“Beyond Black and Blue”
Intimate Partner Violence as a form of Family Violence Against Women and Common Mental Disorders in Mumbai informal settlements

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Declaration by candidate

I, Abigail Bose Bentley, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Signed:

Date: 2nd July 2019

Abstract

The thesis investigates family violence against women living in informal settlements in Mumbai, and its associations with mental health. Globally and in India, a third of women experience violence from an intimate partner in their lifetime, an estimate that would be higher if it accounted for other perpetrators within the family. The thesis includes qualitative and quantitative studies. The quantitative study was a survey of 482 women that investigated violence in detail, including its types, perpetrators, and timescales. Symptoms of common mental disorders were assessed with the General Health Questionnaire-12 and levels of self-esteem with the Rosenberg self-esteem questionnaire. Associations were explored through multivariable linear and ordinal logistic regression, adjusted for socio-demographic covariates. The qualitative study included semi-structured individual interviews and focus group discussions with 33 women, exploring narratives of violence, responses, coping, and resilience. Analysis took a Framework approach.

The prevalence of violence was high - 44% over a lifetime - but in line with other national surveys. More women reported emotional violence than other forms. In-laws were the main perpetrators of emotional and economic violence, and husbands of physical and sexual violence. Emotional violence showed the strongest positive association with symptoms of common mental disorders and lower self-esteem. In the qualitative study, women described patterns of violence that often included the marital family as perpetrators. Responses to violence included feelings, thoughts, and behaviours ranging between active and passive. Women described a ceiling of tolerance that influenced their responses to violence and was informed by their context and previous experiences.

The thesis adds to the current literature by exploring violence in detail and combining survey data with women's narratives. It highlights the need to further investigate family violence and emotional violence, particularly in other South Asian settings where patterns of patrilocal residence and joint families are common.

Impact statement

Violence against women has been described as a global public health crisis. Across the world, women are subjected to violence by perpetrators who range from complete strangers to intimate partners. Although these perpetrators are disproportionately men, violence against women in the home often involves other family members, including other women. Beyond physical injury, violence affects mental health, already a disproportionate global burden on women.

This thesis explores the associations between family violence against women and common mental disorders in informal settlements in Mumbai, in which poverty and other stressors contribute to women's vulnerability to both mental health problems and violence. The findings reveal that violence patterns are complex and nuanced, that other family members are often involved in perpetration, and that violence - especially emotional violence - is strongly associated with symptoms of common mental disorders and low self-esteem.

The thesis contributes to the academic literature in a number of ways. First, it confirms previous findings that emotional violence is of particular importance to women's mental health and that, in the Indian setting, in-laws and other family members play an important role in perpetration. These are critical findings because they highlight the need to broaden the focus from physical and sexual intimate partner violence when consulting service providers such as the police, the courts, and health professionals. Second, the addition of women's narratives allows us to supplement generalisable findings with detail, creating a more holistic contribution to the evidence base to inform policy and practice. The finding that violence patterns are nuanced and complex supports some of the existing literature, which argues that current survey tools are insufficient to understand the extent of the problem. The success of policy and programmes will be limited without a broader understanding of violence patterns, and the mixed-methods approach taken in the thesis adds detail through women's own narratives. Other scholars have highlighted this as important because quantitative exploration alone ignores the fact that violence is complex and varied.

The thesis has the potential to have tangible impacts on the lives of women living in Mumbai. It presents an exhaustive overview of family violence and mental health in

informal settlements, conducted in collaboration with a local organisation working on issues of violence in the community and making an original contribution to the literature. The thesis draws together numerous aspects of violence research that are often explored in isolation - patterns of violence, perpetrators, mental health impacts, and coping and resilience - and applies them to a setting that is under-studied. It is hoped that its contributions will help to inform current programmes and the development of future interventions to address violence in the community, including its mental health impacts.

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Chapter 1
Introduction

Violence against women has been described as a global public health crisis (1). The global burden of mental illness is also a public health priority worldwide and disproportionately affects women (2, 3). India is one of the world's fastest growing economies and, with a population of 1.35 billion (4, 5), the world's second largest nation by population size. Rates of violence against women and mental ill health are high (6, 7). Poverty is still rife - India is one of the most unequal societies on earth in terms of wealth distribution - and places the greatest burden upon women (8). Within this context, my thesis explores the burden of violence against women living in informal settlements (slums) of Mumbai and the mental health concerns linked to this violence.

1.1. Violence against women

Gender based violence (GBV) is violence directed at a person based on their biological sex or gender identity. Victims can include women, men and trans persons (9). Violence against women (VAW) is one form of GBV. It was first defined by the United Nations as "Any act… that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivations of liberty, whether occurring in public or private life" (10). More recently, it has been described as "any act of verbal or physical force, coercion or life-threatening deprivation, directed at an individual woman or girl that causes physical or psychological harm, humiliation or arbitrary deprivation of liberty and that perpetuates female subordination" (11).

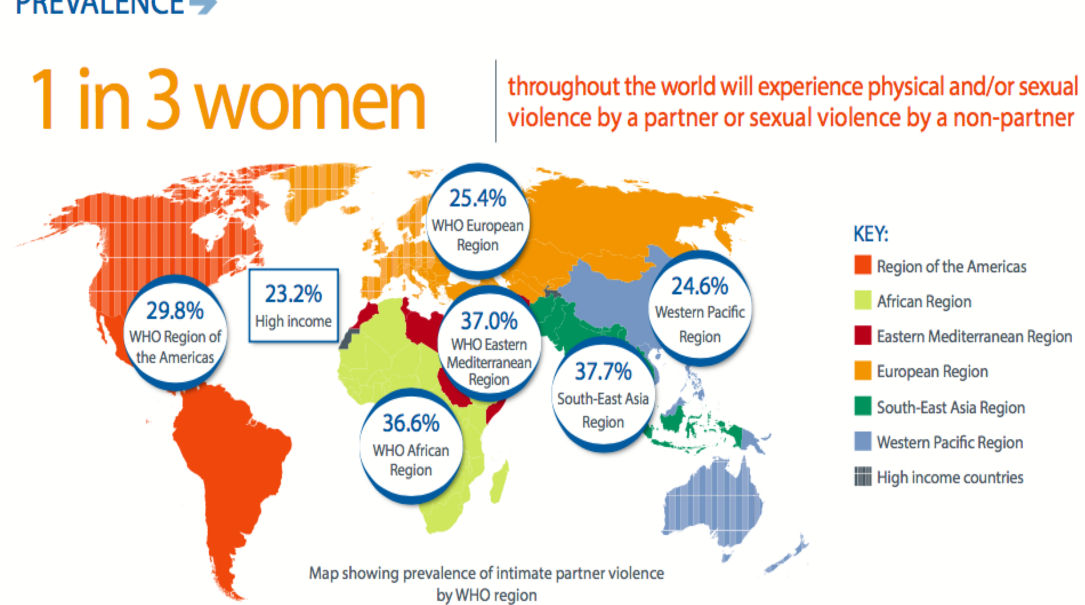
Over a third (35%) of women globally have experienced violence of a physical or sexual nature in their lifetime (12). According to an analysis of Demographic and Health Survey data from 24 countries, this estimate varies from around 15% to 70% (13). The most common forms of VAW are intimate partner violence and non-partner sexual violence (11), both of which are, for the most part, perpetrated by men (2).

The global prevalence of non-partner sexual violence in women aged 15 years and above ranges from 7% to 12%, with the highest prevalence in central and southern sub-Saharan Africa and Australasia (2, 14). Perpetrators of non-partner sexual violence are most likely to be strangers, male family members or male family friends (2).

The World Health Organisation (WHO) describes Intimate Partner Violence (IPV) as a major public health problem and defines it as “behaviour by an intimate partner or ex-partner that causes physical, sexual or psychological harm, including physical aggression, sexual coercion, psychological abuse and controlling behaviours” (15).

The prevalence of IPV varies globally. Between 10% and 60% of women across 36 countries have experienced physical violence by a current or former partner at least once in their lifetime (11, 16). The WHO Multi-Country study on Women’s Health and Domestic Violence against Women reported a prevalence of lifetime physical or sexual violence as high as 71% (2). Intimate partners account for 30% of reports of physical or sexual abuse and almost 40% of murders of women (12). In addition to physical and sexual abuse, psychological abuse is inherent in partner-abusive relationships, accompanying physical abuse in almost all cases and sexual abuse in over 50% of cases (11, 16). Between one-fifth and three-quarters of women report experiencing emotional violence worldwide (2). Figure 1 shows the worldwide prevalence of physical or sexual IPV.

Figure 1. Prevalence of physical or sexual intimate partner violence by WHO region (12).



Whilst the prevalence estimates of VAW and IPV globally are high, they are likely to be underestimates of the true figures, as evidence is based on individuals who decide to disclose victimisation (13). Data from 24 countries suggested that the rate of reporting violence was 40%, the majority of which was to informal confidants, with the level of reporting to formal sources of help standing at just 7%. The true global rates may therefore be at least 14 times higher than the ones estimated from formal sources (13).

An integrated ecologic model of IPV acknowledges four domains to explain why violence happens. These domains represent the individuals (the man and the woman) and their contribution to the relationship, including their past history, the relationship itself and the dynamics within it, the community and social setting within which the relationship exists - including socioeconomic status and support structures - and the wider society which incorporates cultural norms (11, 17).

Within the levels of this ecologic model, factors associated with IPV include past history of or exposure to violence, substance abuse by both survivor and perpetrator, education level, marital conflict, communication issues, disparities in decision-making power between partners, lack of financial autonomy or empowerment at the relationship level, marginalization and isolation of women, economic inequality

between men and women at the community level, as well as cultural and societal norms that enforce strict gender roles and perpetuate patriarchy, male dominance, and gender inequality at the societal level (2, 11, 12, 17). The barriers to reporting violence, which can include embarrassment, a belief that there is no use in reporting or that violence is a normal part of life and deserved, reflect these cultural norms (2, 13). While some claim to have identified societies in which VAW does not exist (for example, the Wape of Papua New Guinea (11)), many societies have cultural norms that justify and normalise it (11, 16).

IPV has been linked to a number of adverse health outcomes. These include physical injury, which occurs in 19% to 55% of cases globally (2), obstetric or gynaecological problems such as infections, unwanted pregnancies, and pelvic pain, and adverse pregnancy outcomes such as miscarriages, premature labour, fetal distress and low birth weight (11). Additionally, psychological problems such as depression, post-traumatic stress disorder, substance abuse, and attempted suicide have also shown an association with IPV (12, 18-20). Women who have experienced IPV are significantly more likely to report poor or very poor health, higher levels of emotional distress and thoughts of suicide than non-abused women (2).

Whether or not pregnancy increases the risk of IPV, pregnant women who experience violence can face serious health problems (21). IPV during pregnancy is associated with a higher risks of perinatal death, fetal injury, infection, low birth weight, and preterm birth, as well as with maternal depression, anxiety, posttraumatic stress, substance use, and attempted suicide (22, 23).

1.2. Common mental disorders

The term common mental disorders (CMD) was originally developed in 1992 and refers to “disorders which are commonly encountered in community settings, and whose occurrence signals a breakdown in normal functioning” (24). Throughout the literature, CMDs have been described as falling into two main categories of the tenth edition of the International Classification of Diseases (ICD-10), including “neurotic, stress-related and somatoform disorders” and “mood disorders” (25). A more specific definition from the National Institute for Clinical Excellence for use in the UK includes “depression, generalized anxiety disorder (GAD), panic disorder, phobias, social anxiety disorder,

obsessive-compulsive disorder and post-traumatic stress disorder (PTSD)" (26). Broadly, CMDs cover depressive and anxiety disorders (27). Somatoform disorders are classified within CMDs and have been defined as symptoms that cannot be explained by a conventional medical definition. These medically unexplained symptoms make up around 30% of all physical symptoms in the general population. There is debate about whether somatoform disorders should exist as their own diagnostic category or as a variant of other CMDs as they have been associated with depression and anxiety (28, 29).

The prevalence of CMDs, assessed across 59 countries between 1980 and 2013, was reported at around 18% for the past 6-12 months and almost 30% over the lifecourse, with levels consistent across high-income countries (HICs) and low- and middle-income countries (LMICs). The lifetime prevalences of mood, anxiety and substance use disorders were around 10%, 13% and 11%, respectively, with anxiety disorders having the greatest impact annually (7% 12-month prevalence) (30). A review of CMDs from six LMICs across Africa, Asia, and Latin America also showed a prevalence of 20%-30% (27). Globally, the period prevalence of CMDs (6-12 months prior to the survey) was higher in females than males, as were mood and anxiety disorders, but substance use disorders were more common in males than females. This pattern was consistent across HICs and LMICs (30). Additional factors identified as associated with CMDs in LMICs include education level and limited opportunities, socioeconomic status, poverty and financial stress, insecurity, particularly food insecurity, poor physical health, rapid social change, and violence (31). However, some of these factors show a stronger association than others, and for poverty indicators such as income it is difficult to draw conclusions about the direction of the association. People living in poverty may be more likely to develop CMDs due to increased exposure to some of the factors mentioned above. However, people who suffer from CMDs may also be at increased risk of poverty due to factors such as lost work productivity and health-care costs (27, 31).

Common mental disorders disproportionately affect women (3, 32). Possible reasons for this include biological factors, particularly the idea that physiological, hormonal, and reproductive processes make women more susceptible to symptoms of depression (33, 34). Psychological factors have been suggested which attribute higher levels of depression in women to their more emotional and ruminative coping styles than men, as well as their tendency to internalise distress (35-37). Feminist scholars critique such biological and psychological explanations for the higher levels of depression in women, and argue that they fail to take into account the inferior social, economic, and political

status imposed on women (33, 35, 37). Social factors, such as those that impose strict gender roles and keep women in a lower social status, as well as exposure to gender-based violence (34) have therefore been proposed as additional or alternative explanations for the higher burden of CMDs in women. The true explanation is likely to lie in a complex mix of all of these factors (37).

Multi-country data have demonstrated an association between IPV and poor mental health outcomes after controlling for confounders (38, 39), with 10% to 80% of women exposed to IPV experiencing CMDs in a review of studies from LMICs in 2010 (40). Mental health sequelae include depression, post-traumatic stress disorder, suicidal ideation, anxiety, insomnia, social dysfunction, phobias, obsessive-compulsive disorders, eating disorders, substance abuse, and other psychological symptoms such as low-self esteem, social isolation, unhappiness, and somatic complaints (38, 40, 41).

Whilst the link between IPV and CMDs has been established, the relationship between them is “multi-directional and complex” (40). IPV may lead to the development of CMDs through loss of self-esteem, isolation, and lack of autonomy and social support, but existing CMDs could also be risk factors for violence by making women more vulnerable and more likely to be involved in unsafe relationships, and causing symptoms that may be more likely to aggravate violence such as paranoia, irritability, or hopelessness (38, 40).

1.3. Study setting and partners

I developed my thesis in collaboration with the Society for Nutrition, Education and Health Action (SNEHA), a non-governmental organisation based in Mumbai. Much of SNEHA’s work is carried out in the informal settlement areas of Mumbai, and spans four main public health domains: maternal and newborn health, child health and nutrition, sexual and reproductive health, and prevention of violence against women and children.[1]

The Prevention of Violence against Women and Children programme has been working in the community for over 15 years and aims to provide services for women and children through crisis intervention and counselling. The programme works with the community by forming women’s groups and collaborates with services such as the police and legal

[1] www.snehamumbai.org

system to prevent, report, and address violence. It is in collaboration with this team, headed by Dr Nayreen Daruwalla, that I conducted my doctoral study.

Mumbai, the capital of Maharashtra, is located on the western coast of India and has a population of 12.4 million (42). 41% of Mumbai's households are in informal settlements (43), also referred to as slums. Informal settlements are "residential areas where dwellings are in any respect unfit for human habitation by reasons of dilapidation, overcrowding, faulty arrangements and design of such buildings, narrowness or faulty arrangement of streets" and "lack of ventilation, light, or sanitation facilities or any combination of these" (42).

1.4. Overview of thesis

1.4.1. Definition of violence

The focus of my thesis is violence committed against women within the family unit. Studies from India have shown that, within the woman's marital family, or her own family, violence can be perpetrated by a number of different family members, including but not limited to, her husband (44, 45). Because perpetration could go beyond the marital partnership, limiting the focus of the study to intimate partner violence would exclude an important aspect of women's experiences. I will refer to the violence that I am interested in as family violence against women (FVAW) from here on.

1.4.2. Justification for the study

The prevalence of IPV in India is higher in rural than in urban areas (6), but within urban areas the prevalence is higher in urban slum than in non-slum areas (46). Additionally, informal settlement living has been shown to have a negative impact on women's mental health (47), suggesting that women could be at increased risk of CMDs, particularly if experiencing violence. At the inception of my PhD in 2015, there was limited literature on VAW in informal settlement areas of India (48-60), and even less on the associations of violence with mental health in these settings (61, 62), making informal settlements an important area for study. Qualitative research may also provide insight into the potential mechanisms linking IPV and CMDs. Currently, no such studies exist in the context of

Mumbai's informal settlements. SNEHA's work is based in informal settlement areas of Mumbai, and given that I was able to collaborate with the organisation, Mumbai became an appropriate setting for my doctoral study.

1.4.3. Aim of the thesis

The overall aim of my doctoral study is to explore the relationship between FVAW and CMDs in urban informal settlement populations of Mumbai. I seek to address three primary research questions:

1. What are the prevalences of family violence against women and of common mental disorders in informal settlements of Mumbai?

2. What is the relationship between family violence against women and common mental disorders in women residing in Mumbai's informal settlements?

3. How do women who have experienced violence from their family, experience, and cope with the nexus of FVAW and common mental disorders?

I also seek to answer two secondary research questions:

1. What are the associations between family violence against women and levels of self-esteem?
2. What are the mechanisms through which women are able to cope with, and be resilient to, the nexus of family violence against women and common mental disorders?

1.4.4. Structure

The thesis is divided into nine chapters. The next chapter, Chapter Two, presents a review of the Indian literature describing the state of women's mental health across the country, the prevalence of violence, associated risk factors and associations with common mental disorders. The chapter concludes with an assessment of help-seeking behaviours and coping mechanisms used by women in Indian settings.

Chapter Three describes theories of violence, mental health, coping and resilience that might be relevant to the thesis. Chapter Four outlines the methods I used for quantitative and qualitative studies. The quantitative study used a cross-sectional survey of violence, CMDs and self-esteem with 482 women living in the community. The qualitative study consisted of 22 semi-structured interviews and three focus group discussions with women living in the community who had experienced violence, as well as with community officers employed by SNEHA and involved in programme activities.

Chapters Five and Six describe the findings from the quantitative study. Chapter Five presents a descriptive summary of the findings and Chapter Six presents the findings from statistical analysis of associations between women's experiences of violence, symptoms of CMDs and levels of self-esteem. Chapters Seven and Eight present findings from the qualitative study. Chapter Seven provides an overview of women's experiences of violence as described through their narratives. Chapter Eight examines the meanings that women placed on their experiences of violence, their responses to it, and the mechanisms used for coping. The thesis concludes with Chapter Nine, which presents a discussion of the findings, the strengths and limitations of the study, the impact of the study and its future implications.

Chapter 2
Background

This chapter presents the background to my doctoral study, drawing on the Indian literature to describe the state of women's mental health, experiences of violence and coping and resilience.

2.1. Methods

I performed a scoping review of the literature following the methodology outlined by Arksey & O'Malley (2005) (63). I began with the research question *'What does the existing published literature tell us about women's mental health, experiences of domestic violence and the interaction between the two in India?'.*

I searched OVID Medline and Psych INFO for literature on mental health using the terms "common mental disorders", "mental health", "psychological distress", "depression", "anxiety", "posttraumatic stress disorder", "suicide". I searched for studies on violence using the terms "violence against women", "intimate partner violence", "domestic violence", wife beating". Finally, I searched for literature using the terms "coping" and "resilience". I combined all of the above searched with "women" and "India" and followed up the database search with a search of the bibliographies of included studies and a hand-search of the literature.

I included studies that discussed violence against women in the home or mental health in adult women residing in India, and studies that discussed coping or resilience in the context of violence. I excluded articles not written in English due to time constraints. I excluded studies on violence against women perpetrated outside the family or violence in the context of conflict. I also excluded studies on mental health in the context of illness or grief. I excluded studies about immigrant South Asian women in other countries because the immigration process could present additional vulnerabilities for poor mental health or violence.

I screened the titles and abstracts of the studies and excluded those that were clearly not relevant at this stage. I then reviewed the full texts of the remaining papers and excluded any that were not relevant or did not fit with the research question.

2.2. Results

The search of the databases, bibliographies and hand-search returned 523 results. After duplicates were removed, 441 studies remained. 295 were excluded based on title or abstract and 24 after reading the full text. A final 114 papers were included in the findings of this chapter.

Throughout this chapter, and in the rest of the thesis, I use the terms ‘emotional abuse’ and ‘psychological abuse’ interchangeably. Similarly, the term ‘psychological distress’ is sometimes used to describe symptoms of common mental disorders.

2.3. Women’s mental health in India

From the studies included in the review, two were systematic reviews, two were narrative reviews, eight were qualitative studies, two were international studies, one was a validation of a mental health screening method and 35 were quantitative studies in India that reported the prevalence of, or associations with, some measure of poor mental health (table 1).

In India, as with elsewhere, mental health problems have been shown to disproportionately affect women (32, 59). The idea of mental health has existed in India for millennia. Symptoms mirroring those of psychiatric disorders such as schizophrenia and bipolar disorder and disordered states of mind are described in ancient and traditional texts (64). Whilst mental illness can be understood through a variety of perspectives, culture plays an important role in shaping our emotional experiences and expressing distress (65).

A woman with good mental health was characterised by participants of a qualitative study in rural Maharashtra as having no worries, tension or pressures in her life, looking physically healthy, smiling, and being open, bold and confident (32). Women interviewees

identified factors that contribute to good mental health, which included a harmonious home life, financial security, financial independence from one's husband and the freedom to move around and make one's own decisions. Women also thought that children could be a positive influence on their mental health (32), which was backed up by other qualitative studies in which women said that their children had been a motivating factor in their desire to stay alive, be well and improve their situation (65).

Social inclusion, freedom from discrimination and violence, and access to economic resources have been presented as key determinants of community and individual mental health in a mental health promotion framework (32). In a meta-ethnography review of qualitative studies, the presence of social support and positive changes in the cultural conceptions of women helped to mitigate depressive symptoms (37). Access to day care services has also been shown to help reduce symptoms of distress. It was posited that this could be due to reducing the woman's burden of work, allowing her to better manage the demands of household and paid work, increase her contribution to the economic productivity of the household, and freeing up time to engage in activities that promote mental health such as relaxation and adequate sleep (66).

Narratives from Indian women have described mental illness, on the other hand, as mental tension or pressure (32). The cultural expression of "tension" (or *tenshun)* to describe psychological distress is common in the Indian literature, and it refers to a wide range of perceived distress, which could also include common mental disorders (37, 59).

2.3.1. Mental health care in India

Mental health care has existed in India for many years. The period of British rule saw a growth in the number of mental asylums, which Ernst (1987) attributed to a form of social control (64, 67). Care for mental health has also historically been provided by traditional healers, religious healers and through traditional medical systems such as Ayuveda. In more recent years, psychiatric units attached to general hospitals have emerged, as have non-governmental organisations (NGOs) and other organisations aiming to provide mental health care to the community (64).

The National Mental Health programme was launched in 1982 and aimed to provide better access to mental health services for the majority of the population (32). Despite this, it has still not been rolled out in all areas and has had mixed success (32, 64). In addition, maternal mental health in particular has not been a strong component of the programme (68). A new Mental Healthcare Act was commenced in May 2018, which grants a legally binding right to mental healthcare to over 1.3 billion people (69).

2.3.2. Prevalence studies

Table 1 details the quantitative studies related to mental health in India included in this section, the mental health outcomes assessed and the tools used to measure these outcomes.

Table 1: Quantitative studies on mental health in India

Author	Year	Study site	Men or women participants	Mental health outcome (as described by author)	Diagnostic or screening tool
Banerjee (70)	2012	West Bengal	Women	Depression	Beck Depression Inventory
Bodhare (71)	2015	South India	Women	Postnatal depression	PHQ-9
Bhattacharya (72)	2016	Calcutta	Women	Depression	Beck Depression Inventory
Chaturvedi (73)	1995	Bangalore	Women	Suicidal ideation	Premenstrual Assessment Form
Dubey (74)	2011	Delhi	Women	Postnatal depression	EPDS
Fahey (75)	2016	Gujarat	Women	CMD	SRQ-20
Gawde (76)	2013	Mumbai (IS)	Both	Psychiatric illness	SCL-90
George (77)	2016	Kerala & Tamil Nadu	Women	Antenatal depression	CIS-R
Gururaj (78)	2004	Bangalore	Both	Completed Suicide	Police records
Maselko (79)	2008	Goa	Women	Attempted suicide	Self-report
Mathias (80)	2015	Uttarakhand	Both	Clinical depression	PHQ-9
Mayer (81)	2002	Nationwide	Both	Completed suicides	National Crime Records Bureau
Mayer (82)	2002	Nationwide	Both	Completed suicides	National Crime Records Bureau
Jonas (83)	2014	Maharashtra	Both	Major depression & moderate depression	CES-D
				Suicidal attempts & suicidal ideation	Created own
Kostick (84)	2010	Mumbai (IS)	Both	Somatic symptoms	Created own
Panigrahi (85)	2013	Odisha	Women	Mental health status	SRQ-20
Panigrahi (86)	2017	Odisha	Women	Mental disorders	SRQ-20
Parkar (87)	2012	Mumbai (IS)	Both	Suicide	Sociocultural autopsy
Patel (88)	2002	Goa	Women	Antenatal depression	GHQ-12
				Postnatal depression	EPDS
Patel (89)	2012	Nationwide	Both	Suicide	Registrar

Author	Year	Study site	Men or women participants	Mental health outcome (as described by author)	Diagnostic or screening tool
					General of India statistics
Patel (90)	2005	Goa	Women	Somatoform disorder	Scale for Somatic Symptoms
Patel (91)	2006	Goa	Women	CMD	CIS-R
Patel (92)	2006	Goa	Women	CMD	CIS-R
Patel (93)	2015	Gujarat	Women	Postnatal depression	EPDS
Patel (94)	2017	Gujarat	Women	Anxiety	State Trait Anxiety Inventory
				Stress	International Stress Management Association survey
Poongothai (95)	2009	Chennai	Both	Depression	PHQ-12
Prost (96)	2012	Jharkhand & Orissa	Women	Postnatal depression	K-10
Rathod (97)	2016	Madhya Pradesh	Both	Depression	PHQ-9
Silvanus (98)	2012	Mumbai (IS)	Both	CMD	GHQ-12
Shidhaye (99)	2010	Nationwide	Women	CMD	GHQ-12
Shidhaye (100)	2017	Madhya Pradesh	Both	Depression	PHQ-9
Shidhaye (101)	2017	Maharashtra	Both	Depression	PHQ-9
Subbaraman (47)	2014	Mumbai (IS)	Both	CMD	GHQ-12
Tawar (102)	2014	Mumbai	Women	Psychiatric disturbance	SRQ-20

IF: Informal Settlement

A meta-analysis of Indian studies conducted in 1998 reported a prevalence rate of mental and behavioural disorders of 58 per 1000 population for men and women (103).

In one of the largest population-based studies of mental health in India, overall depression was reported at over 15%, with women presenting with significantly higher rates than men (16% vs 14%, p<0.001) (95), and in a cross-sectional follow-up study from the second National Family and Health Survey of over 5000 women living in rural areas across India, 11% of women reported symptoms suggesting the presence of a common mental disorder (99).

In contrast, another population-based study conducted in rural central India reported overall mild to moderate depression at 40% and symptoms of major depression at 13%. In both cases, the prevalence was higher for women than it was for men (45% women vs

34% men for mild/moderate, 17% women vs 8% men for major depression) (83). A number of studies found a prevalence of poor mental health of between 20% and 30% (72, 75, 85, 86, 102), and a study in Gujarat found that 35% of women presented with high levels of anxiety and 26% were very prone to stress (94).

Depression was reported at 6% overall in a study in Uttarakhand, with women presenting with significantly more symptoms than men (8% vs 4%, $p<0.001$) (80), and a baseline study conducted in Goa finding a prevalence of common mental disorders in women of reproductive age of 7% (91). Follow-up of these women in a prospective cohort study showed a rate of new cases of CMD at 2% per year (92).

Variations in prevalence could reflect variations in study methodologies, including definitions of poor mental health, diagnostic or screening tools used, cut-points for indicating presence of a mental health condition and the study population recruited.

Suicidal ideation, attempted and completed suicides are also major problems in India, though again there is variation in rates in the published literature. In a study in rural Maharashtra, 5% of participants had attempted suicide or had thoughts of suicide in the past six months (83). A study in Bangalore found that 10% of women reported suicidal ideation during the premenstrual phase (73), and a population-based cohort study of women of reproductive age in Goa found a one-year incidence of attempted suicide of 0.8% (79).

In studies of completed suicides using national statistics from the National Crime Records Bureau, it was found that, in 1995, 67% of completed suicides were of married persons compared with 23% in un-married, and the male to female ratio of completed suicide in married persons was 1.46 (81). Suicide rates according to official statistics increased between 1991 and 1997 from 9.2/100,000 to 10.0/100,000 population and the average male to female ratio between 1995 and 1997 was 1.32 (82). Similarly, a study in Bangalore found a male to female ratio of completed suicides of 2:1, with 75% of completed suicides occurring in the age group 16-49 (78). The most common methods of suicide were hanging, poisoning and self-immolation, with burning and self-immolation much more prevalent among women (78).

In a qualitative study conducted in rural Maharashtra, every participant knew of someone who had attempted or had committed suicide, and two-thirds of the stories involved women. The main suicide methods were self-immolation, hanging, poisoning and jumping in a well (32). The Million Death Study conducted across India between 2001 and 2003 assessed cause of death through verbal autopsy. Three percent of deaths in people aged 15 or over were due to suicide, corresponding to approximately 187,000 deaths in India in 2010 (89). The cumulative risk of death from suicide before the age of 80 for a 15 year-old was higher for men than women (1.7% versus 1.3%). However, the proportion of suicides in younger age groups (15-29 years) was higher for women than men (56% versus 40%). At this age, suicide was the second leading cause of death for both men and women. Higher education level, residing in South India and being Hindu compared with Muslim or Christian were associated with a higher risk of suicide for men and women. Alcohol consumption was associated with an increased risk of suicide in men and being divorced, widowed or separated was associated with a decreased risk of suicide in women (89).

2.3.2.1. Poor mental health in and around the pregnancy period

Mental health in the pregnancy and post-natal period has been a focus of much of the Indian literature. A review of 38 studies across India found an overall prevalence of postpartum depression of 22% (68). One study from Goa reported a similar prevalence of post-natal depression (22%), with 78% of these women showing signs of psychological morbidity in the antenatal period (88). A study from rural Jharkhand and Orissa reported a prevalence of maternal psychological distress six weeks post-delivery of 12% (96), and another from Kerala and Tamil Nadu reported that 16% of women presented with symptoms of antenatal depression (77).

In contrast, a hospital-based study in Delhi found that 6% of women were at risk of developing postpartum depression (74) and a study of postnatal depression in South India reported that 40% of mothers presented symptoms of moderate depression and 5% of major depression (71).

Again, the difference in prevalence could be explained by the use of different definitions of maternal depression and different screening and diagnostic tools.

2.3.3. Predictors of poor mental health

When asked about the reasons for their mental health problems in qualitative studies, women have given a variety of explanations. Some linked mental health problems with physical health challenges, economic difficulties, worries about their children and traditional expectations placed on women, a heavy workload, lack of affection and marital conflict, abuse from both husbands and in-laws, widowhood and divorce (32, 37, 65, 104). Others linked mental health problems with reproductive events such as pregnancies (104), which could be an indication of postnatal depression. When specifically asked about postnatal depression, women attributed the cause to poor relationships within their marital family, violence, and the birth of a girl child (32).

Women attributed the causes of suicide to marital conflict or conflict between parents and children, financial problems, alcohol problems, HIV infection, exam failure, jealousy, drought, and infertility, or the failure to give birth to a son (32). Alcohol abuse has been associated with mental illness by men and women, especially the impact of a man's alcohol abuse on the mental health of his wife and children (32).

Findings from quantitative studies suggest that in addition to gender (80), many other factors are important to women's mental health in India. Studies have shown associations between common mental disorders and increasing age, lower educational attainment, marital status (single, divorced or widowed compared to married), younger age at marriage, lower income or socioeconomic status, joint family living, greater household size, food insecurity, financial stress or insecurity, lower caste, poor housing quality or lack of access to a toilet, alcohol use of the woman or her spouse, smoking or tobacco use of the woman, chronic illness of the woman or a family member, gynaecological symptoms, a lack of empowerment such as reduced autonomy in decision making, marital conflict, dowry dispute, violence, and a lack of protective factors such as support, ability to attend social functions or religious services (75, 80, 85, 86, 91, 92, 95, 99).

In contrast to others, one study in Odisha found that younger age was associated with poor mental health status (85). A study from West Bengal found that cooking with biomass fuel compared to Liquid Petroleum Gas was associated with increased odds of depression (OR 1.7, 95% CI: 1.2-3.0) (70). One study in Gujarat found a high association between the

woman's occupation and anxiety: homemakers had 1.2 times greater anxiety and 1.3 times greater stress levels than working women (94).

Conversely, in Bangalore, students and working women were more likely to report suicidal ideation than homemakers (73). Other factors that have shown an association with suicidal ideation, attempted or completed suicide include the presence of common mental disorders, previous suicide attempt, family history of suicide, food insecurity, financial insecurity, job stress, educational stress, family conflict, marital conflict, partner alcohol use, violence, physical illness and a lack of protective factors (78, 79).

In a review of studies on postpartum depression, common risk factors included financial difficulties, domestic violence, past history of psychiatric illness, marital conflict, lack of support from the husband and family network, birth of a female baby, recent stressful life event, a sick baby or the death of a baby, and substance abuse by the husband (68). A study of rural mothers in Jharkhand and Orissa found that increasing maternal age, low socioeconomic status, maternal health problems, caesarean section, an unwanted pregnancy, small perceived infant size and a stillbirth or neonatal death were all associated with increased risk of psychosocial distress within six weeks after birth. The study did not collect data on violence (96). Research from Goa found that poor marital relationships, economic deprivation and the birth of a girl were important determiners of postpartum depression (88), whereas another study in Gujarat showed that having a girl child was associated with less likelihood of maternal depression (OR 0.31, 95% CI: 0.10-0.92) (93).

2.3.4. Somatisation

People with CMDs often present with "somatisation" (64), which has been described as the physical expression of psychological distress (65). There are three alternative definitions of somatisation: the somatic presentation of symptoms, the reporting of medically unexplained symptoms, and the denial of psychological symptoms of depression when questioned (105). It has been suggested that common mental disorders could be detected solely through somatic symptoms with sufficient validity (64, 106). Some people have suggested that somatic symptoms are more prevalent in non-Western or developing countries, with one explanation being that patients from these settings and those of lower socioeconomic status are less willing or able to express emotional distress (37, 105).

However, somatic symptoms have been shown to be present across all settings, Western and non-Western (64, 105), with one international study finding that 60% of patients with major depression presented with somatic symptoms (105).

In India, patients commonly present with somatisation. Women with depression often present with somatic symptoms rather than emotional symptoms (32, 64, 104). Whilst Indian patients do experience emotional symptoms, they may sometimes prefer to present somatic symptoms as the predominant complaint (64). This is no surprise given that in several traditional Indian medical systems there is an intimate link between the mind and the body, and that physical symptoms are consistent with cultural representations of mental distress (65).

In a study of explanatory models of depression, Pereira and colleagues (2007) found that the most common symptoms reported were aches and pains in the limbs, joints and head, followed by autonomic symptoms such as palpitations, giddiness, fainting and numbness. Tiredness, weakness, low appetite and sleep disturbances were also prominent. Reproductive health symptoms are common, including vaginal discharge, genital itching, menstrual pain, and a burning sensation whilst passing urine. Patients also often describe mental symptoms such as poor concentration, forgetfulness and nightmares (104). These symptoms have also been corroborated by other studies (37, 65, 107, 108).

Vaginal discharge, or *safed pani* (white water), is common symptom that women in India experience. It is usually not indicative of a reproductive tract or sexually transmitted infection and so has become known as one of the idioms of distress used by women in Indian settings (84). Studies have shown that *safed pani* (abnormal vaginal discharge) is associated with spousal violence, general ‘tenshun’, problems with the husband, other gynaecological and reproductive tract symptoms, older age, being single compared to being married being more educated and literate, having higher levels of empowerment, larger household size, food insecurity, no access to an inside toilet and more symptoms of depression (84, 90).

2.3.5. Mental health in informal settlements

Estimates of levels of CMDs in different informal settlement populations of Mumbai vary. Data collected in 1995 estimated the prevalence of mental health conditions at 6%, and severe mental morbidity at 2% using a 5-item version of the General Health Questionnaire (98). This is much lower than the 12.5% of people suffering from any psychiatric disorder in an area of Dharavi, according to a revised version of the Symptom Checklist-90 (76), and the 23% of people in Kaula Bandar at high risk for of a CMD, identified by the 12-item version of the General Health Questionnaire (47). Additionally, local police records from Malavani in 2003 showed the suicide rate to be 12 per 100,000 (87).

Living conditions have been associated with poor mental health. Slum living, the associated lack of facilities and levels of male unemployment have been linked to feelings of hopelessness in both men and women (59). A study on the psychological toll of slum living found that measures of household wealth were negatively associated with CMDs and the unofficial status of the slum led to greater levels of distress in the participants due to greater living problems, tension with the government and feelings of social exclusion. In this study, women's odds of having symptoms of CMDs (GHQ-12 score>=5) was double that of men (OR: 2.12; 95% CI:1.05, 4.67, p=0.037) (47).

In studies undertaken in informal settlements within Mumbai, CMDs have been associated with a number of covariates. Of these, limited education and unemployment are frequently cited (76, 87, 98), though it has been suggested that these could follow from psychiatric conditions (76). Women in Mumbai’s informal settlements often have higher levels of CMDs and suicide than men (87, 98), which could be connected to the social roles that put them at greater risk of stress, depression and anxiety (98). Whilst marriage has also been cited as a risk factor for poor mental health, the relative impact varies with gender, in that marriage appears to have a protective effect for men only (87, 98), again supporting the notion that the social roles of women may be important. Other risk factors include a family history of psychiatric disorders, family sizes above seven and a low monthly per capita income (76, 98).

Additional stressors associated with the informal settlement environment can contribute to the burden of mental health conditions. Qualitative findings from a study in Kaula Bandar, a non-notified informal settlement, suggest that the condition of legal exclusion plays a

central role in generating psychological distress by creating and exacerbating deprivations, creating antagonistic relationships with government and shaping a community identity of social exclusion (47). Financial problems, bereavement, marital conflict and interpersonal conflict have also been identified as stressors for mental health conditions and suicide (87, 98). When interviewing respondents linked to an index suicide case about the underlying causes of the suicide, 82% mentioned *tension* (109), alongside sadness and behavioural problems. However, opinions differed between the respondents, which could reflect the sensitive nature of such topics.

Sensitivity around CMDs could be linked to stigma, a manifestation of which could be reluctance to seek help for mental health conditions. Only 15% of people in the Dharavi study sought professional help for psychiatric disorders, and although services were free and open at convenient times, nearly half still did not seek treatment (76). More than half of attempted suicide cases received help in the form of family, prayer and temple visits, and consultation with a general physician. However, consultation with a mental health specialist was relatively infrequent (87). Another explanation for not seeking help could be a lack of felt need (76), and it would be interesting to investigate the perceived seriousness of mental health conditions in these communities and knowledge of available services and treatments.

2.3.6. The Treatment Gap

The Treatment Gap for mental health refers to the proportion of people suffering from mental health conditions who do not receive intervention or treatment. Across the world, the treatment gap is reported to be large, with an estimated median of 56% for depression, and 78% for alcohol abuse and dependence (110). A study within the PRogramme for Improving Mental health carE (PRIME) conducted across five countries found that in Madhya Pradesh in India, 18% of participants screened positive for depression, but only 13% of them had had contact with treatment providers; 3% with specialist health providers (97, 100). Whilst a similar proportion of men and women sought help for probable depression, a higher proportion of men sought help from a specialist provider (4.4% men versus 1.8% women) and a higher proportion of women sought help from a complementary provider (traditional healer, religious or spiritual adviser) (3.4% women versus 1.9% men) (97).

A grassroots community based intervention in Maharashtra aiming to increase the demand for mental health care through mental health literacy and increased supply of evidence-based interventions found that, after 18 months of the programme, the prevalence of depression had fallen from 15% at baseline to 11% ($p=0.005$). Treatment contact coverage had increased six-fold, from 4% at baseline to 27% ($p<0.001$), and the treatment gap was therefore reduced (101). This shows the importance of increasing access to treatment and interventions for poor mental health and raising awareness about the available options.

Having reviewed the literature on women's mental health in India, I now turn to studies on violence against women.

2.4. Violence against women

Of the studies included in this review on violence against women, three were systematic reviews, three were narrative reviews, three were reports of official statistics, seven were qualitative studies and 48 were quantitative studies. Table 2 lists the quantitative studies included, the types of abuse measured and the tools used to measure violence

Table 2: Quantitative studies on violence against women in India

Author	Year	Study setting	Men or women	Type of violence reported	Perpetrator	Time period	Tool used to measure violence
Ackerson (111)	2008	Nationwide	Women	General IPV	Spouse	Lifetime Past 12 months	NFHS Women's questionnaire
Ackerson (112)	2007	Nationwide	Women	General IPV	Spouse	Lifetime	NFHS Women's questionnaire
Anand (113)	2017	Nationwide	Women	Physical Sexual	Spouse	Lifetime	NFHS Women's questionnaire
Babu (114)	2010	Eastern India	Women	Physical, Sexual, Psychological	Spouse	Lifetime	Author's own
Begum (115)	2010	Mumbai (IS)	Women	Physical Sexual Emotional	Spouse	Past 12 months	Conflict Tactics Scale
Begum (49)	2015	Mumbai (IS)	Women	Physical Sexual Emotional	Spouse	Lifetime	NFHS Women's questionnaire
Chandra (116)	2009	South India	Women	Verbal Emotional Sexual Physical	Spouse	Lifetime	Index of Spouse Abuse
Chandrasekaran (117)	2007	Bangalore	Women	Physical Sexual Psychological	Spouse	Lifetime	Author's own
Chhabra (118)	2007	Maharashtra	Women	Physical	Spouse	Pregnancy	Author's own
Chibber (119)	2012	Mysore	Women	Sexual	Spouse	Past 12 months	WHO questionnaire
Chokkanathan (120)	2012	Tamil Nadu	Women	Economic Control Emotional Physical	Spouse	Lifetime	NFHS Women's questionnaire
Chowdhary (19)	2008	Goa	Women	Verbal Physical Sexual	Spouse	Lifetime Past 3 months	Author's own
Das (50)	2013	Mumbai (IS)	Women	Physical Sexual	Spouse	Pregnancy	WHO questionnaire

Author	Year	Study setting	Men or women	Type of violence reported	Perpetrator	Time period	Tool used to measure violence
				Emoional			
Dasgupta (61)	2013	Mumbai (IS)	Women	Physical Sexual Threat	Spouse	Lifetime	Author's own
Dalal (121)	2011	Nationwide	Women	Emotional, less severe physical, severe physical, sexual	Spouse	Lifetime	NFHS Women's questionnaire
Dalal (122)	2012	Nationwide	Women	Emotional, less severe physical, severe physical, sexual	Spouse	Lifetime	NFHS Women's questionnaire
Decker (123)	2009	Nationwide	Women	General IPV	Spouse	Lifetime	NFHS Women's questionnaire
Decker (124)	2014	Delhi	Women	Physical Sexual	Spouse	Past 12 months	Conflict Tactics Scale
Donta (125)	2016	Mumbai (IS)	Women	Physical Emotional Sexual	Spouse	Past 12 months	Conflict Tactics Scale
Indu (126)	2018	Kerala	Women	Physical Psychological Sexual	Spouse	Past 12 months	Domestic Violence Questionnaire
Jain (127)	2004	Maharashtra	Women	Physical Verbal Threat	Spouse	Past 6 months Pregnancy	Author's own
Jain (128)	2017	Delhi	Women	Emotional Physical Sexual	Spouse	Pregnancy	Author's own
Jeyaseelan (129)	2007	Nationwide	Women	Physical	Spouse	Lifetime	Author's own
Kalokhe (130)	2018	Pune (IS)	Women	Control Psychological Physical Sexual	Spouse	Past 3 months	Indian Family Violence and Control Scale
Kamimura (131)	2014	Gujarat	Women	Physical Sexual Emotional	Spouse	Lifetime	Survey developed by Yoshima et al (132)
Kamimura (133)	2017	Gujarat	Women	Emotional Physical Sexual	Spouse In-laws	Past 12 months	Conflict Tactics Scale
Khosla (134)	2005	Chandigarh	Women	General IPV	Spouse	Pregnancy	Author's own

Author	Year	Study setting	Men or women	Type of violence reported	Perpetrator	Time period	Tool used to measure violence
Kimuna (135)	2012	Nationwide	Women	Physical Sexual	Spouse	Past 12 months	NFHS Women's questionnaire
Koenig (136)	2006	Uttar Pradesh	Men	Physical Sexual	Themselves (against spouse)	Past 12 months	Author's own
Koski (137)	2011	Nationwide	Women	Physical	Spouse	Pregnancy	NFHS Women's questionnaire
Krishnan (138)	2006	Karnataka	Women	Physical Sexual	Spouse	Lifetime	Author's own
Kumar (62)	2005	Multi-site	Women	General IPV	Spouse	Lifetime	Author's own
Madhivanan (139)	2014	Mysore	Women	General IPV Physical Sexual	Spouse	Past 12 months Pregnancy	WHO questionnaire
Mahapatro (140)	2011	Nationwide	Women	Psychological Physical Sexual	Spouse	Pregnancy	Author's own
Martin (141)	1999	Uttar Pradesh	Women	Physical Sexual	Spouse	Lifetime	Author's own
Mogford (142)	2011	Uttar Pradesh	Women	Physical	Spouse Family member	Lifetime	NFHS Women's questionnaire
Muthal-Rathore (143)	2002	Delhi	Women	Physical	Spouse	Pregnancy	Abuse Assessment Screen
Nayak (144)	2010	Goa	Women	Physical Sexual	Spouse	Past 12 months	Author's own
Nongrum (145)	2014	Tamil Nadu	Women	General IPV	Spouse	Past 12 months	Abuse Assessment Screen
Pandey (58)	2009	Calcutta (IS)	Women	Physical	Spouse	Past 12 months	Author's own
Purwar (146)	1999	Nagpur	Women	Physical	Spouse	Pregnancy	Abuse Assessment Screen
Shah (20)	2012	Gujarat	Both	General IPV Physical Emotional Sexual Economic	Spouse	Lifetime	Author's own
Shrivastava (147)	2013	Mumbai (IS)	Women	Physical Verbal Sexual	Spouse	Past 12 months	Author's own
Silverman (148)	2016	Mumbai (IS)	Women	Physical Sexual GBHM	Spouse In-laws	Pregnancy	Author's own

Author	Year	Study setting	Men or women	Type of violence reported	Perpetrator	Time period	Tool used to measure violence
Spiwak (149)	2015	Nationwide	Women	Severe burns	Spouse	Lifetime	NFHS Women's questionnaire
Stephenson (150)	2013	Bihar, Jharkhand, Tamil Nadu, Maharashtra	Women	Physical Sexual Verbal	Spouse	Past 12 months	Author's own
Sudha (151)	2007	Kerala	Women	Physical	Spouse Family member	Lifetime	NFHS Women's questionnaire
Weiss (152)	2008	Goa	Women	Verbal Physical Sexual	Spouse	Lifetime	Author's own

IS: Informal Settlement

The 2015-16 National Family and Health Survey reported a lifetime prevalence of intimate partner violence in ever married women aged 15-49 of 31% (6). In India, the prevalence of any IPV is above the global average (40%) in ever-married women aged 15-49 years (153). In 2014, 36% of crimes against women were classified as “cruelty by husband or his relatives” (154).

Nationally, around one in three women has experienced physical IPV in their lifetime according to nationwide studies and systematic reviews (18, 122, 153). Physical violence can manifest as slapping, hair pulling, arm twisting, being pushed or shaken, and being kicked, dragged or beaten up. Severe physical violence can include being attacked or threatened with a weapon or being choked or burned, and is reported in around 10% of IPV cases in India (122, 153). Being burned is the least reported form of physical violence at around 1-2% (149, 153), however it has become synonymous with India as the phenomenon of “bride burning” (155).

Prevalence estimates vary widely across the country and in different studies. In a review of 137 studies of domestic violence in India, the median prevalence of psychological and physical abuse were 22% and 29%, respectively, but the range for both was 2-99%. The average prevalence of sexual abuse was 12%, ranging from 0% to 75%. (156). Similarly, the reported rate of sexual violence perpetrated by intimate partners stood at just under 10% in other national studies, and usually co-occurred with physical violence, with only 2% of women experiencing sexual violence alone. Emotional violence within intimate partnerships is reported at around 15% nationally, and includes humiliating, insulting or making a wife feel bad about herself, or threatening to hurt someone close to her (122, 153). In a large population-based survey conducted in 1997, however, 43% of women reported experiencing psychological violence in the past year (18).

Not all studies assess all forms of violence. In Kalokhe and colleagues’ review of domestic violence studies in India (2017), physical violence was the type most commonly assessed, followed by sexual violence, psychological abuse and control. Neglect was assessed in only 4% of the studies. Two thirds of the studies assessed one or two types of violence (156). The definitions of violence often vary between studies, as do the tools and timeframe used to assess it. This leads to a variation in prevalence estimates.

Of studies that assessed lifetime intimate partner violence, the prevalence of any type of IPV ranged from 16% to 37% (19, 20, 111, 112, 123, 138), physical violence ranged from 9% to 34%, sexual violence from 0.4% to 25% and emotional violence from 13% to 52% (19, 20, 113, 114, 117, 120-122, 129, 138, 141, 142). Two studies assessed some form of economic violence across the lifetime, one reporting a prevalence of 11% nationally (20), compared with 74% of women in a study in Tamil Nadu reporting that they did not have money for their own use (120). 22% of women in the same study reported that their husband tried to control them (120). An analysis of NFHS-3 data showed a 10% lifetime prevalence of severe physical IPV (121, 122)

In a study in Mysore, 50% of women reported some form of IPV in the past 12 months (139). Physical violence in the past 12 months ranged from 13% to 42% and sexual violence from 8% to 36% (119, 124, 133, 135, 136, 142). 26% of women recruited to a study in Gujarat reported emotional violence from their spouse in the past 12 months, but 20% also reported emotional violence from their in-laws, as well as physical violence (22%) and sexual violence (5%) (133). One study from rural Maharashtra found a prevalence of physical violence in the past six months ranging from 23% to 30%, with 38% of women also reporting verbal abuse, 18% threats of harm and 12% threats of death (127). The prevalence of IPV in the past 3 months from a study in Goa was reported as 13%: 12% emotional, 6% physical and 3% sexual (19).

A cross-sectional study of over 9000 women in urban, rural and urban-slum settings across seven sites in India found that a quarter of women reported lifetime physical violence, with women in urban non-slum areas reporting the lowest levels of all acts of physical violence. In general, violence was much higher in rural and urban slum areas, with the latter showing the highest levels of hitting and kicking (129). In a study of men and women's perceptions of domestic violence, only 57% were aware of the term domestic violence without being probed. When it was described to them, 99.7% of participants admitted that it existed in society (20).

Violence in pregnancy is common. Across studies conducted in India, physical violence during pregnancy has been reported at between 6% and 48%, emotional violence up to 63% and sexual violence up to 22% (118, 127, 128, 134, 137, 139, 140, 143, 146). A study of rural women in Maharashtra found that 47% had experienced physical violence during pregnancy, 30% of whom had also suffered violence when they were not pregnant

(118). This reflects the findings of another study that showed an increase in violence during pregnancy compared to before for 18% women. 76% reported that the frequency of violence remained the same and 8% said that the frequency of violence during pregnancy decreased compared to before pregnancy (128).

Whilst intimate partner violence is an important construct to measure, the context within which married women live must also be taken into account. Other members of the marital family are often involved in the perpetration of violence against women in the home, even when women are living in nuclear families (133, 142, 156-159). Of women who reported experiencing physical violence during pregnancy in the study by Chhabra et al (2007), 70% reported that they experienced the violence from their husband, but parents and siblings in-law were also implicated (118). This is the reason that I have chosen to focus on family VAW throughout my study.

Many aspects of domestic violence are similar across countries and cultures, but some aspects seem to be more common in India. One is non-partner perpetration as previously described. Acts of control, psychological abuse, neglect, isolation, dowry harassment, and control of reproductive and family planning choices are also common among survivors of violence in India (160). In addition, different tools tend to be used to inflict abuse in India compared to other settings. For example, kerosene burning, stones and broomsticks are used rather than guns and knives (156, 160).

One specific type of violence against women in India is dowry murder: the killing of a woman for not bringing sufficient dowry, and often the culmination of a sequence of prior domestic abuse (161). Often, this type of murder is carried out by pouring kerosene on the woman and setting her alight (155). Although officially outlawed, the practice of giving dowry is still in use. It is no longer confined to certain groups in society, meaning that the acceptable amount of dowry to be given is no longer fixed, and the practice has become more akin to a bargaining system in which bridegrooms go to the highest bidder. This perhaps makes the woman’s position in the family even more vulnerable than it has been in the past (161). Historically, gifts would be passed repeatedly from the bride’s family to the groom’s, usually on holidays. The expectation of such gifts may fuel the perception of inadequate dowry and cause the family to attempt to kill the wife in order that the groom might remarry and seek dowry from another woman (161).

2.4.1. Violence in informal settlements

Studies have investigated the prevalence of IPV in informal settlements across India. Lifetime experiences of physical violence range from 17% to 25% (58, 125, 129). Emotional violence in the past 12 months has been reported at around 10% (49, 125). A study of women residing in informal settlement areas of Pune found a prevalence of emotional violence in the past three months of 9%, although 51% of women reported controlling abuse in the same time period (130). Sexual violence in all periods is reported at around 5% or lower (49, 125, 130). Of 1136 women interviewed in 2012-13 in Kajupada and Tunga villages in Mumbai, 21% had experienced IPV at some point in their lifetime (125). The figure was 37% in Malwani, another area in Mumbai (147), which was similar to the 35% of women reporting spousal violence within a shorter three-month recall period, also in a Mumbai informal settlement (61).

The pregnancy and post-partum period appears to be an important focus for IPV research as it is considered a time of increased risk (50). In 2015, 28% of women reported IPV during pregnancy or post-partum, with 15% reporting IPV in the previous year. Of the women experiencing IPV during pregnancy, 69% said that the level had either remained the same or had increased during pregnancy, compared to about 33% who reported that it reduced (50).

The most common forms of violence seemed to differ, with physical violence being the most prevalent in certain cases (50, 125) and verbal violence in others (147). Non-violent forms of abuse, termed Gender-Based Household Maltreatment (GBHM) - for example, not helping with housework when the woman is pregnant - were reported as commonplace (49%) in another study in Mumbai (148). Whilst this does not fit exactly with the traditional definitions of emotional abuse, the characteristics could potentially be similar. Sexual violence was consistently the least reported form of violence (50, 125, 147).

Control can come in many forms, but one of them is the financial control of women. A qualitative study of gendered experiences in a Mumbai slum found that even when women go out to work because men are unable to find jobs, they often do not have the right to manage the money they earn, or only with limited autonomy (59). Whilst prevalent gender roles would dictate that the man be the one who has a job, this is sometimes not possible in slum settings. The study from Malvani slum in Mumbai found that it was harder for men

to find work. Some men felt bad about this, but others seemed comfortable with their wives providing the family income. Even this change in what is normally expected of women was sometimes used as a form of violence, with examples of men having sexual relations with other women while at the same time harassing their wives for money and pressuring them to maintain the household. As men became more reliant on the their wives' earnings, they gave greater priority to controlling them (59).

2.4.2. Predictors of violence

In the Indian context, violence against women is often condoned within patriarchal family systems and gender roles (18). IPV is even more complex as there is a culture of privacy and silence around family matters, alongside beliefs that physical violence is justified as a means of discipline. A study conducted in Gujarat found that around 60% of women thought physical violence was justified in some situations (20). In addition, a belief that sexual violence cannot happen within marriage is reinforced by Indian Law. Section 375 of the Indian Penal Code states that a husband is not guilty of rape if he has non-consensual sex with his wife aged 15 or older (18).

A review of studies from India showed that IPV is present across social strata, including caste, religion, socioeconomic status, education, employment and geography (18). However, clear patterns can still be seen within these demographics. Women who have been divorced, separated or deserted, of lower education, scheduled castes or tribes, Buddhist or Muslim faith, lower wealth quintile, and women who work for money and live in rural areas are more likely to have experienced violence (122, 149, 153). The prevalence of physical and emotional violence increases with age, but the inverse is seen for sexual violence. Other risk factors for IPV include past history or witnessing of violence, not having a male child and giving an inadequate dowry (18, 149). Interestingly, after controlling for covariates urban residence becomes a risk factor for violence (122), which may reflect the influence of large populations living in urban informal settlements.

A study in Delhi examining IPV during pregnancy found that a partner's desire for a son, older age, longer duration of marriage, lower socioeconomic status, low education level, or drug or alcohol addiction were more common in women who had experienced violence than women who had not (128). It has been suggested that dowry violence is more common when women are economically dependent or have reduced social networks

(162). Women from higher socioeconomic strata reported less physical violence in a large cross-sectional study covering seven sites across India, and women who reported high levels of dowry harassment by their husbands had experienced higher levels of physical violence (129). In contrast, women whose job and income level was at a higher status than that of their partner had a four-fold increase in the risk of experiencing physical violence (129).

Women who experienced violence in the study by Jeyaseelan and colleagues (2007) lived in more crowded spaces, owned fewer assets, had completed fewer years of education, as had their husbands, and had less social support. Their husbands were also more likely to consume alcohol regularly, which was associated in a six-fold increase in the odds of experiencing physical violence (OR 5.6, 95% CI: 4.7-6.6) (129). When men and women residing in Malvani slum in Mumbai were interviewed, they reported that dependence on tobacco and alcohol was common in men, estimated that it affected 60-70% of the male population, and felt it was a root cause for many social problems, including domestic violence. They explained that substance use was an expression of frustration in men, caused by unemployment and financial insecurity. They also attributed it to the addictive environment of slum living (59). Many other studies have documented the associations between husbands' alcohol use and violence (49, 50, 58, 117, 119, 125, 128, 130, 135, 139). In a qualitative study from rural India, women attributed violence to the husband's alcohol use, as well as instigation from other relatives (163). Alcohol abuse seems to be a problem, particularly in informal settlements, with 43% of women in one area of Mumbai reporting their husband as drunk in the past 30 days (61).

In focus group discussions among women in Malvani slum, participants agreed that physical abuse followed when men became used to having no responsibilities and leaving everything up to their wives. Some said that men were often influenced by their peers, whom they saw abusing their wives and families, and that other men were highly suspicious of their wives and daughters, which could be a trigger for physical violence (59).

In a study at a voluntary HIV counselling and testing centre in Bangalore, the most common reasons for violence reported by the women were financial problems, husbands' alcohol use and womens' HIV status. Older women and those with lower income were most likely to have experienced violence. Other associated factors included the husband's

education level and HIV status (117). In a nationwide study, domestic violence was not associated with any of the socio-demographic predictors measured, but 41% of participants who had experienced violence reported experiencing it when their spouse was under the influence of alcohol (20). In another nationwide study of violence during pregnancy, the demand for a male child was significantly higher in women who had experienced abuse during pregnancy than in women who had not, and women perceived that the lack of a boy child, a drunk or suspicious husband or an illiterate husband could be predictors of forced sex during pregnancy (140).

A study by Shrivastava and Shrivastava (2013) found no association between family religion or socioeconomic status and experiences of violence among married women in Mumbai’s informal settlements, though associations have been seen during pregnancy and the postnatal period (50, 147). Women who reported IPV during pregnancy were twice as likely to have justified violence in at least one scenario (50). This accords with a study conducted in Kajupada and Tunga areas in Mumbai, which showed that women who countenanced domestic violence were at higher risk of experiencing it (125).

Justification of violence has been linked to a lack of empowerment in women. Alongside this, women’s decision-making power and freedom of movement in the community have also been used to measure empowerment: a complex and multi-dimensional concept. Many women have restricted movement and are indirectly controlled by their husbands, and those who do not have agency in decision-making and freedom of movement are at higher risk of experiencing violence. This suggests a relationship between violence and women’s social status within informal settlements and households (125).

2.4.3. Health outcomes associated with violence

Studies in India have shown that IPV is associated with a variety of adverse reproductive health outcomes. In an analysis of the NFHS-2 data, women who had been physically abused were more likely to experience unintended pregnancies (115). A study of women in Tamil Nadu seeking antenatal care showed that psychological abuse was significantly related with preterm birth, whereas the association with physical abuse was not statistically significant (151). A longitudinal study in Goa conducted between 2001 and 2003 showed that the incidence of sexually transmitted diseases was highest among married women who were exposed to sexual violence (152), and in a nationwide study, 10% of women

who experienced abuse during pregnancy had a preterm delivery, compared with 5% of women who had not (140). In interviews about violence during pregnancy, men reported that their wives were subjected to verbal abuse or forced sex quite often, but they were unaware of (and claimed they did not notice) any adverse effects on the pregnancy or delivery. Women, on the other hand, were aware that forced sex during pregnancy could adversely affect the fetus. Women who were facing domestic abuse were significantly less likely to have accessed antenatal care and immunisation than women who were not (140).

Echoing results from studies in other parts of India, Das and colleagues (2013) found that women who experienced IPV during pregnancy or the postpartum period had greater risk of having adverse pregnancy outcomes, miscarriage and illness during pregnancy. Some women also reported that they were less able to care for themselves or their baby (50), suggesting that partner violence could also have a substantial impact on infant outcomes. Interestingly, the study of Gender-Based Household Maltreatment conducted by Silverman et al (2015) found stronger associations of GBHM with poor infant outcomes, including infant respiratory distress, fever, colic and vomiting, than for physical or sexual violence (148).

2.4.4. Violence and common mental disorders

Studies across India have also demonstrated the relationship between IPV and CMDs (62, 116). Experiences of violence have been associated with measures of CMDs (61, 62, 131, 144, 150, 164), psychiatric disorders such as major depressive disorder, anxiety disorder and adjustment disorder (126), and attempted suicide (164). In addition, violence during pregnancy has been associated with both antenatal and postnatal depression (145). NFHS-2 data suggest that women who had been abused were more likely to smoke or chew tobacco than women who had not, possibly because smoking is perceived to provide stress relief (112). In a study in Goa, domestic violence was associated with 10 times the odds of depression (OR 9.8, 95% CI: 2.6-36.7) (93), and in a population-based cohort study in Goa a woman's odds of suicide attempt were increased eight-fold if she had experienced physical IPV and eleven-fold if she experienced sexual IPV across her lifetime (physical IPV OR 8.0, 95% CI: 1.8-36.4; sexual IPV OR 10.9, 95% CI 2.0-59.3) (19).

In a study of pregnant women in Delhi, depression was diagnosed in 46% of women who had experienced IPV (128), and women residing in urban informal settlements or rural villages in Gujarat who had experienced IPV reported poorer mental health, lower self-esteem, higher levels of anxiety and depression, and more somatic complaints than women who had not (131). A strong association was also seen between verbal or sexual violence and poor mental health outcomes across rural areas of four Indian states. Women who reported one experience of sexual violence in the last 12 months were more likely to report CMDs than women who had experienced sexual violence twice or more in the same period. Physical violence was not as highly associated with CMD as the other forms of violence (150).

Most of the studies carried out in India were cross-sectional, meaning that causality cannot be attributed. One longitudinal population-based study of women's health was carried out in Goa conducted between 2001 and 2004. All types of violence were significantly associated with depressive disorder and attempted suicide after adjustment for confounders in the cross-sectional study baseline study. The longitudinal analyses confirmed the association with violence for attempted suicide but not for depressive disorder (19), suggesting that intimate partner violence is a causal factor in attempted suicide

Only one study from Mumbai informal settlements addressed both CMDs and IPV. It investigated the role of social support in building resilience to depression in women dealing with spousal violence and husbands' risky drinking. Low female education, spousal violence and husbands' risky drinking were all associated with an increased risk of depression. However, 40% of women reported always or usually having the social support they needed, and these women were less likely to report high levels of depression, even after adjusting for husband's recent IPV perpetration and risky drinking (61).

2.4.5. Help seeking and coping

Women are often reluctant to seek help for IPV because of the associated stigma and shame and fear of repercussions (165). A study in Bangalore found that 62% of women who had experienced IPV did not disclose it to mental health professionals, mostly because of embarrassment and shame, fear of further violence, and not wanting to recall their experiences for the fear of re-traumatisation. The small proportion of women who disclosed violence did so because they were unable to tolerate the pain and trauma, and wanted to share their experience with someone to feel better (165). Another study in rural India also found that women were reluctant to report the abuse because of fear of implications such as social isolation (163).

Many services are available to women who have experienced violence, but help-seeking appears to be uncommon. In a study of an urban slum in Mumbai, around 15% of women reported seeking help, predominantly from close family rather than external services (50). Another study in the same setting found that only 2% of women had complained to the police, and the main reasons for not seeking help appeared to be for the sake of maintaining family integrity and for fear of incurring further violence: half of women felt that nothing they could do would improve the situation (147).

In a qualitative study in Goa, sources of help for psychological distress included medical care, home remedies, traditional help, religious help and coping strategies. Only a few women reported that they shared their worries with family, friends or neighbours (104). In a qualitative study in South India, the usual form of treatment or help for violence was the prescription of antidepressants. This was explained by the fact that women who sought help were not looking to escape their husband and family, as the prospect of leaving or staying in a shelter was stigmatised, but to escape the psychological consequences of the violence. Many reported relief after taking antidepressants (65).

Whilst there are varying definitions of resilience, the one reached by international consensus is that "resilience is a dynamic process in which psychological, social, environmental and biological factors interact to enable an individual at any stage of life to develop, maintain or regain their mental health despite exposure to adversity" (166). Women in India, as elsewhere, cope with psychological distress in different ways. Some mechanisms include somatisation and seeking help or treatment (37). Studies have shown

that women may go to great lengths to seek treatment: travelling long distances, braving stigma (37, 65), and having the courage to seek help from community leaders and the police in addressing domestic violence and their husband's alcohol use. Going out of the house to seek employment, social interaction and support also seem to be ways that women tend to cope (32, 37, 59)

Resilience is specific to time and context and may not be present in all areas of life or throughout the lifespan, but it is an important concept in understanding how women cope with IPV and its effects (166). In a qualitative study conducted in Bangalore, resilience to CMDs in women experiencing IPV was characterised by six major factors: the support of women, the support of other men and their family, personal attributes such as self-confidence, self-esteem, optimism and courage, the importance of maintaining their dignity and the strength gained from work, being strong for the children and faith in God (166). One study found that women coped by distracting themselves by engaging in activities such as watching television or going for a walk, sleeping or resting, reasoning with themselves, using alcohol or tobacco, or joining a women's self-help group (104).

2.5. Summary

The prevalence of violence and mental health conditions vary in India, but the burden of both is high. Women's mental health is characterised by culturally-specific idioms of distress, including somatic symptoms. Poor mental health in India generally, and in Mumbai's informal settlements, is linked to numerous factors, including low socioeconomic status, pressure to have a male child, conflict in the family, slum living, and partner alcohol use. Poor mental health is also associated with violence.

Violence is a prominent part of women's lives, including during pregnancy. In the Indian context, violence can be perpetrated by in-laws as well as partners and is associated with many of the same risk factors as poor mental health. In particular, partner alcohol use has been reported in many studies as related to violence perpetration. Culturally-specific manifestations of violence in India include dowry violence and bride burning.

Women report that they are often reluctant to seek help for violence and mental health problems due to fears and social stigma. Women use a number of resources to help them cope and be resilient, some of which include social support, their children and their faith.

Chapter 3
Theories of violence, mental health, coping and resilience

This chapter presents an overview of theories of intimate partner violence, mental health and coping and resilience. I reviewed the literature on the theoretical contributions to these fields in order to inform my subsequent study analyses conceptually. I conducted a search of the literature using a combination of the search terms “theory”, “framework” and “conceptual model” with (“violence”, “intimate partner violence”, “violence against women”, “domestic violence”), (“mental health” “psychology”, “psychiatry”) or (“coping”, “resilience”). I searched PubMed and Google Scholar. I also searched the bibliographies of previously identified publications. Several theories have been proposed for each of these areas. It is not possible to review all of them within the limits of this chapter, but I present a summary of the main theories.

3.1. Theories of violence

Some scholars have classified theories of violence in terms of the main actors and interaction with the surrounding environment. The first to present these types of classifications were Gelles & Staus (1979), two of the main family violence scholars, who presented three categories of theory: intra-individual, socio-psychological, and socio-cultural (167). Intra-individual theories refer to those that take some qualities of the individual actor as the explanation for violence. Within this category, the authors included psychopathological theory and theory of alcohol and drugs. Socio-psychological theories explored the interaction between the individual and their social environment, and posited that violence emerged out of their interplay. Socio-cultural theories examined social features such as norms, values, institutional organisations, or systems to explain individual violence by looking at macro-level variables. Feminist perspectives were classified as belonging to these socio-cultural theories (167).

This section presents an overview of the theories of violence offered by these different perspectives. It concludes by discussing the tension between the family violence and

feminist perspectives and gives an overview of more recent theories that attempt to integrate the two.

3.1.1. Intra-individual theories

Psychological theories were some of the first to try and explain the existence of violence. These theories proposed that violence is abnormal and due to some dysfunction or pathology within individuals (167, 168). In particular, psychological perspectives attributed violence to a wide range of possible biological factors, including brain disorders, autonomic dysfunction, hormonal influences, neuropsychological factors, and temperament (168). Within the field of evolutionary psychology, some proposed that natural selection has led humans to adapt to hurt one another, resulting in phenomena such as the death instinct proposed in Freud's psychoanalytic theory. Freud hypothesised that humans possess an unconscious aggressive impulse, generated by a death instinct, which is in constant tension with the preservation of life instinct. When the two interact, the life instinct redirects aggression towards another (168). The psychopathological theory of violence has been the most widely used explanation of child abuse (167). According to this theory, individuals exhibit violent behaviour because of some abnormality such as poor self-control, sadism, or psychopathic personality or mental illness (167, 169, 170).

These psychological perspectives have been criticised by other scholars because there was insufficient evidence to support the theories and because it was often difficult to pinpoint which abnormal characteristics were associated with violence (167). Family violence theories emerged as a counter and proposed that violence within the family unit warrants its own theoretical frameworks (167).

In addition to psychopathological theory, another explanation of violence at the individual level is linked to alcohol and drug use. Whilst not a complete theory, this "conventional wisdom" suggests that substances lower inhibitions and release the aggressive and violent tendencies already present in humans (167). Many studies and anecdotal evidence suggest that violence often occurs when the perpetrator is drunk. In the 1970s, Gelles and Straus concluded that there was little evidence to suggest that alcohol causes violence (167), and another study by Gelles (1974) suggested that being drunk only provides a convenient excuse for violence (167, 171). Since then, there has been much debate over

whether alcohol is a causal factor in intimate partner violence, whether it covaries with it, or whether it provides an excuse for violence (172).

Studies in France and the United States found that perpetrators of intimate partner violence who had been drinking alcohol were more likely to be arrested or prosecuted than those who had not (173, 174). This suggests that there is less tendency to view alcohol as an excuse for violence, but rather as a cause or contributing factor (175). Population-level studies have shown an association between alcohol use and violence-related homicide (175-177), but these studies do not necessarily reflect a causal link and the role of alcohol in intimate partner violence is particularly controversial (175).

Various suggestions have been made to explain the link between alcohol and IPV; for example, both alcohol use and violence being strongly related to another factor such as young age (172) or cultural context (175, 178), or alcohol being consumed in places where violence is more likely to occur (175, 179). Expectations that alcohol will lead to aggression have shown a link with alcohol related violence (175, 180). It has been suggested that alcohol use causes harm to the relationship and creates an environment of abuse, and that alcohol can weaken brain mechanisms that control impulsive behaviours, evaluate social cues and assess risk (172). There are also arguments for a greater tolerance of violence when people have been drinking (175, 181), which fit with the idea of alcohol as an excuse.

A review of the literature on the role of alcohol in sexual violence perpetration found that it increased the risk of sexual violence in men already predisposed to aggression by interacting with personality and situational factors (182). Other longitudinal studies have found that instances of IPV occur shortly after drinking or drug use (183, 184) and that reduction in alcohol use after a treatment programme is associated with a reduction in IPV (185, 186). The idea that alcohol is a causal factor in IPV mediated through its effects on cognitive processing or expectancies associated with drinking, known as the proximal effects model, is the one best supported by the evidence (172). Scholars have argued that the past three decades of research have shown that excessive alcohol use meets the epidemiological criteria for causality of IPV to the same extent as other widely accepted contributing factors such as gender roles and anger, and that focus should now turn to interventions aimed at addressing both excessive alcohol use and IPV (187).

The intra-individual theories of violence have largely been dismissed as incomplete and I will therefore spend the rest of this section focusing on the socio-psychological and socio-cultural theories.

3.1.2. Socio-psychological theories

Whilst recognising that violence could be influenced by some elements of pathology, as proposed from a psychological perspective, family violence theorists make opposing assumptions to those contained in psychological theories. Whilst psychological theories view violence as an uncommon event brought about by the nature of an individual, family violence theory posits that violence is a normal part of family life in most societies: meaning that it has a high frequency and is culturally approved (167). Family violence scholars argued that the family unit is distinctly separate from other social groups given that it is characterised by high levels of privacy and intimacy, and that violence within this group should therefore be studied as a separate entity (167, 170). Family violence theorists were focused upon violence that can take place between different family members. This included intimate partner violence, but also child abuse, sibling abuse, parent abuse and so on. However, the consideration of the family as the unit of analysis is relevant for understanding the family VAW that my study assesses, given that multiple family members could perpetrate violence against the woman.

Advocates of feminist perspectives of violence criticised the family violence perspectives, arguing that violence against women in the home should be seen as a separate entity from other types of domestic abuse, such as child abuse, elder abuse, or even gender-neutral ‘violence between partners’, given that violence disproportionately affects women (188). In turn, advocates of the family violence perspective have argued that the feminist perspective presents a one-dimensional view of violence which ignores the impact of other social determinants and is too simplistic (170, 189). Although I am interested in family VAW in my study, the gendered nature of violence is not something that can be ignored. Feminist perspectives of violence may therefore also be useful in understanding family VAW in the Indian setting.

As feminist theories of violence have been classified as socio-psychological theories, I will discuss these here before moving on to the family violence theories.

3.1.2.1. Feminist perspectives

In the consideration of violence between intimate partners, proponents of feminist perspectives on violence criticise the family perspective for focusing on violence perpetrated by men and women, because it ignores the fact that the main victims of violence between partners are women. Instead of discussing domestic violence, family violence, and spouse abuse, they suggest that wife abuse and violence towards women should be the main focus of study (170, 188, 190, 191). They argue that intimate partner violence against women warrants study as a separate entity, away from other types of family violence, given that the causes and properties are unique to this specific type of violence (192).

Feminist perspectives argue that patriarchy and male domination are the primary causes of violence against women in the family, and that violence cannot be understood unless one uses a lens that includes gender as the main component (188, 192-195). They argue that violence is the most extreme expression of patriarchy, which as a system promotes the subjugation of women to men directly through norms of obedience, supported by force if necessary, and indirectly by shaping women's opportunities to further subjugation (196). The initial main scholars of the feminist perspective of violence were Dobash and Dobash (1979), who placed wife abuse within the context of patriarchal domination and argued that, although wife beating may be outlawed, the long history of inequality between men and women is still an important factor in marital relationships. It informs family gender roles and norms and fails to challenge male domination, creating an environment in which men are able to continue to abuse their wives (188, 192).

3.1.2.2. Frustration aggression theory

Frustration-aggression theory (197, 198) suggests that aggression results when some purposeful activity is blocked or prevented, leading to frustration. This is relevant to the family setting, which affords many possible sources of frustration. Critics of the theory argue that it does not explain in which situations frustration leads to aggression and why, in some societies, frustration is not always followed by aggression (167).

3.1.2.3. Learning theory

Learning theory proposes that violence is a learned behaviour (167). Among several propositions to explain violence within the home, the most well-known is Bandura's social learning theory (199, 200), which suggests that violence is learned by witnessing it and imitating behaviours (167). Imitation is one of the most important models through which children learn, and this could explain the intergenerational transmission of violence (201). Owens & Straus (1975) subsequently proposed that experiencing and witnessing violence could lead to learning norms that approve of violence (202). Finally Singer (1971) proposed a role model approach in which violence is learned by witnessing it in a role model (167). The family environment can encourage all three of these learning methods by exposing children to violence and allowing them to imitate behaviours, to view their parents as role models, and to experience rewards and punishments that can reinforce violence (167).

3.1.2.4. Exchange theory

Exchange theory proposes that interactions between people are guided by the pursuit of rewards and the avoidance of costs or punishment (203). An individual offers rewards in exchange for something. If the exchange takes place, the interaction will continue, but if the exchange is not reciprocated the interaction will be terminated (167, 192, 203). In the family unit, opportunities for terminating interactions with others are limited. If exchanges are not reciprocated and the interaction cannot be broken off, the individual may resort to violence. Exchange theory has been used particularly in the context of child abuse, where the gratification or rewards of rearing a child may not match the burden or costs, therefore leading to violence (167, 170). Theories that explore rewards versus costs are also useful for thinking about the ongoing perpetration of violence, with violence occurring when the rewards for perpetrating it outweigh the costs. Lack of social controls, inequality in relationships, the privacy of the family unit, and harmful gender norms all reduce the costs of violence and therefore may increase the rewards (192).

3.1.2.5. Ecological perspective

The ecological systems theory was proposed by Bronfenbrenner (1979) and applied to family conflict by Belsky (1980). The theory comprises four levels, one nested within the

other. The innermost layer consists of “ontogenic” factors, which refer to an individual’s personal characteristics and history. The ontogenic factors are nested within the “microsystem”, which is the family unit and the immediate environment within which the individual exists. The microsystem sits within the “exosystem”, which is made up of groups and institutions that connect the family to the wider community, and this is in turn nested within the “macrosystem” which comprises the beliefs and values of the wider society. Factors at all of these levels interplay to create violence within the family unit (189, 192, 204).

3.1.3. Sociocultural theories

3.1.3.1. Functional theory

Coser (1967) proposed that, whilst violence has detrimental impacts, it may also fulfil certain social functions, such as an area of achievement for the individual, a danger signal for the community, or a catalyst for action (167, 205). Within the family, particularly in scenarios where rewards are not provided by society (such as in many low-income settings), the individual function of providing the perpetrator with a sense of achievement may give them a social status they were not previously afforded. Having said this, violence tends to be used more by men, who in the family most often already have a higher status than women and children, and this may be a limitation of the theory (167).

3.1.3.2. Subculture of violence theory

The subculture of violence theory, proposed by Wolfgang and Ferracuti (1967), emerged from observation of the uneven distribution of violence within society, namely the higher prevalence rates in lower-income communities. The theory proposed that the concentration of violence in some communities (or subcultures) reflected their value systems and that violence is learned through being a member of a subculture and exposure to its values (167, 192, 206). When applying this to violence within the family, the family unit becomes the subculture and when family norms and values justify and accept violence, other members of the family learn these behaviours. In addition, the initial behaviours could be learned by the situation of the family unit within a larger subculture such as the local community (167, 192).

3.1.3.3. General systems theory

The general systems theory of violence, proposed by Straus (1973) and developed by Giles-Sims (1983) and Gelles & Maynard (1987), used the idea of feedback loops to explain violence between family members. It sees the family unit as a goal-oriented system, and violence as one of the outputs of this system. Positive feedback processes can increase the output of violence and negative feedback processes can decrease it. The system aims to maintain a state or goal and if it is not on track produces outputs to make corrective action, in this case violence (167, 170, 207, 208). This theory sees violence as the norm within a family unit rather than the exception (192).

3.1.3.4. Conflict theory

Conflict theory proposes that conflict is natural and that conflict management should be the focus, rather than maintaining the status quo (167). Dahrendorf's model of conflict theory (1968) has three stages: conflict, confrontation, and change. He proposes that violence occurs when conflict management is unsuccessful during the confrontation stage, and violence is then a powerful tool to 'win' the conflict and promote one's own interests (167, 209).

3.1.3.5. Resource theory

Resource theory, proposed by Goode (1971) states that violence is fundamental to all social systems and will therefore also be found in the family. The more resources a person has access to, the more force they are able to use. However, what tends to happen is that people with greatest access to resources use force the least, and those with least access to resources use force the most. This is because the latter do not have access to other resources that can help further their interests and violence, again, is a useful tool with which to assert power (167, 170, 192, 201, 210, 211).

3.1.4. Integrated theories of violence

The family violence perspective proposes that patriarchal systems are just one mechanism of inequality that can contribute to the existence of violence and argues that feminist perspectives ignore important social factors such as socioeconomic status that can be

combined with gender inequality to predict violence in the family (196). Violence within the family unit takes a number of forms, one of which is violence between intimate partners (167, 192). In contrast, feminist scholars reject the notion that IPV is perpetrated by women as much as men (188, 192), and argue that the family violence perspective omits the important influence of gender from its analysis of violence. In response to Dutton's critique of the feminist perspective (189) Dekeseredy (2007) argues that, since the initial work by Dobash & Dobash, feminist scholars have published a body of work that also accounts for other factors that may predict violence, whilst still keeping gender as a central focus, and thereby rebutting his claim that feminist work is singular and simplistic (212).

The tension between the two has, however, been addressed by some scholars who recognise the merits of both approaches and aim to integrate them into one framework or theory. Three main integrated theories have been proposed (192). The first was proposed by Anderson (1997), who suggested that structural inequalities influence violent behaviour (as proposed from family violence perspectives), but that these inequalities affect men and women differently and this gendered aspect needs to be accounted for. Specifically, Anderson suggested a gendered application of resource theory. She observed that higher rates of violence are often seen in areas of lower socioeconomic resources, but also that gender is an additional resource that can be used by men to construct toxic masculinity: the use of violence will have different meanings for men and women (192, 194).

In 1998, Heise suggested applying a gendered lens to the ecological framework. She noted that the academic literature had been slow to incorporate issues of gender inequality and unequal power between men and women in the etiology of violence, but that the feminist approach failed to explain why some men are abusive and others are not. She suggested that patriarchal beliefs and structures that normalise male dominance should be the foundation for any theory on violence, but were an inadequate single explanation. Other factors need to be taken into account in an ecological approach that conceptualises violence as multifaceted and grounded in personal, situational, and sociocultural factors (17, 192).

A third integrated framework was proposed by Johnson (1995, 2005, 2006), who suggested that there are different types of IPV, and that this had given rise to different perspectives on violence. He proposed two types of violence: 'patriarchal terrorism' - the type of violence that feminist theorists focus on, which involves unequal distribution of

power between men and women - and ‘common couple violence’ - rooted in conflict rather than patriarchy - which can be understood from the family perspective and suggests that women are just as likely to perpetrate violence (192, 213-215). The debate about gender symmetry (the extent to which women are equal perpetrators of violence in intimate relationships) lies at the centre of Johnson’s theory. He suggests that the debate assumes the theorists are analysing the same subject, when in actual fact they are measuring “different, non-overlapping populations that are experiencing qualitatively different forms of violence” (192, 215).

Given that I wanted to assess violence against women in the context of patriarchal systems and gender norms within my study, but also that I was interested in violence perpetrated by other family members, it made most sense to frame my study within an integrated theory. I chose Heise’s ecological framework because I wanted to explore socio-demographic and contextual factors that could also be associated with experiences of violence. Heise’s framework provided a useful and relevant structure within which to explore these factors. However, the distinction between Johnson’s common couple violence and patriarchal terrorism is also something that I wanted to be mindful of, particularly throughout the qualitative analysis, to explore whether women’s experiences of violence in this setting really were manifestations of patriarchal systems and gender oppression, whether they were a reaction to life stressors, particularly in the context of a low-income setting, or whether it was a mixture of the two.

3.2. Theories of mental health

3.2.1. Grand theories of mental health

A number of grand theories of mental health attempt to explain human behaviour. The main ones are psychodynamic, behavioural, cognitive, and social theories (216, 217). Psychodynamic theories, of which Freud was the first proponent, stipulate that present behaviour is influenced by past behaviour, whether conscious or not (218), and that human functioning is influenced by forces within the individual, particularly the unconscious, and personality structures (219). Psychodynamic theories have faced numerous criticisms, one of which was that they are impossible to measure (219). In response to this, psychology was redefined as the science of behaviour (220). Behavioural

theories – or behaviourism – was first proposed by John Watson, who believed that all human behaviours are the result of experience and are learned from the environment (221). However, criticisms of behaviourism also emerged due to a dissatisfaction with the simplistic emphasis on external behaviour and the stimulus-response links proposed (222). This led to the development of the cognitive approach, which is interested in the information processing that goes on internally in people's minds, including perception, attention, language, memory, thinking and consciousness. The idea for cognitive psychology came from Tolman, who suggested that rather than based on a stimulus-response model, learning was the result of relationships among stimuli, which he termed cognitive maps (222, 223). The advent of computers allowed for the study of human cognition through comparison with information processing in artificial systems (222). Social psychology tries to understand human behaviour in a social context and sees it as influenced by the presence of others (224). The earliest work that most underpins the thinking of social psychology today is that of Allport (1924), who proposed that social behaviour results from interactions with people (224, 225). Later developments in social psychology occurred after the Second World War, with a number of studies emerging in the field. Most notably, and controversially, Milgram's electric shock study and Zimbardo's prison simulation, which looked at the influence of authority figures and social roles on human behaviour (224, 226).

3.2.2. Women and mental health

There are two main schools of thought when it comes to considering gender in the context of psychology, with a clear distinction between the two. The first views men and women as different and opposite, and seeks to exaggerate the difference between the two. This is known as *alpha bias* (164, 227). Alpha bias can be seen most prominently in the psychodynamic theories of psychology. Freudian theory in particular takes masculinity and male anatomy as the norm and femininity and female anatomy as deviations from it. A number of psychological theories developed subsequently propose alpha bias, including from some feminist theorists (227). The second school of thought, *beta bias*, tries to ignore or minimise the difference between men and women and present as gender neutral (227). Beta bias emerged in line with early feminist views that challenged long-held beliefs about sex differences, given that they were used to place restrictions on women in society (228). During the second wave of feminism, Weisstein (1971) published a paper arguing that psychology's approach to women held deep gender bias and did not present scientific

findings, but rather reflections of a “cultural consensus” (228, 229). Following this, scholars produced a large body of work with the intent of demonstrating, through systematic measurement, that women are not different from men biologically and any differences that are seen are due to socialisation. This stance supported early feminist views on minimising the differences between men and women (228). However, other feminist scholars have proposed an emphasis, rather than a minimisation of sex difference. This position, sometimes known as cultural feminism, seeks not to uphold beliefs that allow restrictions to be placed on women, but to honour women’s voices and experiences and to validate qualities specific to women (228). Beta bias overlooks the differences in social contexts for men and women; for example, differences in access to social and economic resources, and the fact that women’s and men’s actions can have different social consequences (227). The debate between alpha and beta bias has been central to the field of feminist psychology and women’s mental health. However a third perspective emerged in the late 1980s with the work of Hare-Mustin and Marecek (1988). They did not focus on whether sex differences exist, but argued instead that indices of difference are not useful, and that gender would be better examined as a construct of social organisation, rather than sex-specific traits (227, 228).

In my study, I am interested in the effects of gender roles and norms on women’s mental health, particularly through the expression of violence and control, and other factors that see women disproportionately affected by mental health problems, such as poverty and informal settlement living. Gender is clearly important in the consideration of women’s mental health, but I was interested in gender as a social construct, rather than an inherent trait, and therefore Hare-Mustin and Marecek’s perspective was the most useful lens through which to view women’s mental health in my study. Given that my study is focused on the mental health outcomes of violence, it was important to then also consider specific theories that linked violence to women’s mental health, in addition to the general theories that have been described up until now. These have been presented in the next section.

3.2.3. Violence and mental health

A number of theories have been proposed that attempt to explain women’s behaviour and mental health in the context of violent relationships. Some of the main theories have been outlined in this section.

The concept of learned helplessness was developed by Seligman and colleagues to describe the failure of dogs to escape or avoid harmful situations (in this case electric shocks), even when given the opportunity to do so, after having been exposed to an unavoidable threat (230-232). The main behavioural symptoms of learned helplessness are deficits in ability to initiate responses and associating reinforcement with responding, which is a result of learning that reinforcement and responding are independent i.e. that responding will not influence whether or not there is reinforcement. This learning is said to reduce the incentive for responding, which results in less initiation of responses and also prevents learning that responses can control reinforcement (230). Seligman and colleagues proposed that the learned helplessness model would be reflected in naturally occurring depression in humans, and that believing that there was no link between responding and reinforcement would be central to the etiology, symptoms, and cure of depression (230, 233, 234).

Lenore Walker (1977) used the theory of learned helplessness to try to explain why women become trapped in abusive relationships, present a seeming lack of effort to escape, and fail to protect themselves or their children. This became known as Battered Woman Syndrome (235, 236). Seligman and colleagues challenged the theory, with the argument that passivity might have been reinforced within an abusive relationship. For example, if the woman remained passive and did not respond, she may have seen a reduction in violence and the appearance of passivity might be protective (236, 237). Another definition of Battered Woman Syndrome related to the cycle of violence in the abuser’s behaviour, which consists of three stages: tension building, violence, and then showing love through remorse and apology. The theory suggests that the abuser maintains control over the victim through the remorseful and loving behaviours displayed after violence, even if severe. Few studies have tested this theory (236, 238). Walker revised the definition of Battered Woman Syndrome in 1992 to be synonymous with symptoms of posttraumatic stress disorder, in an attempt to standardise the definition. She revised it again in 2006 to include three clusters of posttraumatic stress disorder symptoms (re-experiencing, numbing of responsiveness, and hyperarousal), and three additional criteria: disrupted interpersonal relationships, difficulties with body image or somatic complaints, and sexual and intimacy problems (236, 239, 240). Battered Woman Syndrome was a popular theory in the 1980s, but as the field developed its limitations became clear. Criticisms included the suggestion that it lacked a standard definition and evidence of validity, that it did not incorporate current research adequately, and that it

could be stigmatising: it did not distinguish between women who have been abused and could reinforce the stereotype of a “good” battered woman (236).

This section has described theories of mental health in general, in relation to women and in relation to women’s experience of violence. The next section moves to consider theories of coping and resilience. It is important to review these theories to provide a conceptual understanding of the ways in which women may respond to, and cope, with violent situations.

3.3. Theories of coping and resilience

3.3.1 Coping

Theories of coping can be broadly defined by two parameters: macroanalytic versus microanalytic and trait-oriented versus state-oriented. Microanalytic approaches focus on specific coping strategies, whereas macroanalytic approaches look at broader constructs. Trait-oriented approaches focus on early identification of an individual’s resources and tendency to cope, whereas state-oriented approaches focus on actual coping (241).

3.3.1.1. Macroanalytic, trait-oriented coping

Research on trait-oriented coping proposed two central constructs: vigilance, or the orientation towards a stressful encounter, and cognitive avoidance, or the orientation away from stressors (241). Within this are three main conceptions. The ‘repression-sensitisation’ construct, proposed by Byrne (1964) and Erikson (1966), posits that people lie on either end of a spectrum. Those at the repression end deny or minimise the existence of stress, do not display emotions in response to stress, and avoid thinking about negative consequences. Those at the sensitisation end react to stress by searching for information, ruminating, and worrying obsessively (241-243). The ‘monitoring and blunting’ concept was proposed by Miller (1980, 1987), who suggested that individuals who encountered a stressful situation would react with arousal proportional to the amount of attention they directed to the stressor. If the person employed avoidance strategies, such as distraction or denial, the amount of arousal could be lowered (blunting) (241, 244, 245). The model of coping modes (MCM) assumes that the most stressful situations are characterised by the

presence of aversive stimulation (emotional arousal) and a high degree of ambiguity (uncertainty). The preference for avoidance of vigilant coping strategies reflects the susceptibility of the individual to emotional arousal or uncertainty, with people highly susceptible to emotional arousal opting for avoidant strategies and vice versa. The MCM defines four habitual coping tendencies: sensitisers score high on vigilance and low on avoidance: they want to reduce uncertainty; repressors score with the opposite patterns and want to reduce emotional arousal; non-defensives have low scores on both dimensions, and are able to adapt to stressful situations flexibly; high anxious persons have high scores on both, and want to reduce both uncertainty and emotional arousal (241, 246).

3.3.1.2. Macroanalytic, state-oriented coping

In response to the limitations of classic theories on coping, those derived from Darwinian thought and psychodynamic theory (247), Lazarus and Folkman (1984) presented their own model. This saw coping as a process with multiple functions, influenced by the context of stressful environments. They defined coping as follows: “Constantly changing cognitive and behavioural efforts to manage specific external stimuli and/or internal demands that are appraised as taxing or exceeding the resources of the person” (247).

Lazarus and Folkman present many examples of coping as a process. They proposed a distinction between two types of coping: emotion-focused and problem-focused. Emotion-focused coping is directed at regulating emotional responses to a problem and is more likely to occur when the person has assessed that there is nothing that can be done to change the harmful environment. Problem-focused coping is directed at managing or altering the problem causing the distress and is more likely to occur when the person has assessed the situation as amenable to change (247).

In the context of domestic violence, it has been suggested that women’s coping strategies are subject to change depending on the circumstance, beginning with more emotion-focused coping and moving to more problem-focused coping as the violence intensifies (248-250). The type of coping strategy that women employ in the context of violence can influence their mental health, with some studies suggesting that taking an active and problem-focused approach to ending violence is beneficial (248, 251). However, Kocot and Goodman (2003) propose that it is important to take into account the ecological

context within which women experience and respond to abuse, given that the context influences which coping strategies are actually available to them, and the effects that employing them will have on their mental health (251). In an abusive environment, women often have reduced access to social and economic resources and have to cope within these confines. If problem-focused coping is employed, but fails due to lack of resources, it might be detrimental to a woman's mental health and well-being (251). The ecological context within which the woman is trying to cope is therefore important, and these factors could be linked to those used in Heise's (1998) ecological framework to explain why violence occurs in the first place (17). In addition to the ecological context, such as the availability of resources or social support, the nature of the violence itself could also influence coping mechanisms. This could include the frequency and severity of violence and the duration of the relationship. In addition, the prior effectiveness of women's attempts to cope may influence how they choose to do so in the future (248, 252).

Meyer and colleagues proposed that the causal attributions that women place on their violence experience will predict the type of coping strategy they use, and that they will seek to attribute causality in an attempt to make sense of their situation (248). This ties in with attribution theory, which states that the area of interest is the attribution of *intent*, rather than reality and has been discussed in the context of violence (210). The theory suggests that imputation, or assigning, of intent to do harm is more important than the actual intent (167). For example, whether a woman perceives that her partner intended to harm her or that the violence was unintentional may affect the way she chooses to cope. Previous studies have found that the attributions women place on past events influence their decisions for future events (248, 253), and Folkman (1984) proposed that women who felt that they had more control over their situations were more likely to employ coping strategies and be more persistent in their use (248, 254). Meyer et al. found that, the more causal attributions women placed on their violence experience, the more coping strategies they employed (248).

A different approach was proposed by Carlson (1997), based on the work of Lazarus and Folkman (1984). This included an intervention model to address four identified internal barriers to coping: low self-esteem, shame and self-blame; poor coping skills; and passivity, depression, and learned helplessness (255). Lazarus and Folkman (1984) defined stress as “a relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his

or her well-being" (247). Carlson suggests that this definition of stress requires a cognitive appraisal to continuously assess whether a situation is likely to endanger one's wellbeing, and that cognitive appraisal consists of primary appraisal, secondary appraisal, and reappraisal. Primary appraisal determines whether or not the event is stressful, the possible outcomes being that it is irrelevant, benign-positive, or stressful. If the event is seen as stressful, secondary appraisal takes place and the individual determines what can be done. Responses will be influenced by available resources and constraints (255). Coping resources include health and energy, positive beliefs, problem-solving skills, social skills, social support, and material resources. Constraints could be personal restraints, such as internalised cultural values and beliefs preventing certain actions and psychological deficits, environmental constraints, such as a lack of willingness to help, and extreme levels of threat which can create intense emotional reactions that interfere with problem-solving (248, 255).

Based on the cognitive appraisal of stress and the literature on coping among abused women, Carlson developed a model of stages that some women experience in their perceptions of abuse. The first stage, "It's my fault", is characterised by guilt and self-blame. Coping at this point is often focused on improving a woman's performance as a wife and mother. If the abuse continues despite the effort to change, she may begin to realise that violence is not occurring because of her own behaviour. At this point she may move to the second stage: "It's your fault, but I'll help you". In this stage, self-blame may shift towards feeling responsible for changing the abuser and his behaviour and coping may involve problem-focused methods such as trying to address alcohol abuse. If these efforts still do not change the situation, the woman may start to realise that the abuser is solely responsible and there is nothing she can do to change him. At this point, she reaches stage three: "it's your fault and I hope you'll change", where she may feel entrapped, frightened, and suffer from symptoms of CMD. Coping responses become emotion-focused because the woman does not perceive the situation as amenable to change, and she may utilise avoidance strategies (255). This model sits in opposition to the literature which suggests that problem-focused coping is used more as the abuse intensifies, and instead suggests that increasing intensity of violence leads the woman to believe that she is unable to control her situation and therefore ceases to employ problem-focused strategies.

These theories of coping are useful to frame women's responses to violence in my qualitative study. In the analysis and interpretation I will search for signs of emotion-focused and problem-focused coping and explore the movement between the two.

3.3.2. Resilience

The concept of resilience has been hard to define in the literature and has therefore received criticism for its ambiguity and immeasurability (256, 257). Generally, resilience is defined as a dynamic process in which healthy functioning is maintained or regained despite exposure to adversity or threat (166, 255, 258-262). Two criteria are critical: exposure to a significant threat or adversity, and positive adaptation despite the threat (257).

Developmental psychology was the first discipline to study resilience, focusing on children who were able to survive in adverse circumstances (262). The coining of the term resilience is usually ascribed to Garmezy's work with children of schizophrenic mothers (1973) and Werner's work on children in Hawaii (1982) (257, 258, 260, 263). Following these studies, research expanded to include other adverse conditions such as socioeconomic disadvantage, parental mental illness, maltreatment, poverty and community violence, chronic illness, and catastrophic life events (257). Early studies focused on the personal characteristics of resilient children, with later acknowledgment that external factors might also play a role. Three sets of factors were then implicated in the development of resilience: attributes of children themselves, aspects of their families, and characteristics of their wider social environments (257, 263-265).

Resilience has two dimensions: resistance to destruction, which allows an individual to protect their integrity when faced with threat, and the ability to build or create a life worth living despite adverse circumstances (258, 266). As described nicely by Labronici (2012), "Human resilience is not limited to an attitude of resistance as in physics, because it enables the construction, and even reconstruction of life" (266). Some researchers treat resilience as an individual characteristic that is adaptable, whereas others see it as a process, a complex interaction between individual attributes, family environment, and social relationships that is built during human development and drives a person to grow through adversity (258, 262, 266, 267). It is a set of positive personality characteristics, as well as skills and competencies that contribute to coping with stress, trauma, and

adversities through the adaptation of individuals and families. It is not something an individual has, but is a developmental process that is amenable to change (258). Resilience is specific to time and context and may not remain constant over the lifespan (166, 268).

Resilience is vital in the understanding of IPV as it promotes a strength-model rather than a problem-focused approach, yet resilience studies among women who have experienced violence are few, with more research having been directed at the field of child abuse (166). In a mixed-methods study of the resilience of women experiencing domestic violence in the United States, resilience was found to be high and there were few symptoms of posttraumatic stress disorder in women who had ended a violent relationship. These women said that social and spiritual support was important for their recovery, growth, and resilience (267). Humphrey's study with women residing in a domestic violence shelter in San Francisco found that participants showed signs of psychological distress as well as resilience (262, 267). High levels of resilience were seen in the women in general, but women who had higher levels of resilience reported significantly less physical and psychological distress and also perceived fewer symptoms of bodily dysfunction, repeated unpleasant thoughts, cognitive impairment, inferiority, depression and anxiety (262). Anderson concluded that the findings from her study and Humphrey's suggested that resilience and psychological impairment are not necessarily opposites, but are instead different aspects of the overall coping and adjustment for survivors of domestic violence, and that the presence of resilience may not mean the absence of psychopathology (267).

In Anderson's study, developing support systems and accessing resources were important aspects of women's resilience as well as their recovery from violence. Accessing spiritual information and support was particularly helpful for their healing and growth (267). Although there is not a great deal of literature on resilience factors for survivors of violence in India, similar factors have been described as important in Indian and South Asian women more generally. In a qualitative study conducted in Bangalore, women identified six major themes that helped them be resilient: the support of other women, the support of men other than the perpetrator and of their family, personal attributes, dignity and work, being strong for the children, and faith in God. The women selected for interview demonstrated resilience in the face of domestic violence in that they did not appear to show symptoms of CMDs, although they were asked to self-identify as resilient for inclusion in the study (166). Willpower, faith, ritualistic practices based in religion, and

meditation, have all been cited as important sources of coping and resilience for Indian women (269-271).

3.4. Summary

As context for the thesis, this chapter has reviewed a number of different theories in the fields of violence and mental health, including coping and resilience. The focus of my study on family VAW makes it impossible to ignore the influence of gender inequality and patriarchal domination. However, the women involved lived in a poor area of Mumbai, with other individual, family, and environmental stressors that could also contribute to the occurrence of violence. I chose, therefore, to use Heise's integrated ecologic framework as a lens. This allowed for the inclusion of factors at a variety of ecologic levels, as well as power structures between men and women, in order to understand family VAW.

Many of the ecologic factors that the thesis discusses with reference to violence are also of interest when assessing women's mental health. These factors, along with experiences of violence, provide a context that is likely to be central to women's psychological wellbeing. As with the later approaches to women's mental health theory, gender is seen in my study as a function of social organisation and therefore inherently linked to many of these ecological factors, rather than simply a function of individual and sex-specific traits.

Chapter 4
Methods

4.1. Introduction

My study used quantitative and qualitative methods to explore patterns of violence experienced by women, associations of violence with common mental disorders and self-esteem, and coping mechanisms. This chapter provides an overview of methods, challenges, and limitations.

I was extremely lucky to be able to conduct my field research with the help and support of SNEHA. Undoubtedly, this aided in the successful and the safest possible means of data collection for participants. A range of SNEHA team members were involved in the fieldwork. These included Dr Nayreen Daruwalla, Director of the Program on Prevention of Violence Against Women and Children, and Gauri Ambavkar, lead counsellor, who supported me throughout data collection, encouraging the recruitment of participants and acting as invaluable sources of knowledge and experience to check back in with when we had questions or concerns. Sushmita Das, Latika Chordekhar, and the SNEHA Centres data collection team assisted with the quantitative survey. SNEHA counsellors and community officers helped to recruit participants for the qualitative research and Advaita Nigudkar and Jagruti Wandrekar, SNEHA clinical psychologists, added valuable insights to the content of the topic guides and how best to probe about issues of violence and mental health. The team were always happy to cooperate, provide additional information, and act as a source of triangulation and a means to check our ideas, theories, and concerns. They acted quickly upon any information we gave them about women who appeared to be distressed or experiencing violence that was unknown to the organisation. One of the most instrumental people in the data collection process was my research assistant, Apoorwa Gupta, who helped to recruit participants by communicating and coordinating with other SNEHA team members, deliver the training to the quantitative data collection team, and conduct the qualitative interviews. She acted as an additional source of knowledge and guidance when I was developing the study tools and helped with translations and any other issues as they arose. Throughout the quantitative and qualitative studies, the core

team from whom I sought guidance in making decisions consisted of my supervisor David Osrin, Nayreen Daruwalla, and Apoorwa Gupta. Throughout the rest of this chapter, this is the team I refer to when I use the term ‘we’.

4.2. Ethical considerations

Research on violence against women is a sensitive subject and involves working with vulnerable people. There is a risk that disclosing experiences of violence could put women in further danger, and the experience of re-living frightening and painful events can also be distressing (272). In order to safeguard women as much as possible, I drew from WHO guidelines on conducting research on VAW. These guidelines help to ensure that research is conducted in a safe manner and to put structures and processes in place to mitigate potential harms (272). The entire study was conducted through SNEHA, who have many years of experience working on issues of VAW in the local community. Decisions were made in collaboration with SNEHA and advice was sought at each stage as to how best to proceed. This allowed me to feel confident that my research was being conducted appropriately, that we had systems in place to protect participants, and that it was relevant to the local community.

For the quantitative data collection, I worked with a team of 12 SNEHA data collectors. The team had been involved in collecting data from women every month for two years prior to the start of my study, and had therefore built rapport and trusting relationships with them. I decided to work with this team of investigators because we felt it was important that women feel as comfortable as possible during the survey. Working with a researcher familiar with the participant could risk having the opposite effect, with women potentially feeling that they were exposing themselves to someone whose opinion mattered and who might disclose their details elsewhere. After some discussion within the team we felt that women were likely to feel more comfortable with these data collectors than with a stranger. The team of investigators were all women, many of whom also lived in Mumbai’s informal settlements.

As the investigators had not previously collected data on violence or mental health, we held three full days of training to allow them to understand the nature of the study and the questionnaire, in order to ensure that they could answer questions or concerns that women had about the study. On the first day, the lead counsellor within the violence team

gave the data collectors an overview on violence against women in the community, helping them to understand what constitutes violence, particularly things that they may not have suspected, and how to interview women about violence in a sensitive manner. In particular, the team were trained on what to do if a woman disclosed violence, if she became distressed during the data collection, or if the interview was interrupted by someone who could put her at risk, based on WHO guidelines (272) and SNEHA experience. We discussed general questions about women's health, and the team were instructed to switch to these should the interview be interrupted. They were also instructed to explain that the survey was about women's health if questioned by family members (272). On the second day, a SNEHA clinical psychologist trained the team on mental health, explaining to them the definition of CMDs, the conditions we were interested in, and some of the key symptoms. She helped them to learn how to administer the GHQ-12 and Rosenberg self-esteem questionnaires (discussed further in section 4.3.5). On the third day, Apoorwa Gupta trained the team to administer the whole questionnaire. We went through each of the questions, explaining what information we were trying to elicit and addressing any misunderstandings. The team were given a specific referral contact within SNEHA for women whom they felt needed referral and who said that they wanted help, and they carried information leaflets with contact details for local organisations and sources of help, should women have wanted to seek help at a later date.

The data collection team worked in pairs to ensure their safety as well as that of participants (272). They visited women in their homes, explained the study to them, and gave them a participant information sheet (Appendix 1). If a woman agreed to participate, a suitable time and place for the interview was arranged and she was asked to sign a consent form (Appendix 2). Since the study might also be distressing for data collectors, we checked in regularly and held debriefing sessions halfway through and at the end of data collection to ensure that they were happy with the process and to give them an opportunity to talk about anything that they found distressing. We drew on existing SNEHA protocols and training packages designed to help data collectors manage their own safety and that of participants. Responses from these debriefings were very positive. The team felt that the data collection was going well, that they had learned a lot, and that they were doing useful and important work.

Apoorwa Gupta conducted most of the qualitative data collection, and I was present to observe and take notes. A SNEHA community officer or counsellor who was already

known to potential participants approached them for recruitment. They were informed about the nature of the study and given a participant information sheet (Appendix 3). Where possible, interviews were conducted away from the woman's home, either in the centre in which SNEHA offices and violence counselling services were based or in a SNEHA community centre. If the woman was not able to leave her home, a safe time for the interview was arranged. At the beginning of the interview, Apoorwa and I introduced ourselves to the participant in Hindi. Apoorwa then explained more about the study, who I was, and checked that the woman was comfortable to proceed. If so, she was asked to sign a consent form (Appendix 4) and we asked for permission to audio-record the interview. As with the quantitative data collection, if family members interrupted an interview, it was terminated or the topic was changed to women's health. Women were generally alone when interviewed, apart from some with young children who did not have anyone to care for them. Only one interview was conducted with another adult present: the participant's adult daughter, who also ended up participating. The woman's husband returned home part way through the interview and it was terminated.

For both quantitative and qualitative data collection, women were given information sheets and asked to sign two copies of the consent form. We asked if it was safe for them to keep their copies at home, in case a family member found them, or whether they would rather that SNEHA kept them on their behalf. We explained that they were under no obligation to answer any of the questions and that we could terminate the interview at any point. Any women who disclosed severe recent violence or seemed distressed, particularly from the quantitative survey, were flagged to the SNEHA counselling team. As per the SNEHA counselling centre protocol, counsellors did not intervene in the woman's case if she did not consent to psychosocial intervention, but her situation was monitored through a phone call or home visit

The study was approved by the UCL Research Ethics Committee (London: 8655/001) and the Tata Institute of Social Sciences ethics board (Mumbai). Copies of the ethics approvals can be found in Appendix 5.

4.3. Study settings

The quantitative and qualitative studies were carried out in different informal settlement areas within Mumbai. The quantitative study was based in areas of the Municipal wards M East and L on the eastern side of Mumbai. The qualitative study was predominantly carried out in Dharavi, the biggest informal settlement. Dharavi is situated within G North Municipal ward in central Mumbai.

Although located within the same city, the demographics of different informal settlement areas within Mumbai can differ and we often can see large inter-slum disparities (273). Some informal settlements are legally recognised by the government (notified), which affords them access to piped water, toilets and electricity as well as ration cards and voting rights. In contrast, informal settlements that are not legally recognised by the government (non-notified) do not have the same rights, which can lead to disparities in socio-demographic markers and health outcomes (273).

Whilst no official statistics exist, we know from the SNEHA Centres trial (discussed further in section 4.4.2) that in the areas where the quantitative study was carried out the population is predominantly Muslim. Just over half lived in *pucca* houses – those with the most solid structure – and the majority do not have access to a piped water supply, instead buying their water from a tanker or in containers (274).

Dharavi consists of a large area made up of numerous smaller informal settlements. Even within Dharavi populations can differ, with settlements in the centre often relatively older and wealthier than the newer settlements on the outskirts (275). In general, however, and in contrast to the areas of the quantitative study, Dharavi is predominantly Hindu (276). Anecdotal evidence suggests that due to the older settlement status, the extent of informal industry and higher employment rates, families in Dharavi are relatively wealthier than those in other informal settlements of Mumbai, although this is undocumented in the literature. In one area of Dharavi, the average household income was documented as 4000 Rupees per month, and almost all of the households had access to a piped water supply (275).

With a lack of published data to confirm, it was estimated that the two study areas would be similar in terms of housing conditions, access to water and sanitation facilities and

industries of employment, but that the participants in the quantitative study would be predominantly Muslim, relatively less well off and with lower employment rates than those in the qualitative study. Given that Dharavi has been the site of much attention from Non-Governmental Organisations, it was also assumed that residents in this area might have better access to health and social care services.

I decided to conduct the quantitative and qualitative studies in different areas in order to gather a range of data on violence experiences and mental health in Mumbai informal settlements. In addition, given that the SNEHA violence centre is located in Dharavi, I wanted to recruit participants for the qualitative study in this area so that they would have easier access to SNEHA services should they require them.

The population characteristics are discussed in Chapters 7 and 8 and the methods for each study outlined in the following sections.

4.4. Quantitative methods

4.4.1. Objective and outcomes

The objectives of the quantitative study were to explore the associations between women's experiences of violence, perpetrated by the husband or other family members, and symptoms of poor mental health. There were two primary outcomes: symptoms of CMDs measured by the 12-item version of the General Health Questionnaire (GHQ-12), and levels of self-esteem measured by the Rosenberg Self-Esteem questionnaire.

4.4.2. SNEHA Centres trial

In 2011, SNEHA established a cluster-randomised controlled trial, with a phased design, to explore the effects of community resource centres on the health of women and children (274). The trial was conducted in two of the city's 24 municipal wards (M East and L wards), each of which had a population of around 700,000 and was selected because of its low score on the Human Development Index. These municipal wards had seen a growth in numbers of informal settlements in the 20 years prior to the trial. Some of these settlements were located next to Mumbai's largest solid-waste dump, but most had surfaced roads, electricity supplies, and schools. The community resource centres were aimed at women of reproductive age and children under five, but were available to anyone

from the community who wanted to participate in activities or access services. Censuses were conducted at the beginning and end of the trial and targeted ever-married women aged 15-49 years (274).

4.4.2.1. Randomisation and allocation

Informal settlements within the selected municipal wards were identified and were subsequently divided into clusters along obvious physical boundaries. The sampling frame consisted of 159 clusters, each containing around 600 households. A rapid assessment tool was used to assess the health vulnerability of each cluster, and the 40 clusters with the lowest scores were included in the study. An online randomisation generator was used to assign the clusters to the intervention or control arm of the trial, resulting in 20 intervention and 20 control clusters (274).

4.4.2.2. Trial activities

A SNEHA community resource centre was established in each intervention cluster, with the aim of promoting maternal and neonatal health, child health and nutrition, sexual and reproductive health, and prevention of violence against women and children. Intervention activities included home visits, group meetings, day care for malnourished children, community events, service provision, and liaison with government bodies to improve communication with communities, outreach, and uptake (274). The censuses conducted before and after the intervention activities assessed three primary outcomes through an intention-to-treat analysis: the proportion of women with a met need for family planning; the proportion of children aged between 12 and 23 months who were fully immunised; and the proportion of children younger than five years of age with anthropometric wasting. Secondary outcomes included a number of additional child health metrics, but also the number of consultations for violence against women or children (274).

4.4.2.3. Birth cohort

A prospective observational birth cohort was nested within the SNEHA Centres trial with the aim of assessing child growth and nutrition over time. The cohort was established within the 20 intervention clusters of the trial. Infants born to mothers residing in these clusters between March 2013 and April 2014 were identified. Investigators were asked to

identify infants as soon after birth as possible and collect anthropometric data monthly until the last child recruited reached two years of age. Criteria for inclusion in the cohort included families with a live singleton birth at eight months gestation or greater who lived in the cluster and intended to stay there for at least 6 months.

1012 women and their respective infants were identified and 975 consented to inclusion in the cohort. A first data collection visit was made within 72 hours after the birth of the child, followed by monthly visits until the child reached two years of age. Because this cohort was focused on child growth and nutrition, a woman whose child died after recruitment was not followed up further. My study population consisted of the mothers of infants recruited into the birth cohort.

4.4.3. Rationale for selecting study population

After discussion with my supervisors and the team at SNEHA, I decided to collect data from women who had already been recruited for the birth cohort. These women were known to SNEHA and we hoped that they would therefore be more comfortable talking about their experiences of violence, as discussed in section 4.2. We also hoped that the existing rapport that the data collection team had established with participants would increase the likelihood of good quality data on violence, as women might be more likely to disclose experiences. We knew that all of the women recruited to the birth cohort had at least one child, which allowed us to assess violence beyond the perinatal period. Previously collected demographic data for these women also meant that more space could be made in the current questionnaire to assess experiences of violence in detail.

Using the formula for calculating the sample size for a cross-sectional survey(277), with 95% confidence, a precision of 5% and an expected prevalence of violence in the past 12 months of 23%, as documented in Maharashtra by the fourth NFHS(278), a sample size of 272 would have been needed. The NFHS-4 study assessed experiences of emotional, physical and sexual violence perpetrated by the partner in ever-married women aged 15-49(278). As my study was also going to assess economic, emotional and sexual violence in more detail than the NFHS-4 and assess violence perpetrated by any family member, I assumed that the reported prevalence of violence would be higher than that of the NFHS-4. If I inflated the prevalence of violence to 35%, the sample size needed to detect this would be 350.

Based on studies from India in general (62) and Mumbai slum areas (61), I assumed that on average 60% of women who had experienced violence would report symptoms of common mental disorders compared to 30% of women who had not experienced violence. Using the formula to calculate the sample size needed to detect a difference in these proportions (279), with 90% power and a cut-off for statistical significance of 0.05, a sample size of 164 would have been needed. This figure was adjusted for unequal group sizes assuming a ratio of 1:4 women reporting violence in the past 12 months versus those not, in line with the figures for Maharashtra from the NFHS-4 (278).

As there were still 601 women remaining in the cohort at the time of my study, it seemed that the sample size would be sufficient. Using data from the birth cohort mothers therefore appeared to be feasible, saved time, and meant that the chances of collecting good quality data were increased.

4.4.4. Participants

We planned to approach all women remaining in the birth cohort at the start of my study for recruitment and further data collection. These women lived in trial intervention clusters and had at least one child, which allowed us to assess violence in the perinatal period and beyond, as well as at other time points. When initially recruited to the birth cohort, the youngest woman was 17 and the oldest 42, with an average age of 26. This was in line with the age range of 15-49 commonly used in violence studies (272). For ethical reasons, I did not want to conduct the study with women younger than 18, but given that my study took place three years after the initial recruitment, no women needed to be excluded on this basis.

4.4.5. Existing data

As the quantitative study collected additional data on violence and common mental disorders for women already recruited to the birth cohort, most of the socio-demographic characteristics for the sample were taken from the existing cohort baseline survey. The exceptions were marital status and number of children, which were re-assessed. The existing demographic variables included the woman’s age at marriage, religion, level of

education, details of the household and assets, details of her husband and children. Some additional variables were constructed.

4.4.5.1. Operationalising covariates

Time dependent variables

The woman's age and her husband's age needed updating from the cohort baseline survey. To do this, I took age at the last survey and added the number of days that had passed between the two data collections. I used the same process to update the number of years that women had been married.

Family set-up

To get an idea of the type of family set-up that women lived in, I used existing variables that recorded how many other adult men and women were living in the household, because family set-up was not explicitly assessed in the cohort baseline survey. If a woman reported one or more other women, or two or more other men, living in the household, I recorded her as likely to be living in a joint family. 99% reported one or more other males living in the household, with 60% reporting one other male. With my existing knowledge of the setting I knew that it was very unlikely that 99% of the women were living in a joint family, which was also confirmed by SNEHA staff. I therefore think that the women reporting one other male in the household were referring to their husbands, which is why I chose two or more males to represent a joint family structure.

Recent migration to Mumbai

I wanted a variable to record whether the woman had migrated to Mumbai recently (within the past 10 years). To do this, I first created an updated record of the number of years the woman had been living in Mumbai, using the method described for the other time-dependent variables. I then highlighted any women who had been living in Mumbai for 10 years or less.

Socioeconomic status

To assess relative socioeconomic status, I created a score for each woman using Principal Components Analysis (PCA) based on ownership of certain assets and the characteristics of the home. I followed the methodology outlined by Vyas & Kumaranayake (280). I performed the PCA using the baseline birth cohort dataset so that women's socioeconomic status could be ranked against that of all women in the cohort and not just those for whom violence data were collected. Before the PCA was performed, I needed to process the data and decide on variables to include in the analysis. The cohort baseline survey asked about ownership of assets such as a television, mobile phone, fridge, motorbike, and so on. It also asked about characteristics of the house, such as the type of building, materials used for the floor and walls, whether the house was rented or owned, and whether there was access to a toilet. I first assessed the variables for missing data. Those with more than 10% missing data were excluded because their data were also heavily skewed. For PCA to be effective, it is necessary to minimise clumping and truncation. Clumping occurs when records are grouped together in a small number of clusters and truncation when the distribution is spread over a narrow range, making it hard to distinguish between different socioeconomic groups such as the poor and very poor (280). One way to try to minimise clumping and truncation is to include variables in the PCA that have a range of values across the population; those with highly skewed data do not satisfy this requirement. Excluded variables can be seen in table 3.

Table 3. Variables excluded from the principal components analysis due to missing data

Variable	% missing data
Ration card colour	42%
Source of drinking water: bottled	100%
Time taken to get drinking water	62%
Person who fetches drinking water	62%
Type of toilet	8%
Number of households sharing a toilet	17%

Whilst the proportion of missing data for toilet type was less than 10%, I decided to exclude this variable as 8% of missing data translated into a large number of records, and the families in our study population did not use a vast range of toilet types, meaning this variable would not be very useful.

For variables with lower levels of missing data, the data were imputed as described in Appendix 9. Excluding records with missing data reduces the sample size and statistical power and could potentially create a bias towards households of a certain socioeconomic status (281), so this was avoided where possible. Once the missing data were dealt with, all categorical variables of interest were changed into binary response variables, as data in categorical form are not suitable for PCA (280). I then assessed the mean, standard deviation and proportion distribution for each variable. Those variables that were highly skewed (a proportion of less than 10% or more than 90% positive) were identified and excluded from the PCA. All binary variables created from one categorical variable, such as the type of cooking fuel used, were treated as one; all were kept or excluded. However, some variables with similar characteristics and low frequencies were merged to increase the proportion of women with a particular household characteristic or asset (280). The descriptive analysis and decision about which variables to include in the PCA can be seen in Appendix 10, table 1.

To perform the PCA, I ran a factor analysis of a correlation matrix with 25 final variables, producing principal component factors and retaining only the first factor. The analysis used the correlation matrix rather than the covariance matrix to derive eigenvectors, as the data were not standardised to the same units (280). The first principal component is taken to be a measure of socioeconomic status, as studies have shown that this is a reliable component to measure wealth (280). I therefore only retained the first factor in the

analysis. Using the factor scores from the first component I created a continuous variable to represent socioeconomic status, which had a mean of 0 and a standard deviation of 1, as expected (280). I then split the socioeconomic score into quintiles to create broader socioeconomic categories.

4.4.6. Study tools

To complement the existing data from the birth cohort survey, I collected additional data on experiences of violence and symptoms of common mental disorders. This section outlines the study tools used to collect these data.

4.4.6.1. GHQ-12

To assess symptoms of common mental disorders, I used the 12-item version of the General Health Questionnaire. I made this decision based on a systematic review of tools used to assess mental health outcomes in studies on violence against women, which I conducted prior to my data collection. The manuscript of this systematic review has been included in Appendix 6. The findings of the review showed that in studies assessing general symptoms of common mental disorders or psychological distress in the context of violence, the GHQ is the most commonly used tool. Subbaraman and colleagues conducted a review of the literature and suggested that the GHQ-12 is the most rigorously validated screening tool in India (47). It has also been recommended for assessing common mental disorders, particularly in low- and middle-income countries (282).

The General Health Questionnaire was developed by David Goldberg in the late 1960s with a view to assessing psychiatric illness in general practice patients. It consisted of 60 questions designed to elicit self-reports (283). The survey has since been shortened into the GHQ-30, GHQ-28, GHQ-20, GHQ-12, and the GHQ-1 (284). The GHQ-12 is popular because of its brevity and its ability to perform as well as the longer versions. In addition, it “works as well in the developing world as the developed world and loses only a small amount by translation into other languages” (285).

The GHQ-12 has been validated in a number of countries, including India (282, 285-289). One study found that it had the highest internal consistency and area under the receiver operator characteristic curve (AUROC), a measure of discriminating ability, when

compared to four other routinely used screening tools to detect symptoms of common mental disorders in primary care settings in India (287). It has been validated in Hindi (290-292), and for use in community settings (282, 288, 290) as well as primary care settings (287, 289) in India. The GHQ-12 has been used in studies on VAW in a number of settings (293-297), including in India (99, 150, 298).

The GHQ-12 consists of twelve questions that measure symptoms of common mental disorders in the preceding two weeks (282). Six questions are positively phrased and six negatively, and there are two main possible scoring methods: the original bimodal method to indicate the presence or absence of the symptom and a Likert score method to scale the severity of each symptom (299). I decided to use the original bimodal scoring method, as proposed by Goldberg, because this was the method used by SNEHA and many of the validation studies conducted in India (282, 285, 287-289, 291, 300-303). Each item is scored 0 or 1, giving a final score ranging between 0 and 12 (282, 304).

Although I planned to analyse the GHQ-12 score as a continuous variable to examine whether there was an association between experiences of violence and more symptoms of CMDs, I also wanted to be able to elicit a measure of ‘caseness’ within my study population: the proportion of women who could be considered to have a CMD based on the number of symptoms that they reported. A variety of cut-off scores for this distinction have been suggested for the GHQ-12.

Goldberg proposed an initial cut-off of 2+ (305), but studies from across the world have proposed different optimal cut-offs in different settings. Goldberg and colleagues highlighted that there are “cultural differences in the expression of distress”, which could lead to differing validity coefficients in the GHQ-12 in different settings. Other explanations for different optimal cut-offs included the extent of defensiveness of the participant, the accuracy of the translation, and the administration of the survey (285). In order to decide on an appropriate cut-off for my study, I searched the literature to find studies that used the GHQ-12 in South Asian populations. I included articles for which I could access the full text, that used the bimodal scoring method, and that reported a proposed cut-off for ‘caseness’ rather than analysing a continuous score. I then separated validation studies from those that simply used the GHQ-12 in their assessment. Tables 4 and 5 summarise the papers

Table 4: Summary of papers validating the GHQ-12 in South Asian populations

Recommended GHQ-12 cut-off	Study year	Study location	Population	Sex	Criteria validated against	Sensitivity	Specificity	Youden index	References
Validation studies									
2+	2017	Goa	Community	Men	MINI, WHODAS	68.8%	73.1%	0.42	(282)
3+	1988	Calcutta	Hospital	Men & women	ICD-9	77.4%	89.7%	0.67	(300)
	1997	UK	Primary care	Women	CIS-R	96.7%	90.0%	0.87	(291)
	1999	Tamil Nadu	Primary care	Men & women	CIS-R	87.4%	79.2%	0.67	(289)
	2000	UK	Primary care	Men & women	CIS-R	78.1%	77.5%	0.56	(301)
4+	1998	Goa	Primary care	Men & women	CIS-R	87.0%	72.0%	0.59	(303)
	2006	Tamil Nadu	Community	Men & women	CIS-R	78.8%	64.7%	0.44	(288)
5+	1998	Goa	Primary care	Men & women	CIS-R	81.0%	79.0%	0.60	(303)
6+	2008	Goa	Primary care	Men & women	CIS-R	73.0%	90.0%	0.63	(287)
7+	1997	Bangalore	Primary care	Men & women	CIDI-PC	86.7%	88.9%	0.76	(285)

Recommended GHQ-12 cut-off	Study year	Study location	Population	Sex	Criteria validated against	Sensitivity	Specificity	Youden index	References
	2008	Goa	Primary care	Men & women	CIS-R	60.0%	93.0%	0.53	(287)
8+	2008	Goa	Primary care	Men & women	CIS-R	52.0%	97.0%	0.49	(287)

Table 5: Summary of papers using the GHQ-12 in South Asian populations

GHQ-12 cut-off	No. of studies	Study years	Study locations	Population	Sex	Cites a validation study for cut-off decision?	References
Other studies using the GHQ-12							
2+	18	1998-2018	Nationwide, North India, Chandigarh, Punjab, Karnataka, Bangalore, Pune, Jharkhand, UK	Community, clinical population, prison population, caregivers	Both: 16 Men: 1 Women: 1	Yes: 11 No: 7	(306-323)
3+	13	1997-2018	Kerala, Chandigarh, Deli, Uttar Pradesh, Ranchi, Pune, Scotland, Not specified	Community, clinical population, caregivers, army	Both: 12 Men: 1	Yes: 3 No: 10	(324-334)
4+	9	1998-2019	Goa, Tamil Nadu, Vellore, Maharashtra, Tripura, UK	Community, primary care, clinical population,	Both: 6 studies Men: 2 Women: 2	Yes: 7 No: 2	(335-343)
5+	4	2010-2016	Mumbai, Goa, Nationwide	Community and primary care	Both: 2 Men: 1 Women: 1	Yes: 4	(47, 99, 298, 344)
6+	2	2011-2014	Goa, Nepal	Community & primary care	Both: 1 Women: 1	Yes: 2	(345, 346)
7+	1	2010	Maharashtra	Community	Men and women	Yes	(347)
10+	1	2013	Nationwide	Community	Women	Yes	(150)

The majority of studies using the GHQ-12 in Indian or South Asian populations used a cut-off of 2+ or 3+. One validation study recommending a cut-off of 2+, the most recent validation of the GHQ-12 in India, was disputed by another set of academics who instead recommended that the same study should have derived a threshold of 7+ (286). Two of the four validation studies suggesting a cut-off of 3+ were conducted in the UK, albeit in British South Asian populations, around 20-30 years ago (291, 301). The study by Jacob and colleagues (1997) reported the highest Youden index (291) (see Table 4) . Assuming that sensitivity and specificity are of equal importance, Youden's index is a measure of the overall performance of a diagnostic test. The formula for the Youden index is (sensitivity + specificity -1). This produces a number between 0 and 1, where 1 represents a perfect test. The higher the Youden index, the better performing the test (348). However, one study concluded that the GHQ-12 underestimated distress in South Asian populations, particularly in women, and suggested that the cut-off of 3+ was too low (334).

One of the only studies to compare different mental health tools for use in Indian populations was conducted in 2008 in a primary care setting in Goa by Patel and colleagues (287). The study examined three cut-offs for the GHQ-12: 6+, 7+, and 8+. The 8+ threshold had the highest positive predictive value of the three, but only had a sensitivity of 52%, with a specificity of 93%, whereas the 6+ threshold had a lower positive predictive value but a sensitivity of 73% and specificity of 90%. A study from Mumbai's informal settlements suggested a cut-off of 5+ (47). Conversely, a study of women's mental health in a community setting in Nepal and another study by Patel and colleagues in Goa suggested a cut-off of 7+, both citing the Patel 2008 study (345, 346). SNEHA have routinely used a cut-off of 6+ to indicate the possible presence of a CMD. I therefore decided that I would use this same threshold in my study, given that it had a higher sensitivity, comparable specificity and the highest Youden index compared to the other cut-offs assessed in the Patel 2008 study (287). A copy of the GHQ-12 questions has been included in Appendix 7.1.

4.4.6.2. Rosenberg Self-Esteem Scale

To assess levels of self-esteem, I decided to use the Rosenberg Self-Esteem Scale (RSES). The RSES was developed by Morris Rosenberg in 1965 to measure global self-esteem in adolescents in New York (349). The scale's development focused on a number

of practical and theoretical considerations, including ease of administration, economy of time, unidimensionality (people can be ranked along a single continuum of self-esteem), and face validity (the scale measures what it is supposed to measure) (349). This has made it a popular tool to assess self-esteem in a range of populations. Whilst the scale has not been widely validated for use in India, it has been used in a number of Indian studies (350-352), and a study assessing its use in 53 nations validated a Hindi version in India (353). There have been suggestions that some of the RSES questions are ambiguous when used in other languages or cultures. For example, item 8 reads, *"I wish I could have more respect for myself"*. In five settings, including the Bangla version validated in Bangladesh, this had negative item loadings rather than positive loadings. In other words, it may be associated with higher rather than lower self-esteem. However, this did not appear to be the case for the Hindi version validated in India, which also had a Cronbach's alpha of 0.81, falling exactly at the mean of all 53 nations (353). Cronbach's alpha is a measure of the internal consistency of a test, which describes the extent to which all of the items measure the same construct (i.e. self-esteem). It is calculated as a number between 0 and 1 and acceptable values range between 0.70 and 0.95, though a maximum of 0.90 has been suggested (354). The Hindi version of the RSES therefore showed adequate internal consistency.

The RSES has been validated in a number of other low- and middle-income countries (355-358). It has also been used in a number of studies on IPV in low- and middle-income countries (359-362). The RSES has not yet been used in any studies on IPV in India, but Kalokhe and colleagues have developed a protocol for an intervention to prevent IPV in newly married women in informal settlements of Pune, published in 2019, in which self-esteem measured by the RSES will be one of the outcomes (363).

The RSES consists of 10 questions on global self-esteem. Five items are positively worded and five are negatively worded. The questions are rated on a four-point Likert scale from *strongly agree* to *strongly disagree,* which can either be scored 0-3 or 1-4, giving a total score ranging from 0 to 30 or 10 to 40, with a higher score representing higher self-esteem (357, 362). There are no validated thresholds for indicating low self-esteem, but a study in Bangladesh used a cut-off of <15 based on recommendations from different organisations (362). As with the GHQ-12, I was interested in analysing the score as a continuous variable, but also wanted to see what proportion of women had low self-

esteem. I therefore also used a cut off of <15 to indicate to low self-esteem. A copy of the RSES has been included in Appendix 7.2.

4.4.6.3. Violence questionnaire

With the help of SNEHA, I developed a detailed cross-sectional survey to assess women's experiences of violence. The survey investigated experiences of 49 different acts of violence, broken down by type into emotional, economic, physical, and sexual violence. It assessed when these experiences occurred (at any point in the lifetime, before marriage, after marriage, during pregnancy, in the two months after pregnancy, in the 12 months before the survey and in the month before the survey), severity of violence in relation to pregnancy (the same, less, or more than before pregnancy), the main perpetrator (husband/partner, natal family, in-laws, or other), and frequency in the past 12 months (once, occasional, most of the time, or all of the time).

The survey was informed by existing questionnaires on gender-based violence, including the WHO multi-country study on women's health and domestic violence against women (2) and the 2005-2006 National Family Health Survey of India (NFHS-3) (364). It was also informed by questionnaires used by SNEHA to assess women when they first contacted the organisation, and an analysis of the case records held at SNEHA, which documented experiences of violence in the local community. Finally, it was informed by the literature on VAW in India, particularly qualitative literature that describes more nuanced experiences of violence (159, 365), and the experience of SNEHA staff who have been working with survivors of violence in the local community for almost two decades.

After I developed the initial version, I discussed it with my supervisors and the SNEHA team, who drew on their many years of experience, adding valuable insight into which acts of violence women were likely to have experienced. I amended the questionnaire based on this feedback. For the parts of the questionnaire that had been previously validated in Hindi, such as the GHQ-12, the questions were included as written. The other sections were translated into Hindi by an external translator and subsequently back-translated into English to check their accuracy. The translated version of the questionnaire was checked once again with the SNEHA team, who gave feedback as to whether the translations and the wording of the questions would make sense to women.

Following this, the questionnaire was presented to the team of 12 data collectors and each question was explored in detail. This was part of the training given to the team to ensure that they understood what was being assessed in each question and to address any concerns, but it also acted as another level of feedback about the survey. The team highlighted areas where they thought that the woman would not be able to answer the question, or the wording was not clear, and amendments were made based on these suggestions. Finally, the questionnaire was piloted with around 20 women. Attention was paid to questions in which the woman did not understand what was being asked, and her general response to the questionnaire, including signs of fatigue. Again, amendments were made based on this feedback. By the time the questionnaire was administered, it had been through four rounds of feedback from SNEHA staff and women in the local community to ensure that it was functional and relevant to the local context.

The final questionnaire incorporated questions on violence from previously validated surveys from within India, but also included a much more detailed assessment of violence to reflect the experiences of the local community and the knowledge of the organisations that work closely with them. There were questions in the section on emotional violence that were not from the NFHS-3 or the WHO study on women's health and domestic violence against women. These related to things such as harassment due to not having a boy child, not bringing a sufficient dowry, and whether the woman was prevented from attending school or college. The entire section on economic violence was new (i.e. not included in the NFHS-3 or the WHO survey) and asked about coercion to work or not work, coercion to surrender her own income or explanations for the expenditure, deprivation of economic resources, including accessing parts of the house or being thrown out completely, and exclusion from household financial decisions. The questions on physical violence were largely the same as those asked in the NFHS-3, with some minor changes in the combination of acts or the order in which they were asked, based on what made most sense in the context, after discussions with the SNEHA team. When asking about the use of weapons, we removed the specification of knife or gun (used in the NFHS-3 and the WHO survey) because the team advised that these weapons are rarely used in this context. This was supported by Kalokhe and colleagues (160). We added the option of suffocation into the question on attempted murder, which in the NFHS-3 only included choking and burning, again on the advice of the SNEHA team.

Finally, the section on sexual violence in my survey was more detailed than the NFHS-3 and the WHO survey. These surveys asked about forced intercourse, forced sexual acts (but did not specify which), whether the woman had sex because she was scared of what would happen if she did not, and any forced acts that she found humiliating or degrading (2, 364). In addition to these questions, my survey asked about whether the woman had had sexual pleasure withheld, whether she had been forced to watch pornography and copy what she saw (also picked up on in Kalokhe's study (160), whether she had been forced to shave or cut her pubic hair, whether anyone had insisted on having sex with her multiple times, whether anyone had forced her to perform oral or anal sex, or whether anyone had ever used her forcibly to entertain others. These acts of sexual violence were again based on the knowledge and experience of SNEHA staff. The sexual violence section also included at the beginning acts that controlled the woman's reproductive decisions, such as forced use of, or prevention of, contraception, or forcing/preventing abortion. The full survey can be found in Appendix 7.3.

The completed questionnaire consisted of nine separate sections. The first was an introductory section to ease the woman into the questionnaire, and asked questions about demographic information that needed re-assessing. The second and third sections included the GHQ-12 and Rosenberg Self-Esteem scales, respectively. The fourth section included the violence questionnaire. This was followed by questions on perceived causes of violence, help seeking, and whether the woman was aware of, and had sought help from, SNEHA. The penultimate section focused on partner alcohol and drug use, and the final section asked the woman what helped her to remain positive and her sources of strength, to finish the survey on a more positive note. In total, the survey had 135 core items, with additional questions on details of violence if the woman had experienced a particular act, and a skip to the next question if she had not. The additional details included when the act of violence was experienced, the main perpetrator of the act, the severity during pregnancy as compared to before if the woman reported experiencing it during pregnancy, and the frequency of the act in the past 12 months, if the woman reported experiencing it in the past 12 months.

One of the strengths of my questionnaire was that it assessed violence in much more detail than other national and international surveys, which allowed for a more in-depth assessment of VAW relevant to the study context. The limitation was that the questionnaire was long: it took around an hour-and-a-half to complete, which risked tiring

participants. For this reason, it would not be possible to integrate it into a wider survey about women in the community. During the piloting phase, women seemed able to complete the questionnaire, but those who had experienced many different acts of violence were also asked the additional detailed questions, which may have been too much. We told data collectors that they should offer the woman a break during the survey or, if it was clear that it was becoming too much for her, offer to complete it at a later date if necessary, and if she wanted to continue.

4.4.7. Cultural validity of the questionnaire

Fontes and McCloskey (2011) discussed the role of culture in patterns of VAW. Whilst they recognised that some acts of violence transcend all populations and highlighted the risk of essentialising other groups based on racially charged stereotypes of the cultural manifestations of violence, they did acknowledge that violence patterns can be different for women in different settings, and often rooted in a particular context (366). In India, this view has been echoed by Kalokhe and colleagues, who argued that the WHO definition of domestic violence and subsequent national and international surveys fail to recognise important patterns of violence perpetration specific to the Indian context, including emotional violence because of dowry issues, infertility or not giving birth to a son, or the perpetration of violence by family members other than the husband (160, 367). With this in mind, I wanted to develop a questionnaire to assess experiences of violence that were relevant to the local community. Whilst I felt it was important to base this survey on pre-existing and widely used questionnaires, I wanted to complement these questions with additional ones to elicit more nuanced experiences of violence within the population of women that I was going to study. Not only would this help to contribute to the development of future surveys to gain more accurate estimates of violence prevalence within India, but given that I was interested in the relationship between violence and CMDs, there may be important aspects of the violence perpetration pattern that are associated with mental health outcomes but are missed in other existing surveys.

After I had developed an initial version of the survey, based on an assessment of existing questionnaires on violence, my reading of the literature and initial discussions with members of the SNEHA team, the survey was checked for content by the team. In particular they looked at the questions that were not based on the NFHS-3, given that they had a deep understanding of the patterns of violence within the local community.

Additionally, as suggested by Kalokhe and colleagues and supported by the experiences of SNEHA, questionnaires on violence against women in India should also focus upon perpetrators other than just the husband (160). This was added to the questionnaire to be able to more accurately capture women's experiences of violence.

In 2016, Kalokhe and colleagues published a validation of the Indian Family Violence and Control Scale (IFVCS), which they had developed in response to many of the issues with surveys on violence in India that my questionnaire also attempted to address (367). By this point, the questionnaire for my study was already developed and I decided to continue with its use. A comparison of the two surveys showed that the content was very similar, which adds a further level of validation. The major difference between the two surveys was that mine assessed economic violence, and included questions about the control of a woman's reproductive rights within the section on sexual violence, whereas the IFVCS combined these types of questions in a section on control and did not assess economic violence in its own right. My questions on economic violence included whether the woman was prevented from working or forced to work, whether she had money or basic necessities withheld, whether she was forced to hand over her income or had other assets taken or stolen from her, whether she was thrown out or had restricted access to the house, and whether she was excluded from financial decisions and forced to deal with debt. Kalokhe et al.'s questionnaire on similar acts of violence assessed whether the woman was able to spend money she had earned, and whether she was able to seek medical care for herself. Within the same section, it also assessed whether the woman was able to have contact with friends and family, to rest and relax when she wanted, have sex how and when she wanted, dress in the clothes that she wanted, and make her own decisions about family planning (367). Similar questions were included in my survey, but were spread between the emotional, economic, and sexual violence sections. There were some things that my survey did not assess but the IFVCS did. For example, we did not ask about whether the woman was able to dress how she liked or rest and relax when she wanted to. We also did not assess whether she was able to have sex how and when she wanted, but we did ask whether sexual pleasure was ever withheld from her. One thing to note is that the questions in the control section of the IFVCS were worded in the opposite way to the comparable questions in my survey. For example, where the IFVCS asked "during my entire married life, without being bothered by my husband or his family, I could take up a new job or remain in my current job if I wanted to" (367), my survey asked "has

anyone in your family, before or after marriage, prevented you from continuing with employment or taking up a job?"

4.4.8. Data collection

Data collection occurred between June and July 2016. At the start of my study, 611 women remained in the cohort. Data collectors visited women at home, explained the study, and provided a participant information sheet. If a woman agreed to take part, the data collector arranged for a suitable time and a private space to conduct the survey. If a woman was not at home or available on the first attempt, an additional two attempts were made to locate her. Women who were not available at this time (some of whom were in their home villages over the summer months) were revisited in November 2016.

After the training days, discussed in section 4.2, Apoorwa Gupta accompanied each pair of data collectors and administered the first interview for them to watch. The team continued with the data collection and she accompanied them for additional interviews to cross-check that the questionnaire was administered satisfactorily.

We encountered some logistical problems during the initial round of data collection in June and July 2016, as it was Ramadan and also the monsoon. Many women had gone back to their villages for the summer or were not willing to discuss violence, particularly sexual violence, during Ramadan. The team also struggled to move around because of the rain. In hindsight, the monsoon months are not the best time to try and collect data in this setting, but we had a small window when the data collection team were available and this was the only time in which most of the quantitative fieldwork could be done. As mentioned previously, where possible, women who were not interviewed during the summer because they had gone to their village (57 women) were revisited in November 2016 when the team were available again.

Data were collected on smartphones through CommCare, a mobile data collection platform (Dimagi, Inc. Cambridge MA, USA).

4.4.9. Data management and cleaning

This section outlines the steps taken to clean and prepare the data for analysis. Once collected, Latika Chordekar, a data manager for the SNEHA Centres trial, downloaded the data from the CommCare system and transferred them securely to me. At this point I converted them into a Stata dataset, did an initial check for any obvious problems such as missing fields or data, and stored the dataset in a secure folder.

4.4.9.1. Duplicate records

I identified ten duplicate records, which I investigated with the data team at SNEHA. A solution was found and the duplicates were removed. This left a total of 601 records in the dataset.

4.4.9.2. Data linkage

With the exception of marital status and the number of children, which might have changed since women were first recruited to the birth cohort in 2013 and were therefore reassessed in the current study, demographic characteristics and background information pertaining to the women themselves, their families, and their households were obtained by linking the current survey with the original birth cohort database. I decided to use these existing data to minimise the repetition of data collection and to shorten the current survey. In order to ensure that the tracing for the new survey made accurate links with the existing data, I used a probabilistic linking method as a quality control check to match women across the two datasets. Of women who were available for and consented to interview, 99.3% had matching demographic information, with only four missing these data. The linkage process has been described in more detail in Appendix 8.

4.4.9.3. Missing data

During the data cleaning process, I discovered that there were some missing data at different levels. Some of the demographic variables were missing data, and some of the data about the frequency of violence experiences in the last 12 months were missing. This resulted in the decision to exclude the 12-month frequency variable from any analyses beyond the descriptive statistics. In addition, a number of cases were missing from the

dataset. These included women who were already lost to follow-up at the start of my study and those who we could not collect data from during my survey. Appendix 9 describes in detail the process of assessing and managing missing data.

4.4.10. Operationalising dependent variables

Two of the outcomes of interest of the quantitative study were symptoms of CMDs measured by the GHQ-12, and levels of self-esteem measured by the RSES.

4.4.10.1. GHQ-12 scores

The 12-item General Health Questionnaire (GHQ-12) consists of 12 statements about symptoms of common mental disorders that may have been experienced in the previous two weeks. These questions can be answered with ‘yes’ or ‘no’. Six positively worded questions are scored as 1 if the respondent answered ‘no’ and 0 if the respondent answered ‘yes’, and six negatively worded questions are reverse scored. The scores are summed to give an overall score ranging between zero and 12, with higher scores indicating more symptoms of CMDs.

Any of the GHQ-12 questions that were unanswered, or which the respondent refused to answer, were recorded as missing in the dataset. In these cases, a global score could not be computed and the woman’s GHQ-12 status was recorded as missing. I constructed a variable to categorise women as those with a suspected CMD and those without, using a cut-off score of 6 or above for ‘caseness’, as described in section 4.4.6.1.

4.4.10.2. Rosenberg scores

The Rosenberg Self-Esteem questionnaire contains ten statements on positive and negative feelings about the self. The statements were assessed on a four-point Likert scale: ‘strongly agree’, ‘agree’, ‘disagree’, ‘strongly disagree’. I scored the five positive statements from three to zero. ‘Strongly agree’ was scored as three and ‘strongly disagree’ as zero. The five negative statements were reverse scored from zero to three: ‘strongly agree’ was scored as zero and ‘strongly disagree’ as three. I summed the scores to get a global measure of self-esteem that ranged from zero to 30, with higher scores indicating higher self-esteem.

As with the GHQ-12, if a woman did not answer one of the RSES questions, a global score could not be calculated and her RSES score was recorded as missing. I created a variable to identify women falling into the category of low levels of self-esteem, with a score of less than 15, as described in section 4.4.6.2.

4.4.11. Operationalising explanatory variables

4.4.11.1. General experiences of violence

I summarised women's experiences of violence by creating a variable coded 0 for 'no' and 1 for 'yes' if a woman reported experiencing one or more act of violence at any point in her life, and at different time points, including before marriage, after marriage, during pregnancy, in the past 12 months, and in the past month. I then created a separate variable for each type of violence (emotional, economic, physical, or sexual) and for each period of interest. To assess violence at any point after marriage, the variable was coded '1' if a woman responded 'yes' to experiencing one or more acts of that type at any of the time points listed after marriage, including during pregnancy, the past 12 months, and the past month.

4.4.11.2. Number of different acts of violence experienced

For each type of violence (emotional, economic, physical, or sexual) and each period of interest, I created a variable to count the number of different acts of violence that women reported experiencing, in order to explore the range of acts that they were exposed to. For example, if a woman reported being slapped as well as being suffocated, she would have experienced two types of physical violence. There were 14 total possible types of emotional violence, 12 economic, seven physical, and 16 sexual.

4.4.11.3. Frequency of violence experiences in the past 12 months

If a woman reported experiencing an act of violence in the past 12 months, she was asked the frequency with which it was experienced. The response options were a single event, occasionally, most of the time, or continuously. For each type of violence, I created a

variable to summarise the most cited frequency for each woman. Due to small numbers I also created a variable that collapsed the frequencies into two levels: single event or occasional and most of the time or continuous. When a woman cited more than one frequency equally which crossed categories, she was assigned to the group with the higher frequencies (most of the time or continuous). This was the case for five women (7%) for emotional violence, no women for economic violence, one woman (3%) for physical violence, and one woman (3%) for sexual violence.

4.4.11.4. Polyvictimisation

The term polyvictimisation in the literature is often used to describe a combination of violence such as child abuse, intimate partner violence and adult sexual abuse, however it has also been used in some cases to describe victimisation of multiple types of violence (emotional, economic, physical or sexual) at the same time (368). It is within this context that I use the term polyvictimisation in my study. I assessed levels of polyvictimisation in the 12 months and one month prior to the survey by constructing variables to flag different combinations of violence experienced. I created a summary variable that counted the number of different types of violence, ranging from one to four, and another more detailed variable describing the different combinations of violence, of which 15 were possible. I also decided to create a binary yes/no variable solely to highlight cases of polyvictimisation. This variable was coded yes (‘1’) if a woman had experienced more than one type of violence (emotional, economic, physical or sexual) in the past 12 months or the past month. The ‘no’ responses corresponded to women who only experienced one type of violence at each time point, as I was interested in comparing polyvictimisation to only experiencing one type of violence rather than to experiencing no violence at all.

4.4.11.5. Perpetrators

If a woman answered ‘yes’ to experiencing an act of violence at any point in her life, she was asked when it happened. If she reported violence before marriage, she was asked about the main perpetrator. The possible response options were ‘natal family’, ‘partner’, ‘future in-laws’, or ‘other’. Whilst the woman was not married at this point, the addition of the partner or future in-laws option was to assess whether she experienced violence within a romantic relationship or whether her future in-laws had an influence on her even before marriage. If a woman said that she had experienced violence at any of the time points

assessed after marriage, she was again asked who the main perpetrator was. The response options were ‘partner’, ‘in-laws’, ‘natal family’, or ‘other’.

To understand patterns of perpetration, I first created variables to record whether each person(s) had been cited as the main perpetrator of one or more acts of each type of violence. For example, whether the woman’s partner had committed any act of emotional violence at any point before marriage. This was repeated for the in-laws, the natal family, and ‘other’, and for economic, physical, and sexual violence. The process was then repeated for perpetrators after marriage. The questions asking about the main perpetrators allowed multiple response options, to account for situations where more than one family member might perpetrate violence equally, and the categories are therefore not mutually exclusive.

Following this, I created variables to count the number of times each perpetrator was cited for each type of violence and at each time point, to summarise the most frequently reported perpetrator within these different categories.

4.4.12. Study sample

When the birth cohort was established in April 2013, 974 women were recruited. The current data collection took place predominantly in June and July 2016, three years after the birth cohort data collection started. At this point, 600 (62%) women remained in the cohort, after one record that was in the dataset wrongly was removed (see Appendix 9). A reason for loss to follow-up was recorded for 354 out of the 374 other women who were no longer in the cohort, with 20 women unaccounted for. Table 6 presents the reasons for loss to follow-up before the current data collection began. The main reason was migration out of Mumbai (85%).

Table 6. Reasons for birth cohort loss to follow-up before June 2016

Reason for loss to follow-up	Frequency	Proportion
Migration	319	85.3%
Death of infant or child	14	3.7%
Refused to participate	16	4.5%
Not found after 3 visits	5	1.3%
Unknown	20	5.3%
Total	**374**	**100%**

After the data collection round in June and July 2016, 153 of the 600 women remaining in the cohort were not interviewed. Table 7 presents the reasons for this. 50% of women who were not found had migrated out of Mumbai and nearly 40% of women had gone to their village for the summer months. Another round of data collection was conducted in November 2016, in which 37 of the 57 women who had gone to their village were interviewed. After both rounds of data collection, 484 women participated in the survey.

Table 7. Reasons that data were not collected in June and July 2016

Reason for not collecting data	Frequency	Proportion
Migration	77	50.3%
Gone to home village	57	37.3%
At work	2	1.3%
Refused to participate	12	7.8%
Not done	4	2.6%
Mother's death	1	0.7%
Total	153	100.0%

During the data cleaning process, I found two duplicated records. After removing these, 598 women remained in the cohort and 482 had participated in the current survey; 49.5% of those initially recruited to the birth cohort in 2013, and 80.6% of those who remained in the cohort at the start of the current data collection in June 2016 (Table 8). I have described the process of removing duplicate records from the dataset in more detail in Appendix 9.

Table 8. Final sample available for subsequent analyses

	Number	Proportion
Women in the cohort	598	100.0%
Women available for interview	487	81.4%
Women consented to interview	482	80.6%
Women with demographic data matched	482	80.6%
Women with completed GHQ-12 and RSES	478	79.9%

4.5. Qualitative methods

4.5.1. Research objective

The aim of the qualitative study was to explore how women experience, understand, and cope with the nexus of violence and CMDs.

4.5.2. Study setting

The qualitative study was conducted in Dharavi, the largest informal settlement not only in Mumbai but also in Asia, with a population estimated at over a million and a population density of over 400,000 per km^2 (369). Dharavi has ‘notified slum’ status, meaning that as part of the Slum Improvement Programme of 1972 slum dwellers were recognised as having official and legitimate status and the government was supposed to provide basic amenities such as running water, electricity, toilets, and sewage disposal as well as ration cards (369). In reality, this has still not been implemented fully.

The SNEHA counselling centre is located in Dharavi, within a satellite hospital of one of the major city hospitals: Sion hospital. Dharavi and the nearby communities are where much of SNEHA’s primary prevention of violence work is carried out, and secondary and tertiary interventions are provided through the various services offered at the counselling centre. I decided to conduct the qualitative study there, rather than in the same informal settlements as the quantitative survey. This was firstly because the counsellors and community officers had access to more women in this community whom they could approach for recruitment into the study. It also meant that women would be close to

SNEHA's Counselling Centre should they need assistance during the study. Finally, given that the demographics of Dharavi are slightly different from those of the quantitative study setting, it might provide a different perspective on violence experiences. In the end, some of the women who were recruited by the counsellors did not live in Dharavi, but were attending SNEHA's Counselling Centre for services.

4.5.3. Selecting and recruiting participants

We recruited participants with the help of SNEHA counsellors and community officers. We wanted to interview women from the local community who had experienced violence. Women already known to SNEHA would fulfil this criterion and would allow an extra level of protection for participants should the interview process cause any distress. The women who were referred by the counsellors had already sought formal help from SNEHA and were still interacting with the organisation to some extent, with many still coming to access services such as follow-up of psychotherapy, legal cases, family counselling sessions, or counselling for their children. The women who were referred by the community officers mostly had not sought official help from SNEHA, but the community officers were aware of them and their circumstances, and able to continue to monitor them after data collection had taken place.

Women who participated in the focus group discussions were recruited in the same way as those who participated in interviews. One focus group included women who had accessed support from SNEHA counsellors and were currently attending group therapy sessions, and another included women referred by community officers who had not sought formal help. We were keen to have a balance of women referred from both sources because I felt that women who had made the choice to access services and possibly received them might have different narratives about mental health and coping compared to women who had not sought or accessed formal help.

We explained to both counsellors and community officers that we wanted to interview women who were experiencing violence and were aged 18 or over. We did not specify much more than that, so that we could elicit a range of violence experiences. One limitation of the recruitment process was that the counsellors often screened women based on their ability to 'talk'. If a woman was less educated or if she cried a lot and seemed distressed, they would suggest we did not interview her. From the point of view of

participant safety, this is as it should have been if the interview process was likely to cause more distress. In this sense, the counsellors acted as gatekeepers to the participants and helped to ensure that women we did interview would not be harmed by the process. However, excluding women because they were less educated and therefore might not have understood the questions as well, or because the counsellors thought that we did not want to interview a woman who was very distressed, may have meant that certain types of narratives were excluded.

4.5.4. Research approach

The aim of the qualitative study was to explore in more detail the relationship between violence and mental health, as well as understanding women's methods of coping. I hoped that the qualitative study would support the findings from my quantitative study and be able to provide more nuance and detail. The aim was not to develop a new theory on violence, mental health and coping, and I therefore did not think adopting a grounded theory approach was appropriate. Instead, I wanted to use a method that would be suited to analysing women's experiences thematically, but using existing knowledge from the literature and my quantitative findings. I assessed different mixed methods designs and decided that a triangulation design would be the most appropriate. With this method, the purpose is to use quantitative and qualitative approaches, combining their different strengths, in order to get data on the same topic that are different but complementary (370).

Within the triangulation design, I chose to use a convergence model. In the convergence model, "the researcher collects and analyses quantitative and qualitative data separately on the same phenomenon and then the results are converged (by comparing and contrasting the different results) during the interpretation. Researchers use this approach when they want to compare results or to validate, confirm or corroborate quantitative results with qualitative findings" (370). Given that I wanted to be able to support my quantitative findings with the qualitative ones, this model seemed to be the most appropriate. In addition, while I wanted the quantitative and qualitative studies to be complementary, I also wanted to them to be distinct parts of the project in their own right.

Given that I already had some pre-existing ideas about the types of themes that might be found in the qualitative data based on the literature and my quantitative study, I wanted to

use an approach that would combine inductive and deductive approaches. This would involve searching for evidence of pre-existing phenomena using the triangulation design described above, but also allowing new themes to emerge from the data that may not have been picked up in the quantitative survey. With this in mind, I decided to use a mixture of semi-structured interviews and focus group discussions and to analyse the data using the Framework approach.

I decided to use semi-structured interviews rather than open-ended in-depth interviews because there were some pre-identified topics that I wanted to explore, as well as allowing other topics to come through. I then decided to complement the interviews with a number of focus group discussions. I wanted to use vignettes in focus groups with violence survivors to explore whether similar narratives presented themselves when women were discussing a more generalised situation and not their own personal experience. I also wanted to be able to triangulate findings from women with the knowledge and experience of SNEHA staff working in the community and interacting with cases daily, as well as the quantitative findings.

4.5.5. Data collection

4.5.5.1. Data collection tools

Interview topic guides

I developed topic guides for the semi-structured interviews, which initially consisted of four main sections. The first section involved an exercise in which the woman was asked to think about the progression of her married life and identify how she felt at different moments, placing these moments on a scale with a smiley face at the top end and a sad face at the bottom end. This was to be used as a tool to prompt her to think about how she felt around the time of significant events, such as marriage and giving birth, as well as the progression of her marriage and marital relations in general. The second section was about the woman's experiences of violence. These questions prompted her to talk about times of conflict with her husband, how conflict might have changed during her marriage, and how she felt about it. The third section asked the woman about coping mechanisms, what she did when there was conflict with her husband, and what she believed could help.

The final section was about resilience factors. In this section we asked the woman what helped her to remain positive when there was conflict with her husband, why she thought some women struggled to cope with conflict, and what they could do to feel better. We started the interviews with general questions about the woman and her family to relax her and settle her into the interview before moving on to more difficult topics, although we found that many women were keen to discuss their experiences of violence right away. This is likely to be because they were used to talking to the team at SNEHA about such issues and because they were aware of the nature of the study. We made an effort to conclude the interviews on a positive note, drawing on the woman's strengths and asking her to think about things that made her happy and helped her to be positive.

Once developed, I sought guidance on the topic guides from my supervisors and the SNEHA team and they were amended based on feedback. After we had conducted a few interviews it became apparent that women were not able to complete the initial exercise on ranking their experiences between happy and sad. It was explained to them in various ways, but they tended to focus on the fact that they were not educated and so would not be able to complete it. I removed it from subsequent topic guides. After three interviews, we also decided that it might be useful to have a more quantitative measure of the woman's mental health status, as well as the narrative that she was to provide, and we added the GHQ-12 questions to the beginning of the topic guide.

After we had conducted a further ten interviews I felt that we were getting detailed information on violence experiences, but less information on women's mental health and coping mechanisms. We had a number of discussions within the team about how to probe about feelings and emotions. I decided to amend the topic guides again at this point and take a different approach in subsequent interviews. I decided to completely remove the probes on violence experiences because I felt that there were already a lot of data on this and women would find a way to talk about their violence if they wanted to. I added a section on patterns of distress that not only probed about emotions and feelings, but also the woman's general health, potential somatic symptoms, and cognitive symptoms such as overthinking. We asked women what changes they had experienced in their lives when they had problems with their health, such as effects on work or relationships, and what name they would give to these problems. I added a section on the perceived causes for women's health problems, what they believed could be done about them, a section on help-seeking, and a section towards the end to probe about how violence had affected

their health, if they had not already discussed this. Finally, I added a section on general beliefs, such as what caused health problems in women and what they could do to feel better. We also decided to take a more detailed case history from whoever had referred the woman so that we could use these details as prompts in the interviews if necessary. Again, I discussed the revised topic guide with my supervisors and the SNEHA team, and the final interviews were completed using this guide. A copy of both versions of the interview topic guide can be found in Appendix 7.4.

Focus group topic guides

I wanted to conduct focus groups both with women who had experienced violence and with some of the SNEHA community officers who knew a lot about violence in the community. For the focus groups with women who had experienced violence, I wanted to use a vignette to describe a general scenario, which would be used as a prompt to elicit women's opinions and beliefs about violence and its impact. Given that this was a group setting, I did not want to focus on women's individual experiences in case they were not comfortable disclosing, but they were welcome to discuss them if they wanted to, and in the end many of them did. In qualitative research, vignettes are "short stories about hypothetical characters in specified circumstances, to whose situation the interviewee is invited to respond" (371). They are advantageous when researching sensitive topics because participants are likely to view them as less threatening and have more control over at what point, if at all, they reveal personal information (372). The vignette made it possible to avoid asking women directly about their personal experiences. I developed a vignette, which described the situation of a woman and the different types of violence that she was subjected to within her family. I based the details on typical experiences in the study setting, drawing on the literature and the experiences of SNEHA staff, including things such as not being allowed to work, being criticised for housework, being harassed for having a girl child, being accused of having an affair, some acts of physical violence, and some involvement of the mother-in-law in addition to the husband. The story then described some of the symptoms the woman experienced, such as tiredness and lack of concentration, and described disclosure from a friend who was also experiencing violence but appeared to be in good health, in contrast to this woman. I developed probes to place throughout the vignette to understand women's perceptions of the scenario. The vignette and probes were discussed with my supervisors and the SNEHA team to ensure that they were relevant.

In the focus group with community officers, we also read the vignette and asked for feedback. The officers confirmed that it represented a typical situation and that women would be able to answer the questions well, and they suggested that we changed the names of the characters to be more relevant to the community. The rest of the topic guide for the focus group with community officers contained questions on patterns of violence within the community, their understanding of mental health and mental health problems experienced within the community, how women in the community coped with violence and mental health problems, and their beliefs about why some women who experienced violence became more distressed than others. The focus group topic guides can be found in Appendix 7.5.

4.5.5.2. Interviews

Interviews took place between July 2016 and May 2017. All but one were conducted by Apoorwa Gupta in either Hindi or Marathi, depending on the interviewee's preference. I conducted the other interview in English with the only participant who wanted to speak in English. The interviews were conducted in SNEHA's Counselling Centre, a community centre, or the woman's home when this was the best option for her. Once a woman had been approached for inclusion by either a counsellor or a community officer, the study had been explained to her and she agreed to participate, we arranged a suitable time and place to conduct the interview. At the start of the interview we explained the study again and checked that she was happy to continue. We then asked her to sign a consent form and asked for permission to audio record the interview. We explained that she was under no obligation to answer any of our questions and could terminate the interview at any point if she wished.

We conducted the data collection in line with WHO guidelines for conducting research on violence against women (272). We included a set of questions about women's health to switch to if the interview was interrupted by a family member or neighbour, particularly when the interview was being conducted in the woman's home, and we were prepared to explain a study about women's health to a family member if they questioned us.

Apoorwa Gupta followed the topic guides to conduct the interviews, beginning with the more open-ended questions and moving to the more detailed probes if necessary. On

average, the interviews lasted about an hour. Most were conducted in one sitting and three were conducted across two sessions. This was because they were long and the women were upset, so we felt it was best to give them a break. We asked them if they would like to continue, and if they said yes we arranged another time to complete the interview. For two of the women there were significant changes between the two interviews: one of them spent 10 days in a shelter to be able to get away from the situation and relax, and the other had a complete change of opinion between the two sessions, moving from never wanting to see her husband again to hoping and praying that he came back. It is unclear what caused this change, but it provided different perspectives within the data.

A number of women did become upset during the interviews. When this happened we would take a break and check that they were all right. We only continued the interview if they were happy to do so. For women referred by community officers who had not accessed SNEHA services, we would explain what SNEHA did and how they could help, and we would provide them with contact details should they want to seek help. If a woman seemed very distressed or was experiencing a lot of violence, we would relay this to their local SNEHA community officer so that they could follow up. Throughout the process we were aware of the sensitive and potentially distressing nature of the interviews, and we took care not to cause the woman any additional harm. Most women were willing and able to talk about their violence experiences in detail, and after the interview that I conducted in English, the woman thanked me for listening to her story and said that it was helpful for her to be able to talk properly about it and for someone to be interested. This supported the idea that the interview itself could act as an intervention and, in some cases, be beneficial for participants (272). It was also one reason why many women were happy with the services they received from SNEHA: they were listened to, and in SNEHA's experience, interviews sometimes help to catalyse a cathartic therapeutic experience for women.

After each interview Apoorwa Gupta and I had a debriefing to summarise what the woman had said, raise any issues or concerns, and plan for the next interview. We continued with the interviews until we felt that data saturation had been reached. This predominantly relied on Apoorwa Gupta and our debrief sessions because there was a delay in my being able to read through the transcripts, due to the duration of the transcription and translation process. We conducted 22 interviews in total.

4.5.5.3. Focus group discussions

We started the focus group discussions with a session with a group of community officers. It was conducted in a community centre in Hindi and lasted over an hour. We then ran two focus groups with women who had experienced violence. Apoorwa Gupta facilitated the sessions in a mixture of Hindi, English and Marathi. The first discussion took place in SNEHA's Counselling Centre and consisted of nine participants recruited by counsellors, all of whom were currently coming to SNEHA for group therapy. This session lasted almost two hours. The second focus group took place in a community centre with seven women recruited by community officers. This session lasted just over an hour.

As with the interviews, participants were approached for recruitment by counsellors and community officers who explained the study to them. We arranged the time and place for the focus group discussion and invited women who were interested in attending. We explained the nature of the study again, asked women to sign consent forms and asked for permission to audio record. For the sessions with women who had experienced violence, we explained that they were under no obligation to share their personal experiences but were welcome to if they wanted to. We also explained that they did not have to answer any questions that they did not want to, and that they could leave the session at any point if they wished. The same was explained to the community officers at the start of their discussion. Throughout the discussions we had to remind women a few times to try and speak one at a time and loudly enough for the recorder to hear them. In the session with community officers and the second focus group with women, all the participants were involved in the discussion, with a couple of women being more vocal than others. In the first focus group, a couple of women did not speak at all until right at the end when they were prompted by the others, and one woman in particular was very vocal. Apoorwa Gupta tried to manage the group dynamics, directing questions to specific people who looked like they wanted to contribute and trying to give everyone an opportunity to speak.

In each focus group with women who had experienced violence, one or two women became upset. In both cases they were immediately comforted by the other women in the group, and there seemed to be a strong sense of solidarity and understanding between them, even though some of their situations and circumstances were very different.

Three of the women involved in focus group discussions were also interviewed individually; one because we had already interviewed her before the community officer

recruited her for the focus group discussion. For one woman, we felt that she had more to say in the focus group but did not get a chance, and the other was one of the people who had not spoken in the focus group. We asked her whether she wanted to have an interview in a private setting and she agreed.

For participants in both interviews and focus groups, we decided not to offer financial incentives for participation, in line with SNEHA protocol, as this could set a precedent for the future and undermine the work that SNEHA do with other women. However, women were provided with prioritised access to SNEHA services if they wanted it and, as mentioned previously, the process of the interview itself could in some cases act as an intervention.

4.5.5.4. Transcription and translation

Once the interviews were recorded, they needed to be transcribed and translated into English. Initially, I wanted to use the same person for all of the transcripts, someone who had worked with SNEHA regularly in the past, but due to time restraints and the fact that some interviews were conducted in Marathi, this was not possible. The transcription and translation process took much longer than we expected, and because of this multiple people were employed in the process. Whilst this had the advantage of speeding up the process so that I could access the transcripts, although it still took a lot of time, it had the drawback of a potential lack of consistency between transcripts. For example, certain phenomena, particularly emotions, feelings, and other things where language may be important could have been translated differently by different people. On reading the transcripts, it also became apparent that some of the people employed had not always transcribed and translated verbatim, but instead had added their own interpretation. Some omitted certain things such as the use of bad language in the interview. To ensure the quality of the transcripts, each translation was cross-checked against the original audio file by Apoorwa Gupta. She looked particularly at sections that could not be understood by the person transcribing and sections that I had highlighted as potentially missing detail or being someone’s own interpretation.

Due to the transcription and translation process taking a long time, and the additional need to check the transcripts, there was a delay in my being able to read them and begin the analysis. This meant that I was unable to start the analysis as the data collection was

happening and to look for emerging potential topics to explore within the subsequent interviews. It also made it harder to know when data saturation had been reached. However, due to the discussions that we had throughout the data collection process, my presence at the interviews and the debriefing that we had after each one, Apoorwa Gupta and I were able to use the information that we had to make this decision, and the result was a rich data corpus.

4.5.5.5. My role in data collection

As I only speak a little Hindi, it was necessary to use a translator for data collection, but I decided that it would be better if someone was able to conduct the interviews completely in Hindi or Marathi rather than me conducting them with a translator. This was because stopping to translate constantly would have broken the flow of the interviews and taken a long time. Additionally, if women were disclosing sensitive and personal experiences I wanted them to be able to speak freely and without interruption. They might also have felt less comfortable speaking to me directly.

I worked closely with Apoorwa Gupta throughout the whole data collection process, both quantitative and qualitative, and it made sense for her to conduct the interviews and facilitate the focus groups. I spent time discussing the aims of the study and how I foresaw the data collection going before it began. By the time we had started collecting data, Apoorwa was immersed in the project and understood what we were trying to do. I therefore trusted her to conduct the interviews and we would feed back to one another after each one to discuss how it went and raise any issues or concerns.

I was present at all interviews except two or three and conducted one myself as previously mentioned. I thought about and discussed with Apoorwa whether my presence at the interviews would be problematic, given that I am not from Mumbai, and being a researcher from a foreign university likely carries a status that could be distracting or intimidating. We decided to try a few and see. Generally, women seemed comfortable with me being there and were happy to talk to Apoorwa in my presence. Had they been uncomfortable I would have left, although it is not clear whether they would have opened up any more in my absence. In some cases, I spent the duration of the interview distracting the woman’s young child who had accompanied her so that the interview could be conducted without

interruptions. In other interviews I listened and picked up what I could. I also took note of women's body language, tone of voice, and other non-verbal cues.

4.5.5.6. Difficulties or limitations with data collection

Some challenges to data collection stemmed from the language barrier. Because I did not always know exactly what was being discussed throughout the interview, it was difficult for me to add prompts at the time for things that could have been explored further. Additionally, the long delay in getting transcripts back meant that I was not able to assess how the interviews were being conducted. Generally, the interviews and focus groups went well and we ended up with excellent data. There were some points where I would have liked to have probed further, or where Apoorwa interjected in what the woman was saying because it was slightly off topic, whereas I would have let her continue to speak. I am not a trained qualitative researcher, however, and my method of conducting an interview may not have been preferable. Apoorwa was in a better position to understand how the women would speak to her in general, what would happen if she let them veer off topic, and how best to probe certain scenarios. In some cases, towards the end of the interview and once all questions had been asked, the recorder was switched off but the woman kept speaking. Apoorwa and I discussed this and agreed that, although often what the woman talked about was not relevant to the interview, we would leave the recorder running until the woman had stopped speaking and the interview officially ended in case she reverted to talking about something relevant. We tried to find a balance between capturing as much as we could and allowing the woman space to talk to us unofficially, without being recorded.

The other potential challenge was the power dynamic between Apoorwa and myself and the interviewee. Whilst it was definitely better that the interviews were conducted by Apoorwa, there were still socioeconomic status differences between them, and therefore in terms of their experiences of being women living in Mumbai. Whilst women did seem happy to speak to Apoorwa, it is unclear whether the content of their narratives would have been different had there been less of a power difference between them. The WHO guidelines recommend that, where possible, a woman from a similar background, but not from the same community, conducts the interviews (272). I was lucky that SNEHA assigned Apoorwa to my project for its duration, rather than me having to use a translator,

and she was able to interact with the women well and make them feel comfortable whilst conducting the interviews.

Conducting research as an academic from a Western setting in a non-Western country can be problematic. Not only does it create a power imbalance between researcher and participant, but it also risks biased interpretations and the imposition of Western views to explain phenomena that could result in “otherness” and potentially perpetuate damaging stereotypes. I tried to mitigate these risks in various ways. Firstly, I worked closely with a local organisation who were able to guide me in the most appropriate methods of study and interpretations of the findings. Data collection was carried out by women employed by SNEHA so as to reduce the power imbalance with participants and benefit from the knowledge and expertise of women who live and work in these settings every day. Finally, I tried to immerse myself in the environment as much as possible to be able to learn and gain valuable insights into the study setting. I was based in Mumbai for 18 months during the fieldwork and was in the SNEHA office almost daily to integrate myself as best I could into the team and develop good working relationships, particularly with those who assisted with the study.

4.5.6. Data analysis: the Framework approach

The Framework approach was first presented as a method of qualitative data analysis in the 1980s by Ritchie and Spencer (373). It has been used in the health and social science, nursing, healthcare, and policy research fields, and also in qualitative studies in psychology research (374).

The Framework approach sits within the broader qualitative analysis method referred to as thematic analysis (375). Neither are tied to a particular theory or epistemology and are flexible in their ability to fit with the specific aims of a research project (374). Thematic analysis allows for both inductive and deductive approaches to data analysis (376). Whilst some people have associated the Framework approach with a more deductive approach because of its systematic process, Gale and colleagues argue that it has no allegiance to either method and that “where the research sits along this inductive-deductive spectrum depends on the research question” (375). The additional advantage of Framework analysis is that it has a clear set of steps, which for me as a novice was an attractive option. It has been highlighted as a good method of analysis for researchers who are less

familiar with qualitative methods, though it does not negate the need to make analytic choices, interpret the data, and ensure "reflexivity, rigour and quality" (375). It has also been used in previous studies in the field of psychology and in exploring experiences of depression (374), similar to one of the aims of my study.

The defining feature of Framework analysis is the matrix output of rows and columns of data, whereby data can be summarised and reduced both across and within cases (375). There are seven main stages to conducting a Framework analysis. Drawing from the clear description of the stages by Gale and colleagues (375), I describe these stages in the following sections.

4.5.6.1. Transcription

Transcription can be a good way to become immersed in the data (375). As described in previous sections, the interviews and focus group discussions were transcribed and translated from Hindi or Marathi into English by external people hired for the process, although I transcribed the interview that I conducted in English.

4.5.6.2. Familiarisation

Gale and colleagues suggest that familiarisation is done through a mixture of reading the transcripts and listening back to the audio recordings (375). Due to the language barrier, I was not able to listen to the recordings, but I read through each full transcript multiple times, making notes of my first thoughts and impressions and checking anything that I did not understand with Apoorwa. I then began annotating the transcripts in Nvivo and writing memos for each. As I went along, I noted broader ideas or potential themes in a general analytic memo.

4.5.6.3. Coding

During the coding process, the researcher should carefully read through each transcript line by line and apply a 'code' or label to summarise each section. For more inductive approaches this is also the stage at which 'open coding' can take place (375). I used both inductive and deductive approaches to coding. I had specified some codes *a priori* that I wanted to look out for in the data. These were descriptions of violence that could fall into

the categories of emotional, economic, physical, or sexual as defined by my quantitative survey, descriptions of coping mechanisms, and descriptions of the severity of violence. I continued to assign codes to the data inductively as new themes arose. I analysed a couple of transcripts with the team at SNEHA to get feedback on some of the codes that I was using and to help generate new ones. I also went through the annotations that I had made during the familiarisation stage and my notes from the fieldwork to see whether any additional codes emerged. I carried out the coding in Nvivo (QSR International Pty Ltd. Version 11, 2017).

4.5.6.4. Developing an analytical framework

The process of creating an analytical framework involves taking the codes that have been generated from the initial coding phase and finalising a set of codes that can be applied to the rest of the dataset. At this point codes can be grouped together into categories (375). Once I had coded three transcripts and looked at the annotations and memos I had made during the familiarisation stage, I categorised codes into broader categories to begin the process of developing an analytical framework. I discussed the initial framework with my supervisors and the SNEHA team before amending it based on feedback by collapsing some categories and taking note of new categories or codes. I continued to code three more transcripts using this amended framework to see how well it fit the data. This process was repeated iteratively until I had a final analytical framework that we felt fit the data well and no new codes were emerging. The amendments included merging categories, renaming some, and generating new ones. The framework went through three major rounds of amendment and testing and the final version consisted of 13 main categories and 65 sub-categories. The final framework is in Appendix 7.6.

4.5.6.5. Applying the analytical framework

Once the framework was finalised I went back through all the transcripts and coded them accordingly, assigning each piece of data to one of the categories. This stage is often referred to as indexing (375) and I indexed all of the transcripts using NVivo.

4.5.6.6. Charting the data into the framework matrix

The charting stage involves summarising the data from each transcript into a spreadsheet matrix, with framework categories placed in columns and each case represented within a row. The aim of this stage is to reduce the data but maintain a balance with retaining the original 'feel' of the individual narratives (375). I created a spreadsheet in Microsoft Excel with a separate sheet for each main category. The subcategories within a sheet ran across the columns, and each row represented one interview or focus group discussion. Using NVivo, I then systematically created queries to pull out the data for a particular sub-category and interviewee and summarised the data within the corresponding cell in the spreadsheet. I tried to find a balance between retaining the words used in the interview and reducing the data. Where I found sections that I thought could be used as quotes in the later stages, I flagged them within the spreadsheet, noting the page and line numbers. I moved through each category sequentially until all the data were charted in the matrix.

4.5.6.7. Interpreting the data

The final stage of the framework analysis is to interpret the data contained within the matrix. I attempted to move between the summarised data and the original transcripts to reduce the data and draw out broader themes and categories emerging from women's narratives, looking both within and across cases to identify similarities and differences that shaped the themes. I attempted to identify within my data narratives that complemented and contrasted with the existing literature and my quantitative findings on women's experiences of violence within the community. I also explored new emerging themes. This resulted in two main sections of findings, one describing women's experiences of violence and the context within which it took place, and the other detailing the additional themes and concepts that were clearly of importance in women's narratives. These findings are presented in chapters 7 and 8.

4.5.7. Rigour and triangulation

Throughout the stages of the qualitative study, I tried to ensure quality and rigour. I spent time explaining the aims of the study in detail to Apoorwa and conducted debriefing sessions after each interview to understand what had been discussed, whether there were

any issues, and what changes, if any, we might want to make for the next interview. I sought feedback on the topic guides, methods of probing and general areas to explore with the team at SNEHA who have many years of experience interviewing and working with women from the local community who have experienced violence. I ensured that the transcripts were cross-checked by Apoorwa with the original audio-recordings and I sought guidance from my supervisors and the SNEHA team during the coding and analysis stages.

I also attempted to triangulate the data collected through interviews and focus group discussions with other sources of data. “Triangulation assumes that the use of different sources of information will help both to confirm and improve the clarity or precision, of a research finding” (373). To do this, we conducted a focus group discussion with officers who were working within the local community to see whether what they witnessed and experienced supported women’s narratives. I also discussed experiences of violence and its impacts on mental health with the wider team at SNEHA to understand whether my impressions and subsequently my findings were in line with what they knew from their years of work. I then triangulated my findings on violence experiences with the results of my quantitative study and with the literature, as was the case for the other emergent themes.

4.5.8. Personal reflections

This section highlights my personal reflections about the qualitative study as well as how my values, beliefs, and biases may have influenced the ways in which I collected and analysed the data. Reflexivity refers to the process of reflecting on ways in which our own background and experiences can influence our qualitative approach. A discussion of reflexivity is premised on the idea that research can never be value free and researchers should attempt to make their assumptions clear and transparent in order to strive for objectivity (373).

As mentioned previously, conducting qualitative research across a language barrier can add a number of additional challenges to the process. However, in addition, the language barrier created a level of disconnection between the data and me. When reading about the process of qualitative research, one thing that is often mentioned is the need to be immersed in the data. Whilst this was possible for me once I had all the transcripts, I could

not be immersed from the start and by the time I was reading the transcripts I was away from Mumbai. I wonder to what extent more immersion at the time of data collection would have altered my interpretations. Reading the transcripts allowed me to understand what women were narrating, but what I missed at that point were the non-verbal cues such as body language, the atmosphere in the room, the woman's tone of voice. Because I attended almost all of the interviews, I was able to remember how the woman was during the interview while I was reading her words, but that is not the same as understanding everything in the moment. Whilst reading the transcripts I was able to empathise with women, but possibly not to the extent that I would have done if the data were collected in my mother tongue. Having said this, a slight disconnection from the data may have allowed me to be more objective than I otherwise would have been during the analysis stages.

There were times during the analysis when I could feel that my emotions, values, and beliefs may have been influencing how I interpreted what I was reading. There were multiple moments in which I felt very angry, particularly at times when I was engaging with feminist literature and activism outside my PhD, and the process as a whole turned out to be more emotionally taxing than I had anticipated. I tried to notice when this was happening and record it in my analysis journal. I then tried to step away from the data and see whether I interpreted it in the same way when I came back to it. My feminist politics will, without a doubt, have influenced the way that I viewed and analysed the data and it is important to acknowledge this. I realised during the analysis how subjective the process can be, and how the codes that I generated might have differed from those of someone else with different values and beliefs. In this respect, it might have been helpful to have a team of researchers coding the transcripts to be able to get a range of perspectives. Unfortunately, time and budget restraints did not allow for this in my study, but I did try to check my codes and the analytical framework with my supervisors and the SNEHA team to seek alternative perspectives.

On the whole I was happy with how the data collection stage went. There were some areas of transcripts that I might have wanted to probe further or clarify, but working with Apoorwa was the best possible option and I am grateful to SNEHA for assigning a team member to work closely with me during the study. Conducting the interviews with a translator would have meant that the interviews might have been long and disjointed, and with the risk that the woman might not trust me enough to speak. It is also possible that a

translator might have summarised what was being said in the moment and added her own interpretations, which could have influenced subsequent probes. I saw this to some extent with the translations of my transcripts, where in some cases rough summaries had been written rather than verbatim translations and personal interpretations had been added. Apoorwa was able to understand the nuance of what was being said and probe as she saw fit. Additionally, while all of the different guidelines and trainings can teach you how to conduct research on sensitive topics, how to probe appropriately, and what to do if a participant becomes distressed, what it cannot do is teach you how to respond in a culturally appropriate way. For example, in the UK if someone were to cry, the usual response would be to offer them a tissue. This is not what Apoorwa did: she offered her water instead, which is something that I would not have known to do had I not seen it.

The process of reflexivity is something that I tried to maintain throughout the qualitative study and my reflections are detailed further in chapters 7 and 8 describing the qualitative findings.

Chapter 5

Women in Mumbai's informal settlements: a description of socio-demographic characteristics, experiences of violence, symptoms of common mental disorders and levels of self-esteem

Key findings

- Lifetime prevalence of violence is high (44%)
- Emotional violence is the most commonly experienced
- Violence patterns are complex and frequent
- In-laws are the main perpetrators of emotional and economic violence
- The prevalence of women with symptoms indicating presence of a CMD is higher than seen nationally but lower than other studies in Mumbai informal settlements

5.1. Introduction

In this chapter I present descriptive analyses of the study sample. I provide an overview of the sample's socio-demographic characteristics. I then describe the prevalence of violence by type, patterns of violence, the distribution of GHQ-12 scores, frequency of symptoms of CMDs, distribution of RSES scores, and levels of self-esteem.

5.2. Methods

Chapter 4 described the study design, data collection, and data management methods, as well as the treatment of missing data and operationalisation of dependent and independent variables. This section outlines the steps taken to perform a descriptive analysis.

5.2.1. Management of variables

5.2.1.1. Socio-demographic characteristics

The socio-demographic variables contained information about the woman, her family, and her household. In order to manage these variables in a more structured way, I split them into four groups: those that related to women themselves, such as age and number of years of education, those that related to her marriage, such as number of years married or number of children, those that related to the household, such as religion or socioeconomic status, and those that related specifically to her husband, including age, education, and substance use (women provided data about their husbands in the cohort baseline questionnaire).

This decision was based on the advice of Victora et al, who suggested that, when exploring the effect of a possible risk factor on outcomes in a multivariate model, the "decision on which factors to include in the model should be based on a conceptual framework describing the hierarchical relationships between risk factors" (377). Because I knew that I was planning to do a multivariable analysis, I decided to split the socio-demographic variables into hierarchical categories. The categories were informed by the risk factors included in Heise's ecological framework of violence, which contained variables at the individual, relationship, and wider family or household level (17). I adapted this for my purposes. For example, there were no socio-demographic variables assessed at the societal level, so this level was not included in my conceptual framework. I also decided to separate individual factors for the woman and the husband, giving four categories of variables in total: two at the individual level.

5.2.1.2. Comparison with National Family Health Survey (NFHS) estimates

The 2015-6 NFHS-4 assessed experiences of IPV and reported results for urban Maharashtra (278). However, the previous NFHS-3 of 2005-6 reported results for IPV in ‘Mumbai slum’ areas within the Maharashtra state report (46). I wanted to compare the prevalence of violence in my study with that of the NFHS. Unfortunately, the NFHS-4 did not report results for Mumbai slum areas. I therefore decided to compare my results with the NFHS-4 for urban Maharashtra, as this survey was conducted at a similar time to mine, and also with the NFHS-3 because this specifically reported results for the same study setting as mine, even though it was done ten years earlier.

The NFHS questionnaire asks ever-married women aged 15 to 49 years about experiences of physical, sexual, and emotional violence perpetrated by their husband. For both NFHS questionnaires (version three and four), seven questions assessed physical violence, two sexual violence, and three emotional violence (364, 378). In order to compare the prevalence of violence in my study with that assessed by the NFHS, I created a variable for experiences of physical, sexual, and emotional violence using only questions that were comparable to the NFHS, and restricted responses to experiences perpetrated by the husband at any point after marriage. This allowed for a more meaningful comparison of the prevalence of IPV between the two surveys. Appendix 10 Table 2 outlines the questions used.

5.2.2. Descriptive analyses

The descriptive analysis of the sample provides measures of central tendency for socio-demographic characteristics and frequencies and proportions of women with different experiences of violence. These include the type of violence, violence at different time points, the number of different acts of violence, frequency, polyvictimisation, main perpetrators, and a comparison with the Indian NFHS. I also present measures of mental health through a description of GHQ-12 and RSES scores. Where statistical tests were used to explore the difference between proportions, I used a two-proportion z-test.

5.2.2.1. Periods assessed

I summarise violence experiences for all time points assessed in the survey to allow for an exploration of patterns of violence over a woman's lifetime. The time points include before marriage, after marriage but before pregnancy, during pregnancy, in the two months after pregnancy, in the past 12 months, and in the past month. Interviewers also asked about main perpetrators of violence before marriage, and at any point after marriage, to explore patterns of perpetration over a woman's lifetime, and these time points are summarised. However, for the frequency of violence experiences, the number of different types of violence, polyvictimisation, and the comparison of demographic characteristics by type of violence, I only report the past 12 months or the past month, as these were the most recent time periods and were less likely to be subject to recall bias. Table 9 outlines the chapter sections and corresponding periods assessed.

Table 9: Results sections included in Chapter 5, with corresponding periods

Section	Time period assessed
Socio-demographic characteristics	General: no time period
Violence experiences	Lifetime
	Past 12 months
	Past month
	Other: ● Before marriage ● After marriage before first pregnancy ● During any pregnancy ● During pregnancy with cohort child ● In the 2 months after birth of cohort child ● At any point after marriage
Comparison with NFHS	Lifetime
Number of different acts of violence experienced	Past 12 months
Frequency of violence	Past 12 months
Polyvictimisation	Past 12 months and past month
Main perpetrators of violence	Past 12 months
Socio-demographic characteristics by type of violence	Past 12 months
GHQ-12 scores	Past two weeks
Rosenberg self-esteem scores	General: no time period

5.3. Results

5.3.1. Study sample and demographics

The median age of the women in the sample was 28 years (IQR 25-31), and 18 years at marriage (IQR 17-20). Most women (97%) were married and living with their husband. Around two-thirds had been living in Mumbai since birth. Of those who had not lived in Mumbai since birth, the average number of years lived in the city was 17 (IQR 13-22); around 5% of women had migrated to Mumbai within the last 10 years. Women had completed a median seven years of education (IQR 3-9), but less than 2% were currently employed (Table 10).

Table 10. Characteristics of study sample: women enrolled to the birth cohort (n=482)

Characteristic		Frequency (%)
Employed		6 (1.2%)
Marital status	Married and living with husband	468 (97.1%)
	Married but not living with husband	12(2.5%)
	Separated	1 (0.2%)
	Widowed	1 (0.2%)
Living in Mumbai since birth		310 (64.3%)
Recently migrated to Mumbai (<10 years)		22 (4.6%)
N		**482 (100.0%)**

Husbands were around four years older than their wives, with a median age of 32 years (IQR 29-37). They had completed a similar number of years of education as women with a median of 7 years (IQR 5-10), but over 99% were employed, compared to less than 2% of the women. Over 50% of the men used tobacco, 8% drank alcohol, and 1% used drugs or other recreational substances (Table 11).

Table 11. Characteristics of the husbands of the cohort women (n=482)

Characteristic		Frequency (%)
Employed		479 (99.4%)
Substance use	Tobacco	272 (56.4%)
	Alcohol	39 (8.1%)
	Drugs	6 (1.2%)
N		**482 (100.0%)**

Women had been married for a median nine years (IQR 5-13) and around 60% had two or three children, with 12% having only one and 7% having more than five. Around two-thirds had both male and female children, and 20% had only female children (Table 12).

Table 12. Characteristics of cohort women's marriage (n=482)

Characteristic		Frequency (%)
Number of children (parity)	One	55 (11.4%)
	Two	158 (32.8%)
	Three	127 (26.4%)
	Four	69 (14.2%)
	Five	39 (8.1%)
	More than five	34 (7.1%)
Sex of children	All male	75 (15.6%)
	All female	98 (20.3%)
	Male and female	309 (64.1%)
N		**482 (100.0%)**

53% of families were nuclear and 47% were joint. Most households were Muslim (88%). 24% of households fell into the highest socioeconomic status quintile, measured in comparison to other households recruited into the cohort study, compared to 15% in the lowest quintile, represented by a median socioeconomic status score of 0.17 (IQR -0.52-0.99) (Table 13).

Table 13. Characteristics of cohort women's household (n=482)

Characteristic		Frequency (%)
Family set-up	Joint family	226 (46.9%)
	Nuclear family	256 (53.1%)
Religion	Hindu	58 (12.0%)
	Muslim	423 (87.8%)
	Other	1 (0.2%)
SES quintile	1 (lowest)	71 (14.7%)
	2	94 (19.5%)
	3	101 (21.0%)
	4	100 (20.8%)
	5 (highest)	116 (24.1%)
N		**482 (100.0%)**

5.3.2. Experiences of violence

5.3.2.1. Lifetime

Over their lifetime, 44% of women reported one or more of the acts of violence assessed in the survey, perpetrated by a family member either before or after marriage. Among these women, a third (33%) reported one or more acts of emotional violence, over a fifth reported one or more acts of economic or physical violence (22% and 23%, respectively) and almost 12% reported one or more acts of sexual violence (Table 14).

Table 14. Frequency and proportion of women experiencing one or more acts of violence in their lifetime

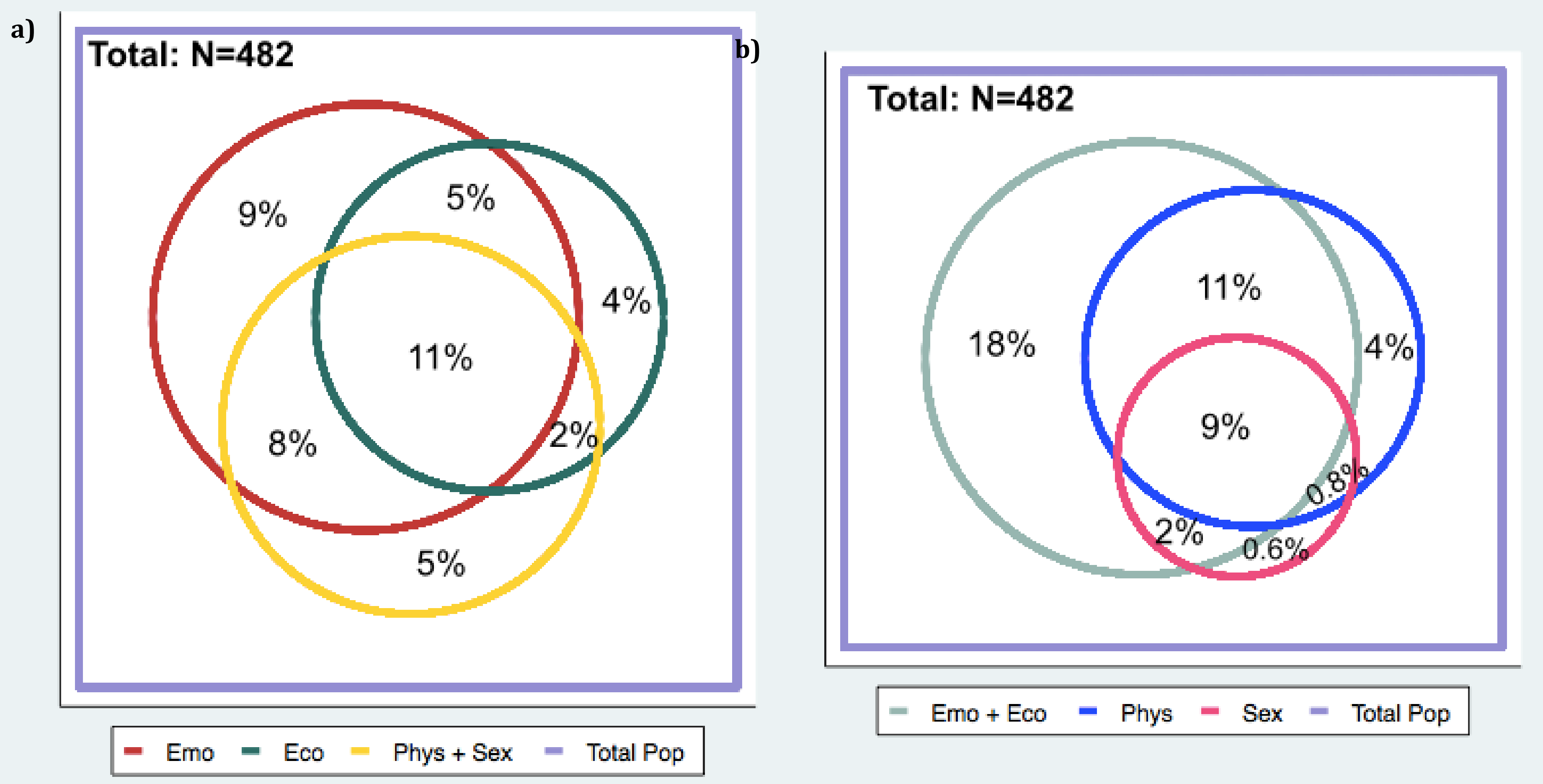
Type of violence	Frequency	Proportion
Any violence	211	44%
Emotional violence	159	33%
Economic violence	106	22%
Physical violence	113	23%
Sexual violence	57	12%
N	**482**	**100%**

Figure 2 shows the proportion of women reporting different forms of violence across the lifetime and how the categories of violence overlap using a proportional Venn diagram. When considering emotional and economic violence separately but physical or sexual violence combined (diagram a), the greatest proportion of women reported one or more experience of all three categories (11%). More women reported emotional violence alone compared with economic violence (9% versus 4%), and 5% of women reported physical or sexual violence without experiencing emotional or economic.

When considering emotional or economic violence combined but physical or sexual violence separately (diagram b), we see that the greatest proportion of women reported experiencing emotional or economic violence without the presence of physical or sexual violence (18%). Only a small proportion of women reported physical or sexual violence alone, but 11% of women reported physical violence alongside emotional or economic violence.

The diagrams in Figure 2 suggest that women predominantly experience emotional and economic violence, that the two often co-exist and that physical and sexual violence rarely occur without some form of emotional or economic violence as well.

Figure 2: Proportional Venn diagrams showing the distribution of women who experienced a) emotional, economic and physical or sexual violence combined, b) emotional or economic violence combined, physical and sexual violence across the lifetime



5.3.2.2. Past 12 months

In the 12 months prior to the survey, 15% of women reported emotional violence, almost 11% reported economic violence, and over 6% reported physical or sexual violence. Of women who had experienced emotional, economic, or sexual violence at some point, around half reported the same type of violence in the past 12 months. Around a third of women who had experienced physical violence in their lifetime had also experienced it in the past 12 months (Table 15).

Table 15. Frequency and proportion of women who experienced one or more acts of violence in the past 12 months, for all women and those with at least one lifetime experience

Type of violence	Frequency	Proportion of all (n=482)	Proportion of those with at least one lifetime experience, (n)
Any violence	111	23%	53% (211)
Emotional violence	74	15%	47% (159)
Economic violence	52	11%	49% (106)
Physical violence	33	7%	29% (113)
Sexual violence	32	7%	56% (57)
N	**482**	**100%**	

5.3.2.3. Past month

Over 13% of women reported emotional violence in the month prior to the survey, around 10% reported economic violence, and 4% and 6% reported physical and sexual violence, respectively. Around 90% of women who reported emotional, economic, or sexual violence in the 12 months before the survey also reported it in the last month. Around 60% of women who reported physical violence in the 12 months before the survey also reported it in the last month (Table 16).

Table 16. Frequency and proportion of women experiencing one or more acts of violence in the last month, for all women and those who had experienced violence in the past year

Type of violence	Frequency	Proportion of all (n=482)	Proportion of those with at least one experience in the past year, (n)
Any violence	97	20%	87% (111)
Emotional violence	65	14%	88% (74)
Economic violence	47	10%	90% (52)
Physical violence	20	4%	61% (33)
Sexual violence	28	6%	88% (32)
N	**482**	**100%**	

Table 17 shows the combined proportion of women reporting one or more acts of emotional and economic violence over a lifetime, in the 12 months prior to the survey, and in the month prior to the survey. 39% of women reported combined emotional or economic violence in their lifetime, 20% in the past 12 months, and 17% in the past month. At each time point these proportions were around 5 percentage points higher than the proportion of women reporting emotional violence alone. A greater proportion of women reported emotional than economic violence at each time point.

Table 17 shows a breakdown of sexual violence into two groups, one including questions about acts of sexual abuse and the other including only questions about the control of reproductive decisions. These were assessed over the lifetime, in the past 12 months, and in the past month. Over their lifetime, 9% of women had experienced one or more acts of sexual abuse and 6% one or more acts of control over their reproductive rights. This compares with a combined lifetime prevalence of 12%.

The combined prevalence of sexual violence in the 12 months prior to the survey was 7%. When broken down, 5% of women reported acts of sexual abuse and 4% reported abuse of reproductive rights. The same proportion of women (5%) also reported acts of sexual abuse in the past month, whilst 3% reported abuse of reproductive rights. This compares to a prevalence of 6% for overall sexual violence in the month prior to the survey.

Table 17. Frequency and proportion of women experiencing one or more acts of combined emotional and economic or sexual violence (including and excluding control of reproductive rights) over a lifetime, in the past 12 months and in the past month.

Type of violence	Timescale	Frequency	Proportion
Emotional and economic violence combined	Lifetime	187	39%
	Past 12 months	94	20%
	Past month	83	17%
Sexual violence excluding control of reproductive rights	Lifetime	41	9%
	Past 12 months	25	5%
	Past month	24	5%
Sexual violence: only control of reproductive rights	Lifetime	28	6%
	Past 12 months	17	4%
	Past month	12	3%
N		**482**	**100%**

5.3.2.4. Violence at different time points

Before marriage, 17% of women reported one or more acts of emotional violence, around 5% reported economic violence, 2% reported physical violence, and only one woman reported sexual violence. A quarter of women reported emotional violence after marriage, but before their first pregnancy, a fifth economic or physical violence, and 10% sexual violence. The proportion of women reporting each type of violence after marriage but before their first pregnancy was similar to the lifetime prevalence of each, and was higher than any other time point assessed after marriage, including within the 12 months prior to the survey.

For each type of violence, the prevalence was lower during any pregnancy than after marriage but before the first pregnancy, and the prevalence was lower still during the cohort pregnancy. However, 17% of women still reported emotional violence, around 10% reported economic or physical violence, and 3% reported sexual violence during the cohort pregnancy. In the two months following the birth of the cohort child, the levels of each type of violence were lower than during the pregnancy, with 12% of women reporting emotional violence, around 7% reporting economic violence, over 4% reporting physical violence, and over 2% reporting sexual violence. The proportion of women reporting each type of violence in the 12 months and one month prior to the survey (Table 18) was higher than during or just after pregnancy, but was still lower than the proportion of women who reported experiencing violence immediately after marriage (before their first pregnancy).

Overall, at any point after marriage, including within 12 months and one month prior to the survey, almost 30% of women had reported experiencing one or more acts of emotional violence, around 20% economic or physical violence, and 12% sexual violence (Table 18).

Table 18. Frequency and proportion of women experiencing one or more acts of violence, at different time points (n=482).

	Any violence	**Emotional violence**	**Economic violence**	**Physical violence**	**Sexual violence**
Lifetime	211 (44%)	159 (33%)	106 (22%)	113 (23%)	57 (12%)
Before marriage	98 (20.3%)	81 (16.8%)	23 (4.8%)	9 (1.9%)	1 (0.2%)
After marriage, before first pregnancy	182 (37.8%)	123 (25.5%)	95 (19.7%)	96 (19.9%)	48 (10.0%)
During any pregnancy	125 (25.9%)	96 (19.9%)	55 (11.4%)	52 (10.8%)	17 (3.5%)
During pregnancy with cohort child	107 (22.2%)	80 (16.6%)	47 (9.8%)	41 (8.5%)	14 (2.9%)
In the 2 months after cohort child birth	80 (16.6%)	57 (11.8%)	35 (7.3%)	21 (4.4%)	11 (2.3%)
At any point after marriage	192 (39.8%)	134 (27.8%)	102 (21.2%)	110 (22.8%)	57 (11.8%)
N	**482 (100.0%)**	**482 (100.0%)**	**482 (100.0%)**	**482 (100.0%)**	**482 (100.0%)**

5.3.3. Comparison with National Family Health Survey

Table 19 shows a comparison of the prevalence of each type of violence between my study and the prevalence figures from 'urban Maharashtra' in the NFHS-4 and 'Mumbai urban slum areas' in the NFHS-3. Similar levels were reported for emotional, physical, and sexual violence. No statistically significant difference, as assessed by a two-sample z-test of proportions, was seen between the prevalence of violence experienced between the NFHS-4 and the current study, or the NFHS-3 and the current study.

Table 19. Comparison of violence prevalence between the NFHS-4 or NFHS-3 and the current study, by type of violence

	Emotional violence	Physical violence	Sexual Violence	Physical or sexual violence	Emotional, physical or sexual violence
NFHS-4 (n=1220)	9.3%	16.3%	1.5%	16.4%	18.4%
NFHS-3 (n=1,107)	8.9%	22.9%	1.9%	22.9%	25.2%
Current study (n=482)	7.0%	19.5%	2.3%	19.9%	22.4%

5.3.4. Number of acts of violence

The graphs in Figure 3 show the number of different acts of violence experienced in the 12 months prior to the survey, by type of violence. For each type of violence, questions were asked about different specific acts. In total, there were 14 acts of emotional violence, 12 acts of economic violence, seven acts of physical violence, and 16 acts of sexual violence. These are outlined in table 20.

Of women who had reported emotional violence in the 12 months prior to the survey, 34% reported only one type of emotional violence, 22% two types, 26% three or four types, and 19% between five and 11 different types of emotional violence. No women reported experiencing all 14 different acts of emotional violence assessed. 75% of women who reported economic violence in the 12 months prior to the survey reported only one of the types of economic violence assessed, with 12% reporting two and 14% reporting between three and seven acts of economic violence. No women reported experiencing all twelve types of economic violence. Of women who reported physical violence in the 12 months prior to the survey, 58% reported only one type of physical violence. 18% reported two types, and 15% three or four different types. Only one woman reported experiencing all seven acts of physical violence assessed.

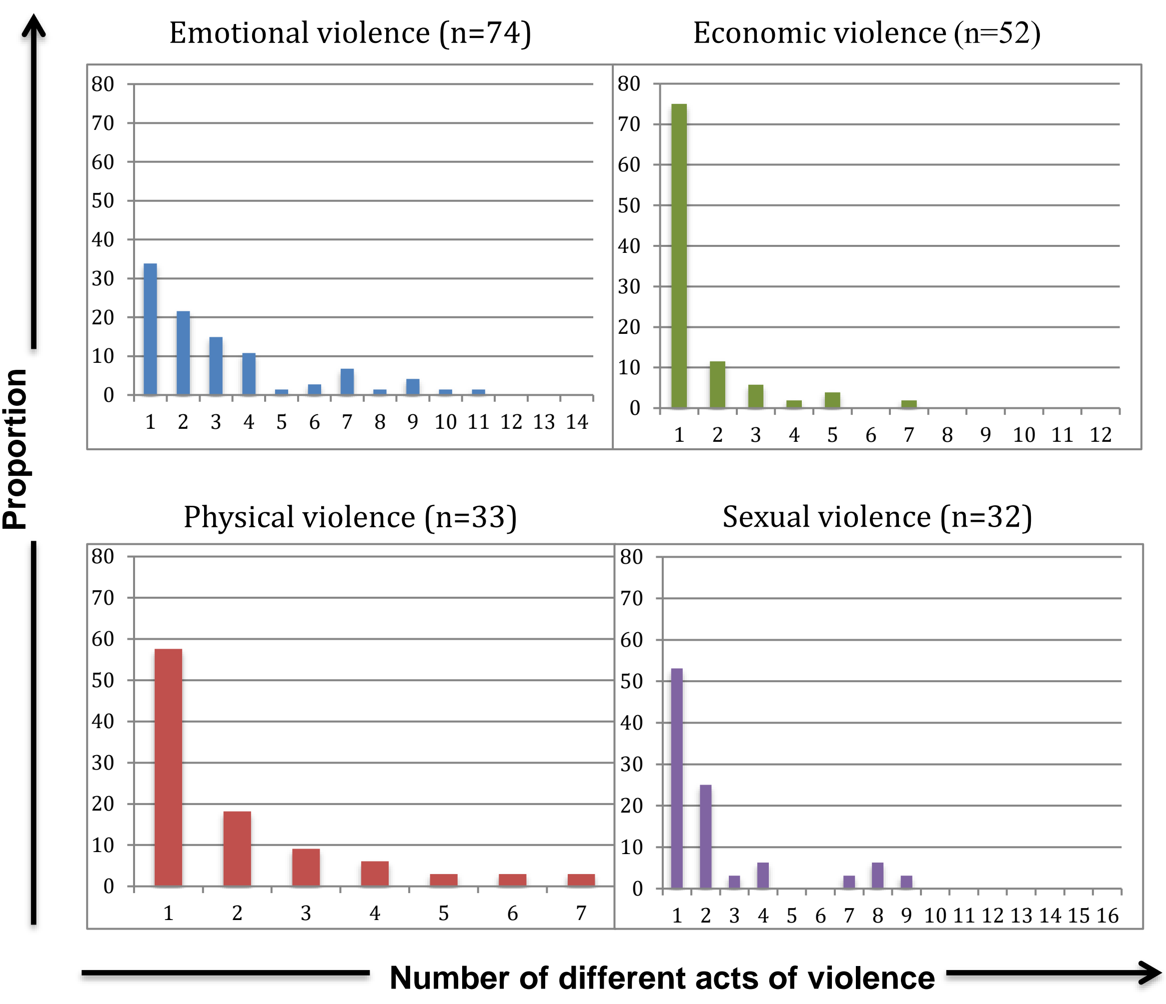
Similar to physical violence, 53% of women who had reported sexual violence in the 12 months prior to the survey reported only one of the acts assessed and 25% two. 22% reported between three and nine different types of sexual violence in the last 12 months, and no women reported experiencing all 16 different acts.

Table 20. Different acts of violence assessed in the survey

Emotional violence (14 acts)
Kept you from seeing friends
Insisted on knowing where you are at all times
Restricted contact with your family of birth
Expected you to ask permission before seeking healthcare
Ignored or treated you indifferently
Insulted you or made you feel bad about yourself
Belittled or humiliated you in front of other people
Been angry if you speak with a boy/man who is not a family member
Often been suspicious or suspected you of being unfaithful
Done things to scare or intimidate you on purpose
Threatened to hurt you or someone you care about
Insulted or treated you badly for not having a boy child
Harassed you for not bringing money or other things from your parents home (dowry)
Prevented you from attending school/college/
Economic violence (12 acts)
Prevented you from working
Forced you to work
Forced you to hand over your income
Asked for reasons for any expenditure
Withheld money or prohibited access to family income
Sold/disposed of your stridhan without your consent
Stolen or taken things from you by force
Denied you or your children food, clothes or money for other necessities
Forced you out of the house
Prevented you from using or accessing any part of the house
Lied about financial assets or debts
Excluded you from decisions about important household matters
Physical violence (7 acts)
Pushed, shoved, shaken or thrown something at you
Slapped, pinched or bitten you
Twisted your arm, banged your head or pulled your hair
Hit or punched you with a fist or other object
Kicked, dragged or beaten you up
Used instruments or weapons to threaten or harm you
Attempted to suffocate, choke or burn you
Pushed, shoved, shaken or thrown something at you
Slapped, pinched or bitten you
Twisted your arm, banged your head or pulled your hair
Hit or punched you with a fist or other object
Sexual violence (16 acts)
Prevented you from using contraception
Forced you to use contraception
Forced you to have children
Prevented you from having an abortion
Forced you to have an abortion
Withheld sexual pleasure on purpose
Forced you to watch pornography or other sexual material
Cut/shaved your pubic hair against your will
Insisted on having sex multiple times even if you didn’t want to
Forced you to perform sexual acts that you did not want to
Forced you to do something sexual that you found degrading or humiliating
Physically forced you to have sexual intercourse
You had sexual intercourse because you were scared of what the person would do
Forced oral sex
Forced anal sex

Forcibly used you to entertain others sexually

Figure 3. Proportion of women reporting the number of different acts of each type of violence experienced in the last 12 months



5.3.5. Frequency of violence in the past 12 months

Complete 12-month frequency data were available for 88% of women who reported emotional violence, 87% who reported economic violence, 82% who reported physical violence, and 66% who reported sexual violence in the past year (N=65, 45, 27 and 21, respectively).

Figure 4 shows the proportion of women reporting emotional, economic, physical, or sexual violence at different levels of frequency within the past 12 months. The categories

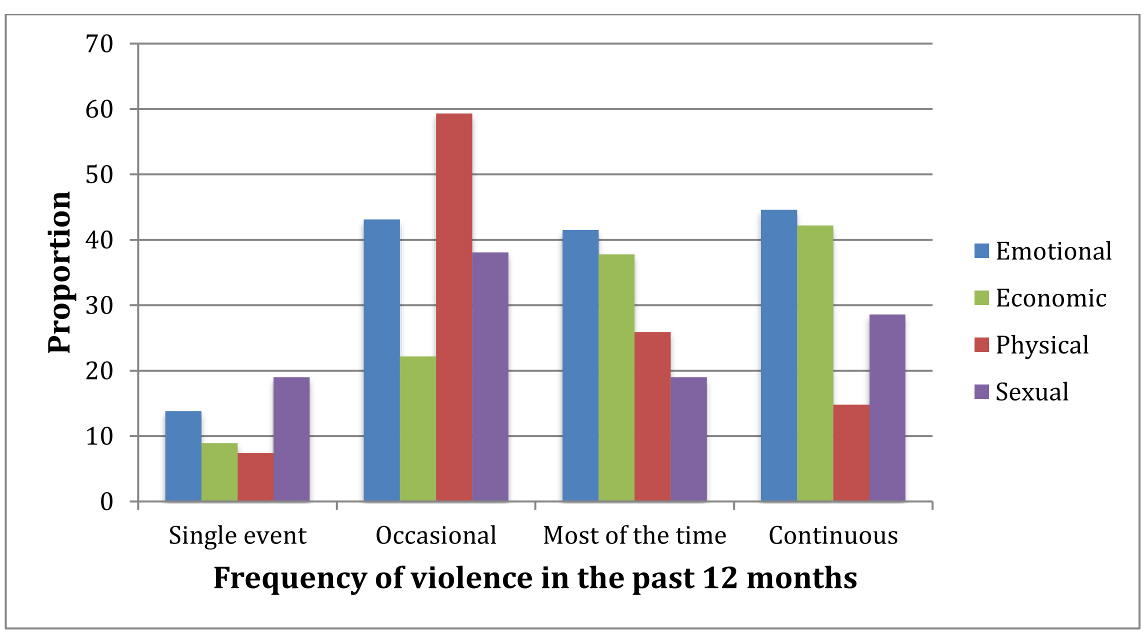
are not mutually exclusive, meaning that one woman may have experienced multiple acts of a certain type of violence at multiple levels of frequency within the past year. For all types of violence, acts were least likely to be experienced as a single event. The proportions of women reporting that acts of emotional violence were experienced occasionally, most of the time, or continuously in the past year were similar (around 43%). A greater proportion of women reported experiencing acts of emotional violence most of the time or continuously, compared with the other types of violence.

For economic violence, the greatest proportion of women reported it continuously over the past year (42%), followed by most of the time (38%), occasionally (22%), and once (9%). More women reported experiencing economic violence most of the time or continuously over the past year, compared with physical and sexual violence. The proportion of women reporting occasional economic violence in the last 12 months was lower than the proportions reporting occasional acts of the other three types of violence.

Of the women who reported physical violence in the past year, most of them reported experiencing it occasionally (60%), followed by most of the time (25.9%), continuously (14.8%) and once (7.4%). More women reported occasional physical violence than other types of violence experienced occasionally. Conversely, acts of physical violence were reported once, or continuously, in the past 12 months by the smallest proportion of women, compared to the other violence types.

As with physical violence, most women who reported sexual violence in the past year reported it as occasional (38%). Continuous sexual violence in the past year was reported by 29% of women, and 19% reported sexual violence as a single act. A greater proportion of sexual violence was reported as a single event in the past year than the other types of violence, whereas sexual violence experienced most of the time was reported by the least proportion of women compared to the other types of violence.

Figure 4. Proportion of women experiencing one or more acts of emotional economic, physical or sexual violence at different levels of frequency in the past 12 months



5.3.6. Polyvictimisation

Table 21 describes patterns of polyvictimisation as both a summary of the number of types of violence (emotional, economic, physical, or sexual) reported and as a more detailed breakdown of different combinations. In both the 12 months and one month prior to the survey, over half of women reported experiencing only one type of violence (53% and 57%, respectively). This was made up of around a third reporting only emotional violence (27% for the past 12 months and 29% for the past month) and 12% and 13% reporting only economic violence in the past 12 months and one month, respectively.

Around a third of women reported two different types of violence in the past 12 months (27%) and the past month (28%). The majority of women experiencing two types of violence reported emotional and economic violence. 14% of women reported three types of violence in the past year, and 9% in the past month, predominantly emotional, economic and physical violence. In the 12 months before the survey, 5% of women reported experiencing all four types of violence, and 6% in the last month (corresponding to six women at both time points).

A quarter of women who reported economic, physical or sexual violence in the past year experienced these types of violence in isolation. This compares to 40% of women who reported emotional violence in isolation. In the past year, physical violence was most commonly reported alongside emotional and economic violence, whereas sexual violence was most commonly reported alongside all other types of violence. For polyvictimisation of physical or sexual violence in the past month, the greatest proportion of women experienced all four types of violence (6%), compared to other combinations of victimisation.

Table 21. Summary and detailed description of polyvictimisation in the past 12 months and the past month

Summary	**Freq. (%)**		**Detail**	**Freq. (%)**	
	Past 12 months	**Past month**		**Past 12 months**	**Past month**
1 type	59 (53.2%)	55 (56.7%)	Emotional	30 (27.0%)	28 (28.9%)
			Economic	13 (11.7%)	13 (13.4%)
			Physical	8 (7.2%)	5 (5.2%)
			Sexual	8 (7.2%)	9 (9.3%)
2 types	30 (27.0%)	27 (27.8%)	Emotional & economic	14 (12.6%)	17 (17.5%)
			Emotional & Physical	4 (3.6%)	1 (1.0%)
			Emotional & Sexual	4 (3.6%)	4 (4.1%)
			Economic & Physical	1 (0.9%)	1 (1.0%)
			Economic & Sexual	6 (5.4%)	4 (4.1%)
			Physical & Sexual	1 (0.9%)	0 (0.0%)
3 types	16 (14.4%)	9 (9.3%)	Emotional, Economic & Physical	9 (8.1%)	4 (4.1%)
			Emotional, Economic & Sexual	3 (2.7%)	2 (2.1%)
			Emotional, Physical & Sexual	4 (3.6%)	3 (3.1%)
			Economic, Physical & Sexual	0 (0.0%)	0 (0.0%)
All 4 types	6 (5.4%)	6 (6.2%)	Emotional, Economic, Physical & Sexual	6 (5.4%)	6 (6.2%)
N	**111 (100.0%)**	**97 (100.0%)**	**Total**	**111 (100.0%)**	**97 (100.0%)**

Figure 5 shows a breakdown of the number of different acts of violence reported in polyvictimisation in the last 12 months, by each specific type of violence. The median number of different acts of each type of violence was greatest for women who reported all four types of violence in the past 12 months, suggesting that, as polyvictimisation increases, the number of different acts of each specific type of violence also increases. The pattern is seen most clearly for emotional violence, with a median of seven different acts experienced in the past 12 months for women who were polyvictimised with all four types of violence (IQR 3-10).

The median number of different acts of economic violence was one for women who reported one or two or three different types of violence in the last 12 months, however the median number of different acts of economic violence increased to 2.5 for women who reported all four types of violence in the past 12 months (IQR 1-7). As with economic violence, the median number of different acts of physical violence reported was one, for women who experienced one, two or three different types of violence in the past year, but increased to 2.5 for women who reported all types of violence in the past 12 months (IQR 2-6, range 1-7).

Reflecting the pattern seen for economic and physical violence, women who reported one, two, or three different types of violence in the past 12 months experienced on average only one act of sexual violence. For women who reported all four types of violence, the average number of different acts of sexual violence in the past year was five (IQR 2-8): higher than that for acts of economic and physical violence.

This suggests that women who experience polyvictimisation experience an increasingly complex and severe pattern of violence. This is particularly true for women who experience all four types of violence, where the average number of different acts experienced was higher overall, and for specific acts (Figure 5). Experiences of emotional violence show the greatest increase in complexity (i.e. the number of different acts of emotional violence experienced) with increasing polyvictimisation, but a complex pattern of sexual violence is also seen for women who experience all four types of violence.

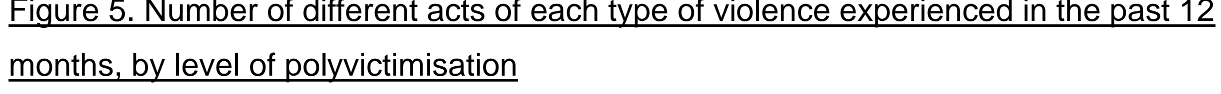
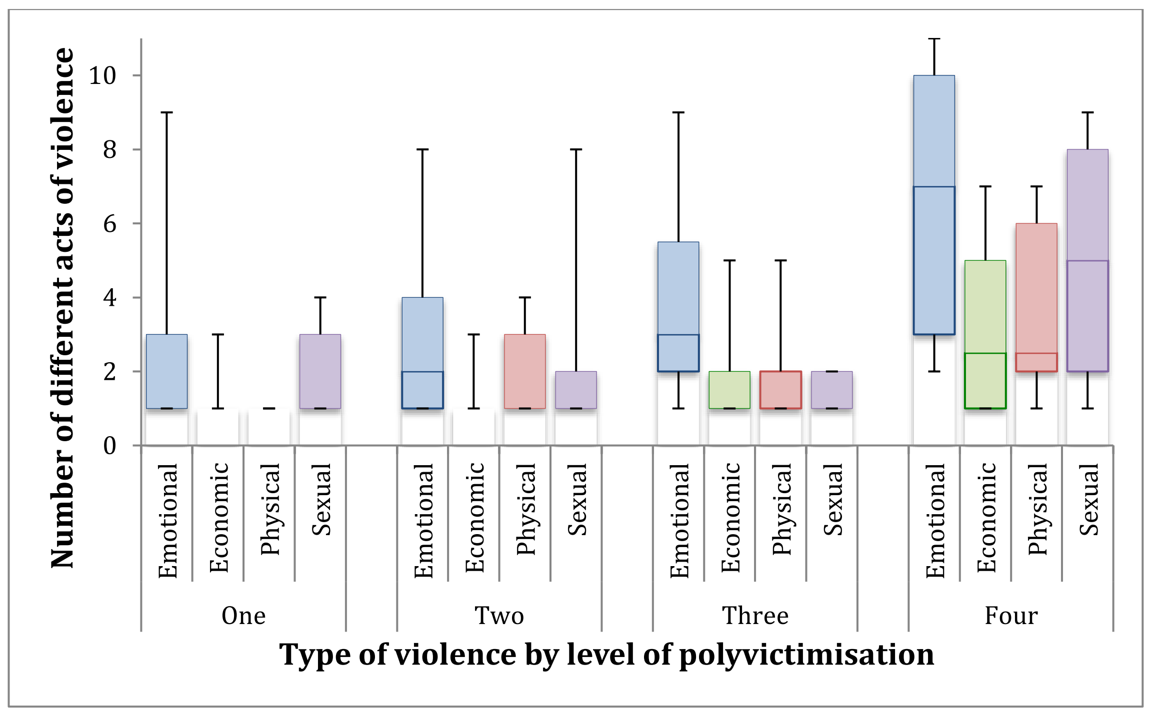


Figure 5. Number of different acts of each type of violence experienced in the past 12 months, by level of polyvictimisation



5.3.7. Perpetrators of violence

Table 22 describes the frequency and proportion of women citing their partner, in-laws, natal family, or other family member as the main perpetrator for one or more acts of each type of violence before marriage, at any point after marriage, and in the 12 months prior to the survey. As women were able to identify more than one main perpetrator within the questionnaire, these categories are not mutually exclusive.

For violence experienced before marriage, the main perpetrators were the woman's natal family, at around 90% or more. However, 14% and 9% of women also cited their in-laws as the main perpetrators of emotional and economic violence, respectively. One woman reported physical violence from her in-laws or another family member before marriage, and one was prevented from having an abortion by her natal family before marriage.

After marriage, partners and in-laws were cited at similar proportions for emotional violence, but in-laws were cited as the most common perpetrators of economic violence

(73% compared with 52% partners). 4% of women reported emotional violence from their natal family at any point after marriage and 2% reported it from another family member, which involved restricting contact with friends, insults or humiliation. After marriage, one woman was lied to about financial assets or debts by another family member, which was recorded as economic violence.

For physical and sexual violence at any point after marriage, the greatest proportion of women cited their partner (86% for physical violence and 84% for sexual violence). 24% reported physical violence and 19% reported sexual violence from their in-laws after marriage. The acts of sexual violence perpetrated by in-laws were those that related to the control of the woman's reproductive rights, including preventing her from using contraception, forcing her to use contraception, forcing her to have a child, and preventing her from having or forcing her to have an abortion. 2% of women reported experiencing physical and sexual violence from their natal family after marriage, which involved being pushed, shoved, shaken, or having something thrown at them, or being slapped, pinched, or being prevented from having an abortion.

For violence reported in the past 12 months, the pattern remained the same as for any point after marriage for physical and sexual violence, with the partner being cited as the main perpetrator by the greatest proportion of women (94% for each). 27% of in-laws perpetrated one or more acts of physical violence in the past 12 months, which is slightly greater than the 24% reported for at any point after marriage, and 19% of in-laws perpetrated sexual violence in the year before the survey. One woman was slapped, pinched, or bitten by a natal family member in the past 12 months and one woman was prevented from having an abortion, the same woman who reported this after marriage.

For emotional violence in the past 12 months the patterns also remained the same, with similar proportions being seen between partner and in-laws as the most frequently cited perpetrator. The pattern for economic violence in the past 12 months differed slightly to that after marriage in general. More women cited their partner as the main perpetrator (79%) compared with their in-laws (62%), the opposite pattern to that seen at any point after marriage.

Table 22: Frequency and proportion of women identifying the main perpetrator of each type of violence before marriage, at any point after marriage, and in the last 12 months

		N	Main perpetrator cited			
			Partner	In-laws	Natal	Other
Emotional Violence	Before marriage	81	7 (8.6%)	11 (13.6%)	76 (93.8%)	2 (2.5%)
	After marriage	134	43 (31.0%)	41 (30.6%)	5 (3.7%)	2 (1.5%)
	Past 12 months	74	54 (73.0%)	55 (74.3%)	3 (4.1%)	0 (0.0%)
Economic Violence	Before marriage	23	0 (0.0%)	2 (8.7%)	21 (91.3%)	0 (0.0%)
	After marriage	102	53 (52.0%)	74 (72.5%)	0 (0.0%)	1 (1.0%)
	Past 12 months	52	41 (78.8%)	32 (61.5%)	0 (0.0%)	0 (0.0%)
Physical Violence	Before marriage	9	0 (0.0%)	1 (11.1%)	8 (88.9%)	1 (11.1%)
	After marriage	110	94 (85.5%)	26 (23.6%)	2 (1.8%)	0 (0.0%)
	Past 12 months	33	31 (93.9%)	9 (27.3%)	1 (3.0%)	0 (0.0%)
Sexual Violence	Before marriage	1	0 (0.0%)	0 (0.0%)	1 (100.0%)	0 (0.0%)
	After marriage	57	48 (84.2%)	11 (19.3%)	1 (1.8%)	8 (14.0%)
	Past 12 months	32	30 (93.8%)	6 (18.8%)	1 (3.1%)	2 (6.3%)

Figure 6 describes the main perpetrators of individual acts of violence reported after marriage, and shows that in-laws were the main perpetrators of emotional and economic violence, while partners were the main perpetrators of physical and sexual violence. The partner was cited most frequently as the main perpetrator for only six out of 26 individual acts of emotional or economic violence measured. Over 50% of women cited the in-laws as the main perpetrators of the following acts: insisting on knowing where they were at all times; ignoring them or treating them indifferently; insulting them or making them feel bad about themselves; belittling or humiliating them in front of other people; insulting them for not having a boy child; forcing them out of the house; preventing them from using or

accessing parts of the house; and excluding them from household decisions. For physical and sexual violence reported at least once after marriage, the partner was cited as the main perpetrator for all except four of the 23 individual acts measured. Three of these, where the in-laws were also implicated, were related to family planning decisions such as forced use of contraception, coercion to have children, and coerced abortion. For one act of sexual violence, withholding sexual pleasure on purpose, all eight women who experienced this after marriage cited someone other than their husband (Figure 6).

Figure 6: 100% stacked bar chart of the most frequently cited perpetrator of violent acts experienced after marriage

Partner only | In-Laws only | Partner & In-Laws equally | Other

Violent Act	N	25%	25%	25%	25%
Emotional Violence (14 acts)					
Kept you from seeing friends	43				
Insisted on knowing where you are at all times	36				
Restricted contact with your family of birth	50				
Expected you to ask permission before seeking healthcare	30				
Ignored or treated you indifferently	54				
Insulted you or made you feel bad about yourself	63				
Belittled or humiliated you in front of other people	56				
Angry if you speak with a boy/man who is not a family member	42				
Often been suspicious or suspected you of being unfaithful	23				
Done things to scare or intimidate you on purpose	29				
Threatened to hurt you or someone you care about	14				
Insulted or treated you badly for not having a boy child	19				
Harassed you for not bringing money or dowry	20				
Prevented you from attending educational institution	2				
Economic Violence (12 acts)					
Prevented you from working	2				
Forced you to work	0				
Forced you to hand over your income	0				
Asked for reasons for any expenditure	46				
Withheld money or prohibited access to family income	11				
Sold/disposed of your stridhan without your consent	13				
Stolen or taken things from you by force	12				
Denied food, clothes or money for other necessities	17				
Forced you out of the house	29				
Prevented you from using or accessing any part of the house	39				
Lied about financial assets or debts	11				
Excluded you from decisions about important household matters	34				
Physical Violence (7 acts)					
Pushed, shoved, shaken or thrown something at you	45				
Slapped, pinched or bitten you	94				
Twisted your arm, banged your head or pulled your hair	22				
Hit or punched you with a fist or other object	24				
Kicked, dragged or beaten you up	23				
Used instruments or weapons to threaten or harm you	7				
Attempted to suffocate, choke or burn you	6				
Sexual Violence (16 acts)					
Prevented you from using contraception	16				
Forced you to use contraception	2				
Forced you to have children	12				
Prevented you from having an abortion	10				
Forced you to have an abortion	3				
Withheld sexual pleasure on purpose	8				
Forced you to watch pornography or other sexual material	9				
Cut/shaved your pubic hair against your will	3				
Insisted on having sex multiple times even if you didn't want to	18				
Forced you to perform sexual acts that you did not want to	5				
Forced you to do something degrading/humiliating	4				
Physically forced you to have sexual intercourse	10				
You had intercourse because you were scared	11				
Forced oral sex	7				
Forced anal sex	6				
Forcibly used you to entertain others sexually	2				

Table 23 describes the proportion of women most frequently citing their partner or in-laws as the main perpetrators of each type of violence. A greater proportion of women who reported emotional or economic violence at any point after marriage more frequently cited their in-laws as the main perpetrators, compared to their partners (61% in-laws versus 49% partner for emotional violence, p=0.04 and 65% in-laws versus 47% partner for economic violence, p=0.01). Partners were more frequently cited than in-laws as the main perpetrators of physical and sexual violence after marriage (83% compared to 19% for physical and 84% compared to 14% for sexual, p<0.001). Partners were also the most frequently cited perpetrators of physical and sexual violence in the 12 months prior to the survey. However, no statistically significant difference was seen between perpetrators for emotional and economic violence was perpetrated in the same period (Table 23). The categories represented in Table 23 include some overlap between the categories, as seen in Figures 7-10 below.

<u>Table 23. Proportion of women most frequently citing their partner or in-law as the main perpetrator of violence</u>

		N	Perpetrator		P*
			Partner	**In-Laws**	
Emotional Violence	After marriage	134	65 (48.5%)	82 (61.2%)	0.04
	Past year	74	37 (50.0%)	43 (58.1%)	0.32
Economic Violence	After marriage	102	48 (47.1%)	66 (64.7%)	0.01
	Past year	52	36 (69.2%)	26 (50.0%)	0.05
Physical Violence	After marriage	110	91 (82.7%)	21 (19.1%)	<0.001
	Past year	33	29 (87.9%)	5 (15.2%)	<0.001
Sexual Violence	After marriage	57	48 (84.2%)	8 (14.0%)	<0.001
	Past year	32	30 (93.8%)	4 (12.5%)	<0.001

*two sample test of proportions

Figures 7-10 show proportional Venn diagrams for the proportion of women most frequently citing their partner, in-laws or both equally as the main perpetrators of each type of violence experienced at any point after marriage. The proportion of women citing their partner and in-laws as equal perpetrators ranged from 4% (physical violence) to 12% (economic violence), showing that economic violence is the type most likely to manifest as joint action between the woman's husband and his family.

For emotional (Figure 7) and economic violence (Figure 8), a greater proportion of women reported that their in-laws were the main perpetrators rather than their partner. The opposite trend was seen for physical (Figure 9) and sexual violence (Figure 10), where the partner was cited as the main perpetrator more often than the in-laws.

The difference in proportion between the main perpetrators was much larger for physical and sexual violence. This suggests that whilst the in-laws seem to be the ones mainly responsible for perpetrating emotional and economic violence, it is more of a joint action between all members of the marital family. In contrast, women's partners are much more likely to perpetrate physical or sexual violence alone, with no involvement from other family members.

Figure 7: Proportional Venn diagram of the main perpetrators of emotional violence after marriage

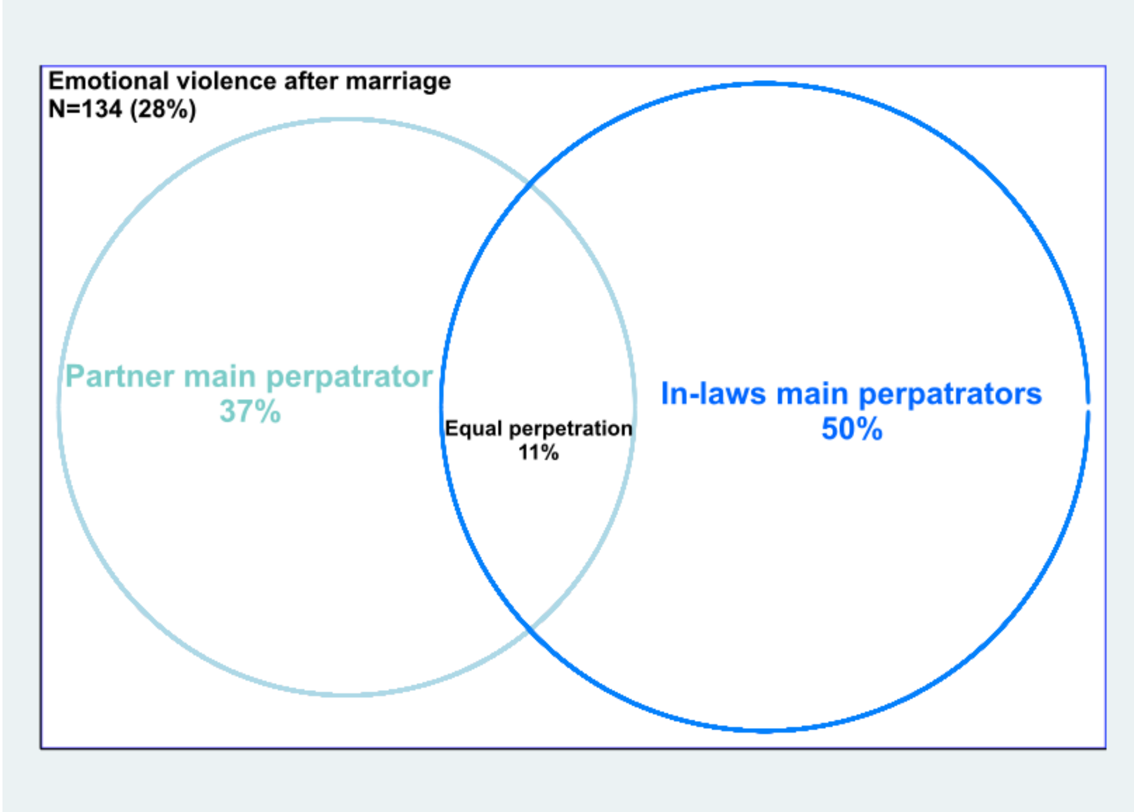


Figure 8: Proportional Venn diagram of the main perpetrators of economic violence after marriage

Figure 9: Proportional Venn diagram of the main perpetrators of physical violence after marriage

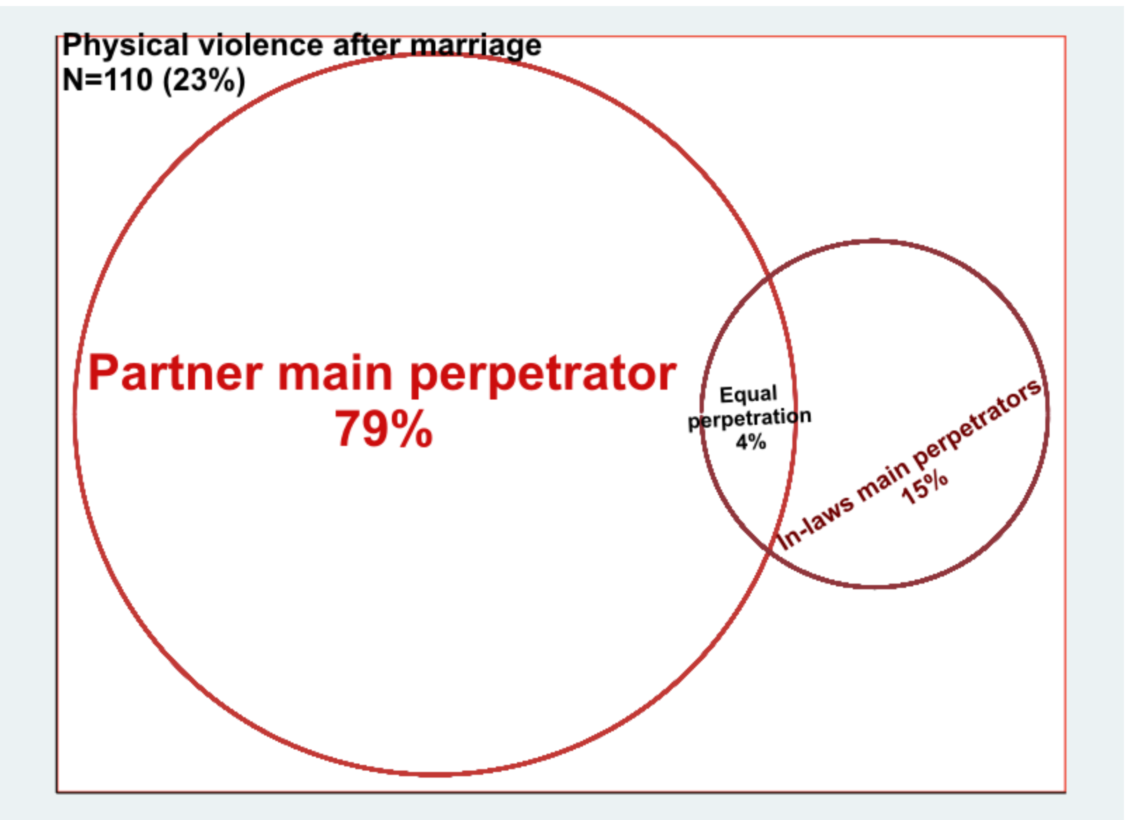
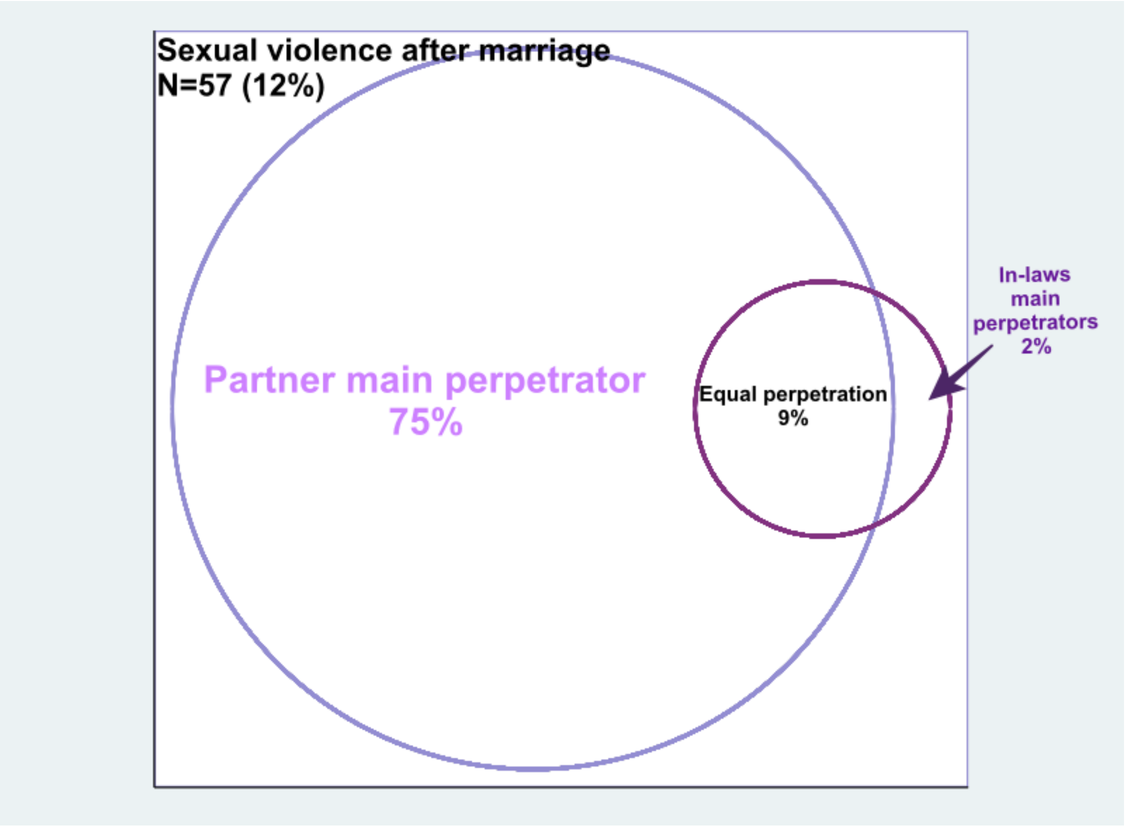


Figure 10: Proportional Venn diagram of the main perpetrators of sexual violence after marriage



5.3.8. Measures of mental health

5.3.8.1. GHQ-12 scores: common mental disorders

Of the 482 women who consented to and were available for interview, 479 (99.4%) had completed the GHQ-12 questionnaire. Three refused to answer one or more of the GHQ-12 questions and a total score could not be computed.

GHQ-12 scores ranged from 0 to 11, with a median of 1 and an IQR of 0-2. Table 24 describes the frequency and proportion of women across the GHQ-12 scores. 37% of women had no symptoms of CMD, with a GHQ-12 score of zero.

Table 24. Frequency and percentage of women by GHQ-12 score

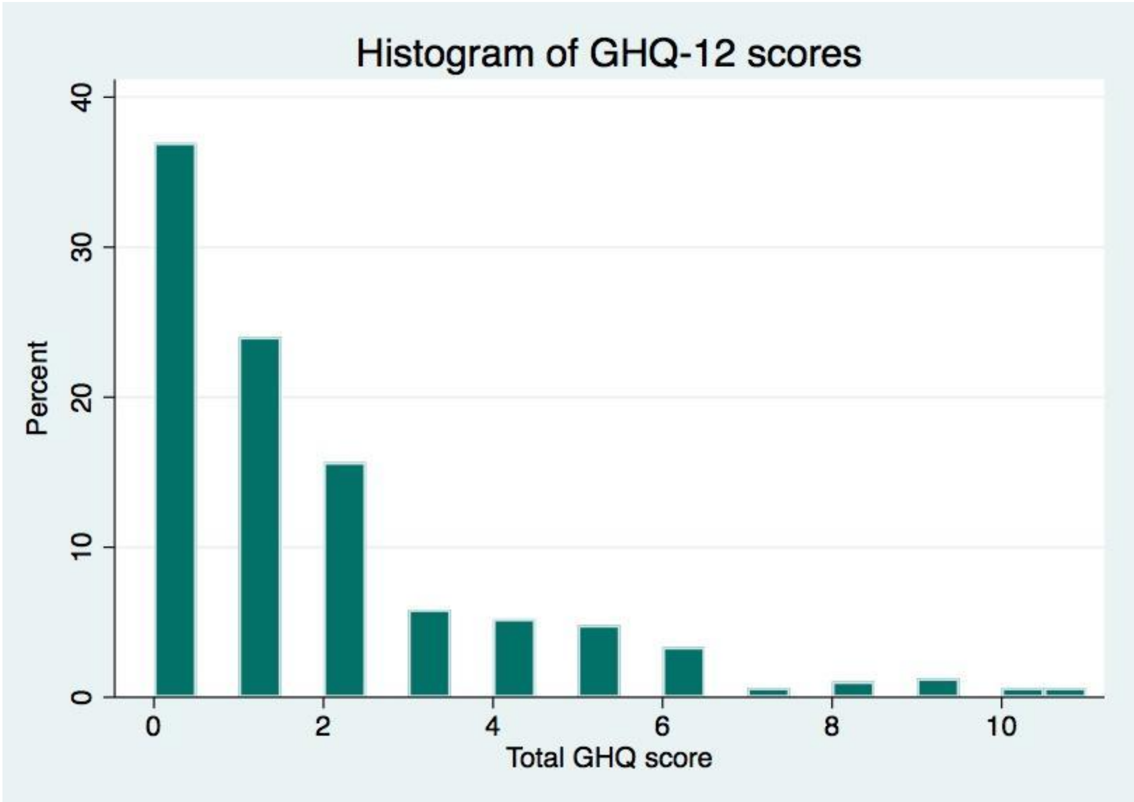
GHQ Score	Frequency	Percentage
0	177	36.7%
1	115	23.9%
2	75	15.6%
3	28	5.8%
4	25	5.2%
5	23	4.8%
6	16	3.3%
7	3	0.6%
8	5	1.0%
9	6	1.2%
10	3	0.6%
11	3	0.6%
12	0	0.0%
.	3	0.6%
N	**482**	**100.0%**

The GHQ-12 is used to measure symptoms of CMD. I used a cut-off of 6 or above as a suggestion of CMD (see Chapter 4). Table 25 shows that 7.5% of women screened as likely to have a CMD.

Table 25. Frequency and percentage of women with common mental disorders, defined by GHQ-12 score

GHQ score group	Frequency	Percentage
0-5	443	91.9%
6+	36	7.5%
.	3	0.6%
N	**482**	**100.0%**

The distribution of the GHQ-12 scores was right skewed, with a high proportion of zeros (around 40%: Figure 11).



[Figure 11]

5.3.8.2. Rosenberg self-esteem scores: levels of self-esteem

Of the 482 women who were available for and consented to interview, one woman refused to answer a question on the RSES, and a global score could not be computed for her. Therefore, 481 women (99.8%) had complete scores. These ranged from 8 to 30, with a mean of 19.8. Table 26 shows the distribution of scores.

Table 26. Frequency and percentage of women by Rosenberg self-esteem score

Rosenberg self-esteem score	Frequency	Percentage
0	0	0.0%
1	0	0.0%
2	0	0.0%
3	0	0.0%
4	0	0.0%
5	0	0.0%
6	0	0.0%
7	0	0.0%
8	1	0.2%
9	0	0.0%
10	1	0.2%
11	5	1.0%
12	1	0.2%
13	7	1.5%
14	11	2.3%
15	17	3.5%
16	21	4.4%
17	39	8.1%
18	56	11.6%
19	80	16.6%
20	84	17.4%
21	42	8.7%
22	31	6.4%
23	21	4.4%
24	15	3.1%
25	14	2.9%
26	10	2.1%
27	7	1.5%
28	7	1.5%
29	5	1.0%
30	6	1.2%
.	1	0.2%
N	**482**	**100.0%**

The RSES scores were relatively normally distributed (Figure 12).

Figure 12. Histogram of RSES scores

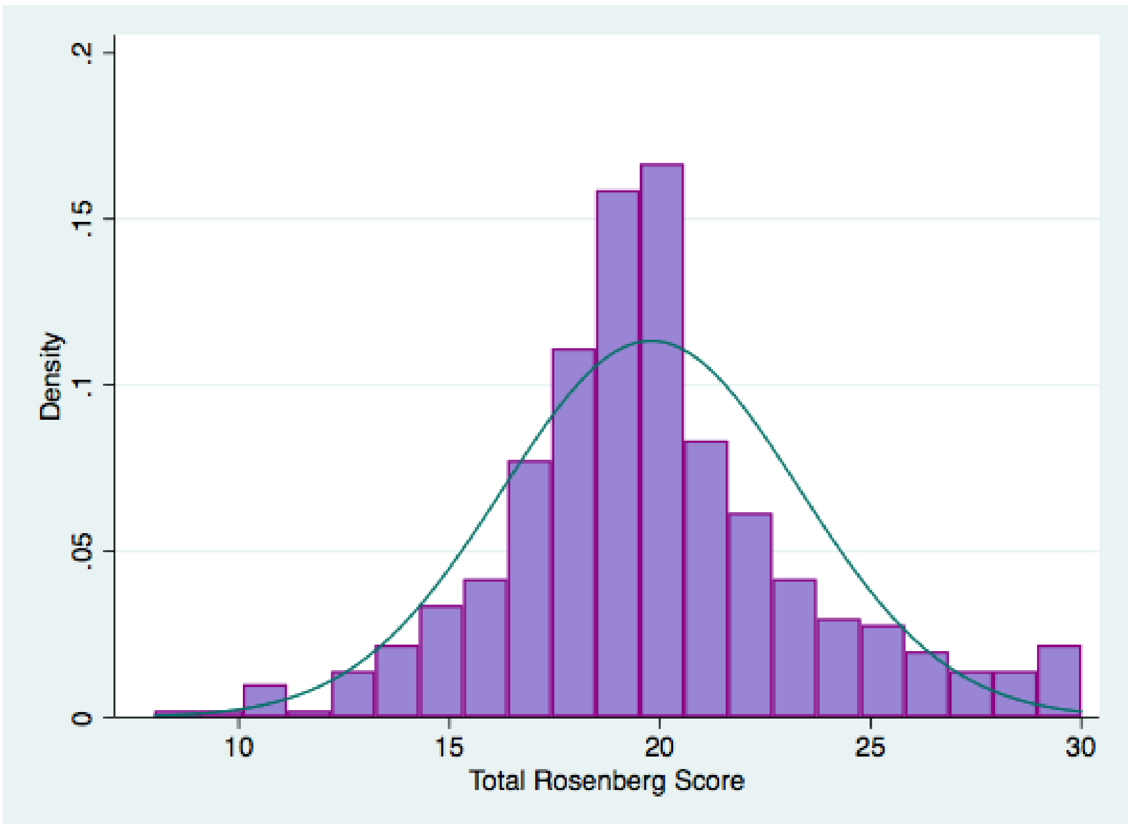


Table 27 describes the proportion of women with low self-esteem as described by internationally recognised cut-offs for the RSES (Chapter 4). A score of less than 15 suggests low, and 15 and above normal or high. 5% of women had low self-esteem.

Table 27. Frequency and percentage of women by level of self-esteem

Rosenberg score group	Frequency	Percentage
Low (<15)	26	5%
Normal or high (15+)	455	94%
.	1	0.2%
N	**482**	**100.0%**

5.4. Discussion

The lifetime prevalence of violence found in my study (44%) was higher than that seen in other national and international studies. NFHS-4 reported a lifetime prevalence of 28.8%, down from 37.2% in the NFHS-3 conducted 10 years earlier (6, 153). Three factors could explain the higher prevalence seen in my study. The first is that the questionnaire

assessed emotional, economic, and sexual violence in much more detail than other national and international studies, allowing women more opportunities to report incidences of violence. In addition, the study assessed violence that occurred before marriage as well as after. The second potential explanation is that the study assessed violence perpetrated by family members other than the husband. This accounted for situations where the patterns of violence might be complex and involve family dynamics outside the immediate marital relationship. Finally, the data collectors had been visiting the women in the study every month for two years for birth cohort data collection. Participants therefore knew and trusted them and may have been more comfortable giving a detailed disclosure of experiences of violence. When comparing the current study to the NFHS-3 for Mumbai slum areas and the NFHS-4 for urban Maharashtra however, using comparable questions and violence only perpetrated by the husband after marriage, the prevalences of emotional, physical, and sexual violence were similar, with no statistically significant difference. This adds a level of validation to my study.

One third to a half of women who experienced violence at any point in their lifetime also reported experiencing it in the past 12 months. Similarly, the majority of women experiencing violence in the past 12 months also reported it within the last month. This suggests that violence may be sustained over time, and that once a woman has experienced violence, she may be at increased risk of experiencing it again. A time-series study of IPV in the USA found that the longer a relationship had lasted, the more frequent, predictable and complex the violence patterns became (379), therefore women who had experienced violence throughout their marriage may have been more likely to continue experiencing it in the year and month before the survey. The pattern was seen for all types of violence, but was lower for physical violence than for the other types. This might suggest that the pattern of physical violence experiences is different from that of other types of violence; it may be more situational, reactive, and less sustained. When looking at male batterer typologies, reactive aggression has been characterised as impulsive and unplanned responses to perceived provocation, in high states of arousal, usually through physical aggression. This is in contrast to proactive aggression, which is perpetrated without being provoked or angry. It is planned, cold-blooded and goal-orientated and usually involves the use of control, intimidation and threat (380).

The proportions of women experiencing violence after marriage, but before their first pregnancy, were similar to the lifetime prevalence of each type of violence, suggesting that

a large proportion of violence begins soon after marriage. This was echoed by a study conducted in Chennai, which found that over 44% of women reported abuse starting within a month of marriage (381). The level of violence decreased during pregnancy and in the two months after birth, but a noticeable proportion of women still experienced violence during these periods. Violence during pregnancy has been well documented within the Indian literature (50, 134, 140, 143, 159, 382, 383). Reviews of the literature have reported mixed findings regarding whether violence increases during pregnancy, though population-based studies tend to conclude no difference or even decreased risk (21, 22), which supports the results seen here. Risk factors for abuse during pregnancy in India have been said to include abuse prior to pregnancy, lower education level, socioeconomic status and alcohol use by the perpetrator and unwanted pregnancy (159, 384). The difference in the proportion of women experiencing violence after marriage but before their first pregnancy, and in the two months after the birth of the cohort child, was greatest for physical violence, suggesting that this is the type of violence most likely to decrease during pregnancy. The proportion of women experiencing each type of violence in the 12 months prior to the survey was greater than for during or just after pregnancy, which could reflect a pattern of violence increasing again after a child has been born. Though, the proportions were still lower than those seen just after marriage, suggesting that this is the most critical time for women in terms of violence exposure, possibly because there is a change in expected roles and responsibilities.

At every time point, more women experienced emotional violence than any other type. If emotionally abusing women is normalised within society, perpetrators are more likely to have seen other women treated like this, allowing them to behave in similar ways. It also might be ‘easier’ to perpetrate some acts of emotional violence than other types of violence, increasing the likelihood that women experience it.

A high proportion of women experienced more than one act of each type of violence, highlighting that patterns are often complex and involve different methods of perpetration. This seems particularly true for emotional violence, of which the greatest proportion of women experienced more than one act. Multiple acts of violence were less common for economic violence, suggesting that this type violence is more specific and less generalised. Economic violence might be influenced by family circumstances - for example, socioeconomic status - how many people there are to look after, and how many people are working: the ways in which economic violence manifests might be specific to each family’s socioeconomic situation. In addition, economic violence in the literature has

been described in terms of very specific aims of the perpetrator - to keep his partner economically dependent so that she is less able to become self-sufficient and leave the relationship (385). Whilst other forms of violence may also be perpetrated with the goal of controlling or intimidating a partner, creating economic dependence is possible through just a few specific acts: “making all financial decisions, reducing her ability to acquire, use, and maintain money, and/or forcing her to rely on him for all of her financial needs (385-387).

When looking at the frequency of violence experiences, less than a fifth of women experienced any act of violence as a single event in the past year, highlighting that violence is often a continuous experience. Whilst the questionnaire was detailed, it did not seem to pick up situations that some could argue are not an experience of violence, such as a single event of being asked reasons for expenditure in the past year. This suggests that either these situations happen rarely, or women are less likely to report single experiences of certain acts of violence. As stated by Follingstad et al (1990), the lack of studies on non-abusive relationships means that it is not possible to compare the frequency of violent acts to a standard (388), however violence reported as occasionally or more suggests that it might be occurring at a higher frequency than in a non-abusive relationship. Due to missing data, it was not possible to explore the associations of violence frequency with mental health outcomes (the focus of Chapter 6), however existing literature has demonstrated that an increased frequency of violence perpetration is associated with poorer mental health outcomes (389-393).

Just under half of women reported polyvictimisation, with those who did not report it, predominantly experiencing emotional violence in isolation. The prevalence of polyvictimisation of the different types of IPV have rarely been reported in the literature, however one study conducted in the USA found that 52% of women had experienced two or more types of violence in the past year (368), reflecting that seen in my study. The fact that the women who were not polyvictimised mainly experienced emotional violence supports the idea that this is the most common type of violence, is possibly more normalised, and therefore can be experienced without other types of violence. In this regard, emotional violence may act as a gateway to the other forms of violence. Studies have shown that there is a high correlation between emotional violence and physical violence, and that emotional violence predicts subsequent physical violence (394-396).

A greater proportion of women experienced physical and sexual violence alone than in combination with one other type of violence. This is not necessarily in line with what we might expect to see, as we often believe that physical and sexual violence happen in conjunction with emotional violence. This could be a true reflection of the situation, and support the notion that these types of violence can be reactive, as discussed previously. It could also be that, because emotional violence may be more normalised, women underreported experiences of emotional violence when they were subject to physical or sexual violence. The literature discussing the normalisation of psychological intimate partner abuse is scarce, however studies from rural North America suggest that emotional abuse can be normalised through conservative views, and that as social norms and values change over time, gendered and controlling acts that are now viewed as violence, were - and in many cases still are - considered acceptable (397).

As the level of polyvictimisation increased, the number of different acts of violence also increased, suggesting that as perpetrators involve multiple forms of violence, they increase the means through which they perpetrate them. This supports the idea that violence often follows complex patterns. It also suggests that there are varying levels of severity of violence that women are exposed to, which involve a combination of factors including the different types of violence experienced and the number of different ways they are perpetrated.

The involvement of in-laws in violence against women after marriage is demonstrated clearly in the results. They are particularly important perpetrators of emotional and economic violence, but also perpetrate some physical violence and have influence over daughters-in-laws' sexual and reproductive health. Comparing husbands with in-laws as the main perpetrators of violence probably does not capture the reality of the situation. The inclusion of a joint category that implicates both parties equally goes some way to investigating the dynamics of different perpetrators in the family, and Figures 6-10 show that they were both equally cited as the main perpetrator for many acts of emotional and economic abuse, some physical violence and the acts of sexual violence that tie in with women's sexual and reproductive health. In-laws as the main perpetrators of economic violence reflects them being the main decision-makers in the joint household and having control over household matters. The emotional abuse of women within the household may involve more complex dynamics with husband and in-laws working together, or in-laws influencing and inciting violence from the husband. A number of studies have highlighted

how in-laws can play a role in influencing IPV (48, 159, 398). In a study of women in Chennai, 46% said that violence from their husbands was instigated by their in-laws (365) and women who experienced violence from their partner during pregnancy or within six months after giving birth were over five times more likely to also report violence from their in-laws during the same period (148). Associations have been found between violence perpetrated by in-laws and IPV (159) and in-law violence has been shown to increase the odds of severe partner-perpetrated burns by almost 20 times (149).

According to pre-defined cut offs, 8% of women had symptoms indicative of a common mental disorder. This is higher than the overall 3% reported for depressive disorders in women in the 2015-16 National Mental Health Survey of India (399), however the mental health of women in my study may have been affected by other factors such as informal settlement living, which has been shown to have a detrimental impact on women's mental health (47). In this study on the psycholoigcal toll of slum living, which was also conducted in an informal settlement of Mumbai and used the GHQ-12, 27% of women were identified as high risk for CMDs (47). The study used a cut-off of 5+ to indicate potential risk of CMDs, whereas I used a cut-off of 6+. However, even with a cut-off of 5+, the prevalence in my study is 12%.

In summary, violence was experienced at high levels within the study population, exceeding the lifetime prevalence reported by the NFHS-4, but showing similar prevalence to the NFHS when using comparable questions. Emotional violence was experienced at the highest level, followed by economic, physical, and then sexual violence. Few women experienced acts of violence as a single event and half experienced polyvictimisation, with the number of acts of violence increasing as polyvictimisation increased. This demonstrates that violence patterns are complex. The marital family were implicated in the perpetration of violence within the home, particularly that of emotional and economic violence, as well as control of women's reproductive choices. The proportion of women displaying symptoms of CMDs was higher than that reported nationally, but lower than another study in the same setting.

Chapter 6

Violence and mental health: associations between experiences of violence and GHQ-12 and RSES

Key messages

- All forms of family VAW were associated with increased symptoms of common mental disorders.
- Over the past year, experiences of emotional violence showed the strongest association with symptoms of common mental disorders.
- Polyvictimisation and the number of different ways each type of violence was perpetrated were associated with more symptoms of common mental disorders.
- Emotional and economic violence were associated with lower self-esteem scores, but no association was seen for physical and sexual violence.
- More acts of each type of violence were associated with lower self-esteem scores, but there was no association between polyvictimisation

6.1. Introduction

In this chapter I explore the associations between experiences of violence and measures of mental health, namely symptoms of CMDs and levels of self-esteem, using the quantitative data collected as part of the study. I describe the statistical methods used, expanding on the study methods described in Chapter 4, and present the results of the univariable and multivariable analyses. Using the literature, I developed a hierarchical framework of potential predictors of CMDs and self-esteem, which were sequentially added to the adjusted models. The chapter concludes with a discussion of results.

6.2. Methods

This section outlines the analytical methods used to explore associations between experiences of violence and GHQ-12 scores or RSES. The study design, data collection methods and the operationalisation of variables have been described in Chapter 4.

6.2.1. Selection of socio-demographic predictors: a systematic review of the literature

In order to identify relevant socio-demographic predictors of symptoms of CMDs and self-esteem, I reviewed the literature to inform the creation of a hierarchical framework of variables, as recommended by Victora et al. (377). This method has been used in a number of Indian studies on CMDs (90, 99, 400, 401). I searched for papers that established a relationship between various socio-demographic variables and either CMDs or self-esteem. I search Ovid Medline using the search terms: ("common mental disorders" OR "mental health" OR "psychological distress") / ("self esteem" OR "Rosenberg self esteem") AND ("covariates" OR "characteristics" OR "demographic") AND ("women" OR "girls" OR "females"). I also performed a hand search. As many studies had assessed socio-demographic predictors of CMDs, I restricted the results of the search to India. Conversely, because the literature is sparser for self-esteem as a primary outcome, I included all studies globally for this outcome. For both outcomes, I looked at socio-demographic predictors in adult women. Where studies assessed predictors in both men and women, I only considered results for women. I also discounted any predictors that described the exposures of interest, for example experiences of violence and relationships with the family or in-laws.

For predictors of CMDs, I included papers that looked at CMDs generally, as well as those that specifically looked at one condition such as depression. I also included studies on postnatal depression. Appendix 10 table 3 outlines the socio-demographic predictors of CMDs assessed in the literature.

Predictors that demonstrated a statistically significant association with CMDs in the literature included age, education, ethnicity, caste, marital status, age at marriage, number of children, family structure, household size, employment or occupation, differences in

employment between husband and wife, husband's occupation, and husband's alcohol use or addiction. A number of variables related to the sex of children, such as gender preference, birth of a female child, pressure to have a male child, and the sex of the infant. My questionnaire asked whether women's children were all male, all female, or whether they were a mix of both, which could act as a proxy for potential pressure around the sex of children. However, as symptoms of CMDs were assessed between two and four years after the birth of the cohort child, an association between the two might be less clear.

A number of studies assessed caste and type of marriage (love or arranged) as predictors of CMDs, and some found associations (77, 131, 402). In the baseline data collection for the birth cohort, the decision was made not to assess caste due to previous experience of participants not responding in a useable way. For example, people would say that they had no caste or that they belonged to castes aligned with certain social or political movements. The type of marriage was also not assessed, as the main focus of the birth cohort study was family planning, nutrition, and immunisation and not marriage and its consequences. These variables were therefore not included as predictors of CMDs in my study. A number of studies also assessed the woman's employment status or occupation, with some significant associations (62, 86, 144, 403). In the current sample, only six women (1%) were employed, and this variable was also not included as a possible predictor.

Throughout the studies identified, a number attempted to quantify socio-economic status. These included measures of socio-economic status or household wealth index; financial measures such as income, financial difficulties or managing financially, debt, inability to buy food or experiencing hunger due to lack of money, and factors relating to housing such as ownership, type of housing, access to water and sanitation facilities or running water in the home, and standard of living. I used a measure of socio-economic status using factors related to the quality of housing, access to water and sanitation facilities, and ownership of household assets (Chapter 4).

Socio-demographic predictors of self-esteem identified in the literature included sex, age, education, ethnicity, marital status, relationship status, religion, number of children, occupation or whether someone was retired or on a pension, income, socio-economic status, and living space per capita or dissatisfaction with housing (Appendix 10 table 3). Relationships between socio-demographic predictors and self-esteem were less clear than

for CMDs. Many studies did not use self-esteem as the primary outcome, did not describe which, if any, socio-demographic predictors had associations with self-esteem, or did not differentiate between self-esteem in men and women. Importantly, there were no relevant studies from India.

An association between self-esteem and CMDs has been documented in the literature (404), and many of the socio-demographic risk factors for self-esteem assessed in the literature reflected those also assessed for CMDs. I therefore decided to include the same list of socio-demographic predictors in the hierarchical framework for both outcomes.

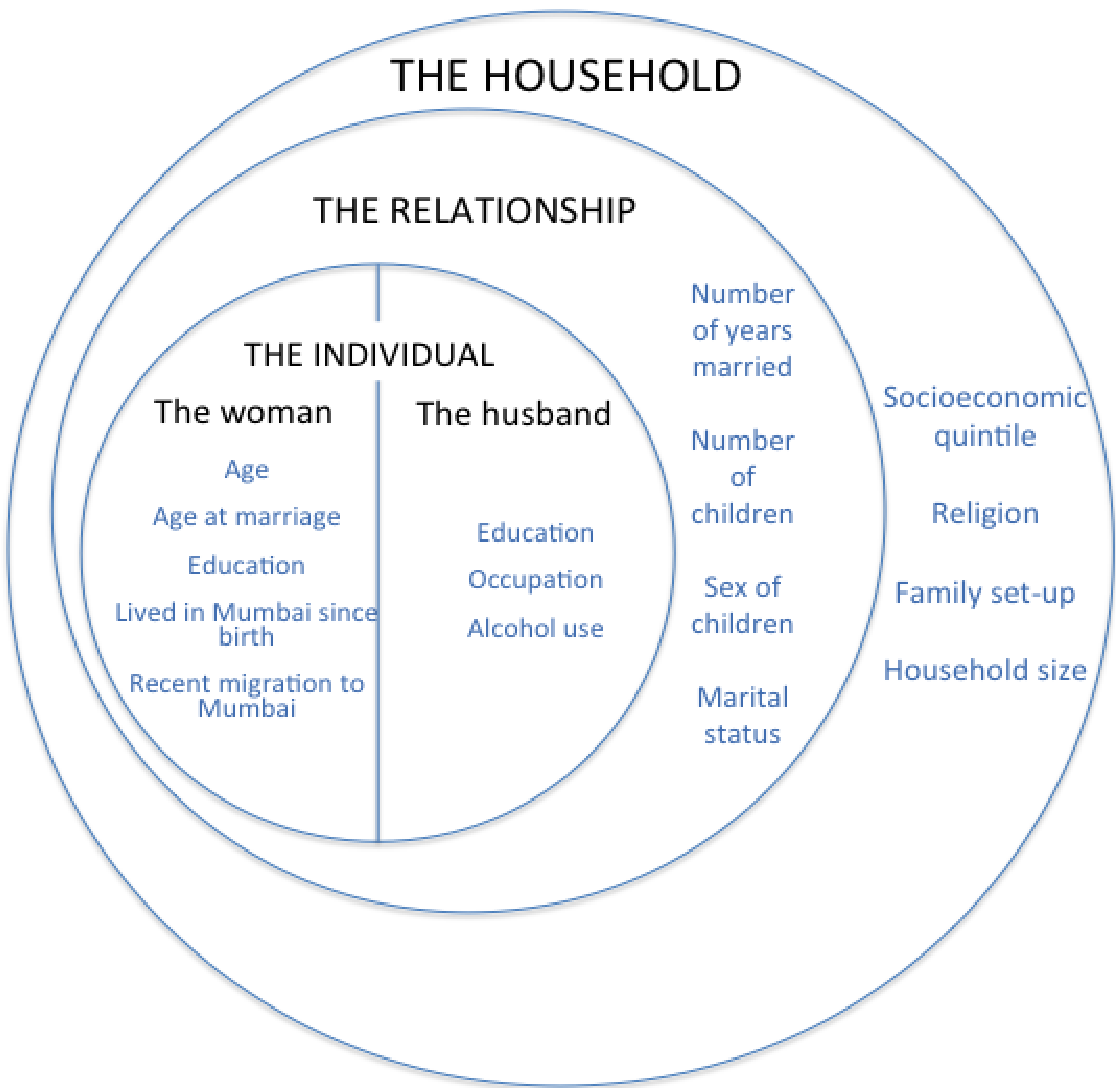
As outlined in Chapter 2, many of the socio-demographic variables listed above have also been shown to be associated with IPV in Indian studies. However, a number of other predictors of violence were also identified, including religion (50, 122), husband's education or literacy level (136, 147), and duration of marriage (147). These variables were added to the framework of predictors.

In addition to the variables identified through the literature, I hypothesised that a woman's migrant status could also affect CMDs or self-esteem. Many women migrate to Mumbai from other parts of India, often leaving behind extended families and support networks to join their husbands or marital family. Being in a new environment with limited social support could affect a woman's risk of symptoms of experiencing CMDs or her level of self-esteem, as well as risk of exposure to violence (62, 91, 405-408). Whether a woman was born in Mumbai and whether she was a recent migrant (less than 10 years) were included as potential predictors.

I organised relevant socio-demographic predictors of CMDs, self-esteem, and violence into a hierarchical framework based on the structure of Heise's Ecological Framework of Violence (17), as I believed that the risk factors for CMDs and low self-esteem could be influenced across different ecologic levels in addition to the risk factors for violence. In the first and innermost group were individual level variables. These were split into those relating to the woman - her age, educational status, age at marriage, whether she was born in Mumbai, and whether she had migrated to Mumbai within the past ten years - and those relating to the husband, including his occupation, education, and alcohol use. The individuals were nested within the relationship at the second level, including marital status, duration of marriage, number of children, and their sex. Finally, the relationship was

situated within the context of the household or wider family and included socioeconomic status, family structure (joint or nuclear), household size, and religion. Figure 13 is a diagrammatic representation of the socio-demographic predictors of interest.

Figure 13. Diagrammatic representation of covariate structure



6.2.2. Treatment of dependent variables

For this section of the analysis, the outcomes of interest were symptoms of CMDs measured through the GHQ-12, and levels of self-esteem measured through the RSES.

6.2.2.1. GHQ-12

The GHQ-12 distribution was heavily right-skewed, with a high proportion of zero scores (37%). I attempted to normalise the scores using Tukey's ladder of powers (409), but they still did not satisfy normality assumptions. After discussing this with a statistician, I decided to analyse the associations between experiences of violence and GHQ-12 scores using ordinal regression (410), given that the order of scores represents an increase in the number of symptoms of CMDs and is therefore meaningful. Ordinal variables contain measurements classified into discrete and ordered groups. With this in mind, I divided the GHQ-12 scores into four groups. Cut-off points were based on the literature to ensure that they were theoretically justifiable. The lowest category that I created contained scores of zero and one, the second scores of two or three, the third scores of four or five, and the highest scores of six or above. A cut-off of 6 or more was identified by Patel and colleagues in Goa as identifying a potential CMD (287). Throughout the current study, I used the same cut-off of 6+ to identify potential cases of CMDs, as discussed in Chapter 4. A cut-off of 4 or more reflects that suggested in a validation study of the Tamil version of the GHQ-12 administered in a community setting (288), and a cut-off of two or more was suggested from a study of the GHQ-12 in a community setting in Goa (282). The mean GHQ-12 score in my sample was 1.7 (SD 2.2). The mean score was suggested for use as a guide to the threshold cut-off by Goldberg in the absence of any validation studies in the population of interest (411): using the mean of my population, a cut off of 2 or more would also be justifiable.

The decision to split the GHQ-12 scores into four groups was based on finding a balance between minimising the risk of separation in the data due to small numbers and a loss of statistical power with few categories. Four categories produced fewer instances than five where separation could occur. I did not further reduce the number of categories as I believed that there might be important differences between the scores to detect, given that Indian studies of the GHQ-12 had recommended cut-offs at all of the levels.

6.2.2.2. Rosenberg self esteem

The RSES was broadly normally distributed, with a slight left skew at the higher end of the scale (see Chapter 5). I decided to analyse the RSES as a continuous outcome.

6.2.3. Univariable analyses

6.2.3.1. Association between socio-demographic predictors and experiences of violence

Operationalisation of the variables describing violence experience has been described in Chapter 4. To assess socio-demographic predictors of violence, I used logistic regression for experiences of emotional, economic, physical, or sexual violence in the past 12 months or the past month as the outcome, and each socio-demographic predictor as the explanatory variable. The models used robust standard errors to adjust for clustering.

6.2.3.2. Association between socio-demographic predictors and GHQ-12 or RSES

To investigate the relationship between socio-demographic predictors and symptoms of CMDs or levels of self-esteem, I first summarised the socio-demographic variables by each level of GHQ-12 or RSES group (low or normal/high – see Chapter 5). For continuous socio-demographic variables, I used the median and interquartile range, as none had a normal distribution. For categorical variables I used the proportion of women in each category. An association between the two variables was initially assessed using a Kruskal-Wallis test for continuous predictor variables and a chi-squared test for categorical predictor variables.

Following this, I conducted an ordinal regression of each socio-demographic predictor against GHQ-12 and linear regression against Rosenberg scores. All models were adjusted for clustering using robust standard errors. The ordinal regression models were tested for the proportional odds assumption, described further in section 6.2.3.3.

6.2.3.3. Association between experiences of violence and GHQ-12 or RSES

I began by creating two-way tables of violence experiences against the GHQ-12 or RSES groups. To test the hypothesis of no difference between groups, I used a chi-squared test, or a Fisher's exact test was where the chi-square was not appropriate (412).

I used an ordinal regression model to assess associations between experiences of violence and GHQ-12 groups. The models were adjusted for the effects of clustering using robust standard errors.

The traditional method of analysing ordinal outcome variables through ordered logit models uses the proportional odds model (413) first described by McCullagh in 1980 (410). In this model, the proportional odds assumption - that the regression coefficient for independent variables is equal across all dependent variable category cut-points - is applied to all independent variables and the cumulative approach of category comparisons is used, where the probability of being in one category or below is compared to the probability of being above that category (413).

A requirement of these models, therefore, is that the proportional odds assumption is satisfied. To test this, I conducted a series of five post-estimation tests, including the Wolfe Gould test, the Brant test, the score test, the likelihood ratio test and the Wald test using the –oparallel- command in Stata (414). These tests compare an ordinal logistic regression model (the proportional odds model) with the generalised ordered logit model, which relaxes the proportional odds assumption for all independent variables (414). A p value of less than 0.05 suggests that the proportional odds assumption has been violated.

To analyse the RSES as a continuous variable I used ordinary least squares regression with robust standard errors to adjust for clustering. Whilst the residuals deviated slightly from normality, multiple linear regression is robust to these deviations, apart from when p values are calculated for hypothesis testing and the sample size is small (i.e. less than 200 cases).

6.2.4. Multivariable analyses

As described in section 6.2.3.3, univariable ordinal regression models were tested for the proportional odds assumption. If a model violated the proportional odds assumption at univariable level, it was adjusted for predictors in the multivariable analysis and was re-tested for the assumption of proportional odds. When the assumption was still violated in three or more post-estimation tests ($p<0.05$), I used a generalised ordinal regression model with the proportional odds assumption selectively relaxed for the variables that violated it, also known as the partial proportional odds model proposed by Peterson and

Harrell in 1990 (415), using the –gologit2 – command in Stata (416). The independent predictors were then re-added to the model using the procedure described in the following section.

6.2.4.1. Selection of predictors

All socio-demographic predictors included in the hierarchical framework were assessed independently against the outcome of interest using univariable analysis. I then used a sequential method to add predictors to the model, following the hierarchical structure of the framework. A statistical significance level of equal to or less than 0.1 was used throughout the selection process. First, all household factors that showed a univariable association with the outcome of interest were entered into Model 1. This represents the broadest level of the hierarchy and the addition of subsequent predictors moves down through the hierarchical levels towards the individual. Predictors in Model 1 that remained significant were carried forward to Model 2, where relationship factors showing an association with the outcome at the univariable level were added. Any of the new relationship factors in Model 2 continuing to show an association were carried forward to Model 3, and individual characteristics showing an association with the outcome at univariable level were added. These were again assessed for statistical significance in the adjusted model. The final model (Model 4) used all factors retained from Model 3. This procedure follows that suggested by Victora et al. (377). In all models, women's age was retained as an *a priori* variable, in line with the Indian studies cited in section 6.2.1.

6.3. Results

6.3.1. Socio-demographic predictors of violence

Table 28 describes the relationship between socio-demographic variables and experiences of each type of violence in the past month and the past year. Women's age was negatively associated with the odds of experiencing all types of violence, both in the past year and in the past month. A one-year increase in age was associated with a 10% decrease in the odds of experiencing emotional or economic violence in the past year, an 11% decrease for physical, and 13% for sexual violence. For violence experiences reported in the past month, a one-year increase in age decreased the odds of experiencing emotional violence by 9%, economic violence by 10% and physical and sexual violence by 13% each.

Women who had completed more years of education had greater odds of experiencing economic violence both in the past year and the past month. A one-year increase in completed education increased the odds of experiencing economic violence by 5% in the past 12 months and 8% in the past month. I found no associations between education and the other types of violence.

Partner alcohol consumption was strongly associated with all forms of violence, both in the past year and the past month. If a woman reported that her husband drank alcohol, her odds of experiencing emotional, economic, or sexual violence in the past year were around three times greater, and her odds of experiencing physical violence were three-and-a-half times greater than for women whose husbands did not drink alcohol. When looking at the past month, women whose husbands drank alcohol, compared with those who didn't, had around three times greater odds of experiencing emotional or economic violence, four times greater odds of experiencing sexual violence, and five-and-a-half times greater odds of experiencing physical violence. Thirty-nine women (8%) reported that their husbands drank alcohol, and the wide confidence intervals may therefore be due to small numbers in the two-way tables, particularly for experiences of physical and sexual violence.

A one-year increase in number of years of marriage decreased a woman's odds of experiencing sexual violence in the past year by 9% and physical violence by 7%. No associations were seen with emotional or economic violence in the past year. A one-year increase in the number of years married decreased the odds of economic violence in the past month by 8% and physical violence by 9%. No associations were seen for emotional or sexual violence in the past month.

Being in the fourth socio-economic quintile (the second highest) was associated with a 71% decrease in the odds of experiencing sexual violence in the past year, but no associations were seen for other types of violence or other socio-economic quintiles.

Table 28: Univariable associations between socio-demographic variables and experiences of each type of violence in the past month and past year

Socio-demographic characteristic	Period	Type of violence: OR [95% CI]			
		Emotional	**Economic**	**Physical**	**Sexual**
Frequency distribution	Past month	N=65	N=47	N=20	N=28
	Past year	N=74	N=52	N=33	N=32
Woman's characteristics					
Current age	Past month	0.91* [0.85-0.97]	0.90* [0.85-0.96]	0.87* [0.79-0.95]	0.87* [0.79-0.96]
	Past year	0.90* [0.85-0.96]	0.90* [0.85-0.96]	0.89* [0.82-0.96]	0.87* [0.81-0.94]
Years of education	Past month	1.00 [0.95-1.06]	1.08* [1.02-1.14]	1.01 [0.93-1.10]	1.00 [0.91-1.11]
	Past year	1.01 [0.96-1.07]	1.05* [1.0-1.11]	1.02 [0.96-1.08]	0.99 [0.91-1.08]
Age at marriage	Past month	0.92 [0.81-1.04]	1.03 [0.92-1.16]	0.97 [0.80-1.18]	0.98 [0.84-1.15]
	Past year	0.93 [0.84-1.04]	1.03 [0.92-1.15]	0.96 [0.83-1.12]	0.97 [0.83-1.14]
Recently migrated to Mumbai *No (reference)*	Past month				
Yes		1.45 [0.54-3.94]	0.43 [0.07-2.82]	1.00 [N/A]	1.67 [0.49-5.73]
No (reference)	Past year				
Yes		1.67 [0.74-3.74]	0.38 [0.06-2.52]	0.64 [0.09-4.46]	1.43 [0.43-4.75]
Living in Mumbai since birth *No (reference)*	Past month				
Yes		0.75 [0.47-1.21]	0.80 [0.42-1.51]	0.83 [0.33-2.05]	0.73 [0.40-1.33]
No (reference)	Past year				
Yes		0.90 [0.55-1.46]	0.80 [0.42-1.52]	0.97 [0.46-2.04]	0.61 [0.36-1.02]
Husband's characteristics					
Years of education	Past month	0.94 [0.88-1.00]	0.96 [0.89-1.04]	0.94 [0.86-1.02]	0.98 [0.90-1.07]
	Past year	0.95 [0.89-1.02]	0.94 [0.88-1.01]	0.95 [0.89-1.00]	0.98 [0.90-1.06]
Alcohol use *No (reference)*	Past month				
Yes		2.83* [1.28-6.26]	2.67* [1.16-6.15]	5.57** [2.18-14.3]	3.48** [1.63-7.40]
No (reference)	Past year				
Yes		3.13** [1.33-7.34]	3.29** [1.39-7.80]	3.51** [1.65-7.46]	2.92** [1.42-5.97]
Occupation^ *Unskilled work (reference)*	Past month				
Machine operator		1.01 [0.40-2.59]	0.60 [0.18-2.01]	1.92 [0.33-11.3]	0.94 [0.17-5.02]
Skilled work		0.66 [0.32-1.33]	0.90 [0.45-1.79]	1.69 [0.34-8.53]	1.30 [0.41-4.16]
Pink or white collar job		0.77	0.70	2.00	0.97

		[0.30-2.00]	[0.33-1.46]	[0.32-12.5]	[0.27-3.48]
Does not work		1 [N/A]	1 [N/A]	1 [N/A]	1 [N/A]
Unskilled work (reference)	Past year				
Machine operator		1.16 [0.53-2.57]	0.60 [0.18-2.01]	0.65 [0.21-1.97]	0.94 [0.17-5.02]
Skilled work		0.59 [0.29-1.20]	1.09 [0.54-2.18]	0.76 [0.29-2.00]	1.55 [0.49-4.90]
Pink or white collar job		0.74 [0.28-1.94]	0.70 [0.33-1.46]	0.53 [0.14-2.06]	1.32 [0.33-5.23]
Does not work		1 (N/A)	1 [N/A]	1 [N/A]	1 [N/A]
Relationship characteristics					
Number of years married	Past month	0.95 [0.90-1.02]	0.92* [0.86-0.98]	0.91* [0.83-0.99]	0.91 [0.82-1.01]
	Past year	0.95 [0.89-1.01]	0.92 [0.86-0.97]	0.93* [0.87-1.00]	0.91* [0.84-0.99]
Marital status^ *Married living with husband (reference)*	Past month				
Not living with husband/divorced/ widowed		0.49 [0.07-3.42]	1.57 [0.42-5.88]	1 [N/A]	1 [N/A]
Married living with husband (reference)	Past year				
Not living with husband/divorced/ widowed		0.42 [0.06-2.98]	1.39 [0.36-5.33]	1.05 [0.13-8.17]	1 [N/A]
Number of children^ *One (reference)*	Past month				
Two		1.10 [0.35-3.47]	0.48 [0.15-1.56]	0.50 [0.11-2.22]	1.14 [0.33-3.92]
Three or more		0.79 [0.36-1.77]	0.66 [0.36-1.28]	0.49 [0.14-1.67]	0.54 [0.14-2.04]
One (reference)	Past year				
Two		0.71 [0.26-1.94]	0.62 [0.20-1.88]	1.14 [0.31-4.17]	1.24 [0.35-4.34]
Three or more		0.55 [0.29-1.06]	0.71 [0.37-1.37]	0.81 [0.25-2.61]	0.70 [0.21-2.37]
Sex of children^ *All male (reference)*	Past month				
All female		0.80 [0.30-2.13]	0.86 [0.27-2.81]	1.16 [0.26-5.11]	1.85 [0.56-6.06]
Both male and female		0.78 [0.35-1.73]	1.12 [0.46-2.71]	0.59 [0.19-1.83]	1.48 [0.44-4.99]
All male (reference)	Past year				
All female		0.98 [0.43-2.23]	0.86 [0.27-2.81]	0.88 [0.22-3.58]	1.85 [0.56-6.06]
Both male and female		0.69 [0.32-1.47]	1.32 [0.53-3.27]	0.80 [0.27-2.31]	1.84 [0.57-5.99]
Household characteristics					
Household size	Past month	1.02 [0.94-1.11]	1.05 [0.95-1.16]	1.09 [0.95-1.25]	1.02 [0.89-1.16]
	Past year	1.02 [0.96-1.10]	1.02 [0.92-1.14]	1.08 [0.96-1.21]	1.01 [0.89-1.16]
Socio-economic status quintile^ *1st [low] (reference)*	Past month				
2nd		0.81	0.73	1.27	0.47

		[0.34-1.90]	[0.29-1.87]	[0.34-4.74]	[0.14-1.59]
3rd		1.23 [0.57-2.69]	0.87 [0.29-2.59]	1.18 [0.33-4.28]	0.36 [0.14-0.89]
4th		0.83 [0.38-1.83]	1.07 [0.33-3.51]	0.94 [0.20-4.44]	0.29* [0.10-0.83]
5th [high]		0.91 [0.45-1.83]	0.66 [0.27-1.60]	0.60 [0.18-2.02]	0.25* [0.06-0.97]
1st [low] (reference)	Past year				
2nd		0.81 [0.34-1.90]	0.82 [0.41-1.65]	0.74 [0.23-2.44]	0.47 [0.14-1.59]
3rd		1.23 [0.57-2.69]	0.84 [0.30-2.40]	1.45 [0.55-3.80]	0.59 [0.27-1.31]
4th		1.34 [0.59-3.06]	1.03 [0.32-3.31]	1.15 [0.34-3.84]	0.29* [0.10-0.83]
5th [high]		1.12 [0.58-2.17]	0.58 [0.24-1.42]	0.59 [0.23-1.54]	0.31 [0.09-1.13]
Religion^ Muslim *(reference)*	Past month				
Hindu or Other		0.85 [0.44-1.63]	0.46 [0.10-2.13]	0.37 [0.07-1.98]	0.54 [0.15-1.93]
Muslim (reference)	Past year				
Hindu or Other		0.85 [0.51-1.41]	0.57 [0.11-2.92]	0.21 [0.04-1.26]	0.73 [0.22-2.43]
Family set-up *Joint family (reference)*	Past month				
Nuclear family		0.59 [0.34-1.02]	0.73 [0.36-1.50]	0.72 [0.31-1.69]	1.00 [0.44-2.26]
Joint family (reference)	Past year				
Nuclear family		0.67 [0.40-1.14]	0.62 [0.31-1.28]	0.71 [0.28-1.78]	0.88 [0.39-1.94]

Statistical test: logistic regression; * p<0.05; ** p<0.01; N/A = not applicable (empty cell in two-way table)
^ Tests for heterogeneity

6.3.2. Associations with symptoms of common mental disorders

6.3.2.1. Socio-demographic predictors of GHQ-12 scores

Table 29 shows associations between socio-demographic variables and GHQ-12 score group. From chi-squared tests, partner alcohol use and recent migration to Mumbai were the only variables showing an association. In the results from ordinal logistic regressions, partner alcohol consumption was the only variable associated with GHQ-12 score group. Women who reported that their husband drank alcohol had four-and-a-half times greater odds of being in a higher GHQ-12 score group and having more symptoms of CMDs than women whose husbands did not drink alcohol.

Table 29. Univariable associations between socio-demographic predictors and GHQ-12 score group

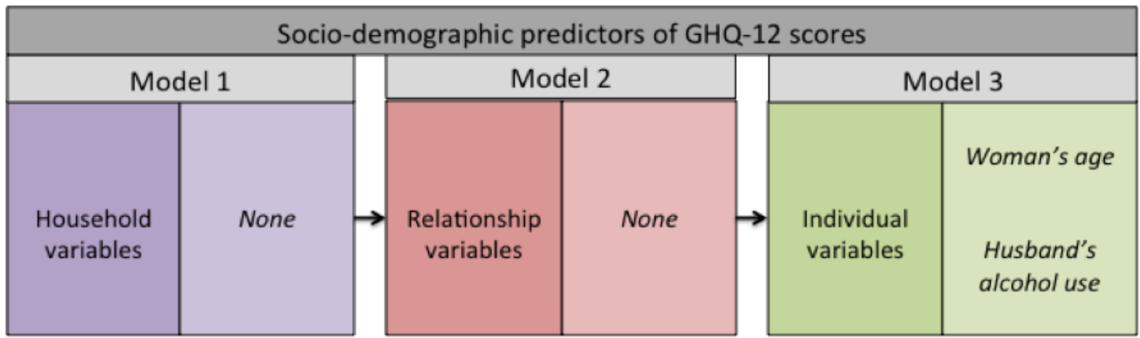
Socio-demographic characteristics	Overall	By GHQ-12 score				P*	OR [SE]	95% CI	P**
		0-1	2-3	4-5	6+				
N	**479**	**292**	**103**	**48**	**36**				
Women's characteristics									
Current age, median (IQR)	28 (25-31)	28 (26-31)	27 (24-31)	27.5 (25-31.5)	27 (24-31)	0.29	0.97 [0.01]	0.95-1.00	**0.08**
Years of education, median (IQR)	7 (3-9)	6 (3-9)	7 (5-10)	5 (0-10)	6 (4-10)	0.52	1.00 [0.02]	0.95-1.05	0.98
Age at marriage, median (IQR)	18 (17-20)	19 (17-20)	18 (17-20)	18.5 (17-20.5)	18 (17-20.5)	0.92	0.98 [0.03]	0.92-1.04	0.52
In Mumbai since birth, n (%) *No*	172 (35.9%)	112 (38.4%)	31 (30.1%)	17 (35.4%)	12 (33.3%)	0.50	*(Reference)*		
Yes	307 (64.1%)	180 (61.6%)	72 (69.9%)	31 (64.6%)	24 (66.7%)		1.26 [0.28]	0.81-1.96	0.30
Recently migrated to Mumbai, n (%) *No*	457 (95.4%)	275 (94.2%)	103 (100%)	43 (89.6%)	36 (100.0%)	**0.01**	*(Reference)*		
Yes	22 (4.6%)	17 (5.8%)	0 (0.0%)	5 (10.4%)	0 (0.0%)		0.51 [0.25]	0.20-1.33	0.17
Men's characteristics									
Years of education, median (IQR)	7 (5-10)	8 (5-10)	7 (5-9)	7.5 (5-9.5)	5 (3.5-10)	0.55	0.98 [0.02]	0.93-1.02	0.29
Alcohol consumption, n (%) *No*	440 (91.9%)	279 (95.6%)	96 (93.2%)	39 (81.3%)	26 (72.2%)	**<0.001**	*(Reference)*		
Yes	39 (8.1%)	13 (4.5%)	7 (6.8%)	9 (18.8%)	10 (27.8%)		4.52 [1.40]	2.46-8.33	**<0.001**
Occupation^, n (%) *Unskilled work*	78 (16.3%)	49 (16.8%)	13 (12.6%)	10 (20.8%)	6 (16.7%)	0.82	*(Reference)*		
Machine operator	83 (17.3%)	48 (16.4%)	15 (14.6%)	12 (25.0%)	8 (22.2%)		1.25 [0.46]	0.61-2.55	0.54
Skilled work	257 (53.7%)	159 (54.5%)	58 (56.3%)	21 (43.8%)	19 (52.8%)		0.97 [0.21]	0.63-1.49	0.88
Pink or white collar	58 (12.1%)	34 (11.6%)	16 (15.5%)	5 (10.4%)	3 (8.3%)		1.04 [0.37]	0.51-2.10	0.92
Does not work	3 (0.6%)	2 (0.7%)	1 (1.00%)	0 (0.0%)	0 (0.0%)		0.66 [0.67]	0.09-4.80	0.68
Relationship characteristics									

Number of years married, median (IQR)	9 (5-13)	9 (6-12)	7 (4-13)	8.5 (5-13.5)	7 (5-13)	0.62	0.99 [0.01]	0.96-1.01	0.26
Marital status^, n (%) *Married living with husband*	465 (97.1%)	282 (96.6%)	100 (97.1%)	48 (100.0%)	35 (97.2%)	0.64	*(Reference)*		
Not living with husband/divorced/ widowed	14 (2.9%)	10 (3.4%)	3 (2.9%)	0 (0.0%)	1 (2.8%)		0.59 [0.29]	0.23-1.55	0.29
Number of children, n (%) *One*	32 (11.0%)	12 (11.7%)	7 (14.6%)	4 (11.1%)	0 (0.0%)	0.97	*(Reference)*		
Two	96 (32.9%)	36 (35.0%)	13 (27.1%)	12 (33.3%)	1 (33.3%)		0.87 [0.24]	0.50-1.50	0.61
Three or more	164 (56.2%)	55 (53.4%)	28 (58.3%)	20 (55.6%)	2 (66.7%)		0.88 [0.15]	0.63-1.23	0.46
Sex of children^, n (%) *All male*	75 (15.7%)	47 (16.1%)	19 (18.5%)	3 (6.3%)	6 (16.7%)	0.24	*(Reference)*		
All female	98 (20.5%)	56 (19.2%)	20 (19.4%)	16 (33.3%)	6 (16.7%)		1.34 [0.49]	0.66-2.74	0.42
Both male and female	306 (63.9%)	189 (64.7%)	64 (62.1%)	29 (60.4%)	24 (66.7%)		1.10 [0.29]	0.66-1.83	0.72
Household characteristics									
Household size, median (IQR)	7 (5-9)	7 (5-8)	7 (5-8)	6.5 (5-9)	6.5 (5-9)	0.79	1.03 [0.04]	0.96-1.10	0.48
SES quintile^, n (%) *1st [Low]*	71 (14.8%)	39 (13.4%)	17 (16.5%)	9 (18.8%)	6 (16.7%)	0.91	*(Reference)*		
2nd	93 (19.4%)	63 (21.6%)	15 (14.6%)	9 (18.8%)	6 (16.7%)		0.61 [0.23]	0.29-1.28	0.19
3rd	101 (21.1%)	57 (19.5%)	23 (22.3%)	13 (27.1%)	8 (22.2%)		0.95 [0.28]	0.53-1.69	0.86
4th	99 (20.7%)	62 (21.2%)	23 (22.3%)	8 (16.7%)	6 (16.7%)		0.71 [0.26]	0.35-1.44	0.34
5th [High]	115 (24.0%)	71 (24.3%)	25 (24.3%)	9 (18.8%)	10 (27.8%)		0.77 [0.24]	0.42-1.41	0.39
Religion^, n (%) *Muslim*	420 (87.7%)	256 (87.7%)	93 (90.3%)	40 (83.3%)	31 (86.1%)	0.67	*(Reference)*		
Hindu or Other	59 (12.3%)	36 (12.3%)	10 (9.7%)	8 (16.7%)	5 (13.9%)		1.07 [0.22]	0.71-1.62	0.74
Family set-up, n (%) *Joint family*	225 (47.0%)	130 (44.5%)	52 (50.5%)	21 (43.8%)	22 (61.1%)	0.23	*(Reference)*		
Nuclear family	254 (53.0%)	162 (55.5%)	51 (49.5%)	27 (56.3%)	14 (38.9%)		0.77 [0.17]	0.50-1.20	0.25

*Kruskal-Wallis test for continuous predictors, chi-square test for categorical predictors; ** Ordinal logistic regression, ^ Tests for heterogeneity

Socio-demographic predictors showing an association with GHQ-12 score group at p <=0.1 were added sequentially to the multivariable models based on their hierarchical group. Figure 14 shows the socio-demographic variables considered in the multivariable analysis.

Figure 14. Socio-demographic variables at each hierarchical level to be considered in multivariable analysis.



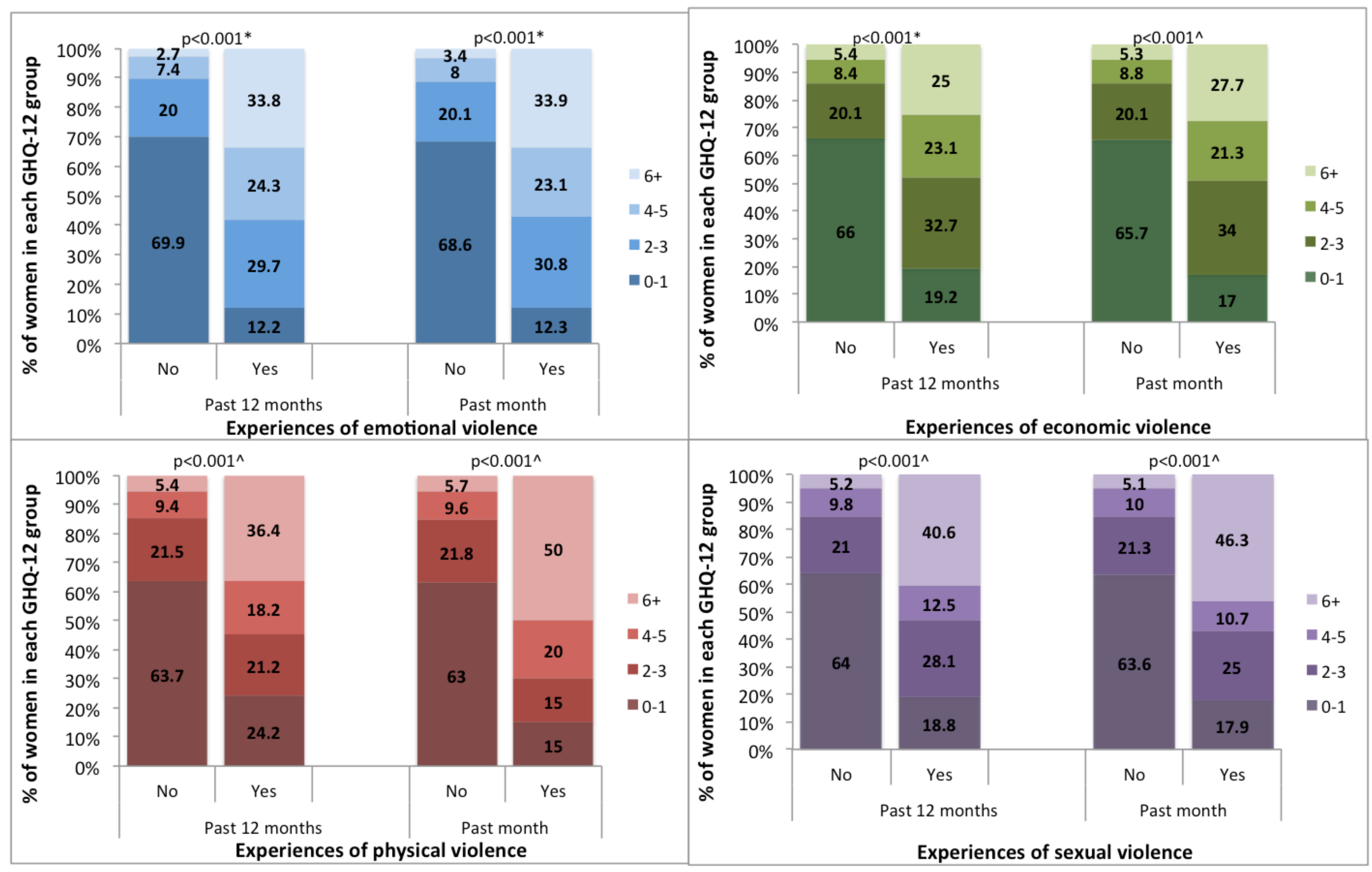
6.3.2.2. Association between experiences of violence and GHQ-12 scores

Figure 15 shows the proportions of women in each GHQ-12 score group who did or did not report each type of violence in the past 12 months and the past month. For women who reported emotional violence in the past year and the past month, the greatest proportion had a GHQ-12 score of 6 or above (around 34%). For both periods, chi-squared tests suggested an association between experiences of emotional violence and GHQ-12 score group. Across both periods, the greatest proportion of women who reported economic violence had a GHQ-12 score of two or three (33% in the past year and 34% in the past month). Chi-squared tests suggested an association between experiences of economic violence and GHQ-12 score group.

The majority of women who reported physical violence in the past year and the past month had GHQ-12 scores of six or above (36% for the past year and 50% for the past month). Fisher's exact test suggested an association between experiences of physical violence and GHQ-12 score group. Women who reported sexual violence in the past year and the past month were most likely to have a GHQ-12 score of six or above (41% for the past year and 46% for the past month). An association between experiences of sexual violence

and GHQ-12 score group was suggested by Fisher's exact test. Two-way tables for experiences of each type of violence against GHQ-12 score group are included in Appendix 10, tables 4-7.

Figure 15: Proportion of women in each GHQ-12 score group, by type of violence in the past year and past month



Univariable models

Table 30 shows the results of univariable ordinal regression models of reported experiences of each type of violence in the past 12 months or the past month against GHQ-12 score group. Women who reported experiencing emotional violence in the past year had 15 times greater odds of being in a higher GHQ-12 score group than women who had not. For women who reported emotional violence in the past month, the odds of being in a higher GHQ-12 score group were 13 times greater.

Experiencing economic violence in the past year increased a woman's odds of being in a higher GHQ-12 score group 6.5 times, compared with women who did not report experiencing economic violence. Similarly, compared to women who did not report it, economic violence in the past month increased women's odds of being in a higher GHQ-12 score group seven times.

Women who reported physical violence in the past year had seven times greater odds of being in a higher GHQ-12 score group than women who did not, and women who reported physical violence in the past month had 14 times greater odds. Experiencing sexual violence in the past year increased women's odds of being in a higher GHQ-12 score group 8.5 times, compared with women who had not experienced sexual violence. For women who reported sexual violence in the past month, the odds of being in a higher GHQ-12 score group were over ten times greater compared with women who had not experienced sexual violence in the past month. The model for sexual violence in the past month violated the proportional odds assumption at univariable level.

A clear association is seen between all forms of violence and more symptoms of CMDs, but this is particularly strong for emotional violence.

Table 30. Univariable ordinal logistic regression of experiences of violence by type in the past year and the past month against GHQ-12 score group, using robust standard errors to adjust for clustering

	N	Odds ratio for unit increase in GHQ-12 score group	Robust standard error	P*	95% confidence interval	
Emotional violence						
Past 12 months	74	14.63	3.49	<0.001	9.17	23.34
Past month	65	12.57	2.76	<0.001	8.17	19.32
Economic violence						
Past 12 months	52	6.55	2.04	<0.001	3.56	12.05
Past month	47	7.04	2.56	<0.001	3.45	14.35
Physical violence						
Past 12 months	33	7.27	2.68	<0.001	3.53	14.95
Past month	20	14.24	7.29	<0.001	5.22	38.83
Sexual violence						
Past 12 months	32	8.51	3.72	<0.001	3.61	20.06
Past month	28	10.42	5.18	<0.001	3.93	27.62

*Ordinal logistic regression

Multivariable models

Covariates included in the models

None of the socio-demographic variables at household or relationship level showed an association with GHQ-12 score group in univariable analysis. Model 1 was only adjusted for the woman's age, added as an *a priori* variable to all models. Partner alcohol use was added to Model 3. It continued to show an association with GHQ-12 score group and was retained for Model 4. The final models for both periods were therefore adjusted for woman's age and husband's alcohol use.

Emotional violence

After adjusting for woman's age and the partner alcohol use, women who reported emotional violence in the past year had 14 times greater odds of being in a higher GHQ-12 score group than women who did not. The odds of being in a higher GHQ-12 score group were 12 times greater for women who reported emotional violence in the past month compared to those who did not (Table 31).

Table 31. Model 4: Multivariable ordinal logistic regression of experiences of emotional violence in the past year and the past month, adjusted for woman's age and partner alcohol use, using robust standard errors to account for the effects of clustering

	N	Odds ratio	Robust standard error	P*	95% confidence interval	
Emotional violence: past year	74	13.8	3.15	<0.001	8.82	21.60
Woman's age		1.01	0.02	0.69	0.98	1.04
Partner alcohol use		3.65	1.19	<0.001	1.92	6.93
Emotional violence: past month	65	11.8	2.48	<0.001	7.77	17.76
Woman's age		1.00	0.02	0.86	0.97	1.04
Partner alcohol use		3.73	1.32	<0.001	1.87	7.45

*Ordinal logistic regression adjusted for woman's age and partner alcohol use

Economic violence

Women who reported economic violence in the past year had almost six times greater odds of being in a higher GHQ-12 score group than women who did not report economic violence at each time point, and women who reported economic violence in the past month nearly six and a half times greater odds (Table 32).

Table 32. Model 4: Economic violence in the past year and the past month against GHQ-12 score group, adjusted for woman's age and partner alcohol use, using robust standard errors to adjust for clustering

	N	Odds ratio	Robust standard error	P*	95% confidence interval	
Economic violence: past year	52	5.81	1.65	<0.001	3.33	10.15
Woman's age		0.99	0.01	0.68	0.97	1.02
Partner alcohol use		3.71	1.07	<0.001	2.10	6.54
Economic violence: past month	47	6.42	2.09	<0.001	3.39	12.14
Woman's age		0.99	0.01	0.66	0.97	1.02
Partner alcohol use		3.96	1.13	<0.001	2.26	6.94

*Ordinal logistic regression adjusted for woman's age and partner alcohol use

Physical violence

When adjusting for woman's age and partner alcohol use, women who reported physical violence in the past year had six times greater odds of being in a higher GHQ-12 score group, and women who reported it in the past month had 11 times greater odds, than women who had not experienced physical violence in the same period (Table 33).

Table 33. Model 4: Physical violence in the past year and the past month against GHQ-12 score group, adjusted for woman's age and partner alcohol use, using robust standard errors to account for clustering.

	N	**Odds ratio**	**Robust standard error**	**P***	**95% confidence interval**	
Physical violence: past year	33	6.06	2.39	<0.001	2.79	13.14
Woman's age		0.99	0.02	0.48	0.96	1.02
Partner alcohol use		3.74	1.15	<0.001	2.06	6.82
Physical violence: past month	20	10.94	6.08	<0.001	3.68	32.52
Woman's age		0.99	0.02	0.48	0.96	1.02
Partner alcohol use		3.56	1.10	<0.001	1.95	6.52

*Ordinal logistic regression adjusted for woman's age and partner alcohol use

Sexual violence

After adjusting for covariates, women who reported sexual violence in the past year had almost eight times greater odds of being in a higher GHQ-12 score group than women who had not. Women who reported sexual violence in the past month had nine times greater odds of being in a higher GHQ-12 score group (Table 34).

Table 34. Model 4: Sexual violence in the past year and the past month against GHQ-12 score group, adjusted for woman's age and partner alcohol use, with robust standard errors to adjust for clustering

	N	Odds ratio	Robust standard error	P*	95% confidence interval	
Sexual violence: past year	32	7.71	3.29	<0.001	3.34	17.78
Woman's age		0.99	0.02	0.47	0.96	1.02
Partner alcohol use		4.14	1.25	<0.001	2.30	7.47
Sexual violence: past month	28	9.06	4.39	<0.001	3.51	23.40
Woman's age		0.99	0.02	0.43	0.96	1.02
Partner alcohol use		3.99	1.19	<0.001	2.22	7.17

*Ordinal logistic regression adjusted for woman's age and partner alcohol use

In order to see whether the associations between each type of violence and symptoms of CMDs was influenced by the other types of violence, I re-ran the analyses, also controlling for the other types. Emotional violence and sexual violence were the only ones that retained their significance at both the past year and past month (Table 35).

Table 35. Emotional, economic, physical and sexual violence in the past year and the past month against GHQ-12 score group, adjusted for woman's age, partner alcohol use and all 3 other types of violence experienced in the same period, with robust standard errors to adjust for clustering

	N	Odds ratio	Robust standard error	P*	95% confidence interval	
Emotional violence: past year	74	9.56	3.14	<0.001	5.02	18.18
Emotional violence: past month	65	6.95	2.34	<0.001	3.59	13.44
Economic violence: past year	52	1.82	0.64	0.09	0.91	3.61
Economic violence: past month	47	2.02	0.87	0.10	0.87	4.68
Physical violence: past year	33	1.05	0.54	0.93	0.38	2.85
Physical violence: past month	20	1.81	1.15	0.35	0.53	6.25
Sexual violence: past year	32	3.75	1.60	0.002	1.62	8.67
Sexual violence: past month	28	3.77	1.63	0.002	1.61	8.82

*Ordinal logistic regression adjusted for woman's age, partner alcohol use and experiences of all 3 other types of violence in the same period

6.3.2.3. Number of different acts of violence

The number of different acts of each type of violence experienced in either the past year or the past month was tested against GHQ-12 score group. All models were adjusted for woman's age and partner alcohol use. Table 36 shows the output of Model 4. The odds of

being in a higher GHQ-12 score group increased with the number of different acts of each type of violence experienced. Women experiencing an additional act of emotional violence in the past year had 2.3 times greater odds, and in the past month 2.6 times greater odds, of being in a higher GHQ-12 score group.

For each additional act of economic violence experienced in the past year, women's odds of being in a higher GHQ-12 score groups were 2.9 times greater. The effect of experiencing an additional act of economic violence in the past month increased the odds 3.4 times.

An additional act of physical or sexual violence in the past year was associated with 3 times greater odds of being in a higher GHQ-12 score group. Women who experienced an additional act of physical violence in the past month had 3.2 times greater odds, and women who experienced an additional act of sexual violence in the past month had four and a half times greater odds.

Table 36. Model 4: Number of different acts of each type of violence in the past year and the past month, by GHQ-12 score group, adjusted for woman's age and partner alcohol use, using robust standard errors to adjust for clustering

No. of different acts of violence	Past 12 months					Past month				
	N	**OR**	**SE**	**95% CI**	**P***	N	**OR**	**SE**	**95% CI**	**P***
Emotional	74	2.3	0.21	1.9 – 2.7	**<0.001**	65	2.6	0.3	2.0 –3.3	**<0.001**
Woman's age		1.0	0.02	1.0 – 1.0	0.66		1.0	0.02	1.0 -1.0	0.82
Partner alcohol		3.2	1.11	1.7 – 6.3	**0.001**		3.4	1.20	1.7-6.8	**0.001**
Economic	52	2.9	0.81	1.7-5.0	**<0.001**	47	3.4	0.99	1.9-6.0	**<0.001**
Woman's age		1.0	0.01	1.0 -1.0	0.52		1.0	0.01	1.0 –1.0	0.46
Partner alcohol		3.3	1.05	1.77-6.17	**<0.001**		3.4	1.06	1.9-6.3	**<0.001**
Physical	33	3.0	0.65	1.0-4.6	**<0.001**	20	3.2	1.03	1.7-6.0	**<0.001**
Woman's age		1.0	0.02	0.96-1.02	0.52		1.0	0.02	1.0-1.0	0.51
Partner alcohol		3.6	1.03	2.0-6.3	**<0.001**		3.5	1.00	2.0-6.1	**<0.001**
Sexual	32	3.1	0.73	1.9-4.9	**<0.001**	28	4.5	1.06	2.9-7.2	**<0.001**
Woman's age		1.0	0.02	0.96 -1.0	0.28		1.0	0.02	1.0 -1.0	0.32
Partner alcohol		4.0	1.29	2.2-7.6	**<0.001**		3.9	1.26	2.1-7.3	**<0.001**

*Ordinal logistic regression with all models adjusted for woman's age and partner alcohol use.

6.3.2.4. Polyvictimisation

Most of the women who had experienced more than one type of violence in the past 12 months or past month had a GHQ-12 score of six or above (39% for the past 12 months and 42% for the past month). A chi-squared test suggested an association between polyvictimisation and GHQ-12 score group (Table 37).

Table 37. Two-way table of polyvictimisation in the past year and past month against GHQ-12 score group

Grouped GHQ scores	Polyvictimisation					
	Past 12 months			Past month		
	No	Yes	Total	No	Yes	Total
0-1	20 (33.9%)	6 (11.5%)	26 (23.4%)	20 (36.4%)	2 (4.8%)	22 (22.7%)
2-3	16 (27.1%)	16 (30.8%)	32 (28.8%)	16 (29.1%)	13 (31.0%)	29 (29.9%)
4-5	12 (20.3%)	11 (21.2%)	23 (20.7%)	8 (14.6%)	10 (23.8%)	18 (18.6%)
6+	11 (18.6%)	19 (36.5%)	30 (27.0%)	11 (20.0%)	17 (40.5%)	28 (28.9%)
Total	59 (100.0%)	52 (100.0%)	111 (100.0%)	55 (100.0%)	42 (100.0%)	97 (100.0%)
P*	0.025			0.002		

*Chi-square test

The odds of being in a higher GHQ-12 score group increased almost three-fold for women who experienced more than one type of violence in the past year, and almost five-fold for women who experienced polyvictimisation in the past month (Table 38).

Table 38. Polyvictimisation in the past year or the past month against GHQ-12 score group, adjusted for covariates and using robust standard errors to account for clustering.

	N	**OR**	**Robust SE**	**95% CI**	**P***
Polyvictimisation past year	52	2.8	1.14	1.2-6.2	**0.013**
Woman's age		1.0	0.04	1.0 – 1.1	0.26
Partner alcohol use		4.9	3.10	1.4 – 16.9	**0.012**
Polyvictimisation in the past month	42	4.9	2.09	2.1-11.3	**<0.001**
Woman's age		1.1	0.03	1.0-1.2	**0.003**
Partner alcohol use		5.5	3.84	1.4-21.7	**0.016**

*Ordinal logistic regression adjusted for woman's age and partner alcohol use

6.3.3. Associations with levels of self-esteem

6.3.3.1. Socio-demographic predictors of self-esteem

Table 39 shows the bivariate and univariable analysis of socio-demographic predictors against RSES group. Women who reported that their husbands drank alcohol had lower self-esteem. At a significance level of p=<0.1, used to select covariates to enter into the adjusted models, a woman's number of years of completed education, her husband being employed in skilled work, and her number of years married all showed an association with RSES group.

Table 39. Univariable analysis of socio-demographic predictors against Rosenberg score group, using robust standard errors to adjust for clustering

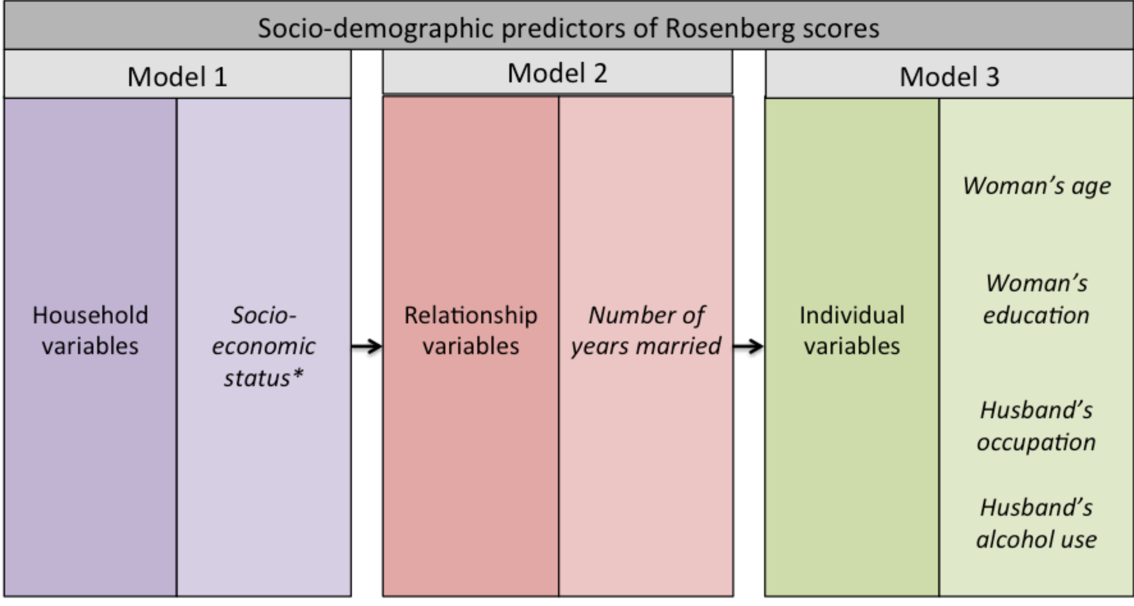
Socio-demographic characteristics	Overall	By Rosenberg score group		P**	Coeff. [SE]	95% CI	P+
		0-14	15+				
N	481	26	455				
Woman's characteristics							
Current age, median (IQR)	28 (25-31)	31 (25-33)	28 (25-31)	0.22	-0.05 [0.03]	-0.1-0.0	0.16
Years of education, median (IQR)	7 (3-9)	5 (0-5)	7 (3-10)	**0.04***	0.11 [0.04]	0.0-0.2	**0.02***
Age at marriage, median (IQR)	18 (17-20)	18 (16-21)	19 (17-20)	0.62	0.08 [0.08]	-0.1-0.3	0.38
Recently migrated to Mumbai, n (%) *No*	459 (95.4%)	24 (5%)	435 (95%)	0.61	*(Reference)*		
Yes	22 (4.6%)	2 (9%)	20 (91%)		-0.1 [1.0]	-2.1-2.0	0.95
Living in Mumbai since birth, n (%) *No*	171 (35.6%)	10 (6%)	161 (94%)	0.10	*(Reference)*		
Yes	310 (64.5%)	16 (5%)	294 (95%)		0.39 [0.3]	-0.3-1.1	0.26
Husband characteristics							
Yrs of education, median (IQR)	7 (5-10)	8 (5-10)	7 (5-10)	0.94	0.04 [0.05]	-0.1-0.1	0.47
Alcohol consumption, n (%) *No*	442 (91.9%)	21 (5%)	421 (95%)	**0.03***	*(Reference)*		
Yes	39 (8.1%)	5 (13%)	34 (87%)		-1.5 [0.6]	-2.8- -0.2	**0.03***
Occupation^, n (%) *Unskilled work*	78 (16.2%)	5 (6%)	73 (94%)	0.93	*(Reference)*		
Machine operator	83 (17.3%)	5 (6%)	78 (94%)		0.6 [0.5]	-0.5-1.8	0.25
Skilled work	257 (53.4%)	14 (5%)	243 (95%)		1.3 [0.4]	0.4-2.2	**0.01***
Pink or white collar	60 (12.5%)	2 (3%)	58 (97%)		0.9 [0.7]	-0.5-2.3	0.20
Does not work	3 (0.6%)	0 (0.%)	3 (100%)		-0.2 [0.7]	-1.7-1.3	0.75
Number of years married, median (IQR)	9 (5-13)	8.5 (6-16)	9 (5-13)	0.33	-0.05 [0.03]	-0.1-0.0	**0.07***
Relationship characteristics							
Marital status^, n (%) *Married living with husband*	467 (97.1%)	25 (5%)	442 (95%)	0.09	*(Reference)*		0.32
Not living with husband/divorced/	14 (2.9%)	1 (7%)	13 (93%)		-0.7 [0.7]	-2.0-0.7	

Widowed							
Number of children^, n (%) *One*	55 (11.4%)	2 (4%)	53 (96%)	0.22	(Reference)		
Two	158 (32.9%)	8 (5%)	150 (95%)		0.3 [0.5]	-0.7-1.3	0.55
Three	126 (26.2%)	7 (6%)	119 (94%)		-0.3 [0.6]	-1.5-0.9	0.67
Four	69 (14.4%)	2 (3%)	67 (97%)		0.09 [0.7]	-1.4-1.6	0.90
Five	39 (8.1%)	2 (5%)	37 (95%)		-0.5 [0.7]	-1.9-0.8	0.42
More than five	34 (7.1%)	5 (14%)	29 (85%)		-0.9 [0.8]	-2.5-0.7	0.24
Sex of children^, n (%) *All male*	75 (15.6%)	7 (9%)	68 (91%)	0.25	(Reference)		
All female	98 (20.4%)	4 (4%)	94 (96%)		-0.1 [0.5]	-1.2-1.0	0.83
Both male and female	308 (64.0%)	15 (5%)	293 (95%)		-0.3 [0.4]	-1.2-0.6	0.48
Household characteristics							
Household size, median (IQR)	7 (5-9)	7 (5-9)	7 (5-9)	0.29	-0.05 [0.05]	-0.2-0.06	0.36
Socio-economic status quintile^, n (%) *1st [Low]*	71 (14.8%)	6 (9%)	65 (92%)	0.16	(Reference)		
2nd	93 (19.3%)	2 (2%)	91 (98%)		0.7 [0.5]	-0.5-1.8	0.22
3rd	101 (21.0%)	5 (5%)	96 (95%)		0.8 [0.7]	-0.7-2.3	0.29
4th	100 (20.8%)	8 (8%)	92 (92%)		0.7 [0.5]	-0.4-1.8	0.22
5th [High]	116 (24.1%)	5 (4%)	111 (96%)		0.9 [0.7]	-0.5-2.3	0.17
Religion^, n (%)	422 (87.7%)	22 (5%)	400 (95%)		(Reference)		
Muslim				0.62			
Hindu or Other	59 (12.3%)	4 (7%)	55 (93%)		1.0 [0.6]	-2.2-0.3	0.12
Family set-up, n (%)	226 (47.0%)	16 (7%)	210 (93%)		(Reference)		
Joint family				0.13			
Nuclear family	255 (53.0%)	10 (4%)	245 (96%)		0.4 [0.3]	-0.3-1.0	0.27

*Statistically significant at p=0.1; ** Kruskal-Wallis test for continuous predictors, chi-square test for categorical predictors; **+** linear regression, ^ Tests for heterogeneity

Figure 16 shows the socio-demographic variables considered for multivariable analysis.

Figure 16. Socio-demographic variables at each hierarchical level to be considered for multivariable analysis.



6.3.3.2. Association between experiences of violence and Rosenberg self-esteem scores

Table 40 displays the mean Rosenberg score by the proportion of women who had experienced each type of violence in the past year and the past month. Using a Kruskal-wallis test to explore the difference in mean scores, a statistically significant difference was seen for emotional and economic violence at both time points. No difference was seen for physical or sexual violence.

Table 40. Mean Rosenberg score by type of violence

Period	Type of violence	Total number of women	Mean RSES score	SD	P*
Past year	**Emotional** Yes	74	18	4	**<0.001**
	No	408	20	3	
	Economic Yes	50	19	4	**0.04**
	No	430	20	3	
	Physical Yes	33	20	5	0.23
	No	449	20	3	
	Sexual Yes	32	20	5	0.31
	No	450	20	3	
Past month	**Emotional** Yes	65	18	4	**<0.001**
	No	417	20	3	
	Economic Yes	47	19	4	**0.02**
	No	435	20	3	
	Physical Yes	20	19	5	0.06
	No	462	20	3	
	Sexual Yes	28	19	5	0.11
	No	454	20	3	

*Kruskal-wallis test

Univariable models

Table 41 shows the results of univariable linear regression models of experiences of violence in the past 12 months or the past month against RSES score. Women who experienced emotional violence in the past year and the past month had lower self-esteem. No other form of violence was associated with RSES scores at either time point.

Table 41. Univariable associations between experiences of each type of violence in the past year and past month and Rosenberg self-esteem score, using robust standard errors to adjust for clustering

	N	Coeff.	Robust standard error	P*	95% confidence interval	
Emotional violence						
Past 12 months	74	-2.58	0.43	**<0.001**	-3.48	-1.67
Past month	65	-2.21	0.40	**<0.001**	-3.22	-1.20
Economic violence						
Past 12 months	52	-1.10	0.52	0.05	-2.19	-0.02
Past month	47	-1.32	0.64	0.05	-2.66	0.01
Physical violence						
Past 12 months	33	-0.16	0.85	0.85	-1.93	1.60
Past month	20	-1.03	1.10	0.36	-3.33	1.26
Sexual violence						
Past 12 months	32	-0.21	0.93	0.82	-2.16	1.74
Past month	28	-0.57	1.00	0.58	-2.68	1.53

*Linear regression

Multivariable models

Covariates included in adjusted models

At the univariable level, number of years married, a woman's educational attainment, partner alcohol use, and partner occupation all showed associations with RSES score. Woman's age was included in all models as an *a priori* variable. Number of years married did not continue to show an association in Model 2 and was not retained for Model 3. Partner alcohol use did not continue to show an association in Model 3 and was also not retained. For Model 3 for emotional violence in the past 12 months and physical and sexual violence in both periods, woman's educational attainment and husband's occupation all continued to show an association with RSES and were retained for Model 4. For emotional violence in the past month and economic violence at both time points, woman's education did not continue to show an association and was therefore not retained for Model 4.

Emotional violence

After adjusting for covariates, experiencing emotional violence in the past year was associated with lower RSES scores (coefficient -2.6, 95% CI: -3.47, -1.78). The same pattern was seen for the past month (coefficient -2.27, 95% CI: -3.36, -1.29) (Table 42).

Table 42. Multivariable analysis of experiences of emotional violence in the past year and the past month against Rosenberg self-esteem scores, adjusted for covariates, using robust standard errors to account for clustering

	N	Coef.	Robust SE	95% CI	P*
Emotional violence past 12 months	74	-2.63	0.40	-3.47 – -1.78	**<0.001**
Woman's age		-0.05	0.04	-0.12 – 0.03	0.20
Woman's education (years)		0.11	0.05	-0.00 – 0.21	0.04
Husband's occupation^					
Unskilled work		*(Reference)*			
Machine operator		0.54	0.51	-0.53 – 1.61	0.30
Skilled work		1.02	0.48	0.00 – 2.02	0.05
Pink or white collar job		0.36	0.72	-1.14 – 1.87	0.62
Does not work		-1.58	0.68	-3.02 – -0.15	0.03
Emotional violence past month	65	-2.27	0.47	-3.26 – -1.29	**<0.001**
Woman's age		-0.07	0.03	-0.14 - -0.01	0.03
Husband's occupation^					
Unskilled work		*(Reference)*			
Machine operator		0.58	0.51	-0.48 – 1.64	0.27
Skilled work		1.12	0.46	0.15– 2.10	**0.03**
Pink or white collar job		0.76	0.69	-0.69 – 2.20	0.29
Does not work		-0.97	0.77	-2.58 – 0.64	0.22

* Linear regression adjusted for woman's age, woman's educational attainment and husband's occupation
^Tests for heterogeneity

Economic violence

After adjusting for covariates, reporting economic violence in the past year and the past month was associated with lower RSES scores and therefore lower self-esteem (Table 43).

Table 43. Multivariable analysis of experiences of economic violence in the past year and the past month against Rosenberg self-esteem scores, adjusted for covariates, using robust standard errors to account for clustering

	N	Coef.	Robust SE	95% CI	P*
Economic violence past 12 months	52	-1.28	0.52	-2.37 – -0.19	**0.02**
Woman's age		-0.06	0.03	-0.13 – 0.00	0.05
Husband's occupation^					
Unskilled work		*(Reference)*			
Machine operator		0.86	0.49	-0.17 – 1.88	0.10
Skilled work		1.26	0.44	0.34 – 2.18	**0.01**
Pink or white collar job		0.82	0.62	-0.48 – 2.12	0.20
Does not work		-0.95	0.84	-2.72 – 0.81	0.27
Economic violence month	47	-1.45	0.60	-2.70 – -0.20	**0.03**
Woman's age		-0.07	0.03	-0.13 - -0.00	0.045
Husband's occupation^					
Unskilled work		*(Reference)*			
Machine operator		0.85	0.49	-0.18 – 1.87	0.10
Skilled work		1.27	0.44	0.35 – 2.19	**0.01**
Pink or white collar job		0.82	0.62	-0.49 – 2.12	0.21
Does not work		-0.97	0.84	-2.72 – 0.79	0.27

*Linear regression adjusted for woman's age, woman's educational attainment and husband's occupation
^ Tests for heterogeneity

Physical violence

The adjusted models showed no statistically significant association was between RSES and experiences of physical violence in the past year or the past month (Table 44).

Table 44. Multivariable analysis of experiences of physical violence in the past year and the past month against Rosenberg self-esteem scores, adjusted for covariates and using robust standard errors to adjust for clustering

	N	Coef.	Robust SE	95% CI	P*
Physical violence past 12 months	33	-0.22	0.77	-1.87 – 1.42	0.78
Woman's age		-0.03	0.03	-0.10 – 0.04	0.44
Woman's education (years)		0.10	0.05	-0.00 – 0.21	0.06
Husband's occupation^					
Unskilled work		*(Reference)*			
Machine operator		0.82	0.50	-0.23 – 1.87	0.12
Skilled work		1.27	0.46	0.30 – 2.23	**0.01**
Pink or white collar job		0.54	0.67	-0.88 – 1.95	0.44
Physical violence past month	20	-1.17	1.08	-3.42 – 1.08	0.29
Woman's age		-0.03	0.04	-0.10 – 0.04	0.39
Woman's education (years)		0.11	0.05	0.00 – 0.21	**0.049**
Husband's occupation^					
Unskilled work		*(Reference)*			
Machine operator		0.73	0.50	-0.31 – 1.76	0.16
Skilled work		1.20	0.46	0.25 – 2.16	**0.02**
Pink or white collar job		0.42	0.67	-0.99 – 1.83	0.54
Does not work		-1.40	0.79	-3.06 – 0.26	0.09

* Linear regression adjusted for woman's age, woman's educational attainment and husband's occupation
^ Tests for heterogeneity

Sexual violence

After adjusting for covariates, no associations were seen between experiences of sexual violence in the past year or the past month and RSES (Table 45).

Table 45. Multivariable analysis of experiences of sexual violence in the past year and the past month against Rosenberg self-esteem scores, adjusted for covariates and using robust standard errors to account for clustering

	N	Coeff.	Robust SE	95% CI	P*
Sexual violence past 12 months	32	-0.33	0.87	-2.15 – 1.48	0.72
Woman's age		-0.02	0.03	-0.09 – 0.04	0.50
Woman's education (years)		0.11	0.05	0.01 – 0.21	0.03
Husband's occupation^					
Unskilled work		*(Reference)*			
Machine operator		0.78	0.51	-0.29 – 1.85	0.14
Skilled work		1.18	0.47	0.19 – 2.16	**0.02**
Pink or white collar job		0.42	0.65	-0.95 – 1.79	0.53
Does not work		-1.34	0.80	-3.02 – 0.33	0.11
Sexual violence past month	28	-0.71	0.93	-2.66– 1.24	0.46
Woman's age		-0.03	0.03	-0.10 – 0.05	0.45
Woman's education (years)		0.11	0.05	0.00 – 0.21	0.04
Husband's occupation^					
Unskilled work		*(Reference)*			
Machine operator		0.78	0.51	-0.29 – 1.84	0.15
Skilled work		1.20	0.47	0.22 – 2.19	**0.02**
Pink or white collar job		0.46	0.67	-0.95 – 1.87	0.50
Does not work		-1.34	0.80	-3.02 – 0.33	0.11

* Linear regression adjusted for woman's age, woman's educational attainment and husband's occupation
^ Tests for heterogeneity

6.3.3.3. Number of different acts of violence

Figure 17 shows the number of different acts of each type of violence experienced in the past year and the past month plotted against RSES. The graphs appear to show that, as the number of different acts of violence increases, scores - and therefore levels of self-esteem - decrease.

Figure 17. Number of different acts of violence in the past year and past month against RSES, by type of violence

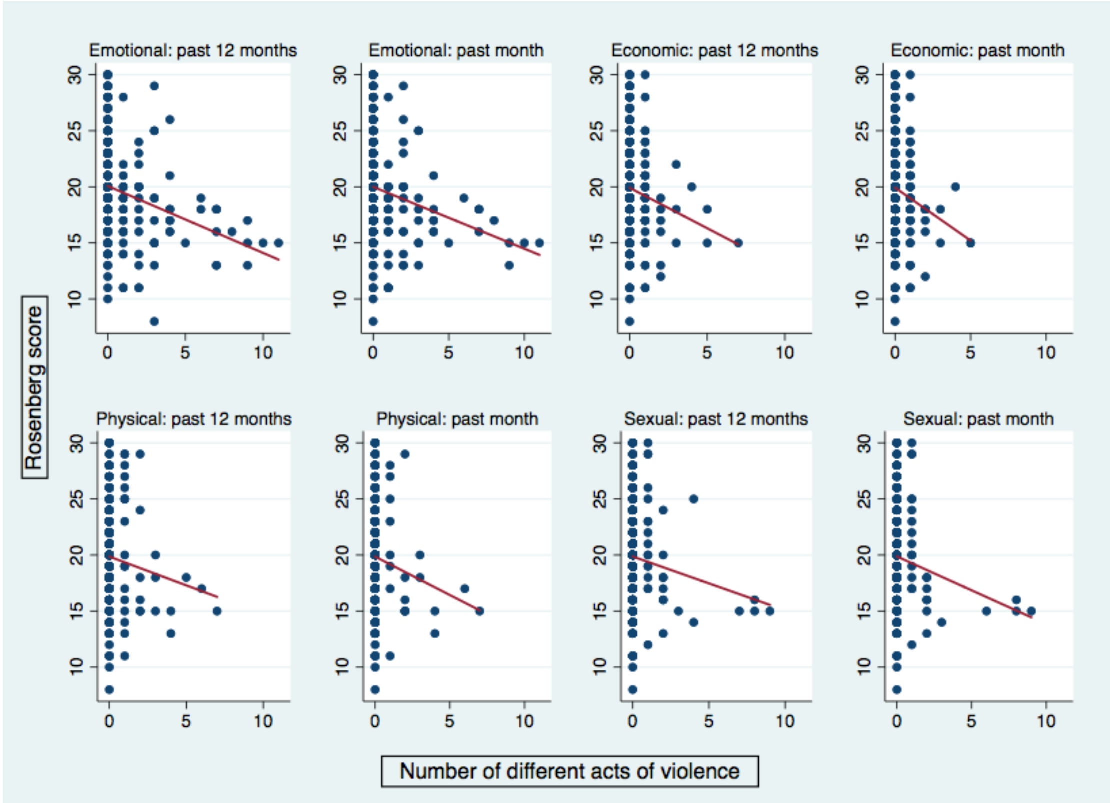


Table 46 shows unadjusted and adjusted models for the number of different acts of each type of violence experienced in the past year and the past month against RSES score. For all types of violence in both periods, the unadjusted and adjusted models show that an additional act of violence decreased women's score and was therefore associated with lower self-esteem.

Table 46. Number of different acts of each type of violence in the past year and past month against Rosenberg self-esteem score, showing adjusted and unadjusted models and using robust standard errors to account for clustering

Number of acts of violence		Past 12 months					Past month			
	N	**Coef**	**SE**	**95% CI**	**P***	N	**Coef**	**SE**	**95% CI**	**P***
Emotional	74					65				
Unadjusted		-0.6	0.1	-0.8 - -0.4	**<0.001**		-0.6	0.1	-0.7 - -0.4	**<0.001**
Adjusted**		-0.6	0.1	-0.8– -0.5	**<0.001**		-0.6	0.04	-0.7 - -0.4	**<0.001**
Economic	52					47				
Unadjusted		-0.7	0.16	-1.1 - -0.4	**<0.001**		-0.9	0.24	-1.4 - -0.4	**0.001**
Adjusted**		-0.7	0.15	-1.1– -0.4	**<0.001**		1.0	0.22	-1.4 - -0.5	**<0.001**
Physical	33					20				
Unadjusted		-0.5	0.18	-0.9 - -0.1	**0.01**		-0.7	0.22	-1.2 - -0.2	**0.006**
Adjusted**		-0.5	0.18	-0.8– -0.1	**0.02**		-0.6	0.23	-1.1– -0.1	**0.02**
Sexual	32					28				
Unadjusted		-0.5	0.14	-0.8 - -0.2	**0.002**		-0.6	0.13	-0.9 - -0.3	**<0.001**
Adjusted**		-0.4	0.15	-0.8– -0.1	**0.01**		-0.6	0.15	-0.8 - -0.2	**0.002**

*Linear regression
**Model adjusted for the woman's age, the woman's educational attainment and the husband's occupation (test for heterogeneity)

6.3.3.4. Polyvictimisation

Table 47 shows the output for the unadjusted and adjusted models of polyvictimisation in the past year and the past month against RSES score.
No association was seen between polyvictimisation in the past year or the past month and level of self-esteem.

Table 47. Polyvictimisation in the past year and the past month against Rosenberg self-esteem score, with unadjusted and adjusted models and using robust standard errors to account for clustering

	N	Coef.	Robust SE	95% CI	P*
Polyvictimisation past year	52				
Unadjusted model		-0.22	0.72	-1.72 – 1.29	0.76
Adjusted model**		0.17	0.85	-1.61 – 1.94	0.85
Polyvictimisation past month	42				
Unadjusted model		-0.22	0.31	-0.87 – 0.42	0.48
Adjusted model**		-0.43	0.29	-1.03 – 0.17	0.15

*Linear regression
**Model adjusted for the woman's age and the husband's occupation (test for heterogeneity)

6.4. Discussion

6.4.1. Socio-demographic predictors

The data suggest that, as women age, their odds of experiencing all types of violence decrease. This is in line with some studies from Mumbai and those using national-level data from India (121, 122, 125, 147, 417). However, the findings from India on associations between women's age and their risk of domestic violence are mixed, with a number of studies showing the opposite trend - of older women being at greater risk of violence (114, 121, 146, 418, 419) - and many showing no association (49, 50, 57, 119, 129, 131, 139, 143, 145, 420, 421). Some studies have also suggested that women aged between 30 and 39 years were at increased risk of violence compared to younger and older women (135, 422). Increasing age could be associated with a decreased risk of violence due to women's increasing autonomy and status as they get older. When a woman initially marries into a family, she is at "the bottom of the gender and generational hierarchies of the family" (423), but as she ages she rises through the hierarchy and occupies a position of relative ease and power later in life, particularly if she has a son (140, 423). This may reduce her risk of experiencing violence. Conversely, it has been suggested that as women age there is a trade off: they build relationships with their children and begin to stand up to their husbands, but in response husbands may be more likely to perpetrate violence (418).

Women who were more educated were at increased risk of experiencing economic violence, but no association was seen with the other types of violence. Other studies from India have also found no association between education level and violence (49, 119, 131), but some report the opposite, with higher educational attainment being protective against violence (111, 121, 122, 135, 136, 418, 424). None of the studies from India specifically assessed economic violence, and the relationship between economic violence and education in this context is unknown. However, studies from Tanzania and Australia show that more educated women experience more economic violence (425, 426). More educated women might be more likely to challenge the status quo in the family and this might increase the risk of violence. Additionally, more educated women might be more

likely to report experiences of violence. This does not explain, however, why the pattern is only seen for economic violence and not the other types.

Partner alcohol use was associated with all forms of violence, with the greatest effect seen for physical violence in the past month. A number of studies from across India have demonstrated similar associations (49, 50, 52, 58, 114, 119, 129, 135, 144, 427). Wagman et al showed that partner alcohol use was associated with both IPV and gender-based household maltreatment (428), and different patterns of drinking have been associated with different levels of risk. For example, heavy drinkers are more likely to perpetrate violence than social drinkers and the direct effects of drinking on violence differ depending on whether the husband drinks primarily at home or outside (53). The effect of partner drinking on violence risk may be greater for physical and sexual violence in the past month due to reporting bias and women being more likely to remember the detail of violence experiences in the past month than the past year. The effect was similar for emotional and economic violence between the past year and the past month, although the odds ratios were slightly larger for the past year. This could reflect the more ongoing nature of these types of violence, as discussed in Chapter 5.

Women who had been married longer were at lower risk of experiencing physical and sexual violence in the past year and of experiencing economic and physical violence in the past month. A study from North India showed that, compared with women who had been married less than five years, women who had been married between five and 14 years were at lower risk of violence, but women who had been married more than 15 years were at increased risk (136). The average duration of marriage in my study was eight years, which fits with these results, although other studies from India have shown longer marriage duration to be a significant predictor of violence (49, 114). In India, physical violence is often used as a form of discipline within marital relationships (422), but with increasing marriage duration husbands may feel less need to discipline their wives, either because they have learned how to pacify their husbands, or because women slowly gain more autonomy and power within the family (423). The association between economic and sexual violence in one period but not the other (past year or past month) might reflect small numbers or reporting bias. Marriage duration might not be associated with experiences of emotional violence because this is more normalised and therefore more a part of married life than other forms of violence. It also could be because husbands

perpetrate emotional violence with less thought (discussed in Chapter 5), which may lead them to not think about a want or need to reduce perpetration as the marriage continues.

Wealthier women were less likely to experience sexual violence. This reflects other studies from India that show that women of higher socio-economic status have lower exposure to violence (122). Babu and colleagues showed that increasing family income protected against psychological and sexual violence, but no association was seen with physical violence (114). Das and colleagues showed that, in slum areas of Mumbai, women in the highest socio-economic quintile were less likely to report IPV than women in the lowest (50).

When looking at the socio-demographic predictors of symptoms of CMDs, partner alcohol use was a strong predictor, in line with other studies from India (62, 99). This relationship could be bidirectional in that the consumption of alcohol may increase women's risk of CMDs due to increased stress for the woman, particularly if mediated through an increased risk of experiencing violence. However, a man might also be more likely to drink if his wife suffers from poor mental health. For example, Berg and colleagues showed through structural equation modelling that men who had a more positive relationship with their wives drank less alcohol and this translated into a decreased risk of violence (53).

When looking at self-esteem, women who reported that their husbands drank alcohol had lower self-esteem than women whose husbands did not drink. This is in line with the results seen for GHQ-12 scores. We know that in India alcohol use is associated with an increased risk of violence, which may in turn impact women's self-esteem. As discussed for CMDs, men who are married to women with low self-esteem might be more likely to drink alcohol as low self-esteem might affect the quality of the relationship (429).

Women who had lived in Mumbai since birth had higher self-esteem. This could be because women who feel more familiar with the city may feel more able to navigate daily life and cope with stresses. Additionally, these women may have stronger social support networks, and social support has been shown to have a positive relationship with self-esteem (407, 408, 430).

6.4.2. Violence and common mental disorders

Women who experienced all types of violence both in the past year and the past month were more likely to have symptoms of CMDs. This reflects both the global and national literature, which shows that violence is detrimental to women's mental health (19, 38, 62, 99, 131, 144, 150, 431). Emotional violence in the past year was most strongly related to symptoms of CMDs. Some reviews have also demonstrated an association between psychological violence and mental health outcomes (432, 433). Whilst emotional violence might be more normalised than physical and sexual violence, it may also be the most distressing for women to experience, particularly over extended periods. This idea is supported by studies suggesting that psychological abuse is more traumatic than physical violence for many women (434). Many of the acts of emotional violence assessed in the study directly attacked the woman by demeaning her character, her work, or her ability to fulfil certain expectations - such as bringing an appropriate dowry or providing a son - or being suspicious of her. Some of the acts, such as restricting her contact with her family or friends, also limited her sources of social support. Social support is important in mitigating the effects of IPV on women's mental health (61). When women are criticised by their marital family, it is often because they have not done something to their husband's or in-laws' satisfaction, including not bringing sufficient dowry, not cooking food correctly, or not carrying out chores correctly (163, 365). These constant criticisms of a woman's ability and character may lead to the development or exacerbation of symptoms of CMDs.

The association between experiences of sexual violence in the past year and symptoms of CMDs was the next strongest, after emotional violence. This could be because sexual violence may be less normalised than some of the other forms of violence and many of the acts assessed are very distressing. Whilst women often report that one of their duties is to have marital sexual relations (435), the impact of sexual assault on women's mental health can be severe (434), and the shock of experiencing just one act of sexual violence can have a psychological impact (150). The sexual violation of a woman's body, whether she believes it to be her duty or not, is likely to erode a woman's emotional wellbeing and lead to symptoms of CMDs. Sexual violence showed a slightly stronger relationship with GHQ-12 scores for experiences in the past month compared to the past year, which could reflect reporting bias or the closer proximity of sexual violence to the timing of the GHQ-12 assessment. It could also suggest that the psychological impact of sexual violence is most severe in the immediate aftermath.

Studies show that, across South Asia, women and men often agree that a husband is justified in beating his wife, usually if she is perceived to neglect children, argues back, or goes out without informing him (436). However, in their justification, women can distinguish between less severe physical violence - such as being slapped- and more severe acts, accepting the former but not the latter (435). Physical violence is likely to have a detrimental impact on women's mental health, particularly when they believe it was not justified. The relationship between experiences of physical violence and GHQ-12 score was stronger for violence in the past month than in the past year, which (as discussed for sexual violence) could reflect the proximity to the GHQ-12 assessment and possible reporting bias, or more severe immediate mental health consequences.

For physical, sexual and emotional violence experienced in the past month, the strength of the association with GHQ-12 scores was similar, suggesting that the immediate aftermath of any type of violence has a similar effect on women's mental health. However, in the past year, the strength of the association between physical violence and symptoms of CMDs was weaker than that for emotional or sexual violence. This supports ideas that the prolonged impacts of physical violence on women's mental health are less pronounced than for other types of violence (150, 434). Anecdotally, experiences of the SNEHA team have also shown that women often view physical violence as non-intentional and attribute it to stress, whereas emotional violence is seen as a more intentional act of harm and may be more detrimental to her mental health.

Economic violence also showed a strong association with GHQ-12 scores, suggesting that control of a woman's economic status and suppression of her financial freedom can lead to emotional distress. The literature on the associations between economic IPV and women's mental health is sparse, although studies from Palestine, Germany, and South Africa all support the finding that economic violence is associated with CMDs (437-439). The association between experiences of economic violence and GHQ-12 scores was at around the same level for the past year and the past month, suggesting that, like emotional violence, economic violence and its effects on mental health may often be more sustained and long-term. Of all the types of violence, economic violence showed the weakest association with symptoms of CMDs. This could be because economic violence may be more normalised and linked to traditional gender roles than other forms of violence.

After controlling for the other types of violence, only emotional and sexual violence retained a significant relationship with symptoms of CMDs, with the association much stronger for emotional violence. This further supports the idea that emotional violence is important for women's mental health, independent of physical or sexual violence, and that sexual violence in itself is also distressing to experience.

Whilst the current section demonstrates a strong relationship between experiences of all forms of violence and symptoms of CMDs, we cannot be certain about the direction of these relationships in a cross-sectional study. As discussed in chapter 1, experiencing violence could negatively impact a woman's mental health, but women with poor mental health may also be at increased risk of violence. It could be that a woman's symptoms of CMDs aggravate her husband or family members and provoke them further into perpetrating violence. It could also be that women who suffer from CMDs may be more likely to perceive situations negatively and therefore be more likely to report abuse. However, the latter is unlikely to be the case in my study as the questionnaire was detailed and asked about specific acts of violence, rather than whether the woman had experienced abuse in general. This would make it harder for a woman to perceive an experience as having happened if it hadn't. There are few longitudinal studies looking at the relationship between violence and mental health. One study from Goa found increased rates of suicide in women who experienced violence, suggesting that violence is a cause of poor mental health (19). A likely scenario is that the relationship is complex and bidirectional.

For all types of violence, experiencing an increasing number of different acts was associated with higher GHQ-12 scores and therefore more symptoms of CMDs. This suggests that, as patterns of violence become more complex, the effects on women's mental health compound. For women who experienced polyvictimisation (more than one type of violence), their odds of having more symptoms of CMDs increased by three times in the past year and five times in the past month. This shows that more complex patterns of violence, where more than one type is used together, compound effects and influence women's mental health to a greater extent. Few studies have reported associations between polyvictimisation and mental health outcomes even though prior research suggests multiple trauma can have worse mental health outcomes (440), however a

studies from the USA found that experiencing more types of violence can have a worse effect on mental health outcomes, in a dose-response relationship (368, 441).

6.4.3. Violence and self-esteem

After adjusting for covariates, experiences of emotional violence in the past year and the past month were associated with lower self-esteem scores. The same pattern was seen for economic violence, although the association was less strong. The acts of emotional and economic violence assessed included many forms of insults, neglect, and control, all of which could send messages of worthlessness to women and could potentially lower their self-esteem. In contrast, no associations were seen between experiences of physical and sexual violence at either time point and self-esteem. Whilst these types of violence are clearly distressing for women, as evidenced by their association with GHQ-12 scores, it may be easier to recognise that physical and sexual violence are the fault of the husband and women may be able to separate the experiences of these types of violence from their own self worth.

In their study of women's experiences of emotional abuse, Lammers and colleagues suggested that repeated negative feedback from a partner could result in feelings of "despair, confusion, sadness and a profound sense of loneliness" and that women who are made to feel unworthy of respect, love, or fair treatment might begin to feel inadequate, which in turn could lead to feelings of shame and possibly erode self-esteem (442).

6.4.4. Limitations

Limitations to the analysis include small numbers, particularly when looking at violence experiences in the past month and ordinal outcome variables where there are problems of perfect prediction, and some of the results have wide confidence intervals. It would be useful to repeat the analysis in the future with a larger dataset to see if the associations hold.

Whilst the analysis has shown associations between experiences of violence and symptoms of common mental disorders and levels of self-esteem, what it has not done is distinguish between levels of violence severity. A few, infrequent, acts of emotional or

economic violence may have a very different impact to frequent polyvictimisation on women's mental health. The frequency of violence experiences would have gone some way to investigating severity, however this variable was excluded from the analyses due to small numbers. It would be useful for further research to explore the association between violence severity and symptoms of CMDs.

There are a number of potential factors that could have confounded the relationship between experiences of violence and symptoms of common mental disorder or level of self-esteem. Studies from Mumbai informal settlement areas have shown that male unemployment can contribute to mental health problems and also increase the risk of violence (47). Male unemployment, and indeed female unemployment, may therefore be important factors to consider in the relationship between violence and common mental disorders. Due to small numbers it was not possible to test the effect modification of male or female unemployment and this is therefore something that should be investigated further in future studies.

The current survey did not collect data on pre-existing mental health conditions or levels of social support available to women. If women had pre-existing mental health conditions this may have affected their GHQ-12 and RSES scores and could also have increased their risk of violence. The amount of social support available to a woman has been shown to be protective against both violence and poor mental health and would be useful to investigate in the relationship between violence and common mental disorders (61).

Whilst the decision to recruit birth cohort mothers for the current study likely increased the chance of having good quality data on violence, as discussed in Chapter 4, there is a risk that using this population introduced some selection bias to the study. Women who do not have children may be at increased risk of violence, and of mental health problems (443-445), and therefore studying only mothers could have excluded an important sub-section of the population and underestimated the effect of children on family VAW and women's mental health, particularly in this context.

The findings may also have been subject to some recall bias when asking women about incidents of violence in the longer term. In addition, there is still a risk that some women did not disclose certain incidents of violence, or that they gave responses that they felt were desirable.

As per the protocol of the SNEHA Centres study, participants were recruited from informal settlement areas in two specific wards of Mumbai city. These informal settlements may be made up of unique or more homogenous communities when compared to other informal settlement areas of the city. For example, the sample in the current study was predominantly Muslim. This firstly makes it more difficult to triangulate findings from the qualitative interviews, which were conducted in another area of the city and makes it more difficult to generalise results.

Finally, a major limitation of a cross-sectional study is the issue of reverse causality. We cannot determine whether violence increases the risk of common mental disorders, whether the presence of common mental disorders increases risk of violence, or whether the relationship is bidirectional.

6.4.5. Conclusion

This chapter has described the associations between experiences of violence and symptoms of CMDs or self-esteem. The results suggest that all forms of violence are associated with more symptoms of CMDs and that the effect compounds with increasing numbers of acts and polyvictimisation. Emotional violence shows the strongest association with GHQ-12 scores in the past year, suggesting the detrimental effects of sustained exposure, and economic violence shows the weakest association at both time points. Emotional and economic violence are associated with lower levels of self-esteem, but no association is seen between physical and sexual violence and self-esteem, suggesting that self-esteem could be affected by the meaning that women place on violence.

Chapter 7

Women's experiences of violence: a qualitative exploration of contexts and patterns

Key messages

- All women interviewed had experienced emotional and economic violence and many experienced physical and sexual violence.
- Experiences of violence were complex and nuanced, particularly for emotional violence.
- Perpetrators of violence included the woman's marital family as well as her husband, in line with the quantitative findings and the Indian literature.
- Elements of violence narratives support both family violence and feminist theories of violence, but ultimately fit best within an integrative approach, which combines the two.

7.1. Introduction

The aim of the qualitative analysis was to explore the nexus of violence and mental health, and to look at women's resilience and coping mechanisms. This chapter presents a description of the context of the participants' responses to violence, and describes the patterns of violence they were subjected to. In the discussion, I explore how these patterns of violence compared with those in the quantitative analysis and discuss how these might fit with different theories of violence.

7.2. Methods

I collected qualitative data through 22 individual interviews and three focus group discussions. Two of the focus group discussions were with survivors of violence, the first consisting of nine participants recruited through the SNEHA counselling centre and the

second consisting of seven participants recruited by the SNEHA Community Officers. The third focus group discussion involved seven Community Officers.

Using the framework developed for the analysis, I reduced the data to extract the main themes within each category relevant to the context and violence patterns. I decided to include the physical health outcomes of violence as I felt these added another dimension, helping to demonstrate the severity of physical violence.

Women's personal details were not collected in the focus group discussions. During the interviews, women were asked for some socio-demographic information, but this was more to settle them into the interview and it was not collected systematically. Therefore, information about context for each woman has been gleaned using data collected through specific questions and other information revealed in interviews. We did not use the GHQ-12 in the first few interviews, but added it later in the topic guide and could calculate a GHQ-12 score for most women (Chapter 4).

The focus groups explored women's experiences of and responses to violence using discussions around vignettes. Women did not have to reveal personal details or experiences. However, such experiences have been used in the analysis when women did choose to discuss them. Pseudonyms have been used throughout the qualitative chapters to protect the identity of participants.

I decided to analyse the data from the interviews and the focus groups together in order to gather a range of opinions and experiences. I believed that the interviews and focus group discussions with survivors of violence might elicit similar narratives, but that women may have felt more comfortable exploring certain topics alone or others in the context of a theoretical vignette. I also thought that the focus group discussion with Community Officers would help to corroborate and clarify some of the topics of interest.

Given that the interviews and focus group discussions were analysed as one data corpus, the rest of this chapter and Chapter 8 present the combined findings.

7.3. Context

This section summarises the context within which women experienced violence. Using the framework developed for the interview coding as a guide, I identified eight categories relevant to context: the woman's individual context, relationship context, family and living context, day-to-day life, family finances, relationship dynamics, sources of stress or tension, and the societal or cultural context.

Individual and relationship attributes are summarised in tables 48 and 49.

7.3.1. Individual context

Table 48: Individual-level attributes of 22 interview participants

Attribute	Frequency (%)
Age	
20-29	6 (27%)
30-39	12 (55%)
40-49	3 (14%)
Unknown	1 (5%)
Religion	
Hindu	14 (64%)
Muslim	4 (18%)
Christian	2 (9%)
Unknown	1 (5%)
Education	
Uneducated	2 (9%)
8th standard	2 (9%)
10th standard	1 (5%)
12th standard	1 (5%)
College	2 (9%)
Unknown	14 (64%)
Place of origin	
Mumbai	10 (45%)
Elsewhere in Maharashtra	3 (14%)
Karnataka	1 (5%)
Uttar Pradesh	5 (23%)
Unknown	3 (14%)
Age at marriage	
Under 15	3 (14%)
15-19	5 (23%)
20s	10 (45%)
30s	2 (9%)
Unknown	1 (5%)
Not married	1 (5%)
Employment status	
Employed	10 (45%)
Not employed	12 (55%)
GHQ-12 score	
Less than 6	7 (32%)
6+	13 (59%)
Unknown	2 (9%)

At the time of interview, over half of women were in their thirties, Hindu, and employed. Half were from Mumbai, with some coming from Maharashtrian villages and a fifth coming from Uttar Pradesh. This reflects the high level of migration from Uttar Pradesh to Maharashtra (446). Around half of women had married in their 20s and two-thirds had a GHQ-12 score of 6 or above, suggesting symptoms of CMDs. The lowest GHQ-12 score reported was 2 and the highest was 11.

When compared with the sample of women in the quantitative study, the women whom we interviewed were around the same age, but those in the qualitative study were

predominantly Hindu, compared with predominantly Muslim in the quantitative study (64% vs 12%). A greater proportion of the women in the qualitative study were employed (55% versus 2%).

7.3.2. Relationship and family context

Table 49: Relationship and family level attributes of 22 interview participants

Attribute	Number of women (%)
Type of marriage	
Arranged	18 (82%)
Love	2 (9%)
Not married	1 (5%)
Unknown	1 (5%)
First or second marriage	
First	16 (73%)
Second	4 (18%)
Not married	1 (5%)
Unknown	1 (5%)
Number of years married	
1-5	4 (18%)
6-10	9 (41%)
11-15	2 (9%)
16-20	5 (23%)
20+	1 (5%)
Unknown	1 (5%)
Age difference with husband	
Husband 1-5 years older	1 (5%)
Husband 6-10 years older	1 (5%)
Husband 11-15 years older	3 (14%)
Husband older (unspecified)	1 (5%)
Husband and wife same age	1 (5%)
Woman older	1 (5%)
Unknown	14 (64%)
Number of children	
None	2 (9%)
One	9 (41%)
Two	3 (14%)
Three	5 (23%)
Four	2 (9%)
Five	1 (5%)
Sex of children	
Boy	2 (9%)
Girl	6 (27%)
Mix	5 (23%)
No children	2 (9%)
Unknown	5 (23%)
Family set up	
Joint	6 (27%)
Nuclear	12 (55%)
Both	4 (18%)
Living arrangements at time of interview	
Staying with husband	9 (41%)
Married but not staying with husband	12 (55%)
Separated	1 (5%)
Husband drinks alcohol	
Yes	10 (45%)
No/not mentioned	12 (55%)

The majority of women had been married 6-10 years, had an arranged marriage, and had only been married once. Just under half had one child. Over half of women lived in nuclear families, but were not staying with their husband at the time of interview, and just under half reported that their husband drinks alcohol, all of whom were Hindu.

Compared with women in the quantitative study, the women interviewed had been married for a similar amount of time but had fewer children. A similar proportion lived in nuclear family set-ups. A greater proportion reported that their husband drank alcohol (45% versus 8%), possibly because the quantitative sample was predominantly Muslim.

7.3.3. Family/living context

Women described four main living arrangements at different points in their married lives: joint family, nuclear family, the woman staying with her natal family, and the woman living alone, with or without her children. Women often moved between these living arrangements depending on circumstances.

Many women reported staying with their in-laws for some periods, whether short or extended, but many also reported staying with their natal family at some point after marriage. In some cases this was to be taken care of after delivery. For example, Vidya described how, once she reached the ninth month of pregnancy, her husband would drop her off at her village and her family would take care of her during and after the delivery. Women also often used their natal family to escape abuse, either permanently or temporarily. Sonal would go to stay with her parents when there was a problem with her husband, as would Swati, who went to her mother's house many times after fights. Pooja's place of respite would be her sister's house:

> *I would stay there when it was unbearable. My sisters would tell me to come. It was just my thinking. I would come and go, come and go. Years passed this way. Twelve years passed.*

Other women experienced this sort of continual back and forth. For example, Savita attempted to stay with her husband a couple of times but always returned to her mother:

R: *Ever since I have been married I have stayed with my mother.*
I: *After the wedding, when did you move back with your mother?*
R: *I just stayed for a month with him and then moved back to my mother.*
R: *[...] I lived at my mom's for six years and then I went to live with my husband for a year but he started to trouble me again, so I came back to my mom's.*

This pattern was also picked up on by Panchandeswaran, who described women "leaving and returning to the abuser as part of their efforts to deal with the abuse" (365).

The issue of separation also came up often in relation to the family. Six women reported being separated from their children at some point, which caused them great distress. For some, the separation was beyond their control. For example, Shobha's husband took the children without telling her and went to stay at his mother's place, leaving her at home alone. For others, the separation was something that they had chosen in the interests of their child, even though they often found it difficult.

R: *If I had some shelter here, I would not need to be with that man (boyfriend) today, and my kid would have been with me.*
R: *…[I request SNEHA to provide shelter] for the women and for the kids who do not leave their mothers. [I had to leave my child] due to compulsion - otherwise today I would have been on the street with my kid. Therefore I kept her with her father.*

[Kalini, late thirties, Hindu]

When women lived alone, it was usually because they had separated from their husband, whether through choice or not. In one case the husband had been put in jail, while another woman's husband worked in Saudi Arabia, so she generally lived alone with her children. One woman had always lived alone and never married or cohabited. Her partner would visit her at her house often, which was one of the things she was distressed about because he would pester her when he came.

7.3.4. Day-to-day life

Many women described extremely demanding and exhausting routines that often became a normal part of life. These routines included multiple household chores with no help, little sleep or the inability to rest, working in a job as well as having to complete all household

chores, and getting up very early to get everything done. Madhuri described her daily routine:

> ***R:*** *I used to get up at 4 o'clock, I used to cook everything and then I used to go to my school. I have to reach the school by 7 o'clock, my school is from 7:00 to 13:00.*
>
> ***R:*** *[…] I'm a teacher. 7:00 to 13:00. After coming back, I cook whatever food is left again, and then we sit to eat.*
>
> ***R:*** *[…] After [coming home], if some cooking is remaining, I will do the cooking, I will do the washing, I will do everything. And afterwards if I want to rest, I won't be able to, because every time there is work to do. At 5 o'clock the water comes, so I have to fill the water. I don't have rest in the daytime. Then again at night, 11, 12, that they will eat. After that I have to clean everything, and then I have to sleep. [This] means I also don't get enough sleep […] because if I am a teacher, and I am going to teach in the school, I have to prepare my lessons.*

The majority of women with exhausting routines lived in joint family settings in which there were many people to cook and clean for. The burden of care often fell on them, requiring them to look after both their children and other family members, especially those who became ill. This added to women's burden of responsibility and possibly provided increased opportunity for abuse and criticism. There seemed to be a fine line between the expectations placed on women in the household by society, with women's daily work being bound up with gender roles and norms, and using housework as a tool of abuse. Many women who had demanding routines also experienced a lot of abuse.

Generally, women seemed aware that the burden of work fell on them, and some were more frustrated by it than others. Women became frustrated and distressed when they continued to be treated badly within the household, regardless of the fact that they were doing work for everyone. The burden of daily work could also be influenced by socioeconomic status. For example, some women talked about having to hand wash clothes when others were able to use a machine. However, Madhuri said that, even though the family had a machine, she was not allowed to use it, and whenever she went to stay at her in-laws they fired their maids, even though they could afford them. This is an example of the daily routine becoming the setting for abuse.

The concept of time also possibly varied with relative socioeconomic position. Many women had to carry out demanding routines at home and also go out to work. In contrast, a woman in FGD 1, who identified as middle class, said that she would have to pay people

to work in her house because she did not have the time due to her job. This reflects the idea that women from poorer backgrounds have additional life stressors to contend with beyond violence.

Five of the women interviewed described less demanding and more manageable daily routines, which included fewer household chores, or household chores with help. Although Sonal was made to do all the housework, she was able to share it with her sister-in-law, with whom she had a close relationship. Neesha described that she had to work only for her husband and herself, and that since the beginning of their marriage she had cooked only once a day. Most women who had less demanding household routines lived separately with their husband and not with the wider marital family.

7.3.5. Family finances

Women talked about how the family finances were managed, as well as who contributed and who did not. Six had husbands who earned well, contributed to the household, and would provide money if asked. The other women had husbands who didn't earn at all or did not give any of their earnings to the household. Instead, they spent it on themselves, or gave it to others, including their mother, other family members, or even the women they had affairs with.

> ***R:*** *He didn't pay for the sonography and said he didn't have money for it, but he used to cater to his family's needs.*
> ***I:*** *He never gave you money for expenses?*
> ***R:*** *No, he never gave money, even for our son's expenses. He never give me a single penny, instead he used to crib that he doesn't earn well. He used to spend all his earnings on that lady [affair].*
>
> *[Priyanka, early thirties, Christian]*

Other women had husbands who contributed during some periods and not others, usually on their own terms. Mahjabeen said that since her husband moved to Saudi Arabia he had stopped contributing to the household. When in Mumbai he used to pay the bills and collect rations, but would not let her manage her own expenses.

As a response to their husbands not providing, many women worked outside the home and took care of household expenses. The stress of lack of money often fell on them as

they were the ones who were expected to manage the household and care for everyone, including buying food and paying the bills, with insufficient resources to support them. As described by a participant in FGD 2:

> *A mother can manage to feed her child somehow, but a father will just walk away… she will clean someone's floor and feed her child.*

In addition to the women themselves, when the husband did not provide for the household, there would be other people in the family who did. This could be someone in the marital family, for example the mother-in-law, or in Sonal's case the grandmother-in-law. Around half of women had financial support from someone in their natal family. There were a number of reports of the woman's parents paying for her expenses and those of her children, and also often paying rent and house deposits. Some women received financial contributions from siblings and even their adult children.

7.3.6. Relationship dynamics

7.3.6.1. Husband-wife relationship dynamics

Relationship dynamics between husband and wife were generally negative, though some women described how things had initially been good with their husbands. Some of these good experiences were time-bound, such as just after getting married, before the first child was born, or while the woman was pregnant. Good behaviours were also often conditional. This included a husband speaking nicely to his wife if she slept with him, being on her side when he was in certain moods, and being good to her when he was not around his family. A participant in FGD 1 said:

> *Sometimes, you know how it is, the husband will maintain distance from his wife when his mother is around. And when his mother isn't around then he will stick to his wife […]. Then they will even help with the housework. I mean my husband even does some housework. While I washed the utensils, he'd wipe the platform clean, but when his mother is around he will speak to me in a raised tone and ask me to get him food or do this or that.*

There were, however, instances of husbands demonstrating unconditional positive behaviours such as offering support, showing love, communicating well, providing, and doing things. However, more often than not, these dynamics deteriorated and the

relationship became strained.

In contrast, negative behaviours from husbands that contributed to negative dynamics included not wanting to talk, not calling when they lived separately, not listening to suggestions, and keeping things secret or telling lies. Some women experienced a lack of care or affection from their husband, such as him not being interested in her and not respecting or understanding her. Some husbands also behaved badly when their wives wanted sex, or stopped having sexual relations with them altogether.

> *When I used to sleep I just used to keep my hand on him but he used to remove it […] why don't you want to have relations with me, what problem you have? I don't know, during the night if I call him (for sex) or wish to call him, he is not in the mood and turns away from me and sleeps. If I keep my hand on him, then he removes my hand […] Even now he doesn't wish to have physical relations with me.*
>
> *[Ashwini, age unknown, Hindu]*

Lack of support and action from husbands was also common, such as supporting everyone else except her, not spending money on her, and being happy to let her carry the burden of managing the home. Some husbands would abandon their wives, often by running away, in some cases multiple times, or telling them they wanted a divorce.

There were also behaviours from husbands that created constantly changing or unstable dynamics. These included things like making promises but not always keeping them, doing something bad and then apologizing for it, being secretive, and temporary reductions in quarrels.

> *One and a half years ago he called up himself, he begged for forgiveness for his mistakes, said sorry a thousand times […]. I said that if you have understood then take me with you […]. That I want to live separately (from in-laws). Then he said, 'no you stay with my mother. I will keep coming and going. I will meet you, whatever you want I will give you, money, money for [child]'s education, anything that [child] needs, I will give you secretly. I will give you without anyone knowing' […] One and a half years came and went, but he never found a place for me. He broke my heart again.*
>
> *[Ashifa, late twenties, Muslim]*

Women described different ways in which they interacted with their husbands, which could have affected the dynamics between the two of them. These ranged from showing care

and love, showing obedience and fearing their husbands, to defying or challenging them. They did the latter through behaviours such as questioning them about things, doing things without their permission, not trusting them, not sharing things with them, and not being intimidated by them. Some women seemed to reject their husbands in different ways, such as being angry when seeing them, not feeling any love for them anymore, not wanting to sleep with them, and not being sexually satisfied by them.

In some cases, the husband was just generally aggressive and abusive, but in others it appeared that the couple had an amicable relationship until the wife challenged her husband about something, such as money, at which point he would get angry. Having said this, a number of men seemed to be happy for their wives to carry the burden of providing for the household, which suggests that they did not feel it was their responsibility.

7.6.3.2. Relationship dynamics with the marital family

When a woman was in contact with her marital family, the dynamics were generally negative. Seven women mentioned positive dynamics, but these tended to either just be initially, or with only one or two of the family members rather than all of them. Positive dynamics included care and support, or the family standing up for her. For three, their marital family, particularly the mother-in-law, appeared to be on their side.

> *Due to this quarrel (between husband and brother), the relationship became hostile. But still my brother comes to visit. Such quarrels and conflicts take place, I explained to him (brother). He told me to leave (my husband), that I did not need to stay there. My mother in law also supported me [if I wanted to leave].*
>
> *[Devika, early thirties, Hindu]*

Almost every woman also described some kind of negative relationship dynamics with their marital family. Even those who described positive dynamics also described some negative ones. For some, there were ups and downs, but for others the relationships were continuously tense. Problems included the family talking badly to or about them, harassing, arguing or complaining about them, trying to get them divorced, and treating them differently from other people in the family. Some women also experienced a general lack of care and support. There was a fine line between the dynamics mentioned here and

acts of abuse, particularly emotional abuse, and in many cases the negative relationship dynamics fed into patterns of abuse.

Many husbands experienced reciprocal encouragement and supportive relationships with their own families. Whilst this was good for them, it may have added to the abusive environment by placing them in opposition to their wife. Four women said that their marital family provoked certain behaviours from their husbands, changed their opinions, or persuaded them to do something, such as leave their jobs. The exchange of money was also a factor in these supportive relationship dynamics: a husband's mother might give him money, supporting his lack of a desire to work, or he would give all his money to his marital family and not to his wife. Often the husband had no autonomy and only listened to his mother, not doing anything without her saying so, or letting his sister make all the decisions. Participants in FGD 1 discussed how the husband often tried to protect his mother's feelings:

> *If something (food) gets prepared well, then he should say that you cooked good food. He won't say it in front of his mother, thinking about how his mother would feel […] and if the wife says 'why don't you behave in the same way with me in front of your mother like you do when your mother is not around?' he says that his mother will feel bad then.*

Six women described bad or challenging dynamics between their husband and his family, which in some cases translated into support for them. They described how members of the marital family would challenge their husband, criticise him, or try to reason with him about his drinking or the abuse. There were also a number of arguments and instances of abuse within the family. Vidya's husband would often argue with his mother, and Neesha's husband would verbally abuse his mother, until she threw him, and by extension Neesha, out of the house. Devika's husband would be abusive to his mother and sister, so much so that Devika helped them to file a case against him.

7.3.6.3. Relationship dynamics within the natal family

Almost half of the women interviewed reported some sort of negative or unsupportive dynamics with their natal family. This was particularly the case for women who had love marriages. There were general fights, anger, or irritation as often experienced within all families, but in some cases there was a lack of communication, a lack of care or love, or a general lack of support.

My family listens to me sometimes and sometimes they don't. What should I tell you now ma'am – my own sister would never listen to me. If they'd beat me she would say that if I had been well-behaved then they wouldn't have done this to me. She would ask me to go to work.

[Areej, early thirties, Muslim]

Most women did, however, mention supportive dynamics with their own family, often being able to turn to them in times of difficulty and receiving love, care, and emotional, practical, and financial support from them. Pooja described how her father supported her decisions when it came to her second marriage:

R: *I was actually free to do anything. You can marry whom you choose […] I had every freedom. That man could be a Muslim or a Hindu or anyone. He could be from any caste. My father never went against me.*

[Pooja, mid- thirties, Hindu]

Neesha described how she had support from her sister-in-law:

My brother's wife is everything to me […] She continuously supports me. And she knows everything about me. Everything. She knows about me from A to Z, but she never scolds me. She says if you wish, then do it. Do not depend on me and what the world says.

[Neesha, mid thirties, Hindu]

7.3.6.4. Relationship dynamics with others

*W*omen described a mix of supportive and unsupportive dynamics with people from outside the family. Sometimes these were the same people and their relationship would take on different dynamics at different times. In particular, this would happen with neighbours and friends who would be quick to judge the woman and her situation, but would also offer support and help. Positive relations with people outside the family included practical or financial help, moral support, and genuine concern. Some women could confide in friends and had good relations with their neighbours, counsellors, mothers of children's friends, or even new romantic partners.

Unsupportive dynamics with people outside the family included questions, criticisms, or

accusations from friends and neighbours. There was also a lack of support, such as the family doctor knowing everything but not wanting to get involved, or the neighbours being good to the woman's partner despite knowing how he treated her.

Women also described dynamics between family members and children. Some were positive, such as the husband and in-laws having a good relationship with their children. Even when their husbands were abusive towards them, women were still able to recognise that they were good fathers. Many women described their own good relationships with their children, however, some women reported negative dynamics, for example taking their anger out on the children. There were also negative relationship dynamics between children and their fathers or paternal grandparents. Mahjabeen's husband would often verbally abuse his daughters as well as his wife. Areej had even filed a child abuse case against her husband. In other cases husbands or other family members believed that they had a good relationship with the children, but the child would not want them around because they had seen how they had treated their mother.

7.3.7. Societal context

7.3.7.1. Roles and norms

The societal context described by women included beliefs about the role of women in society and gender norms. These beliefs and norms can act as constraints that create supportive environments for abuse (435). As Heise (1998) identified, the societal level makes up the outermost ring of the ecological model of violence perpetration (17). Understanding how societal factors can fuel oppressive beliefs and environments conducive to abuse is important because "domestic violence and structural violence are mutually reinforcing and domestic violence is embedded in wider relations of power and privilege in society" (17).

Women talked about the different expectations placed on them as women, wives, and mothers, that saw them as servers to everyone else in the family, with the role of caring for and pleasing others. As described by Panchandeswaran, "despite the enactment of some laws on domestic violence against women, the dent in the patriarchal fabric that views family as a basic societal unit with prescribed traditional roles has been minimal" (365), and women were still given traditional and often oppressive roles within in the marital

family. They were expected to do all household work and look after their children, husbands, and their husbands' families.

> *I used to get up early in the morning, I used to prepare all the food. [I prepared food] for my mother-in-law also. My mother-in-law's food was [different]. For her we don't use masalas. For us, I used to prepare one food. And for her separate [food]. So all these things I used to complete in the morning, then I used to go to school. Again I used to come back, even then as soon as I entered [the house, he would abuse], he never appreciated me for anything. I only used to think that it is my duty to do all the things and I used to do that.*
>
> *[Madhuri, mid-fourties, Hindu]*

Looking after a husband or partner also involved pleasing him sexually.

> *I used to feel that he was so desperate for me, so I should see to it that he got some happiness. I mean his happiness should be looked after [his needs should be satisfied]. Keeping this in mind, he used to visit me sometimes at my house. And sometimes I used to go to his house. He used to live right opposite to me. Initially we used to cook food [together], however, gradually, we started having wrong relations [sex].*
>
> *[Vaishali, late thirties, religion unknown]*

Women expressed contradictory opinions about how a woman should behave with regards to sex, such as she should be happy, willing, and ready to have sex with her husband, but should not express her own sexual desires. This reflects the 'virgin/whore' dichotomy often discussed in literary criticism and theory, including in classic feminist texts such as Simone De Beauvoir's *The Second Sex* (447, 448). Women were viewed as whores if they had sexual relations with men outside of marriage, including if they were raped, and a woman only had good morals if she stayed with one man for her entire life, regardless of how he treated her. Women were also seen to be the downfall of men.

> *A woman does both good and bad things [for a man]. Earlier he wasn't like this […]. As soon as our relationship started, he started acting crazy ten to fifty times a day, and even during the night. People started saying '[she] has done bad things with him [had sex] and made his brain act crazy'.*
>
> *[Vaishali, late thirties, religion unknown]*

Other expectations placed on women included the beliefs that they should not work or study. There was a clear view of what constitutes a ‘good woman’: she should not swear, speak too much, or be seen. However, she should be beautiful. This again resulted in contradictory opinions. For some, women should be seen and not heard, and for others they should not be seen at all. A couple of women described being kept inside the house with a cloth over the windows so that they could not be seen, including in childhood, or being scolded for standing too close to the window. A community officer said:

> *When this girl got married into this household her father-in-law told her this with pride. He told her that when they got married, his wife would not step outside the house and she used to observe purdah (female seclusion).*

There were also expectations that a woman should not hit a man, that she shouldn’t go back to live with her parents after marriage, and that girls should get married early. This idea suggests that girls may be seen as a financial burden on the natal family and need to be married quickly. Ghosh (2015) said that early marriage was common in slums because of the belief that it would protect girls from poor homes from sexual predators and give them economic and social stability (435). Whilst the majority of women interviewed were married in their twenties, a number were married much younger and there was additional talk of doing so for their own children, particularly when the mother-in-law was the one making the decision.

It was also expected that women should not socialise with people outside the house, particularly men, which tied in with beliefs about male-female relations. A particular view was that a husband owns his wife, and that she is both subservient to him and his responsibility. There was also the idea that a woman ‘owes herself’ to a man: when Vaishali’s partner was trying to start a relationship with her, the neighbours would tell her that if *he* was so desperate for her, *she* should go to him. This links to the idea that a woman is the property of her husband, that he can use her how he likes, and that it is his business and nobody else’s if he chooses to abuse her. This was also highlighted by other qualitative studies in similar settings (163), and supports the idea that domestic violence is seen as a private matter (365). Some people said that being beaten or abused was part of being a wife, although usually these opinions came from mothers, mothers-in-law, or husbands, who possibly had an interest in maintaining the status quo.

I: *Do you feel that you have your mother and father's support, so that has made a difference?*
R: *No. What of my mother and father's support? Until now they have advised me that if this goes on* (violence)*, let it go on. They have given this advice*.
I: *So they do not support you much?*
R: *No they do not.*
I: *But you can talk to them. Then when you talk to them, they give you this advice, that this goes on all the time [so] let it be.*
R: *Yes they say this.*

[Shobha, late twenties, Hindu]

The normalisation of abuse is tied to the belief that women by themselves have no inherent value and that a woman needs a husband to give her value. The lack, or threat, of not having a husband was a constant source of tension for families, and a reason for judgement or criticism from others.

R: *I told her that I had tension. I told her everyone asks me, 'You don't have parents? You aren't married? Couldn't your parents get you married? Why were your parents so careless?' I told her that people in my area asked me these questions.*
R: *[…]The people in my neighbourhood often say, 'Look how many girls have been married off. What your mother did, was not a good thing.'*
R: *[…] Even now, I think that people will say that I lived with him for so long. [They will say], 'Chhee, she has stayed with him for so many years and she must have done bad things with him. She must have done bad things with him and they aren't even married. What is her worth? What is her worth?' People say all this, right?*

[Vaishali, late thirties, religion unknown]

The idea that women have no value without a husband was used to by Mitra (2013) to explain why women continue to stay in abusive marriages: "simply because they understand that a woman who is unmarried, divorced, widowed or deserted is looked down upon" (449). There were some contradictory opinions about the value of a woman, such as in relation to children. There was the idea that without children a woman had no value, yet once she had children she no longer had anything to offer. Harsika explained that her parents told her, "we cannot do anything for you. You have had three children, your life has passed so we cannot do anything."

A widely-held belief was that having a son was better than having a daughter, and producing sons gave women more value. This was expressed by husbands, marital

families, and parents, as well as by women themselves, who believed that their situation would improve if they had a son. Sonal said that when she gave birth to a son after having two girls, her mother pampered her a lot more. Husbands and marital families often nagged the woman for a son and complained about having a girl, as described by a participant in FGD 2:

> *If a girl child is born then you don't get respected as much. Husbands say 'a daughter is born, from where will so much money come from for her marriage, her education?'.*

Women themselves were also keen to have a son, but often for different reasons. As Savita said, *"I was quite happy because I had a son now and I thought maybe my husband will see his face and change".*

In addition to beliefs about the role of women, some beliefs were expressed about the role of men. These included the idea that a husband is strong and should take care of his wife and children's needs, that a husband should be going out to work, that men just want sex, and that men have affairs. Some women believed that men having affairs was normal and just something they do. Generally, however, this belief came from other people, such as Priyanka's mother-in-law, who said, "it is OK for a man to enjoy his life and be with as many women as he wants." Women themselves tended to be against this idea.

Beliefs, practices and traditions can create an environment conducive to abuse. In fact, much of the context described by women relates to the factors built into Heise's ecological model of violence (17), explaining why violence is so common in many of these women's lives.

7.4. Patterns of violence

This section describes the patterns of violence that women experienced. It covers acts of violence broken down into four main categories: emotional, economic, physical, and sexual. These categories were based initially on the definitions used in the quantitative questionnaire, but were expanded as other acts of violence arose. I also describe the perpetrators of violence and summarise descriptions of timescales, frequency, and severity.

Twelve of the 22 women interviewed had experienced all four types of violence, eight had experienced emotional, economic, and physical (but not sexual) violence, and two had experienced emotional, economic, and sexual (but not physical) violence. This reflects the results from the quantitative chapter, in that emotional and economic violence were experienced most, followed by physical and then sexual violence.

In general, women talked about violence experienced across their lifetime rather than in a specific period. This included experiences before marriage and in a previous marriage. However, the majority of women talked about experiences of violence with their current husband, which ranged in timescale from the beginning of their marriage to ongoing at the time of interview. Fourteen women had experienced violence from perpetrators other than their husbands, predominantly from members of their marital family. Eight described violence only from their husbands, six of whom had limited contact with their marital family because of distance or because they were no longer alive. This reflects the findings of the quantitative study that the marital family were often involved in violence perpetration.

7.4.1. Acts of violence

7.4.1.1. Emotional violence

All 22 women reported experiencing some form of emotional violence. During the analysis, I further divided acts of emotional violence into nine sub-categories to understand the nuances of this type of violence.

Abandoned, neglected, ignored

Desertion was a common experience. A husband might run away from home, leave his wife with her parents and not visit or call. Shobha described how her husband took their children and went to his parents, leaving her alone at home for days at a time.

Descriptions of neglect mostly centred around health and pregnancy. In these cases the marital family was always involved. For example, some families did not visit a woman in hospital after she had given birth, ignored her when she was bleeding while pregnant, did not care for her during pregnancy, or refused to get medical treatment. In addition, women talked about neglectful behaviours specifically from their husband, including not sharing information with her, not standing up for her when his family abused her, and never talking

to her lovingly. Some women were completely ignored. For example, Mahjabeen described how her husband didn't speak to her for seven or eight years whilst he was away working in Saudi Arabia.

Suspicion and accusations

Over half of women described suspicions or accusations of them being unfaithful. These included questioning where she was going, why she was wearing certain clothing, whom she was talking to, why someone was looking at her, or why she took so long in the bathroom. One woman was followed to work and another's husband would bribe neighbouring children to spy on her and report back. Generally, these suspicions came from the husband and would in some cases be fuelled by the woman refusing sex, or not conceiving, with the assumption that she was being satisfied elsewhere.

> ***R:*** *[He] nagged me constantly […] 'why aren't you conceiving? Are you taking the pill? Are you eating something?' I said […]*
> ***I:*** *What were you thinking at that time?*
> **R:** *I just wasn't conceiving. It's not my fault, madam. I was not taking any pill, so why should I say that I was? I knew nothing. Just nothing*
> ***I:*** *[…] When your husband and you were quarrelling because he suspected you, what do you mean by that?*
> ***R:*** *'Why so long at the shop? Why did you take so long in the bathroom?' [We were] fighting over such matters.*
> ***R:*** *[…] He carried on saying, 'You are having an affair with someone, you take the pill so that you won't have a baby with me, you want another man's baby.'*
>
> *[Shuporna, early twenties, Hindu]*

In some cases, women reported that their marital family also contributed to suspicions, questioning how they had become pregnant so quickly, or convincing their husbands that they were having an affair to provoke abuse. Not only would the woman be questioned about everyday activities such as her choice of clothing or whom she interacted with, but more significant events also led to suspicion, regardless of whether they were positive or negative. Areej described how, when she was pregnant, she had to be given cervical cerclage to prevent premature delivery. After this, her husband accused her of doing something immoral. When Sonal decided to start working and earning for herself because her husband was not doing anything, rather than appreciating the money that was coming into the house, he began to question how she was able to bring home Rs 5000 per day.

As well as being accused of having an affair, some women were accused of having had sexual relations with people in the past. These accusations generally came from the partner and would refer to male figures who had been, or were part of the woman's life, including cousins, nephews, brothers-in-law, work colleagues, and customers. Vaishali was accused by her partner of being a whore because she had been raped by her sister's husband. Women also described being blamed and accused of a number of other things, including stealing, not being able to conceive, and being responsible for a child's death, with these accusations coming both from the husband and the wider marital family.

Verbal abuse

Every woman interviewed described being subjected to verbal abuse by someone. Women used different words to identify verbal abuse: torture, nagging, fights, scolding, and harassment. However, they all described the same thing: using words to cause emotional harm. When describing verbal abuse in more detail, women talked about the use of bad language. One community officer said: "Her husband would verbally abuse her a lot. He would abuse her in Marathi language so much that a person's ear would burn listening to it."

Women were also insulted. Many of these insults were sexual in nature, with people making what women described as 'dirty accusations', and calling them names such as 'whore', 'prostitute', and 'slut'. Pooja described a scenario when she came home after work:

> *When I was climbing on the ladder, [my husband] saw me from the window […] 'Eh chhinal (hey slut), have you come after getting fucked? Have you come after you slept with that Muslim [name] Master? You must have enjoyed? Was his part small or large?'*

Sonal described how her grandmother-in-law and mother-in-law would talk about her and her sister-in-law:

> *They'd say, 'just leave them, they are useless cases. These women are prostitutes. They're troublemakers and useless girls. Why do you all bother about these girls? Just leave it, these women are entertainers, they aren't the ones who would manage their house'.*
>
> *[Sonal, mid- twenties, Hindu]*

These sexualised insults could support the idea that women's sexuality is seen as a negative thing and that being a 'bad' woman, in whatever context it is perceived, is often synonymous with promiscuity. Other insults attacked a woman's knowledge and intelligence, such as being called mad or mental, or told that she was illiterate and knew nothing. Women were told that they were useless, worthless, and that their life was pointless, and some were encouraged to commit suicide.

> *My husband would reiterate that I was mad. 'You do not have any intellect. You just commit suicide. You are like a nothing. Just sacrifice yourself. Alive, a woman like you is worthless, not useful.' He would continuously feed this into my mind. Continuously.*
>
> *[Neesha, mid- thirties, Hindu]*

Another form of verbal abuse involved criticism. Three main areas were criticism of women's food, their work, particularly in the house, and about children, such as not being able to conceive or not having a boy child. On top of this, women described how mistakes were continuously picked out. They were criticised for not doing certain things or not doing them properly, and were scolded for things such as not wearing a *dupatta* (scarf) when standing in front of the window, the children vomiting in the house, or burning milk.

> *Always the same thing, even if I make a little mistake. Suppose sometimes the milk gets burnt. Sometimes it gets burnt. So at that time he will also start shouting like anything. The milk that got burnt will be worth ten rupees only but he will shout as if I have made a loss of a thousand or two thousand rupees. And when he does the same thing he won't say anything.*
>
> *[Madhuri, mid-fourties, Hindu]*

The verbal abuse that women described seemed to be perpetrated to a similar extent by their husbands and the wider marital family, particularly mothers-in-law. Some women mentioned other perpetrators, such as sisters-in-law, fathers-in-law, grandmothers-in-law, and in some cases neighbours or the woman's own mother. Nevertheless, husbands and mothers-in-law were the predominant sources of verbal abuse. Being insulted or made to feel bad about oneself, humiliated, or belittled were all assessed in the quantitative questionnaire, but the qualitative analysis suggests that verbal abuse is more nuanced, with women reporting many different forms.

Threats and intimidation

Women described being threatened by people in different ways. Partners or marital family members made threats of violence, from beatings to murder. For example, Vaishali's partner told her that if he beat or killed her nobody would care. Ashifa's mother-in-law threatened her with severe violence:

> *They used to take [daughter] with them. Sometimes not, but mostly they used to take [daughter]. They used to say 'she is our granddaughter, my son's daughter, you leave this house.' This is what she used to say: 'go away from this house, I will hit you so much, just go away'. I used to say 'I will not go, I will never go, even if I die whilst you beat me up'. Then she would say, 'I will beat you up so badly, get you so beaten by your father-in-law, sisters-in-law, that you will be hanged or you will run away'.*
>
> *[Ashifa, late twenties, Muslim]*

Priyanka experienced death threats, not only from her husband, but also from the woman that her husband was having an affair with. In other cases, the threat of violence may not have been explicitly stated, but actions and previous experience led to the same outcome. Aarushi said that she always feared that her first husband would beat her, kill her, or burn her alive: "he was like a butcher".

As well as the threat of physical violence or death, a husband might threaten to make his wife's life worse, by committing suicide so that she would end up in jail, or that if she filed a case he would be released and would come back (and things would be worse). Aarushi received threats from her husband's children that they would evict her as soon as their father was no longer around. Madhuri even described how her marital family would talk about having contacts at the police station, using their power to deter her from filing a case.

Some women received threats from their mothers-in-law about getting rid of them and marrying their husbands off to other women. The threat of being left was something that women found particularly distressing due to societal shame around separation. This suggests that threats were used widely to scare, intimidate and control women.

Isolation, restrictions and control

Women's isolation and restrictions were prominent forms of emotional violence. Isolation included more obvious things such as not being allowed to visit parents or attend family functions, not being allowed to have friends or visitors, not being allowed to socialise with neighbours, and in some cases not being allowed to interact with other members of the marital family. Some women were not allowed to have mobile phones and were further isolated from friends and family. The more serious cases of isolation involved the woman not being able to leave the house, being locked inside, and the windows being covered with cloth. However, some women also experienced isolation due to deprivation, such as not being allowed to watch TV or access any form of entertainment.

In general, acts of isolation were perpetrated both by the husband and the marital family, most often the mother-in-law. Kalpana described how, when she lived in the village, her mother-in-law prevented her from talking to anyone outside, would not let her parents visit, and would not let them take her back to stay with them. When she moved to Mumbai to live with her husband she also experienced restrictions, but she said that she preferred this option because in the city she had to leave the house to take her child to school, so she felt less isolated than in the village.

Children were sometimes used as a means to isolate the woman and cause distress. Ashifa's mother-in-law would take her daughter and not let her see her for hours at a time. Shuporna described how she originally made the choice to leave her daughter with her mother so that she was able to go and earn money, but her mother began to restrict her access to her daughter and leverage the situation for money and to convince her to leave her husband. For many women, their strongest bond seemed to be with their children and being isolated from them was a significant part of their narrative of abuse.

Added to her physical isolation, a woman's actions were often controlled by her husband and marital family, which could contribute to the environment of isolation. For example, Kalpana had restrictions on "eating, sleeping and everything", and Shobha was not allowed to interact with her children until she had finished all her work, even if they needed feeding. One participant in the first focus group was not allowed to go to the bathroom at night and another was not allowed a say in what clothes she wore. The woman's options would also be restricted through the prevention of education, which could happen at different stages. Madhuri, who was already well educated, wanted to do a Bachelor in

Education to become a teacher. Her husband would harass her about this, tried to stop it from happening, and told her not to accept admission. Her in-laws later criticised her husband for allowing her to attend. Farrah said that after she got married she was forced to quit her studies, despite her husband having promised to make sure she completed them. She fell pregnant and was made to quit five days before taking her 12th grade exams.

Housework and food

Another manifestation of abuse, which I have classified as emotional violence, was the use of housework and food in violence perpetration. Women described how they were often forced to do all the housework alone and were not allowed to rest, which became a part of their everyday routine. This included during pregnancy for some, or immediately after delivery. Work was often made more difficult than necessary. For most women who described this type of abuse, their in-laws were the main perpetrators, although other perpetrators were also mentioned. Devika's husband would wake up in the middle of the night, throw water everywhere, and make her sweep. During her childhood Farrah was made to do all the housework after school and would be criticised by her brother's wife.

Food was used in different ways to control or hurt women. In some cases it was restricted: the woman would not be given anything to eat, sometimes for days at a time, or she would be made to eat different food from the rest of the family. A participant in the first focus group described how one day after a fight, her husband walked out and took the ration with him, declaring, "let me see now how you eat". Some women would be criticised and taunted when they ate, and others were made to eat after everyone else. Perpetrators would also refuse or reject the food the woman had made, would come much later to eat, or would throw away what she had cooked and order food from outside. The food itself would be criticised for its quality and rarely praised. Some men used food as a means of sexual coercion, saying that they would not eat unless women had sex with them. Priyanka's husband would force her to feed him with her hands. The perpetrators using food as part of the abusive pattern were predominantly the wider marital family, particularly the mother-in-law and in some cases sister-in-law, although husbands were involved in a number of cases.

I chose to classify control of food and housework as emotional violence, but these forms of non-violent abuse most closely reflect the concept of Gender Based Household

Maltreatment (GBHM), a term coined by Raj et al. (2011), characterised by “forced heavy domestic labour, food denial and efforts toward prevention of medical care acquisition” (159). Many of the acts of violence described in interviews were similar to those classified as GBHM. In my study, the use of food in abuse patterns went beyond denial of it, as previously described. With the societal belief that the role of a woman within her marital family is to cook food and look after others, the outright rejection of her food could serve to question her value and worth as both a woman and a wife. Food plays an important role in Indian culture and a refusal to share mealtimes could also be a rejection of the woman’s presence in the household. The women interviewed by Mitra also described the use of food as part of abusive patterns, and it was highlighted as interesting that the husband not eating concerned the wife, with the interpretation that “food and emotions related to it are also very much cultural expressions of love and violence” (449).

Humiliation and belittlement

Humiliation and belittlement often involved complaining to others about the woman, such as calling her parents to complain about her or telling the neighbours that she is not fulfilling her duties. It also often involved disclosures of a sexual nature. For example, Pooja’s husband would tell the neighbours that she had slept with a Muslim man and that she needed a Muslim man because he had ‘a large part’. Vaishali’s partner would tell the neighbours that she came to his house to sleep with him. The couple were not married and this was humiliating, made worse by the neighbours gossiping. The partner would also say things such as “despite you being a whore I am accepting you” or “ you are a whore, you are a slut, but you have a good heart”, belittling Vaishali and using backhanded compliments that could erode her self-worth.

Whilst insults and belittling were assessed in the quantitative questionnaire, manipulative insults that were followed up with a compliment or a declaration of love were an added detail that came up in the interviews. Some men seemed to emotionally manipulate their partners by using derogatory terms to insult them and telling them they loved them in the same breath. In some respects, this is similar to perpetrating violence and then apologising, which is a common technique within abusive patterns (450).

Affairs or inappropriate behaviour

A number of women talked about their husbands having affairs or behaving inappropriately with other women. Whilst this may not be classified as an abusive act, I decided to discuss it alongside emotional violence because it seemed for many women to be significant to their narrative, particularly when they themselves were subjected to numerous restrictions, suspicions, and accusations. Often, these affairs seemed to contribute to the abusive environment by rejecting the woman and imposing different standards for the husband, regardless of how the affairs were perceived.

As seen in the quantitative analysis, a lot of women experienced emotional violence and it was perpetrated by in-laws as well as the husband, sometimes in equal measure or sometimes more so by marital family members. This supports the conclusion of the quantitative analysis that the marital family plays an important role in violence in this context, and adds nuance to the types of emotional violence that women are subjected to.

7.4.1.2. Economic violence

I classified acts of economic violence into four main types. All 22 women interviewed experienced some form of economic violence.

Not being given money

Women were often not given money to manage the house or to cover their or their children's needs. The husband was referred to most in these scenarios. Pooja talked about how her husband earned a lot, but when she was in hospital she had to beg the other patients to give her food. Mahjabeen's husband had not given her money for expenses in over 10 years. Medical costs were a particular challenge with which women struggled. Neesha was forced to go to the village for her deliveries because her husband would not give her money. When Kalpana got sick with kidney stones, her mother-in-law refused to pay for the urgent operation that she needed.

The women would be financially instable because their husband would not take responsibility for the house, would not earn and would sit around doing nothing. Sonal said that for six or seven months there had been no food at all in the house. She would have to

send her children to the Aanganwadi centre (government-run health and child care service) to eat and would borrow tea and biscuits from neighbours. Whilst Aarushi's husband was currently earning and providing for her, she was worried about what was going to happen to her and her daughter when he was no longer there. She would ask him to give them financial stability by putting some property or something else in her name, and whilst he would listen, he had not taken action. Some men displayed further irresponsible financial behaviour that put their families at risk. Madhuri's husband sold their house without telling her, a client of one of the community organisers would drink and gamble and not come home for days at a time, and Swati's husband took out countless loans resulting in people coming to their house to demand the money back

In a couple of cases the marital family also contributed to the lack of provision and financial instability. If supplies ran out in the house, Ashifa would be told to go and get more from her father, Sonal's family wouldn't bring back ration supplies even though they had a ration card, and Areej was told at eight months gestation that she should abort her baby because the family didn't have any money to look after it.

Prevented from working or forced to work

Women's employment status was usually controlled by others, often for their own gain. Five women were told not to work, predominantly by their partners, but also by their mothers-in-law. These demands came regardless of the fact that many husbands refused to work themselves and there was no money coming into the house. On the contrary, one woman was forced to work so she could provide for the family while her husband refused to work:

> ***I:*** *These arguments happened more with your husband or with his family?*
> ***R:*** *It was his family members who would [do it]. And you know how they would do it? They would provoke him to take certain actions or beat me. They would do something and would make my husband do it too. Then later they made him leave his job, he had a decent job but they made him leave it, and my baby and I didn't get anything for expenses.*
> ***R:*** *[…] I would tell him [that I needed money for expenses] but he would hit me and say that I should go and get a job. He'd say that I'm educated and I would get a good job at the mall easily with a good salary. Therefore he would force me to work so that he could live off my earnings.*
> ***I:*** *[…] Did he leave his job because of his brother and his wife?*
> ***R:*** *Yes. His brother and his wife told him that if he were to keep working then he will have to feed everyone and if he didn't work then I will feed him.*
>
> *[Areej, early thirties, Muslim]*

Money or assets stolen or taken

Three women said that their husbands took money or assets from them without their permission. Madhuri's husband tricked her into giving him her salary. She also contributed a lot of money to the household on the promise of getting it back from her husband, but she never did. Sonal's husband sold her son's earrings, bought by her father, without permission, and Priyanka's husband kept her ATM card and used it for family expenses. These women's marital families were also involved in taking money. Priyanka's marital family used up all of the money that she had been given for her wedding. Madhuri's marital family kicked her and her husband out when they had spent all their money.

Thrown out of the house and belongings damaged

Being thrown out of the house was a repeated pattern described by many women. Usually, it was the husband who threw the woman out and when the in-laws were involved both husband and wife tended to be affected. This action would often follow an argument or a specific incident, such as refusing sex, and the woman could find herself locked out of the house at any time of the day or night, in some instances for the whole night.

Two women said that their husbands had damaged their property. Pooja talked about how, when her husband was angry, he would break things in the house, but they would always be her things and not his. A community officer described a case in which the woman's husband tore up the exam papers that she was marking as part of her teaching job, to cause her distress.

7.4.1.3. Physical violence

Twenty of the 22 women interviewed reported experiencing some form of physical violence.

Hitting, beating and other acts

The language most women used referred to being either hit or beaten. They described the different scenarios in which they experienced this, which ranged from specific incidents,

such as when Pooja's sister came home to help her after she had delivered her baby, but did not cook vegetables for the meal and so she was beaten, to more general patterns. These included husbands beating them when they were drunk or for little mistakes. Generally, the main perpetrator of physical violence was the husband, although members of the marital family were occasionally implicated. Ashifa said that her father-in-law, mother-in-law, and sister-in-law would beat her so severely that even they would shed blood, but that her husband did not beat her. Some women talked about being beaten in front of other people, including in public and in front of the children. Priyanka said that her husband would hit her in front of her in-laws and they would be happy about it. As well as hitting and beating, women described slapping, pushing, pulling hair and kicking. In one instance, Farrah's husband had kicked her in the eye.

Use of objects

Not only would objects be thrown, such as when Priyanka's husband threw a stick at her, but objects would be used to hit and beat. These included belts, glass bottles, wooden and steel objects, and kitchen utensils. Swati said that her husband would hit her with "whatever else comes into his hand", and Vaishali said that her partner would burn her with cigarettes.

Violence during pregnancy

Women described how physical violence fit into the timeline of their lives, including whether it was related to any particular incidents. One period that was highlighted was pregnancy. Some women described how they were hit, beaten, pushed and kicked when they were pregnant. Ashifa talked about how her sister-in-law would beat her so much during her pregnancy that she would faint, and Sonal's husband had hit and kicked her in her stomach when she was pregnant. Women who reported being beaten in pregnancy generally reported quite severe physical violence, and it did not seem to be constrained to this period. This is supported by Raj and colleagues, who found that "physical abuse was not commonly reported, but when it was reported, it appeared to be a carryover from physical abuse prior to pregnancy" (159).

Attempted murder

Sometimes incidents of physical violence escalated to attempted murder. Areej and Shuporna were both doused in kerosene, Areej by her marital family and Shuporna by her husband. Areej experienced other instances of attempted murder by her husband:

> My *husband tried to smother me with a pillow several times and also tried strangling me. He has tried to keep the gas stove on and locked me in from the outside so that my baby and I would burn inside.*

All of these different acts of physical violence were included in the quantitative survey, and many are included in other national and international studies. Women discussed their experiences of physical violence in much less detail than they did emotional violence. Any form of physical violence is serious, but the words ‘hit’ and ‘beat’ probably encompass a wide range of experiences. Women may have used these terms to cover a range of incidents from a slap to beating hard enough to break bones or draw blood, which in many cases would only have been apparent with further probing.

7.4.1.4. Sexual violence

Of the 22 women interviewed, 14 had experienced some form of sexual violence

Control of reproductive decisions

As in the quantitative analysis, I classified the control of women’s sexual and reproductive decisions as sexual violence. Five women reported having their reproductive decisions controlled by someone else. This ranged from being forced to have an abortion to being forced to have children. Aarushi’s husband didn’t want more children, but refused to wear a condom during intercourse and instead would give her pills to abort. Ashwini’s husband gave her abortion pills on more than one occasion without her really knowing or understanding what they were for. Conversely, Shobha’s husband prevented her from using contraception, but he and her mother-in-law also prevented her from having an abortion and forced her to have both her second and third children when she had only wanted one.

The reference to these incidents throughout the qualitative analysis supports the idea that,

once married, a woman has little control and autonomy over her own body, with many believing that she belongs to her husband. This justifies both the control of these sorts of decisions, but also other forms of sexual violence.

Coerced sex

Seven women described coercive scenarios in relation to sex. For some, this involved manipulative behaviour from a husband to try and get his wife to sleep with him, such as refusing to eat or drink tea with her or to go to work unless she slept with him. Some men continually pestered or massaged their wife's hands and legs until she gave in, or reminded her that as a wife it was her duty to comply and his right to demand sex. In other cases, if the woman refused sex, she was subjected to abusive behaviour that included accusing her of having an affair, verbally abusing her, throwing her out of the house in the middle of the night, and beating her.

Forced sex

Women described how their husbands would not listen to their wants or needs, even if they told them sex was painful. A number reported forced sex, and what appeared to be particularly prominent for them was forced sex in front of their children. Savita felt that this was the sole source of all of her problems, even though she had experienced emotional, economic, and physical violence. A community officer described a situation in which a husband would have sex with his wife five or six times a day, and in front of the children when she did not want to, telling her that it would only take five minutes. Neesha's husband would continue to have sex with her for long periods when she was pregnant, even though she did not want to, and Priyanka's husband wanted daily sex just after she had given birth. He also expected her to always be smiling and happy to have sex, even after he had beaten her.

> *When he wanted to have sexual relations he used to force himself upon me and pinch me on my body parts and say smile, laugh, be happy.*

Other than a husband or partner, Vaishali reported being repeatedly raped by her sister's husband after her mother died and a community officer described an incident in which the

husband would drug his wife and get his friend along to have sex with her whilst he recorded it. If his wife said anything, he would show her the video to silence her.

Pornography

The use of pornography and humiliating and degrading acts was assessed in the quantitative questionnaire, and a number of women did pick up on these to some extent in the interviews and focus group discussions. In some instances, pornography was included in patterns of sexual violence, with husbands forcing their wives to watch it and copy what they saw. This trend was something that the community officers had noticed:

> *Now there are mobiles people watch porn more and make wives try anal or oral sex or whatever else.*

Humiliation

Women were also subjected to humiliating and degrading situations. For example, although Priyanka's husband would not have sex with her whilst she was menstruating, he would check her underwear to keep track of when she was and was not, and would also check her body to see if she had had sex with someone else. Pooja described humiliating and degrading situations that her husband put her in:

> *He said, 'you do not cook rotis, let us call her' (the woman he was having an affair with), with an excuse to make rotis […] He would then lock me in the bathroom and they would sleep together […] I would call her and say 'Didi, come and prepare roti' […] They would lock me in the bathroom without clothes. [Husband] used to say if I am in the bathroom naked I would not make noise. One day my younger baby started crying, he (husband) gave him inside the bathroom and asked me to feed him. And there these two were sleeping naked […] After they had finished having sex he would ask me to wash his penis.*

As with physical violence, women did not give descriptive narratives of sexual violence as they did with emotional violence, but instead gave a more general overview of what happened. We do not know whether forced sex included forced anal and oral sex, which were assessed as separate entities in the quantitative questionnaire. Community officers felt that people did not really talk about sexual violence and that the prevalence was substantially higher than people said it was. Sexual violence was not mentioned at all in

the focus group discussions: women may have felt less comfortable disclosing it in a group.

7.4.2. Timescales of violence

This section discusses the different timescales of the abusive patterns that were described, including when the violence started, and how long it had been going on for.

For around half of the women, the violence started right away after marriage or soon after. For others it started during pregnancy - for Areej, the beatings started from 5-6 months into her pregnancy - or with a certain milestone related to a child, such as at the time of a child's immunisation (Shuporna), or when the child reached a certain age. Ashwini said that the abuse started when her child was around two years of age.

Some women recalled significant events or scenarios that triggered patterns of abuse. Vaishali's brother-in-law started to rape her after her mother died, Mahjabeen's husband stopped providing for the household after he moved to Saudi Arabia, and Shuporna believed she started having problems with her mother when her mother's male friend came into their lives. This suggests that, to get a complete understanding of the patterns and trajectories of violence, it is important to address the full duration of the marriage rather than specific points such as the perinatal period, and this is something I also tried to do in the quantitative questionnaire.

For many women, the abuse had been going on for a number of years, ranging from two to 26 years.

7.4.3. Frequency of violence

Some women experienced violence at a sustained high frequency and this was often referred to in more subjective terms. For example, "many times I was told to leave the house", "at least 50 times I was accused of stealing", or the family "attempted murder a number of times". Other women experienced abuse daily, which was more measurable. Ashifa said that her marital family would beat her every day or every other day: "there was never no fighting".

7.4.4. Severity of violence

Some women described the severity of their violence experience, but again this was often more subjective in nature, with women saying things like he would “hit hard,” or he “physically abused a lot,”. Shuporna described how her mother tortured her mentally - “a lot means A LOT” .These descriptions are not easy to quantify, but the common theme was that each woman perceived them to be severe.

The severity of violence other than physical, particularly physical violence that resulted in injury, was discussed less frequently in interviews. This is likely to be because physical violence is easier to describe and rank in terms of severity. As well as being able to rank acts of physical violence, physical injury could help to understand severity. For example, “they beat me so much that I needed stitches” or “my sister-in-law would beat me so much that I would faint.” These more specific descriptions of severity tended to apply to acts of physical violence with visible and tangible outcomes. Some women also talked about the relentless accumulation of abuse. For example, Devika said that her husband would beat, abuse, and throw her out of the house all in one day.

7.4.5. Perpetration

All but one of the women said that their husband or partner was involved in the abuse to some extent. Eight had experienced violence only from their husband. Some did not mention their marital family at all, whereas others said that their marital family lived elsewhere or were no longer alive. The one woman who did not mention her husband was Ashifa, who experienced severe abuse from her in-laws. Her husband never stood up for her or tried to stop the abuse, but she didn’t mention him actually perpetrating it. In total, eleven women cited their marital family as involved in the violence in some capacity, including siblings-in-law and/or their spouses, grandparents-in-law and parents-in-law. Most commonly mentioned was the mother-in-law.

Outside the marital family, some women mentioned their own family as perpetrators of violence, including their mother, brother, sister’s husband, and brother’s wife. Whilst Shuporna did mention a number of acts of violence committed by her husband, her perception was that her mother restricting her access to her daughter and demanding money was the main problem, and her mother was implicated as the main perpetrator. Other perpetrators were not family members but neighbours, husband’s children,

husband's friends, or mother's friends. Usually these other people were perpetrators of emotional abuse. There also seemed to be a dichotomy between neighbours being judgemental and harmful and then offering help. This echoes a study by Snell-Rood (2014), who found that systems of social support from neighbours were "deeply ambivalent": while neighbouring women would offer help, they would also stigmatise the women experiencing abuse, leading to relationships that were not meaningful nor long-lasting (451).

In some cases, multiple categories of perpetrator were involved in acts of violence, but women would often reference the main perpetrator, usually the husband or in-laws.

Different types of violence involved different combinations of perpetrators. Acts of emotional violence were often perpetrated by both the husband and the marital family at similar levels, with some specific acts showing clear patterns. Husbands were predominantly the ones to abandon their wives or to be suspicious of them, but the marital family were often the ones to threaten or intimidate and to use food and housework as tools of abuse. Lack of money or not being provided for was predominantly attributed to the husband, but refusing to pay medical fees and taking money or assets was often perpetrated by the marital family.

Acts of physical and sexual violence were predominantly perpetrated by the husband, but there were some accounts of women experiencing physical violence from members of their marital family. Ashwini would be beaten by her mother-in-law, sister-in-law, and brother-in-law, Areej was pushed and beaten during pregnancy by her sister-in-law, and Ashifa experienced severe physical violence at the hands of her marital family, particularly her father-in-law. In other situations, the marital family may not have perpetrated the physical violence, but may have provoked the husband into doing so. Shobha was prevented from having an abortion by her mother-in-law as well as by her husband, classified with sexual violence

7.4.6. Physical health outcomes of violence

I decided to include the physical health outcomes of violence in this section to complement the description of severity.

7.4.6.1. Visible injury

There were many accounts of visible injury, including bleeding, bruising, scars, swelling, fractures, and cuts. Ashifa recalled how blood used to flow and Savita said that, “all this had turned black and blue.” Women described a blackening of their skin, sometimes on purpose to avoid drawing blood, and others talked about swollen eyes and mouths, broken feet, scars that were still visible, and cuts that needed stitches. Some injuries had longer-term implications. Harsika said that her husband kicked her in the eye and her entire right eye became swollen, bruised, and filled with blood. She still experienced pain, mistiness, and itching and had to wear glasses as a result.

7.4.6.2. Pain or functional outcomes

In addition to visible injury, women described pain and other functional outcomes linked to the violence. Pain included not being able to sit or walk properly, being hit on their limbs so much that they would hurt terribly, and having stomach pains where they had been hit during pregnancy. Ashifa said that it felt as though someone had pulled out her eyes and her ears. Priyanka said:

> *Now my body has given up, it’s gone through a lot of torture, it pains me, I can’t have too many physical activities […] I can’t walk too much now because of the pain.*

There were some mentions of general injury such as head injury or eye damage, and some women talked about other physical effects of violence such as tiredness and limping or fainting due to physical abuse.

7.4.6.3. Reproductive health outcomes

Some of the reproductive health concerns may have been a direct result of physical

violence, others due to the general situation including stress and lack of care. These included miscarriage or near miscarriage. Other women said that they could not feel their baby move after physical violence, or that the baby had flipped inside the womb. A community officer described a situation in which a woman's stitches from her caesarean section came out because her husband forced sex soon after she had given birth.

7.5. Patterns of interest

Emotional violence seemed to be the type most connected to husbands' alcohol consumption. Women said that when their husbands were drunk they would come home and fight, might harass and verbally abuse them, become more suspicious, or even threaten them. In a number of cases this led to physical violence. Some women would be thrown out of the house when their husband was drunk and one reported that when her husband came home drunk he would force her to have sex in front of the children. The fact that alcohol seemed to increase incidents of emotional abuse could be interpreted in a number of ways. Emotional abuse was the most widely experienced type, and it seems intuitive that women would experience it more when their husband had been drinking. However, as discussed in Chapter 5, emotional abuse could also be the gateway to other types of abuse. No woman experienced physical or sexual violence without emotional abuse. Alcohol as a trigger for violence has been documented throughout the Indian literature (61, 144, 428, 452), and whilst there has been a debate about causality, it is a clear contributing factor in the occurrence of IPV globally (187).

Many of the women who were not employed experienced forms of economic violence that included not being given money and not being provided for, whereas for women who were employed the economic violence often involved acts like having their money taken from them, being forced to work, or being thrown out of the house. Some of the more frequent and severe physical violence was seen in women who were employed, which ties in with the debate in the global literature about whether women's employment status is associated with increased or decreased risk of violence. Some researchers advocate the bargaining models, which predict that an increase in women's economic resources will decrease the risk of violence; others advocate the male backlash model, which predicts the opposite, and data from empirical studies are mixed (453). Women who experience more severe abuse seek employment to escape the situation, husbands may use physical violence as a way to control their wives who have more economic freedom, or women who

work might feel more in control of their situation and therefore may be more likely to stand up to their husband, provoking a violent response. Women's employment status was omitted from the quantitative analysis due to small numbers of women in the sample being employed, therefore it is not possible to compare.

Women who experienced more severe violence from their marital families tended to have lower GHQ-12 scores, while women who experienced more severe violence from their husbands tended to have higher scores. Overall, the women who experienced the more severe patterns of violence tended to implicate their marital family as the main perpetrators, as well as (or instead of) the husband. These women tended to have lower GHQ-12 scores than women who experienced violence just from their husbands, even if the patterns of violence were less severe. This suggests that violence from the husband is more distressing for women, perhaps because they have more emotional attachment to him and more expectations of how the relationship should be. Women who experienced less frequent or less extreme acts of abuse tended to cite only their husband as the main perpetrator and also reported some positive, albeit conditional and time-bound, dynamics with their husband or supportive relationships from their own family.

7.6. Case studies

This section includes case studies from two of the women interviewed, to demonstrate the complexity and repetitive nature of abuse. The first case study is of Farrah, a Muslim woman in her early thirties who was living with her husband at the time of the interview. She was married before she was fourteen and has three children. She describes abuse perpetrated only by her husband:

R: *My husband used to hit me, beat me, abuse me, doubt me, he used to doubt me a lot.*

R: *[…] I was lying down and I was very depressed. Two days earlier my husband had beat me, [...] after that he said sorry to solve the problem.*

R: *[…] He hits and beats me [...] so much so that once my foot broke. Once he beat me so much that my nose started bleeding. Once my right eye, the entire eye, it was swollen. He kicked me so much with the heel of his foot. There was blood in the entire eye so much so that in a little while it became entirely black.*

R: *[…] The way he wants to fight, he fights. He wants to have sex. I cannot refuse.*

R: *[… When I got pregnant] my husband said “leave your studies”. I had to leave my studies.*

I: *[…] So these problems which started, when did they start approximately?*

R: *From the start. Three months after my marriage I came here. Since then he has been like this. I wear my clothes, if the neck is a little wide then [he says] "why has it become wide?". […] On top of that I am beaten. If our curtain is a little open and I am in front and not wearing my dupatta, then [he says] "why are you standing without your dupatta?" […]. Outside he is teasing women, he is flirting. All that he is doing, but there are so many restrictions on me.*
I: *[…] He is very suspicious.*
R: *He tortures me a lot. So he tortures me both physically and mentally.*
I: *Most of your fights were because of his doubting you?*
R: *Yes. Most of the problems were because of his doubting and sexual problem.*
I: *Ok. That he used to demand it and you used to refuse.*
R: *Yes. If I would refuse sex then he would say "you have gone to someone else, that is why you do not feel like it over here". Now, there is no reason to say that, so should I say that I have gone to someone else?*
I: *So despite that also he used to force you?*
R: *Despite that he used to force me. It was not like if I refused he would agree out of love. No, he would not agree lovingly and even if he agreed then firstly he would say a lot of things to me. After that for a minimum of a week to 15 days there would be tension in the house. Tension, calling me names, calling the children names, not coming home. Plus after that he would beat me. After beating me he would say sorry and solve the mater. This is what he used to do. He wouldn't say "ok today she has said no, it's alright", and agree amicably […] no it used to be like that for a week. In a week beating me, abusing me, fighting, then saying sorry and solving the matter.*
R: *[…] My husband was having an affair with some girl, she used to live in my area only […] So for that when I asked him, he hit me, he abused me.*
I: *[…] You tell me something good about yourself. I do not know you that well. What do you find is the best thing about yourself?*
R: *Ma'am, going out with my friends. I really like to spend time with my friends. But my husband does not allow it.*
R: *[…] I had one desire: to have a job […] but my husband is not allowing me to.*
I: *[…] If you have studied till your 12th [standard] then do you want to give tuition? Have you thought about this? Or do you want to do a job outside the house?*
R: *Ma'am, I want to go outside the house and work . As I told you, I like to roam around outside a lot. And secondly, my husband is so strict that he does not allow me to go outside the house.*

The next case study is Ashifa's. Ashifa is also a Muslim woman who was in her late twenties and was living with her parents at the time of the interview. She described an abusive situation involving her marital family:

R: *My in-laws used to beat me a lot: my sister-in-law, my mother-in-law, my father-in-law. They used to find excuses, any excuse, any opportunity and beat me severely*
R: *[…] In my house, even my brother-in-law (husband's sister's husband) would abuse me if something went wrong slightly whilst cooking food. A few times when [daughter] was young, she was crying because she was sick […] so when she slept in the morning I woke up at 6 am and started doing the sweeping. My father-in-law beat me. He beat me a lot. All the bangles on both my hands broke into several pieces, my hands were bleeding.*

I: *[…] So if we were to talk about your marriage, you used to fight with your husband or with you mother and father-in-law?*

R: *With my mother and father-in- law.*

I: *With your mother and father-in-law. Then what did your husband do?*

R: *Whatever they said, he used to do. He used to never do anything on his own, using his own mind*

I: *[…] So what used to happen when you fought with your in-laws, how did all this start?*

R: *[…] like one day there was no sugar to put in the tea. My mother-in-law had ordered a 5 kg packet. She used to ask for the Rs 1 pouch for tea. It used to finish everyday in such a big family of 15-16 people. When I used to go to make tea in the morning, it would be finished […] The next day whilst making breakfast, I would remember and say "order the tea leaves". Immediately they would start abusing me. My father-in-law would beat me, my sisters-in-law, they all beat me.*

I: *[…] You were married at 17. You were married for 3 years*

R: *Yes. From the second week onwards this has been going on. I could not understand with what excuse my mother-in-law would beat me. What can I tell you about my father-in-law, he would come and join in abusing me. As soon as I said something he would abuse me, such terrible abuses he used to give. He used to beat me. I used to think "what have I done?" even if I had not done anything wrong he would still beat me a lot.*

I: *[…] When there was no fighting, then did they treat you properly?*

R: *It has never happened that there was no fighting.*

I: *It used to happen every day?*

R: *It used to happen every day. They used to beat me, one or two days during the week for sure. If I listened to their abuses then they would abuse me everyday, it never happened that all three of us together would finish our work and eat together happily, never like that.*

I: *[…] So you said that, at that time, you thought that you would keep getting beaten so that you would be beaten to death.*

R: *When I was pregnant with [daughter], my sister-in-law had hit me in the stomach. I was into my ninth month of pregnancy, so [daughter] was in my lower abdomen, she had become still, I could not feel her move […] I used to work so much, so much that at 1 am I used to sleep […] a lot of time I had no sleep. I did not have the opportunity to lie down for even two minutes during the day. I used to hand wash the clothes of the entire family, take the utensils and scrub them for an hour, cook food for an hour, two hours. To trouble me they used to spread the work. The entire day used to pass like this. If there was no water at home, then I had to fill the water and carry it myself inside, wash everyone's clothes, my entire day used to pass like this. I had to knead the flour, she (mother-in-law) would ask me to fry the eggs. My husband saw everything, everything with his eyes, he never once said anything in my favour, always sided with his mother…*

R: *[…] The worst day was during the month of Ramzaan. During Ramzaan we fast. One day there was a fight. Then for one or two days I did not get anything to eat, nothing at all. […] On the third day, I cooked the food and lay down. I did not have the energy to wash the dishes, or to eat something […] So I did not wash the dishes, I lay down. I thought that, I will do it, I will wash the dishes, one or two hours later I will wash them. It became night, I lay down. My mother- in-law went to the shop. I don't know what she told my father-in-law, he came and beat me up so badly, he beat me so much, so much that I felt as though someone had pulled out my ears, my eyes.*

7.7. Discussion

Understanding the context of women and their relationships is important to understand how and why various patterns of violence manifest. Factors at different levels can contribute to the occurrence of violence (17). As Ghosh says, “In the Indian context, the cleavages of caste, class, religion and gender are critical for contextualizing human suffering in general and domestic violence in particular” (435). Whilst my study focused on women of lower socioeconomic position residing in Mumbai informal settlements, the interplay of other factors helps us to contextualise violence experiences and understand the ways in which women may perceive and then cope with them. This will be discussed further in Chapter 8.

I used the quantitative questionnaire to inform the framework for the qualitative analysis in terms of the categories and acts of violence. Generally, the acts of violence described in women’s narratives were similar to those that had been assessed in the quantitative questionnaire, although some had not been included previously and required classification. This process involved my personal judgement and may have been different had it been done by another researcher. This is one of the strengths of a mixed methods approach, as it allowed for the further exploration of existing categories to elicit nuance and detail.

The women recruited to take part in the interviews and focus groups were all known to SNEHA in some capacity, whether it be that they were coming to see a counsellor, attending group therapy, or simply that the community officers in the area were aware of them. Because they were selected with a view to understanding violence patterns and the way that women respond and cope with violence, it is unsurprising that so many reported experiencing physical and sexual violence, and that their experiences were quite severe. It is unclear to what extent some acts of violence are normalised within the community, but it could be argued that women who were experiencing milder forms of any of the types of violence might not have been known to SNEHA.

The overarching theme from women’s descriptions of violence is that acts of violence are not discrete. As illustrated in the case studies, many acts overlap and occur simultaneously to create complex and unique patterns, which women will in turn experience and perceive in their own ways. This is one of the benefits of assessing

violence through qualitative methods, to give a voice to women and their narratives, as summarised by Mitra (2013), who said that violence is a process experienced as a complex interplay of different types of abuse and perceived as a continuous dissatisfactory relationship, rather than singular episodes or a set of actions (449).

Overall, whilst the emotional violence section of the quantitative questionnaire was detailed, much more so than that of other national and international questionnaires, the qualitative analysis demonstrates that further nuances and complex patterns of emotional violence exist in this context. The use of food and housework in the abusive patterns seems of particular relevance to the Indian setting, given that food is an important part of the culture. This was also picked up by Kalokhe and colleagues (2015), who found that women reported restricted access to food as a means of control (160).

The prevalence of emotional violence in my quantitative study was greater than that seen in other studies, possibly due to the more detailed nature of the assessment, and it is therefore possible that, if future surveys included some of the additional elements discussed throughout the interviews, the prevalence of emotional violence would be greater still. Having said that, very few women experienced only one type of emotional violence and it may be that emotional violence patterns would be more complex but that many of the women experiencing emotional violence would have been identified already.

The fact that women talked about emotional violence more than any other type might suggest that it is more prominent for them and that they wanted to talk about it. It could be that it is easier to describe and more nuanced, so there is more to talk about, or it could be that it is seen as less of a private matter and 'just part of being a wife' than sexual and even physical violence. The idea that emotional (and economic) abuse is more prominent for women is supported by Ghosh, who described how emotional abuse, controlling behaviours and throwing the woman out of the house are perceived as more violating than physical abuse (435).

The experiences of violence described by women in my study have been documented across a range of South Asian settings, including in those living outside South Asia. Patterns of emotional and economic violence form the basis of the abusive relationship and the wider marital family, particularly mothers-in-law, are involved. This has been documented in the academic literature (44, 45, 159), but has also featured in many other

narratives from South Asian women. For example, Saima Mir, in the book ‘It’s Not About the Burqa’, wrote about emotional and economic abuse and control from her husband’s parents in both her first and second marriages, one in the US and the other in the UK (454).

The patterns of violence also echo those documented in other studies conducted in similar settings (449). In an ethnographic study in Mumbai’s informal settlements, patterns of economic violence included the husband being “chronically unemployed”, throwing his wife out of the house, and preventing her from working even though there was no money in the house for food (435). The pervasive nature of verbal and emotional abuse was highlighted by women from a rural community outside Delhi, including the use of bad language and daily verbal abuse (163). Women interviewed in Chennai, however, reported physical abuse as the predominant form and many experienced severe violence during pregnancy. Although, they also reported patterns of psychological and emotional violence as an ongoing part of daily abuse, including verbal abuse, threats of violence and murder, not being provided for financially, and isolation from family members and children (365)

Other studies report similar instances of women, as well as some men, describing sexual relations as part of the role of being a wife and acts of coerced and forced sex being perceived as such (435, 449). The use of objects in patterns of physical violence was picked up on in some other studies, as was violence during pregnancy (163). Raj and colleagues focussed on the perinatal period and found that more varied forms of abuse were cited during pregnancy, and that both non-physical and physical forms of violence were experienced during pregnancy and the postpartum period, particularly from in-laws (159).

The involvement of in-laws in the perpetration of violence within the home has been a running theme throughout the thesis, and was highlighted by women participating in interviews and group discussions. This is supported by other studies describing emotional, economic, and physical violence perpetrated by in-laws (159, 365, 449). Work by Panchandeswaran concurs in highlighting that, for the majority of women, abuse begins soon after marriage, and many women experience frequent, if not daily, abuse (365).

As described in Chapter 3, a number of theories try to explain why violence happens. For example, feminist theories of violence, first proposed by Dobash & Dobash (1979), argue

that abuse against wives is an expression of male domination over women (188). This could link in with some of the gender norms expressed throughout the narratives, including those that allow men (and women) to believe that it is alright for a husband to abuse his wife and feel ownership over them.

Some of the family violence perspectives are also relevant. In Gelles' social exchange theory, violence occurs when the rewards outweigh the risks (203). This was almost always the case in my study. The rewards of violence are sometimes tangible: the family might benefit financially from demanding dowry or harassing for money, or they might benefit from no longer having to take care of the housework (particularly the female members of the family). Rewards might also include the maintenance of the status quo, the woman being kept in her hierarchical position within the family, and social approval that reinforces one's social standing. For example, a husband might maintain his respect by disciplining his wife through physical violence.

In Goode's resource theory, individuals typically use the resources available to them to achieve their goals. It was noted that people with more resources tended to resort less to power and violence to achieve their goals (211). This could be applicable in this context, given that the population of study were from low socioeconomic backgrounds. However, one of the participants in the first focus group self-defined as being middle-class and still reported violence.

The ecological theory applied to the field of child abuse by Belsky (1980) describes complex interrelated networks of systems that can influence violent behaviour at different levels, ranging from the individual to the society or wider environment (204). Whilst coding contextual factors, I categorised them by levels influenced by Heise's integrated ecological framework, which was in turn based on Belsky's theory (17). Heise's framework is integrated because she combines research from both feminist and family violence perspectives, arguing that all are important to truly understand IPV (17). My findings suggest that, as well as complex patterns of abuse, the factors contributing to these patterns also seem to be complex and interrelated. There is evidence to suggest that gender norms and patriarchal values are important to the perpetration of violence in this setting, but many other factors seem worthy of consideration, including, but not limited to, relationship dynamics, family finances, and partner alcohol use. This integrated approach therefore seems appropriate as the lens through which this doctoral study was conducted.

Linking the seemingly different types of abuse: common couple violence and patriarchal terrorism described by Johnson (215), violence may have had different motives in my study. Some men may be displaying common couple violence if stressed from other things: work, lack of money and so on, whereas the others that are consistently and deliberately harmful may be patriarchal terrorism

7.7.1. Reflexivity

The way that I chose to define, code, and categorise acts of violence expressed throughout the interviews and focus groups was based on my perception of violence, and my previous exposure to other measures of it. Completing the qualitative alongside the quantitative analysis meant that I had preconceived ideas of which acts could be categorised under each type of violence, and used the quantitative questionnaire as a guide to doing so. This allowed me to summarise women’s experiences of violence more easily, but added my own views to those of the women. The interviews captured only short snippets (around one hour) of a woman’s life and the situations that she had been exposed to, and her descriptions of violence may have come across differently from how they were meant or how they were experienced. The narratives required condensing, relaying to strangers, and then translation from the woman’s mother tongue into English. This left a number of occasions on which narratives could have been deliberately or accidentally altered. Added to this is the way that violence is perceived by the reader of the transcripts: in this case, myself. My own perceptions of abuse and violence are shaped by a number of factors. This could lead to my labelling a specific scenario as abuse or assigning it to a certain category when in fact it was not experienced like that by the woman. Alternatively, it could mean my not coding something as an abusive experience when it had significance for the woman in her own narrative. Mitra picked up on this: “violence lies on the edge of what is at risk of interpretation as lack of love or interest, neglect, misunderstandings and ignorance. These do not generally get classified as violence unless we expand the routine and accepted definitions of how we understand it” (449). She noted in her study, as I did to some extent in mine, that descriptions of violence were subtle and ambiguous and different acts of violence had different meanings for different women depending on their context (449).

7.8. Conclusion

Women's narratives suggest that their experiences of violence are complex and nuanced. Specific acts of violence go beyond those assessed in standard questionnaires and are often context-specific, particularly for emotional violence. The mixed methods approach allowed these details to become apparent, expanding on widely recognised acts of violence to understand further its true extent. The perpetrators of violence included, in many cases, the woman's marital family as well as her husband. These findings are supported by both my quantitative study and the existing Indian literature. Contextual factors that seem to contribute to an environment of abuse include both patriarchal norms and values and other factors relevant to the family unit. An integrated view of violence, such as Heise's socio-ecologic framework, seems an appropriate lens through which to view violence against women in this setting.

Chapter 8

Understanding and responding to violence and its effects: an analysis of women's narratives

Key messages

- Women express a range of emotions in response to violence, ranging from sadness and anger to depression and thoughts of suicide.
- Women's responses to abuse lie on a continuum of active to passive, though objectively passive acts can sometimes be active methods of risk reduction.
- Women place meaning on their violence experiences. This is informed by their context, previous experiences and value systems.
- Women have a ceiling for violence tolerance, which is dynamic and informed by the meaning that they place on their situation and factors external to them. The ceiling in turn influences the way women respond to or cope with violence.

8.1. Introduction

This chapter explores how women responded to, and coped with, the experiences of violence described in Chapter 7. These responses included the woman's mental state and any subsequent actions taken or decisions made in order to cope. Two additional themes emerged as potential influences on women's responses. The first was the meaning that women attributed to their lives and experiences. The second was the constellation of factors external to the woman, e.g. how other people responded to her situation and whether she was given help. I conclude the chapter by proposing a conceptual model showing how these themes interlink to explain women's responses to, and coping strategies for, violence. This is followed by a discussion of findings and how they relate to existing literature.

8.2. The search for meaning

This section explores the meaning that women attached to their lives and experiences, particularly their relationships and experiences of violence. Previous experiences and the norms, values and beliefs that women were exposed to, whether from their families or society in general, could shape the ways in which they viewed the world. In turn, the meaning they placed on subsequent experiences could influence the way they responded to them. Women described and gave meaning to violence by drawing on their own personal experiences but also on broader cultural values, with clear interplay between the two.

8.2.1. Most distressing aspects of violence

Women's previous experiences of violence led to them to form opinions about it, including aspects that they found more distressing, as well as an understanding of violence patterns that led to expectations about future experiences. Almost half of participants described emotional violence as the most distressing. This included a range of emotional violence: being thrown out of the house, fights, verbal abuse, criticism, threats, bad language, doubts and accusations.

> ***I:*** *So what do you feel is the one thing among these that is the biggest problem for you? When do you get most upset?*
>
> ***R:*** *Ma'am, the thing that upset me the most was his doubting me. That used to upset me the most, because I did not do anything like that. If I did something, then perhaps his doubting me would not hurt my heart or mind.*
>
> *[Farrah, early thirties, Muslim]*

One woman said that the most distressing thing for her was when her husband forced her to have sex in front of the children. A couple of women said that they were distressed about the violence in general and did not specify one type over another. Others were more bothered about people talking about them as a result of the violence than by the act itself.

R: *In the same day sometimes he beats, throws me out of the house, and also abuses. All three things in the same day.*

I: *But what do you think, out of these three things, which troubles you the most?*

R: *That he throws me out of the house. I do not feel much pain from his beating or abusive language. But when he throws me out of the house, then other people see me. They see that her husband has thrown her out of the house. What would other people think then? They think that you work so hard day and night, you do so much, why tolerate this suffering? Do you not have parents? Why do you not go to your parents' house? Many times the neighbouring people have said this. It troubles me the most.*

[Devika, early thirties, Hindu]

Women were distressed about being abused when they believed it was not their fault. This was reflected in statements such as: 'he throws me out of the house when it was not my fault', 'he beats me when I have made no mistake', 'doubts me when I have always lived well'. Not once in this study did a woman agree that she deserved violence, even when she had done something that she might condemn another woman for, such as making a mistake with food, refusing sex or having an affair.

The meaning women place on their experiences might be different to what we expect. For example, Shuporna described severe physical violence from her husband, including attempted murder, but talked about him very little and seemed to be on his side throughout most of the interview. Instead, she was distressed about the fact that her mother would not let her see her own daughter (who lived with her). Similarly, Vaishali said there was no physical violence in her relationship and was focused on the harassment from her partner, yet she described instances of physical violence, including being burned with cigarettes.

8.2.2. Understanding violence patterns

Women were able to recognise violence patterns, repetitive behaviour, and predict certain behaviours. One woman knew she would be blamed if anything went missing at home. Another knew how her partner would behave depending on whether or not he was drunk. Repetitive behaviour included partners beating women and then apologising and asking for forgiveness, or repetitive patterns of arguments. Women often knew, based on experience, how a perpetrator would react to something they did.

R: *I mean he used to take money from everyone. So I used to say, "why do you want to take money from everyone? God has given you hands and legs, why don't you work? Why do you want someone else's money?" So like that, sometimes I used to say too much in anger. Then he used to hit. He said "you never speak so much, today you are".*

I: *[…] So if someone used to tell him they saw you with the boy you were with earlier, you used to tell him honestly that "I didn't go anywhere, I haven't done anything wrong, you don't talk, you shut up". But if you ever talked about money, about work*

R: *Then he used to get pissed.*

[Swati, early thirties, religion unknown]

When women described violence patterns, they often also described an action they undertook to mitigate the consequences. It was in their interest to understand patterns and avoid consequences, for example by deciding not to go somewhere or coming home before their husbands. They used this knowledge to continue with their lives as best as possible, and bent the rules when needed, as a coping mechanism.

> *I went to my mother's house. He used to come back home at seven thirty or quarter to eight. So at six o'clock I came back. Every time I went to my mother's house, I would go at this time. Before he comes home, I used to come back, so that he should not know. Because if he comes [before I am back], he will quarrel again.*

[Madhuri, mid-fourties, Hindu]

To understand their own violence patterns, women often compared their situation with other women's. They noticed when other husbands treated their wives well, and this could influence how they perceived their situation.

We have just had an argument 2-3 days ago, so we are not talking to each other. I am also not talking to him. I don't see a need as he is not bothered about anything. On the other hand, his sister also has a son. Her husband is earning so much and has insurance for three kids and puts money in the bank. He also works on a contract basis. Also, he has created two accounts in his wife's name. And I don't understand what my husband wants. He hasn't saved anything. Others are at least saving something for their kids and wife.

[Kalpana, late twenties, Hindu]

8.2.3. Perceptions of support

In addition to noticing how other women were treated, women's perceptions of support available to them could also influence the meaning they placed on their situation. For some women, these perceptions of support were based on experience. For others, they were based on other factors, such as relationship dynamics or previous interactions with support systems. Some women were very clear about whether or not support would be available, particularly when it came to their families.

> *Earlier, we had many quarrels. I would go to my parents' place. My father was a strict person. My brothers were younger and we were five sisters. All were living in Mumbai. When my father would come to take me from my husband's place, he would tell him a thing or two. He would tell him, "do not take her back, if you do this with her (if you are going to treat her like this)". My father was more strict. Then one day he would come to drop me there (with husband). Then the situation would remain good. But two years ago, I lost my father. It was a great shock for me. Now going onwards who would do this for me? I had one uncle. Once he told my husband, "if you do this, then we will not let our daughter stay with you. We will not give you your wife. You manage your own kids. We cannot look after them". But then, my uncle too died. Now who do I have to fight for me? No one.*
>
> *[Devika, early thirties, Hindu]*

A number of other women talked about people in their natal family, people who loved and cared for them, but then also said that they had nobody to support them. Perceiving a lack of support even when it is available could reflect women's perception of their situation. For example, if a woman felt helpless, she might have been more likely to notice and give importance to situations where she did not have help.

A couple of women said that support from parents in particular was very important. One even described parents as the "source of your resistance". Other women talked about how help from other sources such as organisations like SNEHA could be useful. When asked about advice for other women in similar situations, a common suggestion was that the woman should share her problems, whether that be with family, friends or external sources of support.

Whatever happens with us, whatever harassment or anything […] you share with them at least. Let them think whatever they want to, but share the things with others. Sometimes you may get some good suggestions from them. Sometimes you may get some bad suggestions also. The people we share to are not equal, it depends upon them, but we have to share.

[Madhuri, mid-fourties, Hindu]

Many opinions were about external sources of help that women could access. Generally, professional sources of help such as medical practitioners, counsellors, psychiatrists, and non-governmental organisations (specifically SNEHA) were thought of in a positive light, and were recommended to other women who might be in similar situations. Some women even talked about how SNEHA were better than the police:

The first time [counsellor] madam came to my house I felt like a loved one had come home. She brought me back into the social sphere. I mean when she comes or someone else comes, I feel like a loved one has come over. Someone said to me, "It is their duty. They get paid to do this." But you need a heart to do work, no? If you go to a police station then the police just come and then go. No one does the complete work, right? These people know the complete story about what has happened. They know everything, they even come home.

[Vaishali, late thirties, religion unknown]

One woman recognised the help that SNEHA could give, but did not see it as the solution to her problems. She thought that, whilst while SNEHA staff could listen to her, they could not provide her shelter and would ultimately not be the ones to look after her, so she had to be careful when seeking help from them. Another source of help that elicited mixed opinions was the police. Some women thought that the police would help them if they were in trouble, whereas others were sure that they wouldn't.

Whenever I have a trouble, when he throws me out of the house, when I make a call, I instantly get help from the organisation. But if I went to a police station, I would get negative responses. They tell me, "these are the problems of a husband and wife". Then I have to keep my mouth shut. I had to return back home. But this never happens in the organisation. They come to my house. They explain something to him, also to me. They resolve the problem. It happens at the house. But the police do not do like this. Rather they detain for one night and release in the morning.

[Devika, early thirties, Hindu]

Women's opinions about support were often grounded in their previous experience of it, and these perceptions could influence whether women chose to seek help. The final thing

that women sought meaning for, predominantly based on their experiences, was poor health. Often this related to mental more than physical health, and women made links between stress and poor mental health:

> ***I:*** *You have daily tension between you and your mother-in-law, besides husband is not working, he has kept a mistress, that adds to your stress?*
> ***R:*** *That mistress is not there anymore, she has passed away.*
> ***I:*** *But that was a problem, wasn't it?*
> ***R:*** *Yes, it was, but I never took stress about that. I thought "forget it, let him do what he wants". I never took so much stress, or else I would have passed away.*
> ***I:*** *That's exactly my point. Now that you have reasoned it out and stopped taking stress, some ladies cannot reason out things so easily. They take unnecessary stress, and in that stress they…*
> ***R****:* *Fall sick.*
>
> *[Suvarna, mid-thirties, Hindu]*

As described in Chapter 2, the concept of "tenshun" (or tension), a cultural expression of stress, has been documented within the Indian literature (107, 108, 455). In my study, many women also used the word 'tension' when talking about the stress they faced. The most frequently mentioned cause of tension was the relationship with their husband. They also recognised the links between overthinking or ruminating thoughts and poor mental health.

> ***R:*** *by thinking too much one experiences weakness.*
> ***I:*** *How does it affect [health]?*
> ***R****:* *Because those people think and think inside and their health deteriorates from inside and by thinking a person will become weak.*
>
> *[Shobha, late twenties, Hindu]*

Some women expanded this by recognising the links between poor mental health and poor physical health. However, others talked about the things that were linked with good mental health, which predominantly centred around courage, confidence and mental strength.

See, we have a mind. That mind gives us courage and sometimes it also takes it away. The inner strength- the soul tells that you do not have strength, you do not have courage, you are dependent on another person. Or sometimes it says "God has given you two hands, two legs and two eyes. You can do something". Some people have good souls. Some have bad. One is human, another is evil.

[Kalini, late thirties, Hindu]

Kalini attributed the presence or absence of courage to how good the person's soul is. If a woman thinks that stress and ruminating thoughts can cause her mental health to deteriorate, that this in turn could cause her physical health to deteriorate, and that the way to mitigate this is to have courage, this could influence the way that she decides to manage poor health. These thoughts might lead her to believe that health problems are an inevitable part of her situation, or they could prompt her to deal with the underlying causes of stress and tension.

8.2.4. Beliefs and values

Women also seemed to place meaning on their experiences by drawing on beliefs and values. These were likely to have been shaped at some point by their experiences, but they were also a reflection of wider familial and societal values and beliefs that women had been exposed to. Women expressed a number of faith-based beliefs throughout the interviews, often to reassure themselves that everything would be fine. In some cases, they related specifically to God and religion, in others to faith more generally.

I have faith in my God. God will change things with time. I asked God for what I wanted, and God gave it to me. And now I am thinking that if he (husband) corrects himself, then God will definitely help. Our life ahead will be very good, it will be a very happy life. This is what I feel.

[Priyanka, early thirties, Christian]

Some women also expressed a belief that God was in control of life, particularly when it came to surviving suicide attempts or other similar situations. Other women talked about destiny and fate, often in relation to their marriage; for example, that it was their destiny to be with this man. One woman talked about her belief in witchcraft, and attributed her husband's behaviour to it. Whether specifically related to God or not, these kinds of beliefs were used as a coping mechanism for different scenarios, including but not limited to women's marriages and experiences of violence.

8.2.5. Accepting or condemning abuse

When women talked about accepting abuse, this was usually theoretical and always conditional. They would say that they would have accepted it *if* a certain condition had been met. Usually, this was if they had made a mistake, but other conditions that were mentioned included accepting it up to a certain level, or accepting it because of their role in the family. One of the participants in the first focus group said that she would accept being scolded by her husband more than he would scold his mother, because she was his wife, but that he should also challenge his mother about the situation. One woman also seemed to accept abuse as a form of bargain:

I: *And were you yourself eating properly at that time?*
R: *No, I had left everything at that time. Because these people used to trouble me. When I used to sit to eat my food, my mother-in-law used to abuse me. So I used to get up and leave my plate. If you insult food, grains, like that, then I will have a problem. Let me at least my food - abuse me afterwards if you want.*

[Ashwini, age unknown, Hindu]

Although women in theory said that they would accept abuse in certain circumstances, in reality they never did. Kalini had an affair, which most women agreed in theory could warrant abuse, but did not accept that her husband should be able to treat her badly. Instead, she argued that she had just as much right to be satisfied, and that she would look elsewhere if she did not get what she wanted:

R: *I was going to him (husband) on my initiative. I was doing this. But he was not doing it. Naturally, when the husband does not get satisfaction, he goes out (outside of the relationship, for sex). Why not the wife?*
I: *When your husband would abuse you, speak this way, then what would you do?*
R: *Nothing. It was pointless to talk. You had to come here (SNEHA). Or go elsewhere. Husbands should not be there for any woman. She (wife) is also alive. She also has some desire. When husbands have the desire, they can meet their wife (for sex). They tell her to do it whenever they want. And when the wife desires, then why not? Then where should we go? The marriage is not only for the husband. The wife is also its part. Both.*

[Kalini, late thirties, Hindu]

Generally, experiencing violence led women to question why it was happening and challenge the perpetrator, whether directly or rhetorically, within the interview. Theoretical acceptance of abuse was predominantly shaped by women's values and exposure to societal beliefs about what is normal within marriage. On the other hand, the lack of acceptance *in practice*, or acceptance as a bargain to get something they wanted or needed, seemed to result from women's experiences of violence.

8.2.6. Understanding why: active versus passive

The majority of women questioned their abuse and almost all said that they did not understand why they were experiencing violence. Many tried to offer explanations. Within women's narratives, these explanations broadly fell into two main categories: passive and active.

Passive explanations for violence included fate or destiny, the work of God, lack of good fortune, black magic or witchcraft. All of these involved something external to the perpetrator and were closely tied with the woman's beliefs. Fate or destiny were the most common 'passive' explanations offered:

They say it is all in one's destiny. If there was happiness in my destiny, I would have become happy already. Then why would I even need to make this effort? Everyone told me that it is destiny. The elders explained that it is my destiny. My elders - Mummy, papa, my grandmother, my aunt, they told me. I got the first bad fellow and the second was bad too. These things happened. Maybe there was some error on my part too. I am wrong somewhere. Or maybe this person was written in my destiny.

[Pooja, mid-thirties, Hindu]

Other women were more explicit in their explanations, attributing the circumstances specifically to God or someone else performing black magic or witchcraft:

I: *When you both began living together again, did he (husband) behave properly?*
R: *He was fine. See, if I say this, you may not believe in it, but we believe in jadu-tona (witchcraft). And he (a friend of her mother's) has cast some spell on my husband.*
I: *Who has?*
R: *That man has. The one my mummy calls God. Due to that, due to the witchcraft, he (husband) always gets shocked with magic. Think about it, a man who lives properly for 4 months to 6 months gets an attack suddenly. He keeps on digging up old stories and talking about them.*

[Shuporna, early twenties, Hindu]

Women who attributed their violence experience to these passive causes also tended to express a sense of helplessness. Many women gave more active explanations for their violence experience. These often focused on the people involved in the situation. Although the perpetrators of violence included members of the wider marital family in many cases, the explanations that women gave were mainly related to their husbands.

The most common perceived active reasons for violence were the perpetrator's characteristics or feelings. Feelings included things such as helplessness, suspicion and jealousy or not wanting to be with his wife. Characteristics included a husband's weakness and willingness to listen to people who provoked him, or his dominating, perverted or sadistic nature. Priyanka explained that her husband would enjoy abusing her:

He was like a sadist who used to get pleasure in giving me pain (physical and mental) and this used to happen daily, day in and day out.

Around a quarter of women interviewed attributed their violence experiences to the influence of their marital family. Ashifa believed that, because her mother-in-law was bad, her husband was also bad. Madhuri said that her husband was just trying to make his parents happy. A similar number of women also believed that their husbands perpetrated violence because they had mental health problems:

> *My husband has some mental problem, like a psycho, something psychological I mean. I'm supposed to do whatever he tells me to do. For example he would show me a BP (pornographic film) and would want me to do the same thing as in there. Watching that would disgust me. So I believed that he suffers from some psychological problem.*
>
> *[Areej, early thirties, Muslim]*

Other active explanations for violence included personal gain for the perpetrator, such as getting money or assets from the woman and her family, a lack of knowledge or understanding on the part of the perpetrator, or external stressors such as alcohol, stress and financial problems. Some women also attributed the violence to gender norms and roles:

> ***I:*** *Why do you think they started physically assaulting you or resorted to hitting you?*
>
> ***R****:* *It's because they are of the view that woman is subservient to man. Everyone from my husband to in-laws and sister-in-law had the same attitude.*
>
> *[Priyanka, early thirties, Christian]*

Finally, three women believed that they experienced violence because they had done something wrong:

> ***R:*** *Yes, I say that I was the one at fault. If I had not fallen in love, if he and I didn't get to know each other, then he would eat his own food and go to his village, to his home. But I got close to him, and because of that everything else happened, I feel this. He also says that [things] went bad because of me.*
>
> ***R****:* *[…] Yes, I think that I am wrong.*
>
> *[Vaishali, late thirties, religion unknown]*

What women perceived as the reason for violence was based on both values and experience, and could influence their responses to the situation. If they believed that

violence was in their destiny or that they were at fault, they might feel like they deserved the violence or that they were helpless to change their situation. If they believed that the fault was largely with their husbands or others, they might seek ways to deal with it.

8.2.7. Opinions about their situation

Throughout the interviews, women expressed opinions and expectations about violence, and their lives and relationships more generally. Three main sub-categories emerged.

8.2.7.1. Gender roles and norms

In most cases, women expressed views that upheld prevalent gender norms, such as it was their role to look after the house and the children, that once they were married returning to their parents would bring shame, or that their life had little value without a husband or children. Some women also expressed the idea that abuse was a normal and inevitable part of being a wife, and that it was common. However, many other women believed that violence was wrong, common, and almost every woman expressed some opinion that challenged harmful gender norms.

Some women had expectations of men that went against what was socially expected, including that they should respect their privacy, that they should satisfy them sexually, and that they should also contribute more than just sex to the relationship, for example, by taking responsibilities within the household:

> *He should take up responsibility. His responsibility, and all of the responsibility. Now, I am a woman. Traditionally, what is the place of a woman? Cooking and bringing up the children. This is her destiny since her birth. And also she has to do domestic work. It is only very recently that women have left their houses. Now girls of 15-16 go out of their houses for work. But it was not the case earlier. They only had the cooking and the children. But as society has given this thing to women, then the men also should be tied to something. It is your responsibility and you must do this.*
>
> *[Neesha, mid-thirties, Hindu]*

Some women voiced opinions about women being equal to men and valuable. They said that women did not have to put up with abuse, that they were capable of achieving things

and could do more with their lives than just be wives. These ideas were particularly prevalent in the first focus group discussion:

> ***R:*** *There is no such thing as a wife should only come home, cook, and do everything else. We are also human beings*
>
> ***R:*** *[…] I'm not there to get beaten up and to sleep with him and to hear his abuses.*

There were opposing opinions about sex and extramarital relationships. Some women felt that, as wives, it was their duty to have sex with their husbands, but many were concerned that the time and place was inappropriate, especially in front of children. They were also upset if their husband did not consider their needs, such as not accepting it if they refused sex, or not being concerned about whether sex was painful. Some women expressed the idea that extramarital relations are normal and just 'something that men do', so that they did not have to worry about sleeping with their husbands. However, for others, extramarital relations were seen as very distressing betrayals. They questioned what they had done that would lead their husbands to seek sex elsewhere, but often seemed more upset that their husbands were providing for other women financially or showing concern for other children when they did not do so for them and their children. They also commented on how their husbands always accused them of having affair, yet went out and had affairs themselves:

> ***R:*** *Yes, after he went to Saudi he started sending money (to her). When he was in Saudi, she got married. Meaning they met after she got married. When my husband came, he met her, he took clothes for her, he always takes clothes for her child.*
>
> ***I:*** *And he used to never get anything to your house?*
>
> ***R:*** *If he gets anything for me, he gives me less than half. He sends the rest of it there. Even now he has kept everything hidden. What has he given me? He has given me one packet of cashew nuts, one packet of almonds, one shampoo and… one… lamp. And what else has he given me? One suit piece and whatever was left from what he used to cook there, a few cloves, cardamom. One packet of chocolate, one packet of Cadbury he gave me. It is small, not big. Whatever he gave me, he has taken more than that over there. Why does he go there? I am his wife, me.*
>
> *[Mahjabeen, mid-forties, Muslim]*

Some women questioned whether it would be fine if they also had extramarital relationships, and recognised that there were clearly different rules for men and women in such situations. They argued that if men could have affairs, so too could women, and that

they had an equal right to satisfaction, including a right to desire sex. They thought that it was not acceptable for their husbands to refuse sex when they wanted it, particularly if their husbands demanded it at other times. However, women also seemed aware of the societal opinion that them desiring sex is bad or inappropriate.

8.2.7.2. Perception of power over a situation

Women's perception of their power over their situation was characterised by the extent to which they felt helpless or in control, which were expressed in varying degrees. Some women acknowledged that the abuse was a decision that the perpetrator made, rather than because of destiny. They did not internalise it as their own fault, and also recognised ways in which they might be able to change the situation, predominantly through help seeking or the existence of support systems. These perceptions retained an element of power for the women. Others, however, directed that power to another source and felt powerless to do anything. They internalised the abuse as their fault, or they would attribute it to something outside of their control such as fate or destiny. They often felt that there was nothing they could do to change the situation, that it would not get better and that they had limited sources of support to turn to.

R: *That is what I think, that my children are growing up, my entire life has been ruined. Neither my mother asks about me nor my father, nobody asks.*
R: *[…] I have gone with my own mind that he will go away then it will be better this is what I think. But this fellow is not going away. For the rest of our lives he will tear us apart like animals.*

[Harsika, early thirties, Hindu]

When women internalised the abuse as something to do with themselves, they often believed that they had no value, that they were to blame for their experiences and that they were not capable of coping. In contrast, other women who felt more in control said that they should channel strength and courage and should take care of themselves. This included learning how to cope and being able to defend themselves, not tolerating abuse and suppression, and fighting for what was important to them. Farrah recognised that whilst help could be offered, ultimately only she could improve her situation:

In order to remove my tension, firstly I will have to control myself. No matter how much you help me. Whatever you tell me, I will have to bear in mind, that yes, I have to do this. But whatever I have to do, only I can do it .

[Farrah, early thirties, Muslim]

Participants in the first focus group also discussed ways in which they believed they should take care of themselves:

R: *There shouldn't be so much violence; those who beat don't understand, therefore it is important for us to know self-defence.*

R: *The first thing that we do is we women tolerate our first slap, we shouldn't allow that to happen in the first place. After the first slap we end up showing pity towards them if they say sorry and promise not to repeat it again, and we let it go. That very forgiveness becomes his strength and then one (slap) turns to two, and two turns to four, and four turns to eight.*

R: *If we harbour expectations and if they don't behave according to our expectations then it hurts even more, but when we don't have any expectations of that person, then it pains less.*

Women who felt more in control also expressed views that they were inherently valuable and capable. They talked about being entitled to work, that the work they did every day was useful, and that they were capable of making decisions, overcoming their difficulties and living alone.

When a good day is to come, it will come. No, one has to resist and struggle hard. Unless I use my capacities, unless the bird uses his wings, he cannot fly.

[Neesha, mid-thirties, Hindu]

These women recognised that the abuse was not tied to their worth, that it was wrong, and that while there were some things they could not change, they could control their own actions. They argued that other people did not have a right to criticise them, and were able to see the positive side of things. They were also able to empathise with others and understand that they were not the only ones experiencing abuse.

The extent to which a woman felt in control of her situation, or powerless to change it was relatively consistent throughout the duration of their interviews, though some women did express mixed opinions and perceptions of power sometimes varied with circumstance.

There may have been times or certain scenarios in which they felt that they were able to cope and be in control, and others in which they did not. As highlighted in Chapter 3, a study by Folkman (1984) concluded that women who believed they had control over their situations were more likely to employ coping strategies and persist in their use (248, 254), and Carlson (1997) suggested that as women's efforts to change the situation continue to have little impact, they are less likely to employ problem-focused coping strategies (255). This suggests that the amount of power or powerlessness that a woman perceives herself as having is central to the way she copes.

8.2.8. Wants and needs

Women's wants and needs were important in determining how they responded to and coped with violence. Women wanted love and connection in their lives. They wanted to feel that their husbands and marital families cared for them, to be close to their children and feel supported. These things were generally not explicitly expressed as wants or needs, but discussed in recognition of what women were missing in their lives.

> *They (the children) have not met me for a long time. They should not go there (to her in-laws). […] he mostly leaves the children with his mother. Everyone keeps them close to themselves. It is not like they should not go to the grandmother and grandfather. A little time there, a little time here [is fine]. Now for 2-2 3-3 days the children are there. If they are there the whole day then who will stay here with me? I will get tension from staying alone. Loneliness will bring tension only madam.*
>
> *[Shobha, late twenties, Hindu]*

Women also wanted to be seen, especially by their husbands. They wanted their husbands to respect and understand them and their needs, and to show interest and concern in them as human beings, rather than just as wives.

R: *My husband has always created troubles for me, he has never ever bothered about me or my happiness*

R: *Despite the fact that I was pregnant, my husband never took care of me, I had to manage everything myself.*

R: *[…] My husband should have understood that I left my family (against their will), that he should be living with me [nicely] and valuing our relationship.*

[Priyanka, early thirties, Christian]

Often, women wanted to be able to have good relationships with their husband and marital family. There were some who wanted to leave their husbands, but many of them wanted to remain in their relationships and so wanted to see an improvement in their situations.

[…] I think that all this should go far away, it should all go away. We should live nicely in our own house. We can eat roti and chutney during the day and pass the day [like this]. We will live nicely. I want this.

[Harsika, early thirties, Hindu]

While women wanted to see an improvement, some of them also wanted to protect their reputation and that of their family and children, meaning that they wanted to keep their situations private or not act if they risked damaging someone's reputation. This tension between a desire to improve things and an aversion to reputational risk could impact how women chose to respond. There was also a tension between wanting to be provided for and wanting independence, particularly financial independence. The majority of women wanted their husbands to take care of them financially, provide for them, but also buy them nice things or take them to nice places. For some, the fact that their husbands did not look after them financially was one of their biggest concerns. However, five of the women reported wanting independence, both financially but also in terms of freedom to go out of the house, spend time with whoever they liked, and work if they wanted to.

[…] I think that I should restart my parlour. I am telling the truth. I want to do something on my own. I am just telling the truth. I do not want anything separately belonging to [husband]. Nothing. Not even a rupee.

[Pooja, mid thirties, Hindu]

8.3. Responses and coping

I sought to understand patterns in how women responded to and coped with violence, including through their emotions, feelings and thoughts as well as somatic symptoms, general functioning, and their subsequent actions.

8.3.1. Emotions, feelings, thoughts

Women's emotions, feelings and thoughts were not only a response to their situations, but in some cases also a reflection of their coping, particularly in terms of their thought patterns.

When women described positive emotions, thoughts and feelings, they often expressed them as generally feeling 'good' or 'better', and this was usually in situations where they were out of the house and interacting with people.

> *Gradually the stress would be less because of taking my son to school and back, and speaking to people in the school. I would speak to other parents in the school and I would feel better.*
>
> *[Kalpana, late twenties, Hindu]*

In particular, women mentioned feeling good when they came to SNEHA. Beyond feeling good, they talked about feeling relaxed and peaceful in certain situations. Again, this tended to be when women were out of the abusive situation, when they were with other people, or when they were actively doing something to feel better, such as taking medication or partaking in a comforting ritual.

> ***R:*** *If I drink juices, when I drink lemon squash, I get a little under control.*
> ***I:*** *Ok. So when your children talk to you then after that you rest a bit, when you do this then you feel a little bit relaxed.*
> ***R:*** *My children know what problem their mummy has. They make lemon squash and give it to me, they get juices for me.*
>
> *[Farrah, early thirties, Muslim]*

Some women talked about the enjoyment and satisfaction they were able to find in their day-to-day life. Usually this was in small things such as their daily work or enjoying food, although one woman found satisfaction by leaving her husband for another man, because he would not satisfy her sexual needs. Nine women described having confidence and courage. For some, it was that throughout their experiences they had not lost confidence in themselves, for others it was the experience itself that had given them confidence and courage. They talked about how the situation had pushed them to do things that they would not have had the courage to do earlier, such as talking to others, standing up for themselves and going out of the house.

> *In the beginning I was a very fearful person. Even at night going into the other room I used to get afraid. But all these things have changed me. They have made me stronger.*
>
> *[Madhuri, mid-fourties, Hindu]*

Women described moments when they felt happy. Some of these were circumstantial, such as when they had company, when their husband was happy, or when their situation had changed. Others sought happiness in certain things, including their daily work and their children. Almost all of them also described some positive thoughts or positive mindset. The most common positive thought was the idea that they could cope and were able to carry on. For many women there was a general sense of hope, which helped them to cope with their situation.

> ***I:*** *You tell me. What do you feel is the best thing about yourself?*
> ***R:*** *This is it. I have life, nothing else. The best thing is life. If you have a life then you have everything, otherwise there is nothing.*
> ***I:*** *And in your life what is most dear to you today?*
> ***R:*** *In my life the thing most dear to me is that when I stand then I have strength in my arms and legs to keep standing. If I don't have strength in my hands and legs then how will I stand. How will I be able to look after my health, this is what I think. The most dear thing to me is my life. Nothing else.*
>
> *[Harsika, early thirties, Hindu]*

Women would strive for strength and determination, and believed that things would get better for them. For some, this was a belief that seeking help at a place such as SNEHA would help them leave their abusive relationship or deal with it in an official way and that things would improve as a result. For others, it was the belief that one day their husband or

marital family would change and things would improve. Whilst these latter beliefs could be seen objectively as damaging because they kept women in abusive relationships, they could also be seen as coping mechanisms. This links to the idea that one of the major factors in the stay/leave decision for abused women is “will I be better off?” - if the answer is, no, the woman is unlikely to leave (456).

> *When they first started abusing me, I would listen silently. Then they started beating me and I bore it. Then my father-in-law started beating me, everyone beat me. I bore it thinking that at some point they will take pity on me, they will keep me properly. I constantly thought this so I kept bearing it.*
>
> *[Ashifa, late twenties, Muslim]*

Some women also recognised that their mental state could affect the way that they responded to and coped with the situation, and tried actively to remain positive:

> ***R:*** *If I would have taken things negatively I would have become depressed. I would have thought of killing myself or something else*
> ***I:*** *So when you have a conflict with your husband, when you’re feeling sad, what is it that helps you to remain positive? Or stay positive?*
> ***R:*** *Thinking power.*
>
> *[Madhuri, mid-fourties, Hindu]*

In addition to the more positive emotions, thoughts and feelings, women described a number of different negative ones throughout the interviews. Often they referred to feeling ‘bad’ when asked about their emotions and feelings. This referred to the abuse, but also to feeling sorry for their husband or partner and feeling bad that they were hiding things from their family. Feeling bad included feelings such as sadness, unhappiness and upset.

> *Not even one day passed when I remained happy. I was very sad, my laughter died. As soon as I got married my life was ruined.*

[Ashifa, late twenties, Muslim]

Women also described specific things such as being heartbroken and hurt, as Ashifa continued in her interview:

In the beginning I did (trust him), when he said sorry so many times. I thought that maybe he has come in earnestness, [… I thought] perhaps in his heart and mind God has blessed me in some way that my husband has come for me. But slowly my heart broke completely, he did not want to take me, nor settle me.

Women talked about tension a lot, as well as stress and being under pressure. Many used a mixture of all of these terms, including to describe external stressors as well as feelings:

I have just one tension. My daughter. I am worried how to bring back my kid. I must bring her back. That's all.

[Kalini, late thirties, Hindu]

Some women used words such as distressed, disturbed, troubled or affected to describe similar feelings. In addition, almost all described feeling anger at some point. Some women were angry when their husband abused them or came home drunk, others when people accused or insulted them. Some women were angry when their husband wouldn't have sex with them or when they had an extramarital relationship. Others were angry at their parents, for not educating them or for getting them married. Women's anger manifested in different ways, including not expressing it externally, shouting and screaming, throwing things, or even taking it out on their children.

When my son was just four months old, I would bath him with cold water because I was angered by the tension given by my husband. He would always come home drunk. […] when we wanted something to eat, then we could not. How could we eat when there was no money? And even when he had money, he would steal it. He would do this and then I would get angry and I would release all my anger on my son.

[Neesha, mid thirties, Hindu]

Women also felt irritated or agitated with the people around them. Others had feelings of betrayal, jealousy and even hatred. A number of situations made women feel some kind of discomfort, particularly when forced to have sex in front of their children. Some felt disgusted or humiliated by things that their husband would do. One woman described feeling ashamed of her financial problems and her husband not bringing money into the house.

> ***R:*** *I gave birth to three children. I started feeling ashamed because he would not bring home any money. So therefore I found 2-3 homes in labour camp where I took up washing utensils and cleaning work.*
> ***I:*** *[…] How was your first day when you stepped out of the house?*
> ***R:*** *I used to feel weird. I felt ashamed to go to someone's house and wash their utensils and clothes. I didn't like it.*
>
> *[Vidya, early thirties, unknown religion]*

Over half of women also said that they were afraid, anxious or worried at some point. Generally, this was fear of their husband or marital family and the violence that could happen. Some were also scared of seeking help from people such as the police, because they were worried about what might happen to them and their children. A sense of hopelessness and helplessness ran through many of the interviews.

> *Right now ma'am I seem happy. I look happy. But earlier I felt that I do not want to live, nor do I want to laugh, nor do I want to die. It felt as though everything was over for me.*
>
> *[Farrah, early thirties, Muslim]*

In line with this, some women also expressed a sense of apathy about their lives. They said that they did not have any desires, did not enjoy their day-to-day life and felt like doing nothing at all and just sitting all day. There were varying feelings about being in their marital family. Some women felt trapped and restless, some women felt lonely and others were seeking solitude.

> *Many times I feel like doing nothing. I feel as if I should go to some forest and not do anything, just relax without any trouble. No one should be there. No one. Only the chirping of the birds. There should be silent wind. There should be one big tree and I would just sit there silently. I should sleep there. No one should be there. No one. Not even my son. One just feels so peaceful and do not wish to move.*
>
> *[Neesha, mid thirties, Hindu]*

Many women often had internalised thoughts and feelings in response to their situation. Around half described how they felt worthless, like they had no value, or felt a decrease in their self-confidence. Half also had ruminating thoughts. They would think about their situation over and over again, and this would affect how they felt:

> *[…] If I start to think about it a little then I think about it a lot, then I get more tension. And if I keep thinking about my husband, then who will see to my children in the future?*
>
> *[Harsika, early thirties, Hindu]*

Harsika seemed to be hinting that her ruminating thoughts could lead to something happening to her in the future. She did not specify what, but almost all women described having suicidal thoughts or feelings at some point. Others actually mentioned mental health conditions. They talked about being mentally disturbed or having problems with their mind, and a couple used the word depression.

> *People used to call him up from here. His friends used to have his number. They used to talk to him, people used to tell him [I was having an affair]. As this kept happening, I was very disturbed*

[Mahjabeen, mid- forties, Muslim]

> *Sometimes I find my work is difficult, I am not able to concentrate. Then I get angry that should I do it or not do it. My mind is in turmoil.*

[Shobha, late twenties, Hindu]

> *My confidence has become very low. I think about a lot of things, but I am unable to do them. I have suddenly lost all confidence. Earlier, I felt as though I do not want to live, I was that depressed.*
>
> *[Farrah, early thirties, Muslim]*

Around three-quarters of the women we interviewed described problems with their cognition and a decrease in general functioning. They talked about their mind and body being affected in general, and described more specific outcomes such as forgetting things, being unable to concentrate, being confused and not being aware of what they were doing.

R: *Yes I used to keep lying down, or things used to come to my mind and I used to go anywhere. I had reached such a state that I would reach home, then say "what should I do", then I used to go out. I was not looking after my children, [not paying attention to] what they were doing, not doing, what are they saying, what are they drinking, nothing.*
I: *You used to go outside meaning?*
R: *Outside anywhere, I used to go anywhere outside I think. I was not conscious of where I was going, that was my state. I used to return, look in the house, then I used to wonder "what am I doing, where have I come?" Then I used to go somewhere again.*

[Farrah, early thirties, Muslim]

8.3.2. Somatisation and physical symptoms

Somatisation is the somatic, or bodily, manifestation of psychiatric disturbance (457). In addition to emotions, feelings and thoughts, women described a number of physical symptoms that might have been linked to their mental health. Some physical symptoms have been repeatedly associated with CMDs or idioms of distress within the Indian literature. These include 'weakness' (*kamjori* in Hindi), characterised by pain, headaches, dizziness and fatigue and gynaecological symptoms such as *safed pani* (white discharge) (84).

One of the most commonly reported physical symptoms was pain, be it headaches, chest pain or general aches and pains in the rest of the body. Women mentioned that they got these symptoms in response to the general abuse, and the tension and anger they felt as a result. However, three women specifically mentioned that they got chest pains or aches and pains in their limbs around the time that they experienced verbal abuse, and two women said they got headaches when their husband had sex with them.

R: *When I sleep with my husband, then it affects my head.*
I: *Means, what happens?*
R: *It troubles me with pains. […] When I would sleep with him, it gives me pain. At the time of the intercourse.*
I: *And when the intercourse is over, does the headache also stops?*
R: *No.*

[Aarushi, early thirties, Hindu]

Other symptoms reported by a majority of women were tiredness, weakness or fatigue. Again, some spoke about their tiredness and weakness in relation to specific things such

as tension due to work or chores, sexual violence by their husbands, fights or being ignored. Others mentioned these symptoms in relation to their general abusive situation. Around three-quarters of women said that their sleep was affected by the situation, attributing this to stress and worry. A third of women described a change in appetite. Some stopped eating due to tension, and others started eating more:

> ***I:*** *When your husband speaks with you in this way, when he reacts like this, then do you think that it affects your thinking and your health in some way?*
> ***R:*** *Yes, it affects [it] very much.*
> ***I:*** *How?*
> ***R:*** *I started eating three times more. Not even two times, I started eating three times more. It is said that a person may lose his appetite. But I would eat more and more with a large utensil. It would be filled up with dal and rice. I would demolish it entirely. But I would just fail to understand where my food has gone. I would simply be unaware. A roti was prepared, [so] I ate it. I ate. Again I ate. I would eat everything in the refrigerator - fruits, vegetables and all. I would eat even uncooked food.*
>
> *[Pooja, mid-thirties, Hindu]*

Two women mentioned that tension from their situation would give them a fever, and another that the stress gave her blood pressure problems. Two women talked about the gynaecological symptom of white discharge due to the stress that they were under. A number of different sensations were described, including dizziness, a sense of heaviness, feeling hyper or giddy and feeling numb.

> ***R:*** *I was very tense, [thinking] "why is this happening, and for so many years". Now it should be less, but no. I was thinking about that whilst lying down and my hand and leg became numb.*
> ***I:*** *Ok. You were not able to move?*
> ***R:*** *I was not able to move, only tears were falling from my eyes and I was crying.*
> ***I:*** *But you were conscious?*
> ***R:*** *Yes I was conscious.*
> ***I:*** *You were conscious but you were not speaking, you were not even moving.*
> ***R:*** *I was not moving, nothing.*
>
> *[Farrah, early thirties, Muslim]*

Finally, some women suffered physical health problems because their abusive situation meant that they did not adhere to medication for other conditions, such as thyroid problems or diabetes. The violence had an indirect effect on women's physical health by affecting their mental state and in turn their ability, or willingness, to manage existing

conditions. A community officer described a woman who had stopped taking her medication because she asked what the point of staying alive was.

As we have seen in these two previous sections, the violence that women were subjected to could affect their mental health. When women described a more positive mental state, it was usually in response to an escape from the situation, either temporary or permanent or was used as a coping mechanism. In contrast, many women described negative emotions, thoughts and feelings in response to violence, ranging from sadness to thoughts of suicide. For some this mental state also manifested as physical symptoms. Some women seemed particularly distressed. These women tended to talk much more about suicide, described a greater lack of cognitive functioning such as not being able to concentrate or being confused, and more somatic symptoms. Their GHQ-12 scores tended to be higher. The patterns of violence experienced by these women differed. Some of them were experiencing frequent and severe emotional, physical and sexual violence. Others were not experiencing any physical violence and not much sexual violence, but they were not supported financially and their husbands would verbally abuse them.

More women said that they found emotional violence to be the most distressing type of violence. Triggers for anger and tension often seemed to be verbal abuse, criticism and accusation, particularly when they felt they had not done anything wrong. Women who mentioned more severe somatic symptoms expressed a sense of being worn down, not only by being beaten but by a constant environment of control and criticism. This links with the idea that emotional violence can be more detrimental for women's mental state than some of the other forms of violence, as we saw in Chapter 6. However, as the patterns of violence experienced by women who were the most distressed varied, it is likely that other elements were at play. These elements could include the extent to which a woman felt powerless in her situation. I discuss this further in the next sections, which describe how women chose to respond to abuse in light of, or in addition to, their mental state.

8.3.3. Active and passive responses

When women experienced violence, they generally made a choice, whether conscious or subconscious, about how they would respond. Responses appeared on first inspection to be divided into active and passive. However, as I progressed through the analysis there appeared to be a tension between these two extremes, with some responses feasibly falling within both categories. To begin this section, I highlight the active and passive distinction as it began, and follow it with a discussion of this tension.

8.3.3.1. Active responses

Active responses to violence tended to involve some sort of action to challenge the situation, act on emotions or feelings or protect oneself. Every woman we interviewed described some kind of release for her emotions. For the majority, this was crying.

> *I would cry so much that I would soak my saree drape in tears. But now the tears won't come, I don't know why. I think all the water in my body has evaporated.*
>
> *[Vidya, early thirties, unknown religion]*

Around half of women used a means of escape such as self-harm or attempted suicide in response to the situation. One woman used addiction, saying that she had become addicted to chewing tobacco because of the tension caused by her husband. To release their anger and tension, some women would shout or verbally abuse their husbands in return, throw or break things, feel like hitting them and in some cases do so.

> *He massages my legs. Even if I refuse, he comes. I then get angry. Then I beat him, like a karate champion (laughs).*
>
> *[Neesha, mid thirties, Hindu]*

In deciding how to respond, almost all women spent some time weighing up their options or strategising about the best thing to do, both for themselves and for their children. They weighed up the idea of suicide, leaving the relationship or seeking help and also thought about ways in which they could avoid abuse, manage alone and take care of the household. In terms of thinking about what was best for their children, they considered

how they would take care of them, both practically and financially, including how to send them to the best schools possible and provide for their futures. There were opposing views between wanting to protect their children from abuse and thinking that their children also needed their father's love.

Considerations about what was best for themselves included whether or not they should have got married, whether they should leave the relationship, where they should live and how they would manage if they did, and whether they should seek help. The decision about whether or not to seek help was weighed against the potential consequences of doing so, including causing problems for their family and making the abusive situation worse. Madhuri said that because she was his wife she would have to file a case against her husband, but really it was her marital family that she was most distressed by:

> *A friend told me about SNEHA. But I was thinking whether to go or not. If I start one thing, I pursue it. […] and I was thinking whether to go against my husband or not. See, because of my in-laws my husband is doing all these things. He wants to satisfy them or he want to make them happy by harassing me. He is doing it because of them. But, since I am his responsibility, whatever case I make has to be filed against him*
>
> *[Madhuri, mid-fourties, Hindu]*

Women would also try to strategise how to best manage their situation financially, both in the moment and in the future. This financial planning included wanting to find work or encourage their husband to do so, saving for the future of their children, protecting their savings by keeping them secret and trying to minimise household expenses:

> *Even then he would not take up any responsibility and we kept having children. I used to get everything done at the village. I'd leave the kids there so that there wouldn't be any expenses here.*
>
> *[Vidya, early thirties, unknown religion]*

Women looked for options that would prevent the abuse from getting worse, including taking up work, giving in or appeasing the perpetrator and staying quiet.

I used to think that I will not say anything. If I talk back, they will beat me even more. Whatever they are doing, let them do it, If I say anything then they will get me divorced and get rid of me - their son is in their hands. I will close my fist, I will not open my mouth, I will remain quiet, but at some stage whilst they keep beating me I will die, I will be free. This is what I used to think, nothing else.

[Ashifa, late twenties, Muslim]

Most women had either thought about or attempted suicide. Some had weighed up the option more closely, making a decision between being able to escape the situation and the consequences of doing so. The most common consideration was what would happen to the children if a woman took her own life. This strategising led women to make decisions about how to respond to the violence they were subjected to. When considering how to minimise abuse, some women tried to avert the situation by avoiding talking to people within the marital family so as not to give them an excuse to be abusive, and doing what they could to not provoke the perpetrators, including coming home on time, avoiding spending time with friends and family and trying not to make mistakes.

Many women tried to find solutions, such as taking up work to ease the financial strain, taking control of their own reproductive health, including seeking medical care to help them conceive or prevent them from having more children, and taking actions such as seeking help for their husbands for alcohol problems, mental health problems and problems with their sexual functioning. Some tried to make things better with the perpetrator, which included supporting or defending him, gently trying to reason or bargain with him and doing things to appease him:

He [partner] said, "You work so hard and other people in your family eat with your money." He asked me to leave everything [my job]. I left everything for him. He said "live with me like this, stay close to me, do this to me, do that to me". […] I lived like he wanted to; we lived like a husband and wife live together

[Vaishali, late thirties, religion unknown]

Around half of women tried to protect themselves by removing themselves from the abusive situation. Many also tried to actively comfort or make themselves feel better. This involved deciding to not feel stress or tension, actively remaining strong by continuing with their lives and taking active steps to feel better. Some women distracted themselves with

their work, some prayed, some rested and others went out of the house for a walk or to find some peace.

> ***R:*** *Several times when there had been too much hitting and shoving, I used to sit by myself. I used to lock my house and go sit in some place. I used to feel peaceful when I did this.*
> ***I:*** *Where did you used to go?*
> ***R:*** *Anywhere. Any garden or any place on the road that had some shade.*
>
> *[Vaishali, late thirties, religion unknown]*

Women tended to oppose their abuse through a position of attack or a position of defence. Both of these standpoints helped them to respond, and in some cases cope. The positions of attack involved challenging the husband or marital family and questioning their actions. Some women asked for an explanation for the abuse. They wanted to know why they were being verbally abused, neglected financially or beaten, especially when there was no fault on their part. Interestingly, none of the women actively questioned why they were being sexually abused, perhaps because this was thought of more as their duty as a wife, as has been discussed previously.

> *He would sell off things for money, like my son's earrings. He sold them, and that became a reason for the arguments. My father very fondly got those earrings made for my son. I told him (my husband) to get them back: 'go earn, work hard and give back my son's earrings'. He said 'It's my wish, if I want I can sell them'. I asked him if he had given them to my son with his earned money. Then why would he sell them? […] I would stubbornly sit demanding him to give those earrings that my father had bought back to me.*
>
> *[Sonal, mid-twenties, Hindu]*

In opposing the abuse, some women decided to fight back or answer back when the perpetrator fought with them or verbally abused them. Some women complained about the perpetrator to another member of the marital family and some threatened about going to the police or SNEHA, or hurting themselves.

One day I told him what was in my heart. I said [if you believe] what these people (neighbours) say about me doing wrong things, then I will not tell you anything. If you, wish then I will go, You are committing so many atrocities against me. You are troubling me. If you tell me to go, then I will go away, but I will not return to you again. Either I will commit suicide or I will go away somewhere, but I will not come back to you again.

[Mahjabeen, mid-fourties, Muslim]

Opposing the abuse from a position of defence involved women standing their ground, ignoring or refusing to accept the abuse and acting in direct resistance to it. When women stood their ground, they refused to do something that had been demanded of them, such as leaving the house or the relationship, having another child, leaving education or complying with their husband's sexual requests. Many of them also chose to ignore the abuse, especially verbal abuse, and a number of women would actively defy the perpetrator to show their disapproval. They would take up work, seek medical care, apply for entry into college and talk to family and friends even though they were forbidden from doing so. Madhuri described a number of these defiant acts during her interview

He did not allow me to attend that function. He was trying to isolate me from all others. He was not allowing me to meet my relatives or attend any functions. Even now, I don't know most of my in-laws relatives. […] When he used to go to the office, and if he was doing the first shift and the function was in the afternoon, I used to go and attend it […] and I used to meet all my relatives at that time.

On Sunday I had come to my house to clean the clothes, in the washing machine, we have a washing machine. They wanted me to wash the clothes with hands only, not to wash with the washing machine […] Then I used to think I have my own house, my own washing machine, why should I wash with the hands? That's why in a week I used to come to my house and wash all the clothes.

Many times he asked me not to give tuition classes and all that, but I continued with it.

[Madhuri, mid-fourties, Hindu]

These acts of resistance pushed against the control that was placed over the women and possibly gave them some sense of power over their own outcomes.

The other active responses to the violence involved deciding whether or not to seek help. Almost all of the women at some point made the decision not to seek help, whether it was

not confiding in someone, refusing to accept help that was offered, not asking their family for help or not seeking more formal help from the police or an organisation like SNEHA. Usually these decisions were made earlier on in the women's experiences and by the time we interviewed them most had sought some form of help, particularly as they were all known to SNEHA in some capacity.

One of the most common reasons for not seeking help was the notion that it was not acceptable. Women were worried that they would bring shame on their family, particularly if they left their husband and went back to live with their parents, and were also worried about the bad name that they would get. These worries were most often shaped by the societal values that women had been exposed to, which were often reinforced by their families and the people around them.

> ***I:*** *Did you ever tell him (father) anytime that you can't adjust here and that you are coming back to the village?*
> ***R:*** *No I didn't tell him. He (husband) was asking my father to take me to the village, "how will she manage here?" but my father never took me along.*
> ***I:*** *But why?*
> ***R:*** *Because it would bring shame to our family honour: "my daughter will have to listen to taunts from people that she left her husband and came here", he'd say. The world doesn't want to see what the problems are, they will only see that she left her husband and came here to stay with her parents. This would dishonour my father's name and mine too.*
>
> *[Vidya, early thirties, unknown religion]*

Women expressed not wanting to bother siblings, whom women felt had their own lives to deal with, being worried about what would happen to their children if they sought help and in a couple of cases, were also worried about getting the perpetrator into trouble. Around half of women were in circumstances that prevented them from seeking help: they had nowhere to go, either because they did not have family or anyone to support them, or because they were geographically isolated, particularly if they went back to the village. A couple of women were unable to seek help either because they had no means of doing so – for example, they would be locked inside the house on their own - or because they were advised not to. In some cases, they reported that their family or even their neighbours and the people around them would advise them to stay in their marriage and that it would get better. This was taken further when people outwardly refused to help the women, so that even if they wanted to seek help they would not have received it. Usually this refusal to help came from the woman's own family and again reflected the belief that leaving her

marriage would bring shame on the family. The refusal tended to be worse if the woman had a love marriage:

> *I went against everyone's will in the family and got married. I had to bear the brunt of my choice. My brothers had made clear that they will not help me in times of crisis and not support me and I delayed seeking help.*
>
> *[Priyanka, early thirties, Christian]*

Some women were also unable to seek help because of time, money or logistics. For example, they did not have time to go to SNEHA because they needed to work, or they did not have the money to go to the doctor. A few did not seek help because they thought that there was no need, that their situation had already improved or they believed it was going to, or they just did not consider that going to the police or an organisation like SNEHA was an option available to them. Some thought that nothing would happen if they sought help, that they would not get support, or that nothing would change. In particular, a number of women had little faith in the police, with some believing that seeking help would make things worse.

> ***R:*** *If I do something, like giving a complaint to the police, then he will not keep me properly.*
> ***I:*** *You feel then he would create more problems.*
> ***R:*** *Yes.*
> ***I:*** *Then you do not want to go into this.*
> ***R:*** *Yes, because I have only his support. What would happen to me when he goes away? Therefore I would not go.*
>
> *[Aarushi, early thirties, Hindu]*

Although many of the women had resisted seeking help at some point, all of them did seek some form of informal help and almost all had sought formal help by the time we interviewed them. A common source of informal help was the woman's own family: parents, siblings and siblings-in-law on their natal side. Other sources included friends, neighbours or other community members, children in one case where they were already adults, and the husband or marital family for three of the women. Suvarna would call her mother-in-law when her husband beat her and her mother-in-law would try and stop him. She was one of the few women who mentioned a supportive relationship dynamic with her mother-in-law.

To address violence directly, women had sought help mainly from SNEHA, around half had sought help from the police, and some from the doctor. Generally, women did not give reasons for seeking help. Madhuri mentioned that when she left her husband she did not want to go back to her parents and came to SNEHA because she had nowhere else to go. A few women said SNEHA were good, that they offered better help than the police, and that they did not need to spend money to seek help from them. Some of the women in the second focus group talked about the benefits of opening up to someone:

> ***I:*** *You said she should talk, what happens if you talk?*
> ***R:*** *You will find some or the other support and your problem will be solved.*
> ***R:*** *It feels lighter if you share it with someone but if you keep it to yourself then you feel sadness.*
> ***R:*** *[…] If there is someone to support her and comfort her then it will keep her fresh. She will also feel less stressed if she shares her problems with someone who can then give her directions.*
> ***R:*** *[…] If a person remains silent it increases the stress and it may turn that person crazy. If you talk to people then you will feel a bit fresh. It feels like at least you have someone who understands you, instils courage in you, so it makes you hopeful. If a person stays alone and keeps thinking about it then it will definitely drive that person crazy.*

8.3.3.2. Passive responses

In addition to these active responses, women also displayed what could be viewed as more passive responses to violence. More than three quarters decided to bear the abuse at some point and in some way. They tolerated or accepted it, quietly enduring various forms of violence, and in some cases gave in to what was demanded of them.

> *Yes, in the night, he tells me “let's have dinner”. I said no, he persuaded me. I said “I am not hungry”, he tells me “if you're not eating, make me [something to] eat”. Then I fed him and I told him “let's sleep now”. He said “no, I want to have sex”, then I gave in, had I said no he would have suspected that someone else is satisfying me outside.*
>
> *[Priyanka, early thirties, Christian]*

Most women chose not to react to violence at some point. Many said that they would keep quiet and listen when they were being abused. This was mainly in response to verbal abuse and accusations, but in some cases physical abuse too. They were afraid that saying something would make the situation worse.

I would remain silent, and I'd just cry sitting in a room thinking how my life has become […] If I were to do anything he would show me his power in everything hence I would keep quiet.

[Areej, early thirties, Muslim]

Around half of the women described just "sitting there" when they were abused. For some, sitting in one place, sometimes outside the house, was a way to help them calm down.

I: *What do you do to cool down yourself?*
R: *Once or twice, I spent the night outside my house. I did not return to the house. I do not do anything else. Just keep my mouth shut. What else I could do to cool myself down?*
I: *Whom do you talk to? With some neighbour or someone else?*
R: *I do not talk with anyone. For cooling myself down, I just sit in one place and keep quiet. When the anger recedes, then I return back home and keep quiet. Nothing else.*

[Devika, early thirties, Hindu]

In addition to bearing the abuse and not reacting, there was a sense of wanting to continue with their lives. A third of those interviewed expressed wanting or needing to control their emotions in response to the abuse, particularly their anger, and they would try to carry on with their lives as best as possible. Usually this involved continuing whatever work they had, using it as a distraction from the situation.

I would just get up and engage myself in work, I'd bear the physical abuse quietly, then cry and be done. We should just keep doing our work. Even if we get beaten we should continue doing our work.

[Sonal, mid twenties, Hindu]

Over half of women also chose to forget about the abuse and let it go, or forgive the perpetrator. Again, this may have been a way for them to cope with the situation. Some believed that the perpetrator would change and thought that they should forget about it and wait for the change to come. Others believed that they had no other option, that they had to remain in the situation regardless, and letting it go was a way to be able to continue.

> *My son needs a father's love. I can give a mother's and father's love but no matter how much you do, later he* will *ask " who is my father?". In that way, thinking about him, I said "never mind, let it be". It has happened, he has made a mistake so I have forgiven him for this child's sake, for the sake of my house. I do all this for him. If he returns, then I will keep him, it is not that I will not keep him.*
>
> *[Priyanka, early thirties, Christian]*

The act of choosing to let go of the abuse or forgive the perpetrator suggests that women believed it was the perpetrator's fault. However, some women had more internalised responses to violence. They described thinking over and over about the situation and asking God why this was happening to them. They seemed at a loss and in some cases did not know how to respond or cope. Others blamed themselves and thought something was wrong with them or that they had no inherent worth or value. These responses were quite different to the active and passive ones that I have already discussed because they shifted the focus from the perpetrator to the woman herself.

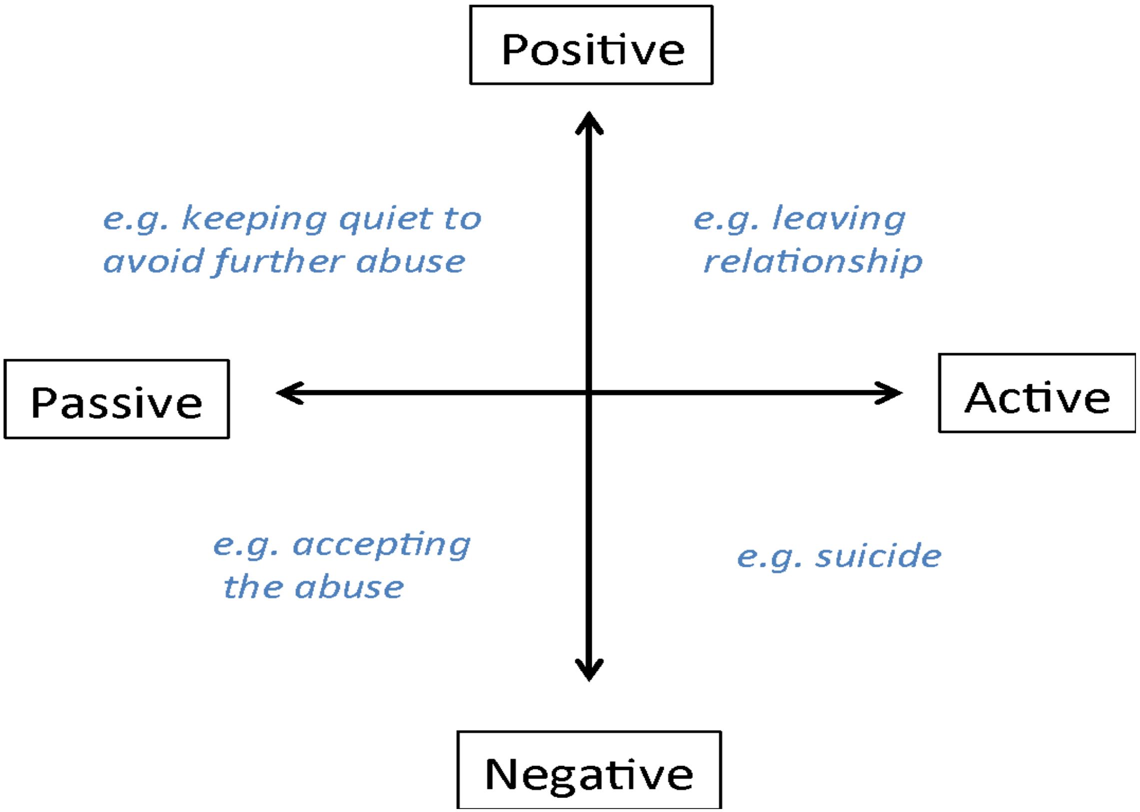
> ***R:*** *He made acquaintance with people for me, he started talking to everyone in the lane for me. And now he is in such a bad state. I feel that I am the one who is wrong.*
> ***I:*** *Are you saying that he went bad for you?*
> ***R:*** *Yes.*
> ***I:*** *Do you feel like this or someone else has told you this?*
> ***R:*** *I feel that. Other people also said, "He wasn't like this before. He is like this for you."*
>
> *[Vaishali, late thirties, religion unknown]*

Prevalent societal norms and the people around Vaishali all suggested to her that she was wrong to have had sexual relations with a man she was not married to, and that everything that had happened since was because of that decision. Had she been exposed to the opinion that abuse is wrong whatever the circumstances, she may not have internalised her experiences as her fault. This idea is relevant to many of the different responses discussed in this section: choices that women made were influenced by their experiences to date. Women who recognised that abuse was not their fault and that they did not deserve it may have been exposed to values and beliefs in their lives that challenged inequitable gender norms. They might have been used to being treated well in other situations or might have reached a point at which they were no longer willing to put up with the situation. These latter two will be discussed further in subsequent sections.

8.3.3.3. Tension between active and passive responses

The two previous sub-sections have described women's responses to violence, categorising them broadly as active or passive. However, in many cases there was a tension between these two extremes, and also between responses that could be viewed as 'positive' or 'negative'. Responses could lie on a continuum between these points, but could also be both (or all) simultaneously. For example, keeping quiet to avoid further abuse could be seen as a passive response, but it could also be an active choice to protect herself and find a way to cope. It could be positive because she is finding ways to protect herself, or negative because she is allowing the abuse to happen. When Priyanka described a situation in which she told her husband that if he was so desperate for a child he could marry someone else and keep her at her parents, this could be seen as a passive submission to demands and pressure, or it could be an attempt to challenge him. Figure 18 represents the spectrum within which responses to violence might fall.

Figure 18: Spectrum of active to passive, and positive to negative responses to violence



Even responses that seemed, at face value, to fit clearly within a certain section of the diagram could still carry an element of tension. For example, attempted suicide in response to violence could be viewed initially as a strong active and negative response. However, whether it represents a positive or negative response depends on one's viewpoint and values. For the woman herself, it might be the most positive outcome she could think of at that moment. Similarly, the different emotions, feelings and thoughts expressed in response to violence could be interpreted in different ways. Externally, people seem to view anger as negative for example, particularly in this context, but it could actually be a positive and healthy reaction to a situation that is inherently anger-inducing. This will be discussed further in subsequent sections.

In considering how women chose to respond to their abuse in relation to the meaning that they placed on it and their mental state, it appeared that women who demonstrated more passive responses tended to have more external loci of control. For example, they felt helpless, out of control and did not see how things would change, compared with women who actively opposed the abuse, who demonstrated more internal loci of control. They perceived more active reasons for the abuse, rather than fate or destiny, recognised that the abuse was the perpetrator's fault and not their own, and presented a sense of being able to control the outcome, or at least fight for it. Women who demonstrated more passive responses seemed to feel more powerless than those who responded in a more active way. In turn, women who responded more passively and had more external loci of control tended to be more distressed. This suggests that, in addition to violence directly impacting women's mental state (particularly emotional violence), the degree of power and control that women perceived could also affect their mental state and subsequent responses.

8.3.4. Ceiling for violence tolerance

Three quarters of women that we interviewed described a kind of ceiling of violence tolerance, beyond which they were no longer willing or able to cope.

> When *I get tension, I cannot tolerate it. My tolerance, [my] capacity to bear it has decreased. Now I cannot tolerate anything. I simply cannot do it.*
>
> *[Devika, early thirties, Hindu]*

Women described how repeated abuse built up and eventually reached a level where they could no longer bear it.

> *I was depressed, my husband used to hit me, beat me, abuse me, doubt me, he used to doubt me a lot. There is a level. I kept tolerating it, then I crossed that level.*
>
> *[Farrah, early thirties, Muslim]*

Both Devika and Farrah reached the tolerance ceiling when they experienced physical symptoms severe enough to hospitalise them. They reached a point at which their mind and body could no longer cope. In most cases, this altered the way that women responded to abuse. Some might reach a point at which they attempted suicide, whereas others reached a point at which they were willing to seek help, regardless of the associated risks:

> *Going to SNEHA will ruin the relation so only when things get bad, beyond my limits of bearing, I will go and talk to someone.*
>
> *[Kalpana, late twenties, Hindu]*

Equally something might have happened that told the woman that she was in danger, at which point she decided to take a more active response. Swati described a situation in which, if she didn't act, there was a chance that she could be put in prison because her husband was trying to set her up.

> *I filed NC (police complaint) because when he came to hit me he brought scissors and threatened to put them in his stomach. If he does something then I might get into trouble.*
>
> *[Swati, early thirties, religion unknown]*

8.4. External factors

This section explores the external factors, which, in addition to women's search for meaning and the context within which violence took place, could influence the way that they responded to, and coped with, the abuse.

8.4.1. Context influencing coping

Whilst women's general contextual environment, described in Chapter 7, will have shaped the way that they perceive and subsequently respond to their violence experiences, there were some specific contextual factors that were raised as directly influencing their responses. Many of these factors related to things that women experienced or were exposed to before marriage. Over a third of women talked about how they never experienced things such as bad language, fights within the family, any kind of physical or sexual abuse, a lack of money to buy food or alcoholism when they were children, so that it came as a shock to them when they experienced these things within their marital family.

> *You come here and trouble me so much. You keep asking for food and water. You use bad language. My parents never used bad language in front of us. My father never abused my mother. There was never a fight in our home.*
>
> *[Vaishali, late thirties, religion unknown]*

Some women talked about their family finances before marriage. Some grew up with no money in the family, meaning that they felt able to adjust to living with little money now, or felt unable to ask their family for financial support. Some grew up with money and were not used to not being provided for. Others, such as Pooja, were financially independent before marriage and felt that they should be able to be so after marriage:

> *I want that life back. I don't want to live with [husband name] and have a life of a dependent woman. I want to fulfil my potential. That is to say, how we were earlier, we were together in a group. Anyone would contribute (earn) in his/her way, it was going well.*

Two women talked about being taught by their family to be strong and to cope with the difficulties that life threw at them. This information about how to manage could have helped women to develop resilience and perhaps encouraged them to stand up for themselves. In contrast, three women were exposed to violence before their marriage, one of them directly, and the other two witnessed their sister experiencing violence. This exposure seemed to have different influences on their responses. Areej described a fear that she should not be abandoned by her husband like her sister was, and this prevented her from speaking out and seeking help, whereas Neesha described seeing what her sister went through in an abusive relationship. She decided that she would not be put

through the same thing, and resolved to challenge her husband. Farrah was abused by her sister-in-law when she was a child, and believed that if it had not happened, she might have been less tolerant of her husband's abuse.

8.4.2. Help

In addition to witnessing the outcomes of help-seeking for other people, women's own experiences of seeking and receiving help (or not doing so) could influence how they chose to respond to violence. If they chose to seek help at some point, whether or not it was offered, and how successful the outcome was could influence whether they chose to seek help again in the future.

All of the women reported receiving some kind of help. Help was offered in forms such as advice or information, including how to manage one's sexual and reproductive health and medical advice, which came not only from doctors but also family members and SNEHA counsellors. Women were advised on how to respond to and cope with the situation, how to protect themselves, that they should seek formal help from SNEHA or the police, and even that they should stay in the relationship. The people offering this advice ranged from doctors, police and SNEHA counsellors to family, friends and neighbours. It is worth noting that the help given to women may not have always been in their best interests. People offered the support and advice that they believed was the best, based on their experience, training or their own personal value system. In some cases, the advice may have been in that person's own best interests rather than the woman's.

> *My mother would say to me that everything would be fine after 2-3 years of marriage; I just need to have some patience. She would tell me that even they have been beaten and it would be good for me if I had some patience. She would say that if I got violent it will only spoil my relationship. If you get divorced or the matter worsens then people will say she got married recently and she already been abandoned.*
>
> *[Areej, early thirties, Muslim]*

Other types of help and support included intervening or taking action against the perpetrator in some way, such as trying to break up fights, stopping the perpetrator from abusing, and helping the woman to file official complaints. This intervention came from the woman's own family, friends, neighbours, professionals such as doctors, SNEHA staff and the police and, in a couple of cases, someone from the woman's marital family. Suvarna's

mother-in-law was on her side. She would try to stop her son from beating her and would try to reason with him about it. Family and friends offered women moral support, and many also offered practical support such as financial help or resources, caring for women when they were ill or after the delivery of their children, helping them to find a job and become more independent, or offering them shelter when they left their relationship, either temporarily or permanently.

Another form of help was through medication. Many women described being put on medication, predominantly antidepressants, by doctors or psychiatrists, or being advised to take medication by their SNEHA counsellor. Most of the women who reported taking medication said that it helped them to feel better, although some did experience some bad side effects. Women reported different reasons for being given antidepressants. Some acknowledged that it was because of their mental state, or even mentioned depression. Some said it was because of headaches and one woman said it was because of over-thinking, but the majority of women who were taking medication said it was for what they described as their ‘anger’.

I: *Then (before marriage) you used to not get so angry.*
R: *No, then I used to not get angry. If I got angry it was normal, how everyone else gets angry, not excess anger. Now I get very angry.*
I: *So what do you feel, why do you get so angry?*
R: *I don’t understand why I get so angry. That is why I am taking medicines from Sion Hospital […] Earlier I used to think that everybody gets normal anger, some get more like I get. This is what I used to think. But [counsellor] madam said that there is medicine for it. So I have started taking medicine.*

[Shobha, late twenties, Hindu]

This brings up the issue of medicalisation of women’s mental health in this context: should a woman who expresses anger in response to being abused be medicated? Debates about the pathologisation and medicalisation of women’s feelings have been ongoing for a number of decades. In her book ‘Women and Madness’, Phyllis Chesler said:, “Both psychotherapy and marriage enable women to express and defuse their anger by experiencing it as a form of emotional illness, by translating it into hysterical symptoms: fragility, chronic depression, phobias, and the like. Each woman, as patient, thinks these symptoms are unique and are her own fault: she is “neurotic”. She wants from a

psychotherapist what she wants – and often cannot get - from a husband: attention, understanding, merciful relief" (458).

Whilst Chesler was referring to white, middle-class marriages in America in the late 1980s, a similar sentiment could be relevant in this context. Anger seems like a natural response to being abused, yet women feel, and are told, that the symptoms are out of character and should be controlled. This raises the question of whether medication provides women with relief and helps them to cope with their situation, acting as a positive and appropriate form of help, or acts to subdue them and keep them in an abusive relationship because that is what is socially expected. This highlights some potential motivations for offering certain types of help and how responses to violence, both by women themselves and the people around them, are shaped by societal values.

In line with this, when discussing whether or not help was offered, a few women referred to what seemed like thresholds beyond which people were willing to offer their help and support or intervene in the situation. As with women's own ceilings of tolerance, in some cases help was only offered when the abuse reached a certain level, which seemed to be driven by the belief that abuse was a normal part of marriage and that it was a private matter between husband and wife.

> *Many people tried to make me understand, and also his friends explained to him "this will cause huge damage for you". They knew everything about the cops and the rules, and one of them told me that when it gets too far he will give me the contact number of some very high positioned women of some NGO. But such small arguments happen in every house.*
>
> *[Kalpana, late twenties, Hindu]*

Some women had people directly refuse to help them, including parents and siblings, neighbours or bystanders and even the police or their doctor. The reasons why a woman's family would not help her tended to be because they believed abuse was part of marriage, and that it would be damaging for all of their reputations if she left the relationship or complained. In some cases, they were also angry with her for having a love marriage. Neighbours and bystanders tended to not want to put themselves on the line by intervening or helping, and the police and doctor said it was a private matter and nothing to do with them.

When women did decide to seek help, or were offered help and support for their situation, there were a variety of outcomes. Some were positive, such as action being taken against the perpetrator, including informal and formal intervention, leading to a reduction in abuse and improvements in the woman's health and mental state. There were neutral outcomes where action was taken against the perpetrator but there was no change in the abuse, and even negative outcomes where the abuse worsened as a result of seeking help.

> ***I:*** *Did you never go to the police?*
> ***R:*** *I went once or twice. But they detained him for the night and left him in the morning. Then he came home and fought with me for going to police and having to spend the night there. He beat me up again for that.*
>
> *[Devika, early thirties, Hindu]*

8.4.3. Perpetrators responses

Devika's husband responded in a negative way to her decision to seek help. Perpetrators' reactions to women's responses to violence could also influence the way that women chose to respond in future, adding a feedback loop of how women continued to perceive, respond to and cope with their situation. If they saw that challenging their husband and seeking formal help reduced their abuse, they might continue to do so. If they saw that it made it worse (as with Devika), they might refuse to respond in this way in future.

Perpetrator reactions to women's responses ranged from negative to neutral to more positive. Negative responses included continuing or worsening abuse, ignoring, not communicating or even abandoning the woman and complaining about her, such as going to the police or SNEHA. Neutral reactions included the perpetrator not accepting criticism or not changing in response to the woman's actions, but also communicating their grievances or explaining their decisions to the woman. Whilst the abuse did not necessarily reduce, they explained to the woman what the problem was.

> *I take care not to make any mistakes so that he cannot scold me. But he keeps on scolding. He continues. I ask why he speaks like this. Then he says that he has tension from work, which cannot be tolerated. "What cannot be tolerated, tell me more? I should know this". If I ask this much, then he will speak more.*
>
> *[Aarushi, early thirties, Hindu]*

Around three-quarters of the women did describe more positive reactions from the perpetrator at some point in their interview. These tended to include a reduction in the abuse, though often temporarily. Sometimes the perpetrator showed remorse and apologised, accepted the criticism or at least did not argue back or was even on the woman's side. In some cases, these reactions may have been part of the wider patterns of abuse - for example, repeatedly abusing and then apologising - but in other cases the woman's response to the abuse may have had a genuine impact. For example, a community officer told the following story:

> *There is a pani-puri vendor in Dharavi. His wife said […] her husband used to go and sell pani-puri and used to make her do all the work. She wasn't allowed to open the door, even the window was covered with a cloth, only the fan used to remain switched on. She wasn't locked inside the house, but she wasn't allowed to talk to anyone outside. When he used to return home in the evening he used to talk to the neighbouring kids and say, "I will give you a chocolate if you tell me whether my wife stepped out of the house." She suffered this for 10 years. One day she got really angry and said, "I will come to the place where you sell pani-puri. You think I am cheating on you, but I want to see how many women you make a pass at. I will come to your shop, you keep an eye on me and I will keep an eye on you." He told her, "I go there to sell pani-puri and not to look at women." Then she said, "And do I make a pass at the men in the neighbourhood? We will stay together, the both of us. You keep an eye on me and I will keep an eye on you. I will come to your shop." From that moment on her husband has given her freedom.*

8.4.4. Sources of strength

The final external factors that could influence women's responses to violence were the various sources of strength they had throughout their lives and during experiences of violence. Whilst most of these factors were external, some women did also seek them out to cope. Six main sources of strength became apparent during interviews.

8.4.4.1. Situational factors

Situational factors included things in the woman's life that gave her tangible help in being able to cope with her situation. Often this was having somewhere to go if she left the relationship, or having money or financial independence to be able to support herself alone. Suvarna described how women get confidence from earning their own livelihood and a participant in FGD 1 talked about the importance of money in giving women strength:

Money is the main target for women; if she has money then she is free […] if she has money she is strong, if there is no money she is down.

In addition to being able to leave the relationship and have the security of finances and shelter, women benefited from situations that distracted them from what was going on at home and kept their minds busy. Most often, this was in the form of work, whether outside the house or inside. As well as keeping their mind busy, going out of the house to work had the advantage of being able to escape from the atmosphere. A number of other women acknowledged that leaving the house was helpful, especially when they were able to talk to people. Participants in FGD 2 said:

I: *Do you think that if women step out of their houses even for a little bit then the despair and stress and all the problems they have will reduce in magnitude?*
R: *Yes by stepping outside the house and talking with someone.*
R: *When a person receives some information from the outside it may free their mind a little.*
R: *Like when you get to know the world outside you get new ideas and a new perspective.*
R: *When a person tells you their problem you realise that your problem is very insignificant compared to theirs.*

8.4.4.2. Knowledge and information

The acquisition of knowledge and information also helped women to be strong and cope with their situation. This might be through formal education, for example Madhuri said that studying and working had helped her to be more positive and more able to make sense of her situation. She also described how just basic knowledge about their rights could help women:

They should know what their basic rights are, and if anybody is going against their rights, what they should do. But in our education system that thing is not there […] When we attend these meetings (at SNEHA), we come to know more about the rights of women and children, and in certain conditions what we have to do. […] So I found it to be very good.

[Madhuri, mid-fourties, Hindu]

Other than learning through a formal education system, or organisations such as SNEHA, a number of women drew strength from watching and listening to other women and seeing

how they dealt with their situations. Swati described how information she had acquired from seeing other women had given her strength:

> *I came here (Mumbai), so I saw everyone around. I heard how women behave with their men, how you should behave, how you should maintain strength with men. After hearing them, after watching programmes, I felt even I should do what they do. Even I should enhance my life. Later when my husband used to fight, abuse, I used to fight back […] Later when we all (SNEHA) had a meeting, everyone was talking about their husbands: this happened with me so now my husband is like this, I had such problems in my house, my husband does all this, mother-in-law is like this, sister-in-law is like this, then how to fight with them […] Then I felt that these people have courage, I should also have some.*

In addition to examples of what to do and how to behave, women learnt about what not to do from other women. Neesha witnessed her elder sister being subjected to severe abuse and how badly it affected her, and said *"no, not me".* She described how she drew strength from the teachings of prominent figures as well as the women whom she came across in daily life:

> *We have so [many] great leaders. Our country was built by these leaders. Why? To bear this? They liberated our country from slavery, only to be slave again? So many great leaders like Savitribai Phule, Tara Holkar . How many great women had done so much work. How greatly they had toiled. We are so feeble compared to them. But we should dare at least a little. We must. Now the woman has advanced so much there is no point to go backward. The woman is not meant only for children and for sleeping with the husband.*

8.4.4.3. Something to love or care for

Having someone or something to love and care for – in most cases, their children - gave women purpose and helped them to remain strong. They talked about how their children made them happy and removed their tension. One woman explained how she would get relief from her physical pain when she spoke to her children. The most common way that children acted as a source of strength, however, was as a deterrent for suicide. Many women described how they would have suicidal thoughts, but the thought of their children would prevent them from taking steps.

> *I used to feel like committing suicide, and then I would see my daughter and think that at least for her I have to live […] when I thought of my girl, it stopped me from committing suicide.*
>
> *[Savita, mid twenties, Hindu]*

Interestingly, in the absence of children, some women found other things to play the same role, as Vaishali described, suggesting that just having a sense of responsibility and purpose could act as a source of strength.

> ***I:*** *What is the thing that comes to your mind to calm you down?*
> ***R:*** *Earlier I used to have a cat at home. I used to think about the cat. I often say [to myself] now it is evening. Who will feed some milk [to the cat]? I would think about the cat."*

8.4.4.4. Receiving help and support

Receiving help and support helped women remain strong during experiences of violence. This was mainly because women felt like there was someone on their side who cared about them. Even for women who were still in an abusive relationship at the time of interview, receiving support was important for them and gave them hope that things would get better. Often, they wanted support from their families because they believed this would help. Savita described how support from her mother changed her mental state:

> *No I don't think like this (suicidal thoughts) anymore, my mother supports me. Earlier I used to think she will not support me, but one day she spoke to me that she will support me.*
>
> *[Savita, mid twenties, Hindu]*

Harsika said that if she had had the support of her parents she could have been happy and this was supported by a community officer who said that support from the family was important because they can tell the woman not to worry and this atmosphere can bring change. However, support from people other than the woman's parents was also beneficial. Sonal described how support from her sister-in-law, who was also one of her best friends before marriage, allowed them to endure their situation, and Vaishali described how support from SNEHA helped to give her strength and hope.

8.4.4.5. Faith and religion

Faith seemed to play a part in helping women to be positive and strong. Some would use their religion as a place of solitude. For example, Ashwini described how after a fight she would go and sit in a quiet place and read holy books, and Vaishali said that she

sometimes went to church to help her feel better. Other women used their faith to believe that things were going to be alright. There were also some women who seemed to draw strength from the fact that their family members had faith that things would be alright.

> ***I:*** *Would she [grandmother] give you hope and courage too?*
> ***R:*** *She would tell me to pray to God and everything will be fine. If we don't think badly about anyone, then God won't do anything bad to us. My grandmother is very much into God.*
>
> *[Vidya, early thirties, unknown religion]*

8.4.4.6. Optimism and courage

The final source of strength that helped women to cope with their situations was having optimism and courage. Whilst this was linked more with inherent characteristics of a woman, rather than being an external factor, it was something that they often actively tried to channel in order to remain strong. For example, Madhuri believed that she needed to take things positively, because if she took them negatively she would get depressed.

8.5. Conceptual model

In this section I outline my thoughts on how the previous sections of this chapter might fit together, summarised in a conceptual model of how women respond to violence (figure 19). The model centres around the idea that there is a ceiling for tolerating or coping with abuse, as discussed in section 8.3.4, which is in constant negotiation. Where this ceiling is set, and whether or not it is reached, may influence and inform women's responses to, and how they cope with their experiences. As previously seen, responses to the situation can include the woman's emotions, feelings, thoughts, and her actions. These actions lie on a continuum of active to passive and positive to negative. If a woman is below her ceiling for tolerating abuse, she may challenge the perpetrator but not too much, or she may keep quiet and bear the abuse so as not to make things worse or disrupt the status quo. Alternatively, if a woman has reached her ceiling of tolerance, it may lead her to take more radical actions such as seeking help or attempting suicide. The woman's mental state may also be a reflection of how close she is to the ceiling. For example, whilst all of the women described feelings of tension, sadness and anger, we saw that when two of the women

reached their capacity for tolerating abuse, this manifested in quite severe somatic symptoms that resulted in their hospitalisation.

The model contains three main factors that could influence where the ceiling is set, all of which have been described earlier. The first is the meaning that women place on their situation and experiences. This can be made up of many things, including how they understand patterns of violence, whether they accept or condemn abuse, their perception of power over their situation and how they perceive their situation in comparison to others. It could also include women's expectations and opinions, beliefs and values, wants and desires. The meaning that women place on their situation is nested within their broader context. Everything that contributes to the meaning that women place on their experiences could influence the level to which she is able, or agrees to tolerate violence, and this level depends on the individual. For example, if a woman views violence as her destiny or part of her role as a wife and a woman, if she thinks that mental illness is caused by weakness and that she doesn't have much support available to her, all of these things might result in her having a higher ceiling of toleration. This could be because the meaning that she places on the situation is that this is how her life is and she just has to deal with it.

The second category that could influence the ceiling is external factors, including help or support, the perpetrator's reactions and sources of strength. Whilst the meaning that women place on their experiences is nested in their context, context might also directly influence the ceiling of tolerance in some cases. For example, if a woman was used to being allowed to do something prior to marriage and is no longer allowed to do it, this may make her less likely to tolerate it. The final category is the other outcomes of violence, which could also alter the threshold for tolerance. These could include physical injury, reproductive health outcomes or the impact of violence on others such as children. Some women mentioned that they decided to take action because they believed their children were at risk in some way or another.

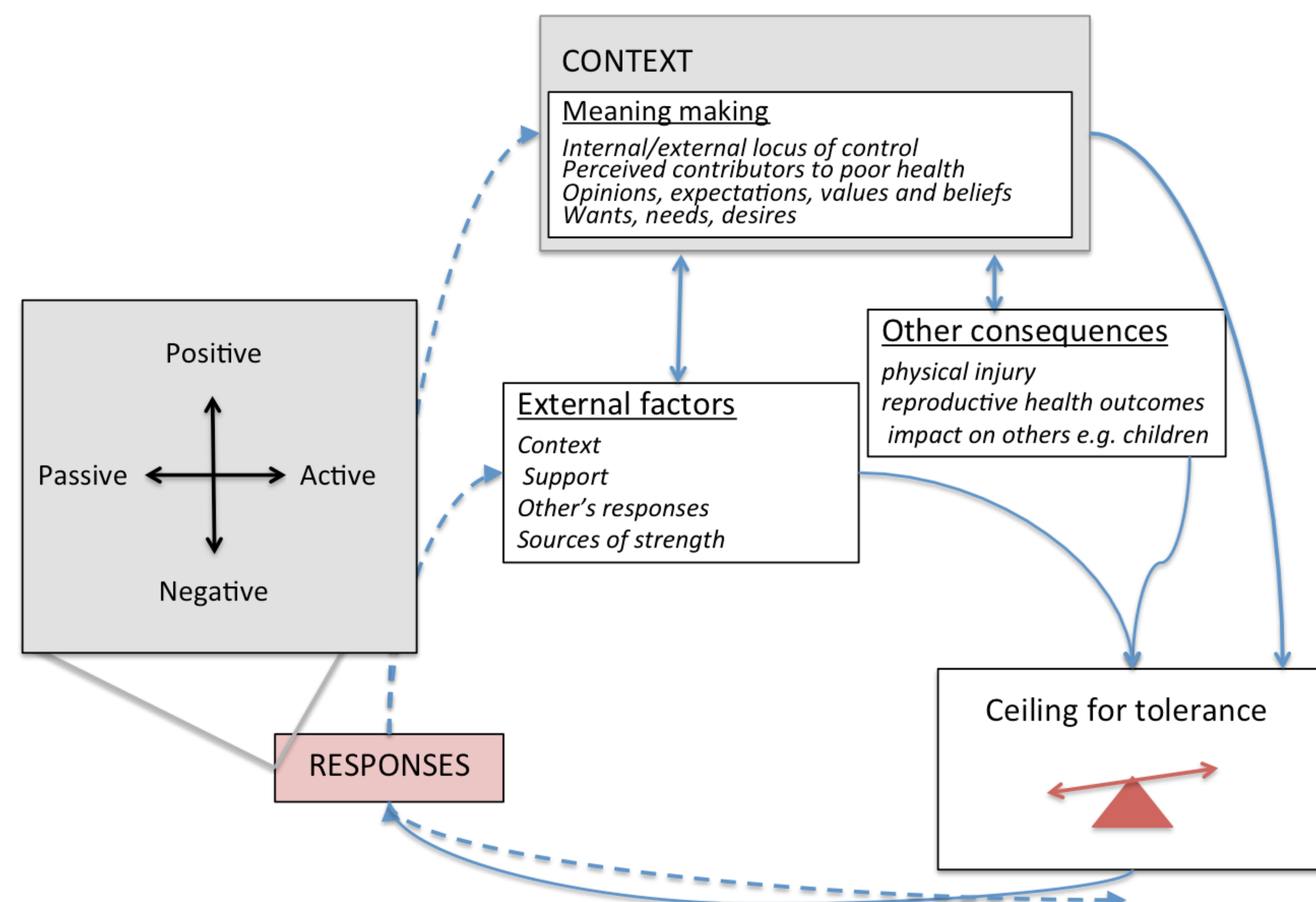
It is likely that the ceiling of tolerance is constantly changing, and although women's responses to violence might be influenced by it, these responses could in turn shift or even re-calibrate the ceiling. The decision to respond in a particular way might make women feel stronger, more determined, and less willing to put up with things, and therefore lower the ceiling for future responses. The ceiling will be unique for each woman, but what it means is likely to be different for different women too. For some women a high ceiling

might mean more resilience and an ability to cope or it might mean less agency to do something and by default a greater willingness to tolerate.

Women's responses might also indirectly alter the ceiling by feeding back through the other factors. For example, a response such as deciding to seek help could result in a positive or negative outcome, which might in turn influence women's perceptions of support and therefore the meaning that they place on the situation. If a woman seeks help and as a result feels more supported, this could influence her tolerance level.

The violence patterns themselves could also influence the ceiling. If a woman experiences severe and repeated exposure to violence over a prolonged period of time, she may be more likely to reach her capacity to tolerate quicker than someone who experiences less severe violence.

Figure 19.



8.6. Discussion

In this chapter I have described women's mental state and other responses to violence, and how they cope. I have described the different ways in which women place meaning on their situations, how this is nested within context, and also external factors related to the abusive situation. The context and external factors could influence women's responses to violence, and this relationship could be mediated by a dynamic ceiling for violence tolerance, as outlined in the conceptual model.

Several tensions ran through the chapter, particularly between women's active and passive responses, but in general these tensions described fluctuations between mental states, the meaning that women placed on their abusive situation and how they wanted to respond. This demonstrates the complex and constantly changing environment of an abusive relationship.

This qualitative chapter supports the continuing theme of this thesis: emotional violence has a very substantial impact on women's mental health. Many of the women acknowledged that the most distressing thing for them was some form of emotional violence, particularly when they felt it was not their fault. Not only does this reflect the findings of the quantitative chapter, but it supports the existing literature that also suggests the importance of emotional violence (432, 459). Women's violence experiences appeared to affect their mental state, with reactions ranging from feeling sad or angry, to being depressed or attempting suicide, which has been seen throughout the global literature (38-40). Carlson also suggested that when women reach a point where they feel like there is nothing to do to change their situation, that they may also experience psychosomatic symptoms. In addition, he suggests that women may reach a point where the only option is to end the relationship permanently and this is when thoughts of suicide of homicide may arise (255). This was seen in my data for a couple of the women who displayed severe psychosomatic symptoms in the face of severe and ongoing abuse, or attempted suicide. However, what we saw in this chapter was that a woman's mental state may also be influenced by how she perceives her situation and the extent to which she feels powerless. Though criticised by some scholars (236), this could reflect the theory of learned helplessness (460), as applied to wife-abuse by Walker (235, 450, 461), which involves the cyclical nature of motivational, cognitive and affective deficits. The motivational deficit

of learned helplessness occurs when a woman believes that her responses to violence will have no impact on the situation and she stops trying. This leads to a cognitive deficit in which, because she has stopped trying, she does not see that some responses could make a difference. This in turn leads to an affective deficit in which the woman becomes depressed, which fuels her motivational deficit (456). In the theory of learned helplessness, this is what leads a woman to become trapped in an abusive situation and unable to leave (239), and a similar pattern was seen with the women of my study. Women who expressed more external loci of control and a sense of powerlessness over their situation demonstrated more passive responses to violence, being less willing to actively oppose it and appearing to be more mentally distressed. However, the critique of learned helplessness (or battered woman syndrome), suggests that a lack of response and passivity could be an active choice, rather than helplessness (236), and this was also seen in my data.

The later work of sociologists Brown and Harris on the social origins of depression suggests that rather than helplessness being a learned response, it may instead be a feature of a difficult event. In a review of three decades of his work, Brown concludes that a “biopsychosocial” perspective needs to be taken when understanding depression (462). He highlights three types of meaning involved in evaluating a threatening life event that can increase vulnerability to depression. The first is “role-based meaning” and sociological concerns, for example whether the event challenged the person’s commitment to a certain social role, their plans or their concerns. In other words, the long-term threat of the event. The second type of meaning is the “specific meaning” associated with the event that involves “evolutionary-derived biological mechanisms and the triggering of special-purpose appraisal systems”. Events perceived as involving humiliation or entrapment, loss, or danger, in that hierarchical order, add specific meaning and could increase the risk of a depressive episode. The final type of meaning placed on a significant life event is “memory-linked emotional schemas”. These include factors such as low self-esteem, helplessness or memories of childhood abuse and neglect, and can also increase vulnerability to depression (462).

The findings presented in this chapter reflect the theories developed by Brown and Harris in terms of the context and the meaning placed on experiences of violence. If a woman is highly committed to her role as a wife, a mother or being a ‘good daughter in-law’, experiences of violence perpetrated by her husband or in-laws could challenge her desired

role or her plans for a harmonious marriage and family life. As seen throughout the narratives, experiences of violence often evoke feelings of humiliation, entrapment in the situation, loss of dreams or hopes about the relationship and fear for women's lives and those of their children. Both of these types of meaning attributed to violence could increase women's vulnerability to depression. In addition, findings from the quantitative and qualitative studies have shown that women with low self-esteem are more likely to present with symptoms of common mental disorders. The work of Brown and Harris therefore suggests that the responses of the women in my study to their experiences of violence are psychologically, cognitively and biologically coherent and plausible (462).

Throughout the interviews, the women in practice never justified their abuse, yet some of their belief and value systems may have upheld justification in certain scenarios. In NFHS-4, 52% of women believed that a husband is justified in beating his wife if she goes out without telling him, neglects the house or children, argues with him, refuses to have sex with him, doesn't cook food properly, if he suspects her of being unfaithful or if she shows disrespect for her in-laws; this compared to only 42% of men (6). However, women participating in this study rarely thought they deserved the violence. This suggests that women's exposure to societal values can influence their own beliefs in theory, but that belief might not apply in reality when they are the ones in question. A number of studies on the acceptability of intimate partner violence have suggested that the questions included in demographic health surveys globally tend to elicit people's perceptions of prevailing norms or their own assumptions about, and designation of, fault between perpetrators and victims, rather than their personal beliefs about the acceptability of violence (463-466). Therefore, the actual acceptability of violence in personal situations, including in my study, may be much lower than other studies suggest. This is interesting when it comes to thinking about the meaning that women place on their violence experiences: the lack of justification, and attribution of fault to the perpetrator is likely to influence how women choose to cope with their situation. As highlighted by Meyer and colleagues, the attribution that women place on past events influences their choices about future events (248) and Carlson (1997) highlights that women pass through three stages of attribution, moving from internalising the fault to attributing blame solely to the perpetrator, and their coping responses change each time (255).

In her ecological model, Heise described factors that contribute to an environment within which violence against women can occur (17). In chapter 8, I used my data to describe the

contextual factors at the different levels of the ecological framework and how they contributed to the violence that women were subjected to. However, context not only influences the incidence of violence, but also how women respond to it, through the meaning that they place on their situations. These contextual factors are therefore an important area for attention because addressing them could not only help to reduce violence, but also improve how women are able to cope with it. Waldrop and Resick (2004) also reference the ecological context in their study of coping among survivors of domestic violence, but argue that the context also includes the woman's abuse history, the severity of abuse, length of the relationship and the relative success of her previous attempts at coping. All of which can influence future coping decisions (248, 252). This supports the idea of the feedback loop in my conceptual model, in that the outcomes of one response to violence could alter the level of tolerance and the willingness to respond in the same way again. Yoshihama (2002) also proposes that the choice of coping method is based on the context and is therefore subject to change (467). This highlights the importance of the context and supports the idea in my conceptual model that responses to violence are dynamic and amenable to change.

Elements of Carlson's model of coping, and the behaviours he associates with each stage, are seen throughout my data. In stage one he suggests women internalise the blame and try to improve themselves. In stage two they recognise that it is the perpetrators fault and try to help change them and in stage three they realise there is nothing they can do (255). In my study, women talked about what they could do to improve themselves as wives, such as not making mistakes with their cooking and housework. They also tried to solve problems with their husbands, such as trying to help them get treatment for alcohol dependence.

Lazarus and Folkman's theory on coping describes emotion-focused and problem-focused coping, but suggest that often women employ a mixture of the two (247). It is clear from my data that this is the case, with women responding in a variety of ways to the abuse, including silently bearing it, expressing anger or other emotions, attempting suicide or seeking help to try and change the situation.

8.7. Reflexivity

As with chapter 8, it is important to recognise that the interpretations I have placed on my data and the conclusions that I have drawn are subjective and influenced by my own personal values, beliefs and experiences. In particular, my perceptions of whether a certain response to violence is active or passive was based upon my own value system and a projection of what my own personal motivations would be in a similar situation. In many cases, it was not possible to know what women's motivations were behind certain actions, and to understand this would require probing further in subsequent studies. I have placed my own interpretation on these actions, but I have also tried to recognise where there may be tensions and nuances that are difficult to unpick, and that the most likely explanation is that one particular response could have a range of motivations. The use of the framework method allowed me to explore these themes in a structured way, staying as close to the data as possible. I also attempted to triangulate my findings against the quantitative chapters, the existing literature and the experiences of the team at SNEHA.

One finding that I was particularly aware of as being influenced by my personal values and biases was the manifestation of anger and its subsequent medicalisation. My initial reaction to the idea of treating women's anger with antidepressants was that it felt more like a way to subdue them and prevent them from acting in ways that challenged gender norms. This interpretation is rooted in my belief that it is natural to feel angry if you are being abused, and my support of the feminist arguments that women in general are discouraged from expressing emotions such as anger. Having taken time to reflect on how my own beliefs have shaped my reaction to this piece of data in quite a strong way, I continue to maintain that it is a societal response that should be evaluated critically to understand the real motivations behind giving abused women antidepressants for their anger. However, as many of the women described, and as discussed earlier in the chapter, the medication inevitably helped them to feel better, and if it relieves symptoms of distress and allows them to cope better, it might be the most appropriate response.

Throughout the process of my qualitative study, I have been lucky to be able to access the experience, knowledge and support of the team at SNEHA. This has helped to guide my research in a manner appropriate to the local context, and I believe has added a layer of validity to my findings. For me this highlights the importance and benefit of collaborating with local organisations, if they have the capacity, to ensure that participants are

safeguarded as much as possible and the research is culturally and contextually appropriate.

Chapter 9
Conclusion

A discussion of the results has been included throughout the thesis in Chapters five to eight. In this chapter, I identify six major findings of my thesis: the complex and co-existence of multiple forms of violence; the importance of emotional violence in perpetration patterns and for women's mental health; that violence is a family affair; the active nature of women's seemingly passive responses to violence; the existence of a dynamic ceiling for women's tolerance of violence and the instrumentality of responses to women's psychological distress. I summarise these findings with reference to the global literature and then discuss the strengths and limitations of my thesis before considering its implications for future research, policy and practice.

9.1. Summary of findings

I used a mixed-methods approach to explore experiences of family violence against women in informal settlements in Mumbai. The study examined the associations between family VAW, CMDs, and self-esteem, the meanings that women placed on their experiences, and the ways in which they responded and coped. My findings present the most comprehensive assessment of violence experiences and mental health outcomes in Mumbai informal settlements to date. This allows us to understand in more detail the true extent of the challenges that women living in these areas face, in order to address them in appropriate ways.

Patterns of violence were complex and nuanced, and current standard questionnaires may not be sufficient to assess the full depth and range of violence. This was particularly the case when assessing culturally-specific expressions of abuse such as control in relation to reproductive choices, the use of household work and food in violence patterns, and the extent of economic violence, which is rarely assessed in detail in other questionnaires. This finding is in line with that of Kalokhe and colleagues (2015), who suggested that existing questionnaires were not appropriate for the Indian context due to their omission of violent acts that are prevalent in these settings, or because of culturally irrelevant

descriptions of violence such as the use of guns and knives in attempted murder (160). In two reviews of screening tools used to assess partner violence globally, one of which focused on mental health settings, the conclusions were that tools have not been sufficiently tested and validated, and that validation studies have been predominantly conducted in North America (468, 469). Rabin and colleagues (2009) highlight that IPV is complex, that there are no standardised definitions and therefore no gold standard assessment tools against which to validate additional screening tools (468). In addition, Arkins et al. (2016) highlight that the cultural transferability of tools to assess violence needs serious consideration (469), as do Hays and Emilianchik (2009) who conducted a content analysis of 38 different IPV assessments (470).

The subtlety and coexistence of multiple forms and acts of violence was a constant theme that ran throughout the findings of my thesis, with violence waxing and waning over extended periods, particularly apparent in women's narratives. The literature on the complexity of violence is scarce. One study conducted by Katerndahl and colleagues (2010) in the USA identified three dynamic patterns of violence complexity: the chaotic pattern which was the most severe, frequent, yet unpredictable; the periodic pattern which was regular, predictable, and the least severe; and the random pattern with mid-level severity but unpredictability (379). These patterns were evident to an extent throughout the women's narratives in my study, but whilst the Katerndahl study assessed frequency, severity and other predictors of violence to measure complexity, they used the 6-item Conflict Tactics Scale to assess violent acts, which can omit detail (379). Some authors argue that focussing only on specific acts ignores the fact that violence can often go alongside an environment of terror (11). However, the confirmation of nuance in violent acts through women's narratives in my study, alongside their descriptions of fear, contributes a level of detail lacking in the current literature, particularly for Mumbai informal settlements. This further highlights the need for appropriate study tools. Understanding the true extent of violence patterns, particularly those that are context-specific, is important to ensure that service providers are able to accurately identify cases of abuse and programmes can be appropriately targeted.

Another major finding of my thesis is the importance of emotional violence. Not only was emotional violence the most commonly experienced form of violence in the quantitative study, but throughout women's narratives, it was described in the most detail and appeared even more nuanced than that which the quantitative survey assessed. A recent

study by Heise et al (2019) highlighted the importance of emotional abuse in violence research but the lack of a consensus in how to define, conceptualise and measure it. The authors identified a need to further our cross-cultural understanding of emotional violence through qualitative research, which describes the meaning that women place on emotional abuse and helps to refine cut points that can discriminate between “low-grade aggressive acts and frank abuse” (471). The narratives in my study described a number of distinct forms of emotional abuse, all of which were important for the women and went beyond the “occasional unkind word” (471). These narratives therefore add to the Indian and global literature in describing what constitutes emotional violence in the Indian setting.

Over two-decades of research has consistently linked intimate partner violence with negative mental health outcomes (471), a finding supported by my data showing associations between all forms of violence and symptoms of CMDs. However in 2010, Jewkes stated that “a radical re-evaluation of the importance of emotional abuse in women’s mental health is necessary” (472). A number of studies have reported associations between emotional violence and poor mental health (441, 459, 473-481), but Oram and colleagues (2017) noted that a scarcity of primary data has prevented systematic reviews from assessing the associations between different types of violence and mental health outcomes (433). My study contributes to the evidence base of primary data, with the added dimension of assessing culturally-relevant emotional violence in a lower-middle income country, supported by women’s narratives. These narratives not only confirm which are the important acts of emotional abuse, but that collectively they are also some of the most distressing to experience.

The quantitative study showed that emotional violence had the strongest association with symptoms of CMDs, which persisted when controlling for other forms of violence, suggesting emotional violence alone is the most important factor for women’s mental health. These findings reflect those by Pico-Alfonso et al (2006), who compared women who were not abused, who had experienced psychological abuse only and who experienced physical and psychological abuse. They found that abused women had worse mental health outcomes than non-abused women, but that there was no difference between the two groups of abused women, which suggests that the driver of the association with poor mental health is psychological abuse (459). A similar finding was reported by Yoshihama et al (2009) in their study in Japan, where no significant differences between health outcomes, including mental health, were seen between women

who only reported emotional abuse and women who reported emotional abuse alongside physical or sexual violence (477). A study in Portugal found that psychological abuse had the strongest association with symptoms of post traumatic stress disorder (474), and another in Brazil found that the association between physical or sexual violence and postnatal depression was substantially reduced when controlling for psychological violence (478). My findings therefore reflect and contribute to the global literature that demonstrates the significance of emotional abuse on women's mental health outcomes.

There are a number of mechanisms through which emotional violence could be the most damaging for women's mental health. Follingstad (2009) highlights that we know as part of human experience that negative emotional dynamics with an intimate partner will cause feelings of upset, hurt, sadness and temporary depression. She also acknowledges that it is theoretically feasible that denigration from a partner would raise levels of anxiety, particularly if the recipient felt they should be able to change or cope with the behaviours of their partner, and produce depressive symptoms through feelings of hopelessness and the diminishment of self esteem (432). My study supports this statement. The strongest association was seen between experiences of emotional violence and levels of self-esteem in the quantitative study, and women in the qualitative study described feelings of low self-worth. Follingstad's review of studies on psychological abuse found only one that assessed self-esteem as an outcome, with emotional/controlling abuse being the only type significantly related to lower self-esteem scores (432, 482), but she highlighted the need for corroboration of these findings (432). My study therefore also adds to the literature by providing an exploration of distinct types of violence and levels of self-esteem.

As discussed in Chapter 6, the importance of emotional violence for women's mental health may be confounded by other factors such as the perpetrator, given that the in-laws were the main perpetrators of emotional violence. The qualitative narratives also suggested that violence perpetrated by the in-laws was more distressing. This leads to the next major finding of my thesis: the enmeshment of marital family members in violence patterns. Members of the marital family were implicated in perpetrating emotional, economic and physical violence as well as the control of women's reproductive choices in both my quantitative and qualitative studies, often being the main perpetrators. In-laws were also implicated as risk factors for violence in the women's narratives, usually because they interfered, but also as the source of disagreement between husband and wife. All of these findings reflect the current global literature.

Research on in-law abuse is limited. No reviews on violence perpetrated by in-laws have been conducted to date, however the existing studies tend to come from areas where traditional gender norms persist and joint family living is common. A number of studies from India have documented the involvement of in-laws in violence perpetration patterns, either directly or through methods of instigation and interference (133, 148, 483-485), and similar patterns have been seen in Japan (486, 487), Hong Kong (488, 489), Pakistan (490), Nepal (491), Jordan (485, 492), Afghanistan (493), Nigeria (494) and the Cote d'Ivoire (485, 495, 496). Raj and colleagues (2006) also found that South Asian women living in the USA experienced violence from their in-laws (497), and a cross-country study in Asia found that women in India and Cambodia often justified IPV if the woman had disrespected her in-laws (436). Violence perpetrated by in-laws has been located by previous scholars to areas with 'classic patriarchy', including North Africa, the Muslim Middle East, South and East Asia and Muslim Central Asia (493, 498).

Whilst women's narratives described abuse from fathers-in-law, sisters-in-law and their spouses, often the main person to perpetrate or instigate violence in the marital family was the mother-in-law, which is seen throughout the other studies on in-law abuse (493). Violence perpetrated by the mother-in-law can be understood by examining the effects of having a new woman in the household. Before marriage, a man's affection, attention and financial support may be directed mainly towards his mother, but after marriage his mother comes into competition with her daughter-in-law for care and support. The mother-son relationship is threatened, particularly where there may be a level of intimacy between the husband and wife (44, 499, 500). The mother in-law may become jealous of her son's relationship with his wife and try to weaken their bond as a result (493, 498). The threat of potentially losing control over the household may increase the likelihood of violence perpetrated by the mother-in-law, particularly if she views her daughter-in-law as not obedient enough to her or to her family (398). The mother in-law may also desire to show her daughter in-law her rightful place within the family hierarchy, where she uses dominance, control and abuse as an expression of her power (493, 498, 501). Conflicts over grandchildren, including not producing them at an appropriate point after marriage, differences in opinion about childcare, and inadequate dowry as perceived by the marital family have also been cited as reasons for violence perpetration by mothers-in-law in Indian settings (44, 398, 500).

The next important finding of my thesis is that women's responses to abuse ranged on a continuum between active and passive, with active responses often seeming passive. Women may employ strategic mechanisms in order to cope and keep themselves safe, and responses that appeared from the outside as passive may have been active decisions to avoid further abuse. This finding is supported by the literature. Kocot and Goodman (2003) suggest that women can only employ coping mechanisms that are within their control, due to their context. They proposed that some women might choose to placate the abuser rather than actively challenge, because reducing the risk of abuse is the best option that they can hope for in a social environment that might not offer them support if they left the relationship (251). Other authors, in their critique of the application of learned helplessness to abused women, highlighted that passivity may be an instrumental coping behaviour aimed at reducing the risk of violence, rather than learned helplessness, and that whilst women might appear passive they may actually be employing active efforts to protect themselves and their children (236, 237).

These active and passive responses made up part of my conceptual model, which framed responses to violence around a dynamic ceiling for tolerance, informed by context, external influences and feedback from previous experiences. This conceptual model is novel, in that it is rooted in my qualitative data, and adds a level of detail specific to this setting. However, many of the concepts are supported by the wider existing literature. Some studies suggest that as violence intensifies, women use increasingly problem-focused strategies in order to cope (248-250). This reflects the fact that women in my study decided to take some sort of action when the abuse became too much, when they reached their ceiling of tolerance. Carlson (1997) on the other hand suggests that as women move to the third stage of coping in his model, where they reach the realisation that the abuse is attributable solely to their partner and there is nothing that they can do to change it, they employ increasingly emotion-focused coping strategies (255). This supports the idea in my model that the ceiling for tolerance, and the response when this ceiling is reached, is unique to each woman, as well as the fact that feedback from previous coping efforts can influence current ones.

Garcia-Moreno's (2015) description of women's trajectory to safety highlights that there are key 'turning points' in their readiness for action, but that their trajectory is non-linear (502). In this model, women do not initially recognise or acknowledge the abuse and have a strong belief that it is their fault. A key turning point is when they are able to name or

recognise the abuse, and they move to continuing to endure it, but begin to ask questions and try to minimise harm. This stage can act as a catalyst for change whereby women begin weighing up their options, consider seeking help and start preparing and planning, which can increase their self-efficacy and lead to action. However, a lack of change in the situation when they do take action, a lack of support, or negative life events can act as negative feedback loops and set women back in this process (502). These key concepts were all present within my model, including the idea of a turning point or ceiling, a trajectory of responses that move from more passive to active, and the emphasis of non-linearity, with feedback loops that inform the level of the ceiling. My model also adds additional detail in what influences women's readiness for action.

Whilst the application of the theory of learned helpless to wife abuse has been criticised (236), the theory does also support the feedback loops present in my conceptual model (235). If the meaning that a woman places on her situation is one of powerlessness, which is influenced by her context, experiences and values, this could mean that she is less likely to reach the threshold where she feels willing or able to do something about the abuse. This may then lead to passive responses that support the continuation of abuse and feed back into her perception that the situation will not change. External factors such as a lack of support, or the societal message that abuse is part of being a wife, can contribute to this feedback loop and keep the woman in a cycle of powerlessness and passive responses. If, however, she believes that her responses to the violence will have an effect. If she believes that the abuse is the fault of the perpetrator, but that it is within her power to do something about it, this cycle of helplessness could be broken, by reaching a ceiling above which she is willing to take action.

The final major finding of my thesis is the instrumentality of responses to women's expressions of distress, namely the prescription of antidepressants to control anger. It is unclear whether this is a medical system response to women's expression of their distress. A response which could be informed by knowledge about the manifestations of mental illness, of which anger can be one (503), or guided consciously or unconsciously by gender norms, to keep women conforming to their prescribed roles. It could also be a method of coping used by women. A study by Rao and colleagues suggested that, because women are often unable to leave abusive relationships due to social stigma and financial dependence, they opt instead to numb their pain with medication and continue the relationship (65). However, using the reasoning that Follingstad presented in her study

(432), human experience tells us that anger would also be a natural, and healthy, reaction to experiencing violence.

The angry woman trope is one that has a long history, often tied in with notions of madness. In her book *Women's Madness: misogyny or mental illness?* Ussher (1991) states that during twentieth century psychiatry, little attention was paid to gender as a system of oppression and that "A woman who is unhappy, angry and withdrawn may be told by a psychiatrist that her hormones are in flux, by a psychologist that her cognitions are faulty, by a sociologist that her environment is responsible, or by a psychoanalytic therapist that she is repressing her unconscious desires" (p103-104) (504, 505). Yet, the manifestation of gender as a system of oppression, through the use of violence, may be exactly the reason why women are angry. Early Freudian psychoanalytic theory tended to enforce gender stereotypes and pathologised women's anger (506). Women's expression of anger is often viewed as hysterical, threatening, unfeminine and neurotic, particularly if directed at men (507, 508). Research has found that men's expression of anger tends to be viewed as understandable and linked to external situations, whereas women's anger is judged as emotional and seen as a sign of pathology (509). Women therefore tend to view their own anger as bad or unfeminine and suppress it, or express it in different ways.

The interesting dimension in the narratives in my study is that the majority of women who described taking medication for anger, identified or named their own anger as problematic, and did not link it to other emotions or mental health problems. It is unclear whether this was their own belief, whether they were relaying the sentiments of other people around them, or whether it was a mixture of the two. In a study of suicide in Sri Lanka, 'anger suicide' existed as an idiom whereby participants described the suicide as a result of 'sudden anger'. The authors highlight that a cause of anger suicides is the subordination of women within the marital family and that "anger is a direct challenge to the patriarch or matriarch in the sense that it allows the expression of a highly taboo emotion that cannot be vented by other means" (510). This suggests that women's response to their own anger, including in South Asian settings, is often to suppress it, possibly through suicide attempts or through medication, as there are no socially acceptable ways for women to express it.

9.2. Strengths and limitations

A major strength of my study is that it combined research on family VAW, mental health outcomes, and methods of coping, and applied it to an under studied population to develop a comprehensive understanding of, and insight into, the experiences of some of India's most vulnerable women: those living in informal settlements. The detailed in-depth survey gave me the opportunity to explore patterns of violence in much more detail than those presented in other Indian studies, including contextually-specific acts of violence, various timescales, and the different perpetrators that could be involved. Understanding the complexity of violence patterns is essential in being able to provide true estimates of prevalence and in creating an evidence base from which meaningful programmes and policy can be developed.

The mixed-methods approach allows us to understand the nuance of violence experiences, as well as narratives of distress. The inclusion of women's narratives helps to retain the individualist nature of violence, rather than reducing experiences solely to numbers and taking them out of their context (511). Working with an organisation based in the study setting was another strength of the study, adding a level of validity and relevance to both process and findings. The work within this thesis not only contributes to the academic literature by corroborating existing findings, adding novel ones and further extending the perspective to underserved populations in a lower-middle income country, but it also contributes to SNEHA's evidence base. It is hoped that the findings in this thesis will help to inform existing work programmes and future interventions in order to have a tangible impact on the lives of women living in Mumbai.

As mentioned previously, few surveys assess violence in sufficient detail, which could impact prevalence estimates. However, violence prevalence estimates may vary for another reason. As concluded by Hegarty and Roberts (1998) in a review of the literature, the lack of an operationalised definition of partner abuse can lead to survey instruments assessing different things (512). The authors argue that often in quantitative surveys, any acts of violence, no matter how small, are assessed. This then reflects Johnson's (1995) depiction of common couple violence, whereas qualitative studies tend to assess more severe violence that is likely to fall within the definition of patriarchal terrorism (215, 512). The desire to assess violence in detail in my survey could be a limitation of the study. Situations may have been picked up that were actually describing common couple

violence: less severe violent expressions of frustration from both parties in response to situational factors, rather than the more severe abuse and control of women, by men, and rooted in patriarchal norms, that is patriarchal terrorism (215). Hegarty and Roberts suggest that surveys on violence include measures of frequency, meaning and intent to avoid evaluating only common couple violence (512). This ties in with my discussion in Chapter 6 about the need to assess a more global measure of violence severity, in order to distinguish between violence experiences.

The limitations of cross-sectional studies are well documented. The primary one being that causality cannot be assigned in associations (513). We therefore cannot know for certain whether experiences of violence resulted in more symptoms of distress and lower self-esteem in my study, or whether women with symptoms of CMDs and low self-esteem were at greater risk of violence. In a recent systematic review of IPV and health, only two cohort studies were found from India, both of which were conducted in Goa (514). This suggests the need for more cohort studies, particularly in underserved communities, so that the causal associations between violence and mental health can be assessed.

Whilst my thesis provides insight into an under-studied population, it was conducted solely in informal settlement areas of Mumbai, and did not include women from other strata. This limits the generalisability of the findings to low-income groups, and further research would need to be conducted to see whether the associations hold true for women from other socio-demographic backgrounds, particularly within South Asia.

9.3. Overall reflections

This doctoral project has led to a number of reflections and learnings, both academic and personal. The findings from the quantitative and qualitative studies generated two main concluding thoughts about violence against women and mental health in this context.

The first was that, regardless of gender norms and relations, women want to be treated with love and respect. This seems like an obvious point, but it is worth noting. When we conduct research in settings with unequal and rigid gender roles and where much of society justifies wife beating, it may be easy to conclude that women accept abuse and poor marital relations as part of everyday life. Whilst some women in my study, and in other studies within India (120, 125, 135), have justified violence in certain circumstances, or expressed that there was no escape from their abusive situations, they did not concede

that it was all right. More than the physical abuse, however, women were hurt by words, humiliation and dismissal of their feelings. This was also apparent through the importance of emotional violence in the quantitative study. When asked about justifications of abuse, most questionnaires ask solely about physical violence (378). It may be that some women believe physical abuse is a legitimate form of punishment in some circumstances, but I wonder whether they would give the same responses if the questions related to unloving and disrespectful treatment.

The other point that became more apparent to me throughout the project was that the family unit is very important to a woman's wellbeing throughout her married life. Both a woman's marital family and her natal family can be the difference between whether she thrives or struggles with her marriage. If her in-laws treat her badly, condone abuse and even instigate or perpetrate it, this will contribute to the woman's suffering. Add to this a lack of support from the woman's natal family and she finds herself completely alone. If, however, the woman's own family are supportive, she may feel she has the option of improving her situation. Similarly, if a woman has love and support from her in-laws, even if her husband is abusive, it is again more likely that she will feel she is able to challenge and improve the situation, which will be beneficial to her overall wellbeing.

On a personal level, the experience of the doctorate has helped me to learn a number of new practical and life skills, including how to set up a research study from the beginning with all of the elements that go along with it, new statistical techniques, and how to conduct qualitative research. I strengthened my team working skills, but also discovered how to be successful in independent working. I learnt how to approach research on sensitive topics, work in settings different from those I was used to and integrate an academic research project with the practicalities of a non-governmental organisation. Aside from my supervisors, my colleagues at SNEHA have been my biggest teachers. Their intimate knowledge of the study setting, the realities of violence against women in the area and the needs of the local community was invaluable. Beyond that, I learnt how to live in a new country and how my research might eventually translate into practice. This was one of my biggest motivators in periods of difficulty.

Were I to conduct the entire project again, however, there are a number of things that I might do differently. First, I would consider the possibility of a longitudinal study. Although a PhD project occupies a relatively short amount of time, the short reference timeframe of

diagnostic tools such as the GHQ-12 mean that repeated measures over a six to twelve month period may have proved useful. Whilst my findings have contributed empirical knowledge to the field, a lack of cohort studies still prevents us from assigning causality between poor mental health and experiences of violence.

In terms of the quantitative study, I would sample a new population for data collection. Whilst I believe that the recruitment of the birth cohort mothers allowed us to gather good quality data on violence, as discussed in Chapter 6, the limitation of sampling only mothers could have excluded an important group of women. It would therefore be useful to repeat the study to include women who have chosen not to, or are not able to, have children. Additionally, I would sample participants from a wider geographical area to be more representative of informal settlement communities across the city and the country, therefore making generalisability easier.

For the qualitative study, if I were to repeat it again, I would attempt to extend the sample of women interviewed to ensure that all narratives and experiences were captured. First, I would try to interview women who were not already known to SNEHA or another NGO in some capacity. These women are likely to be the most vulnerable and their experiences may differ from those of women who have been offered or who have sought help. I would also consider interviewing other family members, such as mothers-in-law to understand these dynamics from another perspective.

Finally, with the benefit of hindsight, I would alter the timings of the project. Knowing that the data collection process in particular took longer than I imagined, I would begin the qualitative interviews earlier and try to allow for more simultaneous collection and analysis of the quantitative and qualitative data. I would also spend more time training and debriefing the data collection teams to further ensure that their wellbeing was taken care of whilst they were collecting data on difficult topics.

9.4. Implications and recommendations

9.4.1. Implications for future research

My thesis contributes to the Indian literature on family VAW and its potential impact on measures of mental health. This can assist in improving the evidence base from which to develop policy and programmes. In particular, the detailed assessment of experiences, outcomes, and responses for women living in Mumbai informal settlements helps to understand areas to target in primary and secondary prevention efforts. Understanding the specific context within which violence takes place, and the factors that contribute to an environment of abuse, means that efforts can be targeted to address these factors and work toward minimising the risk of abuse in the first place. Having a more detailed knowledge of the different acts of violence that women experience can allow vulnerable women to be better identified, to be able to raise awareness of the range of acts that constitute violence for women themselves, and those working in the community, and to address these acts when working with perpetrators and family members. In addition, understanding women's expression of distress can help to identify those who may be suffering with their mental health as a result of violence and provide them with quicker access to services. Finally, understanding the ways in which women respond to and cope with violence can aid efforts to increase women's access to sources of strength and support, helping them to cope better and build resilience.

As described in the introduction, violence against women, mental health, and poverty are all global crises that disproportionately affect women. The current political climate - globally and in India - suggests that women's situation is unlikely to improve quickly. Contributions from studies like mine help to shine a light on these issues and increase the evidence base for the need for action from top down as well as from grassroots up. The findings of my study suggest a need for the integration of mental health interventions into the programmes of local organisations working on VAW, at a primary, secondary and tertiary level. Some of the popular psychotherapeutic interventions for survivors of intimate partner violence include those that use cognitive-behavioural strategies, such as Cognitive Trauma Therapy for Battered Women (CTT-BW), which uses standard CBT therapies to treat PTSD, (515-517), the Helping to Overcome PTSD through Empowerment (HOPE) programme, which focuses on safety issues, symptoms, quality of life and post-shelter goals (517, 518), and interpersonal therapy (IPT), which focuses on resolving

interpersonal problems and symptomatic recovery (517, 519, 520). Such interventions could be included in standard work programmes on VAW to help the survivor cope with her situation and enhance her mental well-being.

A number of areas for further study have emerged from my thesis as potentially useful and important. The first is understanding the difference in severity of women's experiences of violence, by creating hierarchical categories through a technique such as item response theory, and how this is associated with mental health outcomes. Whilst my quantitative study was detailed, it did not discriminate between women who may have experienced one or two acts of emotional violence at relatively infrequent intervals and women who may have experienced multiple acts of emotional violence on a daily basis. Intuitively, these two experiences would be different and might lead to a difference in health outcomes, responses, and coping. In addition, further exploration of the mechanisms through which emotional violence is associated with mental health outcomes, and the existence of family violence would be useful, particularly in settings where patrilocal residence and joint family living are common, such as in South Asia.

9.4.2. Implications for policy and practice

The findings of my thesis, and particularly the qualitative analysis, suggest that women who experience violence require and seek help from multiple sources. Not only do they need intervention and support for the violent situation itself, healthcare for injuries and mental healthcare, but they also require cooperation from the police, legal help and shelters, among others. Both policy and practice need to consider the multiple stages involved in helping survivors of violence. The Protection of Women From Domestic Violence Act (PWDVA), 2005, includes provision for protection, right to residence, financial assistance, custody orders and emergency help. It also includes provision for counsellor, police and legal assistance, shelters, medical care and legal aid (521). However, in practice there have been numerous criticisms of the PWDVA Act, given that it is often not implemented properly (522). Another major criticism is that it excludes provision for mental health care (521).

It is therefore important that existing laws and policies are implemented properly so that they can help the people that they were designed for, and that provision is available to women along the whole pathway, including for their mental health.

SNEHA have in place an integrated stepped care model for dealing with domestic violence and mental health (523). In their model, a woman who is experiencing domestic violence progresses through initial support, validation and information on her basic rights. She then receives psychological first aid, home visits, and crisis intervention work with the family and partner, alongside direction to medical facilities, police, shelters and lawyers. The woman is also screened for psychological distress. If she presents with symptoms of distress she is referred to a clinical psychologist who provides individual psychotherapy, group therapy, psycho-education with family members and performs a mental health assessment. If necessary, the woman is then referred to a psychiatrist to receive pharmacological interventions.

Whilst SNEHA do not have the resources to provide all levels of assistance, they have built good working relationships with other service providers such as the police, lawyers, and health professionals so that women can be directed to the appropriate services. The women who participated in my research all had access to this stepped model of care, but this is rare within the country. It is therefore important that non-governmental organisations work together to share experience and resources so that policy and practice can align and women can be provided with adequate services across the country.

Given that the family unit is so important to a woman's well being, current policy and practice also needs to advocate working with the entire family system to raise awareness about domestic violence and the laws and rights surrounding women and children. In addition, it is important to ensure that the definitions of domestic violence in laws and policies are monitored and kept up to date in line with current research. Based on my findings, and other research (160), the impact of emotional violence is very important and current definitions are not adequate to describe the extent of women's experiences. These different types of abuse need to be officially recognised so that women are able to seek the appropriate help when needed.

9.4.3. Recommendations

In addition to the various methods of secondary prevention for survivors of violence that have been thoroughly considered through SNEHA's stepped model of care, primary prevention is also an important consideration when working with survivors of violence. A

number of interventions in primary and/or secondary prevention have been tested in other settings and may be appropriate for adaptation to the Indian context.

In a review of violence interventions by Ellsberg et al in 2015, successful interventions from low- and middle-income countries "engaged multiple stakeholders with multiple approaches, aimed to address underlying risk factors such as social norms condoning violence and gender inequality and supported the development of non-violence behaviours" (524). Four approaches with promising evidence emerged: participatory or community driven development, empowerment training to improve the agency of women, workshops to address gender and behavioural norms with men and women, and economic empowerment or income supplements alongside gender equality training.

Bourey and colleagues (2015) reviewed a number of structural interventions in low- and middle-income countries, that is those that aim to change structural factors within the economic, political, legal, physical and social spheres, in order to reduce intimate partner violence (525). Economic interventions that reduced measures of IPV included cash transfers and microenterprise training in Uganda (WINGS) (526), and a national unconditional cash transfer programme in Ecuador (BDH) (527). Social interventions that reduced IPV included a participatory gender learning programme in China (528) and a community mobilisation and HIV prevention programme in Uganda (SHARE) (529). Combined economic and social interventions such as group savings for women alongside gender dialogue for couples in Cote d'Ivoire (530), a microfinance and participatory learning programme in South Africa (IMAGE) (531, 532), and a combination of a participatory learning programme (Stepping Stones) and livelihood intervention (Creating Lives) in South Africa (533) all showed a reduction in markers of IPV.

Finally, a review of short-term psychotherapy interventions for survivors of intimate partner violence found that Cognitive Behavioural Therapy (CBT) and other interpersonal therapies that were tailored to survivors of IPV were the most effective (534). Interventions that showed a significant change in the outcome variable included psycho-education, CBT, exposure therapy, interpersonal therapy designed for IPV survivors, talking therapies such as giving testimony combined with yogic breathing, group programmes, feminist oriented counselling, eclectic therapy and cognitive trauma therapy for battered women (CTT-BW) (534).

Many of the existing interventions were developed for intimate partner violence rather than the wider marital family. An intervention that therefore combined elements of social and economic programmes, such as empowerment training and microfinance or cash transfer schemes, with tailored interpersonal therapy for women along with gender equality training and participatory learning for the whole family, may be appropriate in this setting for reducing family VAW and its effects.

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Appendix 1

Participant Information Sheet: quantitative data collection

You will be given a copy of this information sheet

"Intimate Partner Violence as a form of Family Violence, and Common Mental Disorders in Mumbai informal settlements"

This study has been approved by the UCL Research Ethics Committee (Project ID Number): **8655/001**

We would like to invite you to participate in our research study. Before you decide whether to take part, we would like to explain why the research is being done and what it would involve for you. Please take time to read this information and discuss it with others if you wish or ask us if there is anything that is not clear or if you would like more information. Please take as much time as you like to decide.

Thank you for reading.

What is the purpose of the study?

Violence that occurs within the family setting, and particularly between partnerships, can impact on the health and wellbeing of those involved. We are interested in how violence interacts with people's emotional wellbeing (something that we can also refer to as 'common mental disorders') and people's experiences and ways of coping with these two things.

The information we collect will be used to inform and develop services that are part of the Prevention of Violence Against Women and Children programme, run by the Society for Nutrition, Education and Health Action (SNEHA).

Why have I been asked to take part?

You have been contacted because we want to ask people who are known to SNEHA about their experiences of violence and their emotional wellbeing. You have previously been recruited to collect information on the growth status of your child. We would like to see if you would be interested in participating in a questionnaire for a further research study.

Do I have to take part?

No. It is entirely up to you to decide whether you would like to take part. If you decide to participate, you will be given a copy of this information sheet and will be asked to sign a 'consent form'. If you decide to take part, you are still free to drop out at any point. No questions will be asked. If you decide not to take part, there will be no penalty and your standard of care with any future SNEHA services will not be affected in any way.

What will happen if I take part?

If you decide to take part, we will contact you to arrange a safe time and place that suit you to conduct the questionnaire. This may or may not be your home. We will also try to answer any questions you may have about the questionnaire or the project in general.

What would the questionnaire be like?

We will give you a 'consent form' before the questionnaire, which you only sign if you are happy to take part. We will give you a copy of this form. We will then ask you a series of questions about your emotional wellbeing and your experiences of violence, including when you experienced violence and who by, if relevant
We will also ask a few questions about your husband and about services you may have accessed.

The answers that you provide will be recorded electronically on a smartphone, rather than on paper.

How long will the questionnaire take?

The questions will take around an hour to complete. Remember, you are also free to stop answering questions at any point if you wish.

Will my taking part in the study be kept confidential?

Yes. Your involvement in the study will not be disclosed to anyone by the researchers. We will make sure the questionnaire takes place in a private and safe setting that suits you. You will not be able to be identified from any information that we collect from you, and your name will not appear in any publications of the research.

What are the possible disadvantages and risks of taking part?

We will be asking questions about sensitive topics that could be distressing or upsetting for you. If you want to stop answering questions at any point then you are free to do so. We will also give you the details of the counselling services at SNEHA should you wish to talk to someone further about these issues in a confidential setting.

There is also a risk that other people could discover about your involvement in the research. To minimize this risk, we will conduct the questionnaire in a private setting. Your involvement in the study will not be disclosed by any SNEHA researchers.

What are the possible benefits of taking part?

Your involvement in this study will help to improve services for women experiencing violence and emotional wellbeing problems within the community.

Once the research is complete, we will give you a copy of the final document if you wish or we can come and talk to you about the results.

We will also ensure that you have prioritized access to any of the services run by SNEHA, should you wish.

What would happen after the questionnaire?

The answers that you provide will be entered into a database, and will be stored securely. Only a small number of researchers will have access to the information and they will have signed an agreement to keep all of the information a secret.

We will use your name and date of birth to find information that we previously asked you about your house and your family, so that we do not need to ask these questions from you again. Once this is done, your details will be deleted and nobody will know that the information provided came from you.

What if I decide to withdraw after the questionnaire has taken place?

There will be no questions asked and no penalty if you decide to withdraw from the study after you have completed the questionnaire. Before the point where we delete your personal details, we would be able to destroy any information that you had provided. Once we have removed your details, we will not be able to destroy your information, as we will not know which is yours.

How will the information be used?

We will combine the information you provide with that of everyone else who has completed the questionnaire. We will then use this to investigate questions about violence within families and how this relates to people's emotional wellbeing. The results of the study will be summarised and will be reported back to SNEHA and other organisations involved in the project. They will also be published in research documents.

You will not be able to be identified from any of the results that are released.

Who is organising and funding the research?

The study is being funded by SNEHA and by University College London. The study is being organised by Abigail Bentley, a PhD student at University College London, who is working in collaboration with SNEHA.

Who has reviewed the study?

The ethics committees at University College London and the Tata Institute of Social Sciences have reviewed the study.

Further information and contact details

Thank you for taking the time to read this information sheet. We hope that it has given you the information that you need to know before deciding whether or not to take part.

If you have any further questions then please don't hesitate to contact us:

Name: Dr Nayreen Daruwalla

Work Address: 310, 3rd floor, Urban Health Centre 60 Feet Road, Dharavi, Mumbai 400017

Contact Details: 91 22 24042627 / 24086011

All data will be collected and stored in accordance with the Data Protection Act 1998.

Appendix 2

Consent form: quantitative data

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

"Intimate Partner Violence as a form of Family Violence, and Common Mental Disorders in Mumbai informal settlements"

This study has been approved by the UCL Research Ethics Committee (Project ID Number): **8655/001**

Thank you for your interest in taking part in this research. Before you agree to take part, the study should have been fully explained to you.

If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you to decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

Participant's Statement

- I have read the notes written above and the Information Sheet, and have listened to the explanation of the research. I understand what the study involves.
- I understand that if I decide I no longer wish to take part in this project, I can notify the researchers at any time and withdraw immediately without penalty.
- I consent to the recording and processing of the information that I give for the purposes of this research study.
- I understand that I will not be able to be identified from any outputs of this research.
- I understand that any information I provide will be treated as strictly confidential and will be stored securely.
- I understand that my involvement in this research study will not be disclosed by any of the researchers.

- I consent to being contacted in future for any follow up or feedback.
- I agree to the use of anonymised information collected in the study in other research, depending on the agreement of the SNEHA research committee.
- I agree that the research project named above has been explained to me to my satisfaction.
- I agree to take part in the study.

Signed:

Date:

Appendix 3

Participant Information Sheet: qualitative data collection (interview)

You will be given a copy of this information sheet

"Intimate Partner Violence as a form of Family Violence, and Common Mental Disorders in Mumbai informal settlements"

This study has been approved by the UCL Research Ethics Committee (Project ID Number): **8655/001**

We would like to invite you to participate in our research study. Before you decide whether to take part, we would like to explain why the research is being done and what it would involve for you. Please take time to read this information and discuss it with others if you wish or ask us if there is anything that is not clear or if you would like more information. Please take as much time as you like to decide.

Thank you for reading.

What is the purpose of the study?

Violence that occurs within the family setting, and particularly between partnerships, can impact on the health and wellbeing of those involved. We are interested in how violence interacts with people's emotional wellbeing (something that we can also refer to as 'common mental disorders') and people's experiences and ways of coping with these two things.

The information we collect will be used to inform and develop services that are part of the Prevention of Violence Against Women and Children programme, run by the Society for Nutrition, Education and Health Action (SNEHA).

Why have I been asked to take part?

You have been contacted because we want to interview people who have had experiences of violence within their family. We will be interviewing a range of people with similar experiences.

Do I have to take part?

No. It is entirely up to you to decide whether you would like to take part. If you decide to participate, you will be given a copy of this information sheet to keep if you wish and will be asked to sign a 'consent form'. If you decide to take part, you are still free to drop out at any point. No questions will be asked. If you decide not to take part, there will be no penalty and your standard of care with any future SNEHA services will not be affected in any way.

What will happen if I take part?

If you decide to take part, we will contact you to arrange a safe time and place that suits you to conduct the interview. This may or may not be your home. We will also try to answer any questions you may have about the interview or the project in general.

What would the interview be like?

We will give you a 'consent form' before the interview, which you only sign if you are happy to take part. We will give you a copy of this form. We will also ask you if you are happy for the interview to be audio recorded so that we can give you our full attention.

The interview will be like a conversation. We will help and encourage you to talk about yourself and your experiences in your own words. We will ask you to talk about your experiences of violence within your family and about your emotional wellbeing. We will ask you questions about your thoughts and feelings in relation to these issues, and about any help that you may have sought or your own ways of coping.

We are interested in your own experiences. There are no wrong answers.

How long will the interview take?

The time it takes to complete an interview varies, depending on how much you have to say, but most interviews last at least an hour. If you would prefer, we could interview you on two separate occasions. Remember, you are also free to stop the interview at any point if you wish.

Will my taking part in the study be kept confidential?

Yes. Your involvement in the study will not be disclosed to anyone by the researchers. We will make sure the interview takes place in a private and safe setting that suits you. You will not be able to be identified from any information that we collect from you, and your name will not appear in any publications of the research.

What are the possible disadvantages and risks of taking part?

We will be asking you to discuss sensitive topics that could be distressing or upsetting for you. If you want to stop the interview at any point then you are free to do so. We will also give you the details of the counselling services at SNEHA should you wish to talk to someone further about these issues in a confidential setting.

There is also a risk that other people could discover about your involvement in the research. To minimize this risk, we will conduct the interview in a private setting. Your involvement in the study will not be disclosed by any SNEHA researchers.

What are the possible benefits of taking part?

Your involvement in this study will help to improve services for women experiencing violence and emotional wellbeing problems within the community.

Once the research is complete, we will give you a copy of the final document if you wish or we can come and talk to you about the results.

We will also ensure that you have prioritized access to any of the services run by SNEHA, should you wish.

What would happen after the interview?

The audio recording of your interview will be labelled with a code and will be given to a researcher who will type out everything you said and translate it into English. This researcher will have signed an agreement to keep any information a secret.

Your personal details will not be attached to these documents, so nobody will be able to identify you. The digital recording of your interview will be destroyed and the typed version will be stored in a secure place.

What if I decide to withdraw after the interview has taken place?

There will be no questions asked and no penalty if you decide to withdraw from the study after you have completed the interview. Before we have published any results of the study, we would be able to destroy all audio recordings and typed transcripts of your interview. Once the research has been published, we will not be able to destroy any information that may already have been seen by others. You will not be able to be identified from any of the results that are published.

How will the information be used?

The typed version of your interview will be combined with information from around 25 other people who will also have been interviewed.

We will use this information to look for patterns in responses and to understand experiences of family violence and emotional well being from people in the community.

We will feedback the results to SNEHA and other organisations involved in the study and will publish results in research documents. The final documents may contain quotes of things that you have said in your interview, but we will use false names so that you cannot be identified.

Who is organising and funding the research?

The study is being funded by SNEHA and by University College London. The study is being organised by Abigail Bentley, a PhD student at University College London, who is working in collaboration with SNEHA.

Who has reviewed the study?

The ethics committee at University College London and the Tata Institute of Social Sciences have reviewed the study.

Further information and contact details

Thank you for taking the time to read this information sheet. We hope that it has given you the information that you need to know before deciding whether or not to take part.

If you have any further questions then please don't hesitate to contact us:

Name: Dr Nayreen Daruwalla

Work Address: 310, 3rd floor, Urban Health Centre 60 Feet Road, Dharavi, Mumbai 400017

Contact Details: 91 22 24042627 / 24086011

All data will be collected and stored in accordance with the Data Protection Act 1998.

Appendix 4

Consent form: qualitative data (interview)

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

"Intimate Partner Violence as a form of Family Violence, and Common Mental Disorders in Mumbai informal settlements"

This study has been approved by the UCL Research Ethics Committee (Project ID Number): **8655/001**

Thank you for your interest in taking part in this research. Before you agree to take part, the study should have been fully explained to you.

If you have any questions arising from the Information Sheet or the explanation already given to you, please ask the researcher before you to decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

Participant's Statement

- I have read the notes written above and the Information Sheet, and have listened to the explanation of the research. I understand what the study involves.
- I understand that if I decide I no longer wish to take part in this project, I can notify the researchers at any time and withdraw immediately without penalty.
- I consent to my interview being audio recorded.
- I consent to the processing and use of the information that I give for the purposes of this research study.
- I consent to quotes from my interview being used in research publications and understand it will not be possible to identify me from them.
- I understand that I will not be able to be identified from any outputs of this research.

- I understand that any information I provide will be treated as strictly confidential and will be stored securely.
- I understand that my involvement in this research study will not be disclosed by any of the researchers.
- I consent to being contacted in future for any follow up or feedback.
- I agree to the use of anonymised information collected in the study in other research, depending on the agreement of the SNEHA research committee.
- I agree that the research project named above has been explained to me to my satisfaction.
- I agree to take part in the study.

Signed: Date:

Appendix 5: Ethics approvals

University College London ethics approval

UCL RESEARCH ETHICS COMMITTEE
ACADEMIC SERVICES

20 May 2016

Professor David Osrin
Institute for Global Health
UCL

Dear Professor Osrin

Notification of Ethical Approval
Re: Ethics Application 8655/001: Intimate partner violence as a form of family violence and common mental disorders in Mumbai informal settlements

Further to your satisfactory responses to the committee's comments, I am pleased to confirm in my capacity as Chair of the UCL Research Ethics Committee (REC) that your study has been approved by the UCL REC until 31st December 2019. Approval is subject to the following conditions.

1. You must seek Chair's approval for proposed amendments to the research for which this approval has been given. Ethical approval is specific to this project and must not be treated as applicable to research of a similar nature. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing the 'Amendment Approval Request Form': http://ethics.grad.ucl.ac.uk/responsibilities.php

2. It is your responsibility to report to the Committee any unanticipated problems or adverse events involving risks to participants or others. The Ethics Committee should be notified of all serious adverse events via the Ethics Committee Administrator (ethics@ucl.ac.uk) immediately the incident occurs. Where the adverse incident is unexpected and serious, the Chair or Vice-Chair will decide whether the study should be terminated pending the opinion of an independent expert. The adverse event will be considered at the next Committee meeting and a decision will be made on the need to change the information leaflet and/or study protocol.

3. For non-serious adverse events the Chair or Vice-Chair of the Ethics Committee should again be notified via the Ethics Committee Administrator (ethics@ucl.ac.uk) within ten days of an adverse incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Chair or Vice-Chair will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.

On completion of the research you must submit a brief report of your findings/concluding comments to the Committee, which includes in particular issues relating to the ethical implications of the research.

Yours sincerely

Professor John Foreman
Chair of the UCL Research Ethics Committee

Cc: Abigail Bentley, Applicant

Academic Services, 1-19 Torrington Place (9th Floor),
University College London
Tel: +44 (0)20 3108 8216
Email: ethics@ucl.ac.uk
http://ethics.grad.ucl.ac.uk/

Tata Institute of Social Sciences ethics approval

टाटा सामाजिक विज्ञान संस्थान
Tata Institute of Social Sciences

INSTITUTIONAL REVIEW BOARD

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Dr. Kamal Hazari

External Expert-Social Sciences
Prof. T. V. Sekher

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Prof. Siva Raju
Prof. Bino Paul

Member and Medical Expert
Dr. Kanchan Mukherjee

Member and Legal Expert
Dr. Monika Sakhrani

Community Representatives
Ms. Pallavi Palav
Mr. Bhaskar Kakad

Member Secretary
Prof. Surinder Jaswal

Institutional Review Board
Ethics Clearance Report

Serial No. of IRB Meeting	2016-17	02
Project Title	Intimate Partner Violence as a Form of Family Violence, and Common Mental Disorders in Mumbai Informal Settlements	

Name of Faculty In-charge/Project Coordinator/Principal Investigator
Ms. Abigail Bentley

Date of Submission to the Committee	2	6	0	6	2	0	1	6
Date of Submission to other IRB's (if applicable)								
Date of Review	0	8	0	7	2	0	1	6

IRB Members present for the meeting:
Prof. Indra Munshi (Chairperson), Prof. Surinder Jaswal (Member Secretary), Prof. Kanchan Mukherjee, Prof. Mouleshri Vyas, Prof. Shalini Bharat, Dr. Kamal Hazari, Dr. Amar Jesani and Mr. Bhaskar Kakad.

Comments from IRB Members:

1. How will women with IPV be identified from the cohort?
2. What referral services will be provided to women who have observable and overt signs of physical injuries?
3. Researcher may inform to the participants about the availability of services at SNEHA but not promise prioritised care by SNEHA.
4. The proposal does not define some of the key concepts such as informal settlements, common mental disorders.
5. The design of the qualitative phase needs to be elaborated in greater detail.

All suggested changes have been successfully incorporated

Signature of the Chairperson   Signature of Member Secretary

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A Deemed University established under Section 3 of the UGC Act, 1956, vide Notification No. F11-22/62-U2, dated 29th April, 1964, of the Government of India, Ministry of Education

Appendix 6

Tools to assess mental health outcomes in the context of violence studies: a systematic review

Abstract

Background: Gender based violence has been associated with symptoms of common mental disorders in a range of studies, however there is no gold standard for the tools to assess these mental health outcomes.

Aim: This systematic review aims to summarise the literature on outcomes of common mental disorders, and therefore the tools used to assess them, in the context of studies on gender based violence.

Methods: A search of the following databases was performed in April 2018: Ovid Medline, PsycINFO, PsychEXTRA and the Cochrane library. 11,439 studies were identified. 2028 duplicates were removed and 9073 did not meet the inclusion criteria leaving a total of 338.

Results: Included studies were conducted between year and year, predominantly occurred in the USA and administered the tools in English. The most commonly assessed outcome was depression, measured by the Beck Depression Inventory in 31% of studies.

Discussion: There are a wide range of tools used to assess common mental disorders in the context of violence, which may prevent the comparison of findings between different studies and thereby the true reliability of the associations measured. Further work to assess the psychometric properties of the most commonly used tools would be useful.

Introduction

It has been established in the literature that experiences of violence against women are associated with poor mental health outcomes (1-3). However, estimates of the prevalence of mental illness in women globally vary greatly (4, 5), due in part to the range of tools available to measure mental illness. Additionally, the terms ‘mental illness and ‘common mental disorders’ incorporate a range of disorders, which in turn can be measured in a variety of ways. According to the UK National Institute for Clinical Excellence guidelines, common mental disorders include “depression, generalized anxiety disorder (GAD), panic disorder, phobias, social anxiety disorder, obsessive-compulsive disorder and post-traumatic stress disorder (PTSD)” (6) and some people argue that they also include somatoform disorders (7). There are many different tools that exist to measure each of these disorders, and some studies are simply interested in measuring general symptoms of psychological distress.

Assessing mental health outcomes in the context of studies on gender-based violence is important, but with no clear guidelines as to the ‘gold standard’ tools to use in specific settings, research findings can vary and are often incomparable. This review of the literature aims to assess the pattern of mental health outcomes, and the tools used to assess them, in studies of gender-based violence globally. The review was performed as part of my doctoral thesis on violence against women and common mental disorders in Mumbai, India, and was used to inform the choice of study tool for my field research.

Methods

I performed an original search of the literature in April 2015, which I updated in April 2018, using a combination of the search terms contained in Table 1. I searched Ovid Medline, PsychINFO, PsychEXTRA and the Cochrane Library. I did not restrict the search by language or year, so as to locate as wide a range of studies as possible.

Table 1. Key terms used in search of literature

<table>
<tr><th>Search Term</th><th>Topic</th><th colspan="2">Combinations</th></tr>
<tr><td>Violence AND Gender identity</td><td rowspan="8">Violence</td><td rowspan="8">OR</td><td rowspan="24">AND</td></tr>
<tr><td>Domestic violence</td></tr>
<tr><td>Intimate partner violence</td></tr>
<tr><td>Gender based violence</td></tr>
<tr><td>Battered females</td></tr>
<tr><td>Partner abuse</td></tr>
<tr><td>Women’s health</td></tr>
<tr><td>Rape</td></tr>
<tr><td>Mental health</td><td rowspan="8">Mental health</td><td rowspan="8">OR</td></tr>
<tr><td>Mental disorders</td></tr>
<tr><td>Anxiety</td></tr>
<tr><td>Anxiety disorders</td></tr>
<tr><td>Stress</td></tr>
<tr><td>Depression</td></tr>
<tr><td>Depressive disorder</td></tr>
<tr><td>Common mental disorders</td></tr>
<tr><td>Validation studies</td><td rowspan="8">Measurement</td><td rowspan="8">OR</td></tr>
<tr><td>Questionnaires OR surveys</td></tr>
<tr><td>“reproducibility of results”</td></tr>
<tr><td>“sensitivity and specificity”</td></tr>
<tr><td>Screening tests</td></tr>
<tr><td>Psychiatric status rating scales</td></tr>
<tr><td>Psychometrics</td></tr>
<tr><td>Psychological assessment</td></tr>
</table>

I was interested in peer-reviewed, published studies on gender-based violence that assessed measures of common mental disorders as a primary or secondary outcome. In line with the NICE guidelines, I defined common mental disorders as incorporating symptoms of depression, anxiety, post-traumatic stress disorder and general symptoms of mental illness or psychological distress. I included descriptive studies, interventional studies and studies that validated a new tool within a population of survivors of violence. I also included protocol studies that outlined which mental health outcomes and tools they would be using. I excluded any results that were not peer reviewed or were not a full description of a research study, such as reports and conference proceedings. I also

excluded qualitative studies and reviews of the literature, though I did check through the bibliography of the reviews for any additional relevant studies.

Studies on gender-based violence included intimate partner violence, dating violence and non-partner sexual violence. I excluded any forms of domestic violence that included child abuse or elder abuse and studies of children witnessing intimate partner violence in the home. I also excluded sexual violence against women in the context of war, including military sexual violence, because I believed these women might differ in terms of their mental health.

In line with the World Health Organisation (WHO) Multi-country study on violence against women and girls, I used a lower age cut-off of 15. The WHO study assessed all women of reproductive age (15-49) (8). I did not apply an upper age limit because I wanted to also assess gender-based violence and common mental disorders in older women. In studies that assessed violence in adolescents, more than 50%, or the mean age, of the study population had to be 15 or above to be included in the results. For studies that assessed violence against both men and women to be included, either over 50% of the study population had to be women, or the results had to be presented separately for men and women.

I did not restrict the type of violence that was assessed (physical, sexual, emotional, economic and do on), but violence that matched the perpetrator-victim relationships described above had to be characteristic of the study population or a clear independent variable. For example, studies that looked at multiple forms of violence such as child abuse and adult intimate partner violence were included so long as the adult violence was a clear and separate predictor, measured separately to that of child abuse experiences. Studies were also only excluded if a common mental disorder was not one of the primary or secondary outcomes of the study, measured separately. Studies that only assessed psychiatric mental health outcomes such as major depressive disorder, bipolar disorder and schizophrenia, suicidal ideation and attempts, or other measures such as quality of life and self-esteem, were excluded unless these outcomes were assessed alongside other common mental disorders. I included studies that created their own new questionnaires to assess common mental disorders or modified existing questionnaires to fit their purposes, however I excluded studies that did not clearly describe how these were assessed – either through reference to an existing tool or a description of the questions used.

As I was predominantly interested in male violence against women, given that this was going to be the study population of my thesis, I only included studies that assessed violence between same-sex partners or trans populations if they also included cis male violence against cis women as one of the study groups. A full list of the inclusion and exclusion criteria is displayed in table 2.

Table 2. Inclusion and exclusion criteria

Inclusion criteria	**Exclusion criteria**
Studies with populations experiencing male perpetrated gender-based violence, or gender-based violence as an independent variable	Studies not assessing gender-based violence, including those assessing child abuse, elder abuse, witnessing domestic violence as a child and violence in the context of war
Studies on gender-based violence assessing a common mental disorder as a primary or secondary outcome	Study populations including children and adolescents below the age of 15, studies with less than 50% women where results are not stratified by sex, studies of violence in same-sex or trans populations
All peer-reviewed, published studies	Studies that don't assess a common mental disorder as one of the primary or secondary outcomes
	Studies that are not peer-reviewed or fully published
	Qualitative studies and literature reviews
	Studies that do not provide sufficient detail on the assessment of common mental disorders

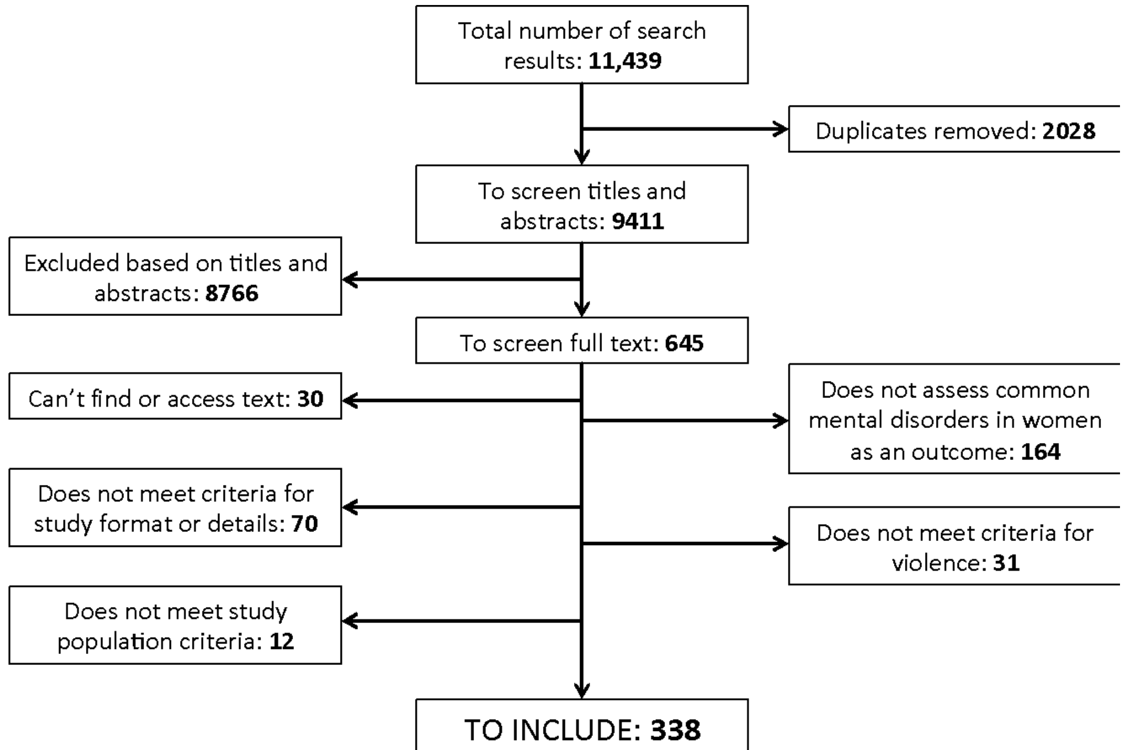
Once I had performed the search, I combined the results and removed any duplicates. I then sequentially read through titles, abstracts and then the full papers, removing any studies that did not meet the inclusion criteria. Using the final list of studies to be included, I extracted data relevant to this review. This included the country and study population, the mental health outcome(s) assessed and the tool(s) used to assess them and the language that the tools were administered in. I also extracted data on the type of violence assessed and the tools used to assess violence, the year of the studies and whether they had performed any validation tests. Where multiple articles had been published by the same

authors, using the same study population and methods, I combined these and only added one entry for the study tools used.

Results

Figure 1 displays a CONSORT flow diagram for the sequential exclusion of search results.

Figure 1. CONSORT flow diagram of search results



In total, the search returned 11,439 results. I removed 2028 duplicates and 8766 studies were removed based on their title or abstract. This left 645 full papers for review. Of these, 307 were excluded because they did not meet the inclusion criteria.

The majority of studies (60%) were performed in North America, followed by Europe (13%). Around 5% of studies were conducted in the Middle East, South Asia, Latin America or the African continent and 1% were conducted in East Asian countries or were multi-country studies. The most common language for administering the tools was English (67%), followed by Spanish (9%). Study populations were recruited from a variety of

settings. Most commonly community-based, but also specific violence services and services tailored to women, as well as the healthcare system such as primary care, obstetrics and gynaecology or antenatal clinics and psychiatry wards. Some populations were recruited from the legal system including the police and courts and some were existing research populations. 11% of the studies were intervention studies and 0.1% were protocols. The rest were descriptive studies of violence and common mental disorders. 10% of the studies assessed violence during pregnancy or the perinatal period.

When looking at the assessment of gender-based violence, around 13% of the studies relied on self-identified abuse, either from the participant directly or from services that the study population were recruited from. The majority of studies (38%) created their own survey, often modified from, or based on and existing tool to assess violence. Of the studies that employed an existing tool, the Conflict Tactics Scale was the most commonly used (22%). Other tools that were used commonly throughout the studies included the Abuse Assessment Screen, the WHO Questionnaire on Violence Against Women, the Psychological Maltreatment of Women Scale, the Index of Spouse Abuse and the Sexual Experiences Survey.

The most common mental health outcome assessed was depression, in 60% of the studies, followed by post-traumatic stress disorder (44%), general symptoms of common mental disorders (27%) and anxiety (19%). Other outcomes that were commonly reported alongside these main ones were general stress, somatisation, self-esteem and suicidal ideation. Table 3 contains the details of the five most commonly used tools to assess each of the four main outcomes discussed. Where there were multiple versions of the same tool, such as the 28 and 12-item versions of the General Health Questionnaire, the revised version of the Symptom Checklist-90 or the civilian version of the Posttraumatic Stress Disorder checklist, all were combined under the same entry.

Table 3. Five most commonly used tools to assess depression, anxiety, post-traumatic stress disorder and general symptoms of common mental disorders

Mental health outcome (Total studies assessing outcome)	Tool	Frequency and proportion of studies using tool	Current studies using tool
Depression (N=200)	Beck depression Inventory (BDI)	61 (31%)	(9-65)
	Centre for Epidemiologic Studies Depression Scale (CES-D)	55 (28%)	(66-125)
	Edinburgh Postnatal Depression Scale (EPDS)	22 (11%)	(126-148)
	Patient Health Questionnaire-9 (PHQ-9)	13 (7%)	(149-161)
	Authors created own survey	12 (6%)	(162-172)
PTSD (N=149)	Post Traumatic Stress Disorder Checklist (PCL)	27 (18%)	(12, 15, 29, 31, 49, 62, 65, 74, 75, 101, 111, 119, 123, 144, 152, 153, 173-185)
	Post Traumatic Symptom Survey (PSS)	24 (16%)	(17, 21, 45-47, 57, 63, 64, 110, 124, 151, 154, 172, 186-197)
	Post Traumatic Diagnostic Survey (PDS)	19 (13%)	(27, 38, 56, 69, 108, 112, 140, 153, 198-203)
	Clinician Administered PTSD Scale (CAPS)	12 (8%)	(30, 42, 60, 61, 63, 143, 192, 203-208)
	Impact of Event Scale	12 (8%)	(30, 46, 47, 55, 115, 176, 209-217)
Anxiety (N=65)	State-Trait Anxiety Inventory	14 (22%)	(18, 27, 31, 36, 37, 46, 47, 51, 53, 115, 153, 218-220)
	Beck Anxiety Inventory	10 (15%)	(10, 15, 24, 30, 33, 49, 57, 64, 221, 222)
	Brief Symptom Inventory	7 (11%)	(9, 19, 20, 193, 223-225)
	Hopkins Symptom Checklist	5 (9%)	(138, 226-229)
	Hospital Anxiety and Depression Scale (HADS)	4 (6%)	(153, 230-232)

General symptoms (N=91)	General Health Questionnaire	18 (20%)	(11, 146, 177, 178, 233-246)
	Brief Symptom Inventory	15 (16%)	(186, 193, 201, 202, 212, 213, 215, 225, 247-253)
	Authors created own survey	9 (10%)	(81, 122, 162, 165, 254-260)
	Symptom Checklist-90 (SCL-90)	9 (10%)	(12, 188, 261-266)
	Self-Report Questionniare-20 (SRQ-20)	8 (9%)	(1, 267-272)

In total, there were 30 different tools used to assess depression throughout the studies, eight of which were variations of another tool: the Beck Depression Inventory and the short version; the Centre for Epidemiologic Studies Depression scale and it's short version; the Symptom Checklist 90 and the revised version and the Patient Health Questionnaire 8 and 9. Thirteen of the depression tools were used by only one study. The most commonly used tool to assess depression was the Beck Depression Inventory (31%), which appeared in studies published between 1979 and 2016. The Beck Depression Inventory was developed by Aaron Beck in 1961 and later revised in 1996 to the second edition (BDI-II) (273, 274). The BDI-II is said to be one of the most widely used tools to assess symptoms of depression and has been described as the "gold standard of self-rating scales" (275, 276). In the studies included in this review, the Beck Depression Inventory was used in nine different languages, including Portuguese, Spanish, Persian, Hebrew, Turkish, Kannada, Chinese and Arabic. Of the studies that assessed the internal consistency reliability of the Beck Depression Inventory, Chronbach's alpha ranged from 0.73 to 0.95.

The Post Traumatic Stress Disorder Checklist (PCL) appeared in studies between 1993 and 2017 and was the most commonly used tool to assess PTSD (18%). The PTSD checklist was published by Weathers in the 1990s (277, 278). There are two versions of the PCL: one for military populations and one for civilian populations (PCL-C). The PCL-C was the one used by most studies in this review. Other than in English, the PTSD checklist was adapted into Swedish, Arabic, Swahili, Kannada and Portuguese in the studies within this review and Chronbach's alpha ranged between 0.88 and 0.97. Symptoms of Post Traumatic Stress Disorder were assessed by the widest variety of tools (35 in total), with 14 only being used by one study.

On the other hand, anxiety was measured by the fewest amount of different tools (22 in total), and also the fewest amount of studies. The most commonly used tool to assess anxiety was the State-Trait Anxiety Inventory (STAI) (22%), which appeared in studies between 1983 and 2017. The STAI was developed in the 1960s by Spielberger and Gorusuch, containing 40 items to measure state and trait anxiety (279). The STAI was used in Spanish and Swedish as well as English. Only one study tested the internal consistency reliability of the STAI for themselves, giving a Chronbach's alpha of 0.95 (27), though other authors referenced previous validation studies.

General symptoms of common mental disorders or psychological distress were assessed by 91 different studies through 24 different tools. Seven of the tools were only used by one study. The General Health Questionnaire (GHQ) was the most commonly used tool, with a mixture of the 28 item and 12 item versions (20%). The GHQ was developed by William Goldberg as a 60-item tool in the late 1970s, which was then shortened into the 28 and 12 item versions and validated in 1997 (280, 281). The GHQ tended to be included in more recent literature than the other tools mentioned, featuring in publications between 2007 and 2017. It has been adapted for use in numerous languages, including Swahili, Thai, Swedish, French, Portuguese and Spanish. Of the studies that assessed the internal consistency of the GHQ, Chronbach's alpha ranged between 0.78 and 0.95.

Discussion

Studies that assess the mental health outcomes of gender-based violence have been conducted all over the world, though predominantly in North America. There are a wide range of tools used to assess gender-based violence, numerous different mental health outcomes assessed and varying tools used for each of these. Whilst the choice of tools and the decisions to modify them to suit the setting allows for nuanced assessments of violence and mental health that take into account locally relevant factors, the lack of guidance on which tools to use means that findings may differ, that they are rarely comparable and that some studies may not use the most appropriate tools.

The mental health outcome most commonly assessed in violence studies is depression, through the use of the Beck Depression Inventory in the majority of cases. The BDI is a widely used and validated tool, and so this may reflect the confidence that the academic

community places in this tool. However, there were many other tools used to assess depression throughout the literature, some only being used by a single study. Similarly, many different tools were used to assess anxiety, general symptoms of common mental disorders and post-traumatic stress disorder. PTSD was assessed by widest range of different tools throughout the literature, suggesting that this outcome may be one of the hardest to measure. In addition, some authors created their own tools to assess mental health outcomes. In some cases, the survey questions were validated in the study population and language of choice, demonstrating that they were relevant to that setting, but in other cases, no validation tests were done. This could place a question on how reliable some of the findings associating violence with mental health are.

This review aimed to provide a summary of the range of tools used for assessing common mental disorders in the context of studies on gender-based violence and to highlight those most commonly used globally. To my knowledge, this is the first review of such kind and so makes some steps towards offering guidance to researchers looking to incorporate mental health tools in their violence studies. The limitations of this review are that whilst tools may be used widely and commonly, they may not be the most appropriate. The wide use of tools could also be influenced by the existence of previous studies in similar populations, thereby providing some kind of reference, and also by large study groups producing research over a number of years. It would be useful to extend this review by assessing validation studies of the most commonly used tools to understand the psychometric properties of each in different settings.

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Appendix 7: Survey tools

7.1. GHQ-12 questions

1. In the last two weeks, have you been able to concentrate on whatever you're doing?
2. In the last two weeks have you lost much sleep over worry?
3. In the last two weeks have you felt that you are playing a useful part in things?
4. In the last two weeks have you felt capable of making decisions about things?
5. In the last two weeks have you felt constantly under strain?
6. In the last two weeks have you felt you could overcome your difficulties?
7. In the last two weeks have you been able to enjoy your day-to-day activities?
8. In the last two weeks have you been able to face up to your problems?
9. In the last two weeks have you been feeling unhappy and depressed?
10. In the last two weeks have you been loosing confidence in yourself?
11. In the last two weeks have you been thinking of yourself as a worthless person?
12. In the last two weeks have you been feeling reasonably happy, all things considered?

7.2. Rosenberg Self-Esteem Questionnaire statements

1. On the whole, I am satisfied with myself
2. At times, I think I am no good at all
3. I feel that I have a number of good qualities
4. I am able to do things as well as most other people
5. I feel I do not have much to be proud of.
6. I certainly feel useless at times
7. I feel that I am a person of worth, at least on an equal plane with others
8. I wish I could have more respect for myself
9. All in all, I am inclined to feel that I am a failure
10. I take a positive attitude toward myself

7.3. Full quantitative survey

No.	Question and filters	Response options and coding	Skips
1.	Enter the respondent ID जानकारी देनेवाले का आइ डी नंबर लिखिए		
2.	What is your marital status? आपकी वैवाहिक स्थिति क्या है?	Married and living with husband…………………....1 शादीशुदा है और पति के साथ रह रहे है Married but not living with husband……………….2 शादीशुदा लेकिन पति के साथ नही रह रहे है Divorced……………….……………………….....3 तलाकशुदा Widow……………………………………….…..….4 विधवा Answer refused…………………………….…......99 जवाब देने से इनकार कर दिया	If '1' or '2' skip to Q3 If '3' skip to Q4 If '4' skip to Q5
3.	How long have you been married? आपकी शादी हुई कितने साल हुए है?	Less than a year………………..……………..........1 एक साल से कम 1-3 years……………………..……………………2 १ से ३ साल 3-5 years…………………………………………….…..3 ३ से ५ साल 5-7 years…………………..……………………..4 ५ से ७ साल 7-9 years…………………….…………………..5 ७ से ९ साल 10 years or more…………………….……………6 १० साल या उससे ज्यादा Answer refused……………………………...…..99 जवाब देने से इनकार कर दिया	
4.	How long ago did you separate from your husband? आप और आपके पति कितने सालोंसे साथ नहीं रह रहे है?	Less than a year……………..……................1 एक साल से कम 1-3 years……………………………….…………...…2 १ से ३ साल 3-5 years………………………………………..……..3 ३ से ५ साल	

		5-7 years……………………….………………..4 ५ से ७ साल 7-9 years………………………………..………..5 ७ से ९ साल 10 years or more……………………..…….…….6 १० साल या उससे ज्यादा Answer refused……………………………..…..99 जवाब देने से इनकार कर दिया	
5.	How long ago did your husband pass away? आपके पतिका निधन हुए कितने साल हुए है?	Less than a year………………..………….........1 एक साल से कम 1-3 years…………………………….……………2 १ से ३ साल 3-5 years………………………………………….3 ३ से ५ साल 5-7 years…………………………………….…..4 ५ से ७ साल 7-9 years…………………………………..……..5 ७ से ९ साल 10 years or more……………………………..…….6 १० साल या उससे ज्यादा Answer refused……………………………..…..99 जवाब देने से इनकार कर दिया	
6.	How many children do you have? आपके कितने बच्चे है?	None (कोई नहीं)…………………………………….0 One (एक)……………………………..…………..1 Two (दो)……………………………..…………2 Three (तीन)………………………………………..3 Four (चार)…………………………..……………4 Five (पांच)………………………..………………5 More than five (पांच से ज्यादा)………………………6 Answer refused ………………..……………...99 जवाब देने से इनकार कर दिया	
7.	What sex is/are your children? आपके बच्चो में कितने बेटे है और कितनी बेटियां है?	Yes……………………………………………………1 No……………………………………………………2	If '2' skip to question 3a.
2b.	When did you experience	Before marriage…………………………………….1	If '3' move

	this? SELECT ALL THAT APPLY	During marriage but before pregnancy……..……2 During pregnancy……………………………….....3 In the two months after pregnancy……..………4 In the last 12 months…………………….…………..5	to question 2c. If not, skip to question 2d.
2c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before………………..…..……………...1 More than before…………………………………2 Less than before…………………………………..3	
2d.	Who was the main person that did this?	Husband/partner…………….…..……………..1 In-laws……………………………………………...2 Natal family…………………………….………….3 Other…………………………………….………….4	
2e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner…………………….……………..1 In-laws……………………………………………...2 Natal family……………………………..………..3 Other…………………………………….………….4	
2f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………………………………………2 Occasional…………………………..………………3 Most of the time……………………………......4 On-going……………………………….............5	
3a.	Has anyone in your family ever insisted on knowing where you are at all times?	Yes……………………………………………………1 No…………………………………….………………2	If '2' skip to question 4a.
3b.	When has this happened? SELECT ALL THAT APPLY	Before marriage…………………………………..1 During marriage but before pregnancy…………2 During pregnancy……………..……………..………3 In the two months after pregnancy………………4 In the last 12 months…………………………..…..5	If '3' move to question 3c. If not, skip to question 3d.
3c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………...……..…...1 More than before………………………………..2 Less than before…………………………………..3	
3d.	Who was the main person that did this?	Husband/partner…………………..……..……….1 In-laws……………………………….……………...2 Natal family…………………………...……….3 Other…………………………………….………….4	
3e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………...…..………………….1 In-laws…………………….…………………………..2 Natal family……………..…….……………….3 Other…………………………………………………4	
3f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………...…………………………2 Occasional………………………………………3	

		Most of the time…………………………………...4 On-going…………………………………………...5	
4a.	Has anyone in your family ever ignored you and treated you indifferently?	Yes…………………………………………………1 No…………………………………….……………2	If '2' skip to question 5a.
4b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………….…………….1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months……………………………..…..5	If '3' move to question 4c. If not, skip to question 4d.
4c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………...……...…..1 More than before……………………………..…2 Less than before…………………………………..3	
4d.	Who was the main person that did this?	Husband/partner…………………..……..………..1 In-laws…………………………….………………...2 Natal family…………………………….…..………..3 Other…………………………………….…………4	
4e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………..…...…………………1 In-laws…………………….……………………..2 Natal family……………..……..…………………..3 Other…………………………………………………4	
4f.	In the last 12 months, how often have you experienced this?	Not at all…………………………………………1 Single event…………....…………………………2 Occasional……………………….………………3 Most of the time…………………………………...4 On-going…………………………………………...5	
5a.	Has anyone in your family ever been angry if you speak with another man other than your husband?	Yes…………………………………………………1 No…………………………………….……………2	If '2' skip to question 6a.
5b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………….…………….1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months……………………………..…..5	If '3' move to question 5c. If not, skip to question 5d.
5c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………...……...…..1 More than before……………………………..…2 Less than before…………………………………..3	
5d.	Who was the main person that did this?	Husband/partner…………………..……..………..1 In-laws…………………………….………………...2 Natal family…………………………….…..………..3 Other…………………………………….…………4	

5e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner……………………………………1 In-laws……………………………………………..2 Natal family……………………………………..3 Other…………………………………………………4	
5f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event………………………………………2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going……………………………………………...5	
6a.	Has anyone in your family ever been suspicious often that you are unfaithful?	Yes……………………………………………………1 No……………………………………………………2	If '2' skip to question 7a.
6b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage……………………………………...1 During marriage but before pregnancy………….2 During pregnancy……………………………………3 In the two months after pregnancy……………….4 In the last 12 months…………………………..….5	If '3' move to question 6c. If not, skip to question 6d.
6c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………………………...1 More than before……………………………….…2 Less than before…………………………………..3	
6d.	Who was the main person that did this?	Husband/partner……………………………………1 In-laws………………………………………………...2 Natal family………………………………………..3 Other…………………………………………………4	
6e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner……………………………………1 In-laws……………………………………………..2 Natal family……………………………………..3 Other…………………………………………………4	
6f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event………………………………………2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going……………………………………………...5	
7a.	Has anyone in your family ever expected you to ask permission before seeking healthcare for yourself?	Yes……………………………………………………1 No……………………………………………………2	If '2' skip to question 8a.
7b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage……………………………………...1 During marriage but before pregnancy………….2 During pregnancy……………………………………3 In the two months after pregnancy……………….4 In the last 12 months…………………………..….5	If '3' move to question 7c. If not, skip to question 7d.

7c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………..……..…..1 More than before……………………………….2 Less than before…………………………………..3	
7d.	Who was the main person that did this?	Husband/partner……………………..……..………..1 In-laws…………………………………………………..2 Natal family…………………………………..………..3 Other…………………………………………….………4	
7e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………….....…..…………………1 In-laws…………………….……………………..2 Natal family……………….….….……………..3 Other………………………………………………….4	
7f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………...……………………………2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going…………………………………………...5	
8a.	Has anyone in your family ever distrusted you with money?	Yes……………………………………………………1 No…………………………………….……………2	If '2' skip to question 9a.
8b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage……………………………………..1 During marriage but before pregnancy………….2 During pregnancy…………...……………..……..3 In the two months after pregnancy……………….4 In the last 12 months……………………………..….5	If '3' move to question 8c. If not, skip to question 8d.
8c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………..……..…..1 More than before……………………………….2 Less than before…………………………………..3	
8d.	Who was the main person that did this?	Husband/partner……………………..……..………..1 In-laws…………………………………………………..2 Natal family…………………………………..………..3 Other…………………………………………….………4	
8e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………….....…..…………………1 In-laws…………………….……………………..2 Natal family……………….….….……………..3 Other………………………………………………….4	
8f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………...……………………………2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going…………………………………………...5	
9a.	Has anyone in your family ever insulted you or made you feel bad about yourself?	Yes……………………………………………………1 No…………………………………….……………2	If '2' skip to question 10a.

9b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage……………………………………..1 During marriage but before pregnancy…………2 During pregnancy…………….………….………3 In the two months after pregnancy………………4 In the last 12 months……………………….…..5	If '3' move to question 9c. If not, skip to question 9d.
9c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………...……..…...1 More than before……………………………….2 Less than before…………………………………3	
9d.	Who was the main person that did this?	Husband/partner………………….…….……….1 In-laws……………………………….……………..2 Natal family…………………………...………..3 Other…………………………………….……….4	
9e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………..…..………………….1 In-laws…………………….…………………….2 Natal family…………….….……………….3 Other…………………………………………….4	
9f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………….1 Single event………...……………………….2 Occasional……………………………………3 Most of the time………………………………...4 On-going……………………………………...5	
10a.	Has anyone in your family ever belittled or humiliated you in front of other people?	Yes…………………………………………………1 No……………………………………….………2	If '2' skip to question 11a.
10b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage……………………………………..1 During marriage but before pregnancy…………2 During pregnancy…………….………….………3 In the two months after pregnancy………………4 In the last 12 months……………………….…..5	If '3' move to question 10c. If not, skip to question 10d.
10c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………...……..…...1 More than before……………………………….2 Less than before…………………………………3	
10d.	Who was the main person that did this?	Husband/partner………………….…….……….1 In-laws……………………………….……………..2 Natal family…………………………...………..3 Other…………………………………….……….4	
10e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………..…..………………….1 In-laws…………………….…………………….2 Natal family…………….….……………….3 Other…………………………………………….4	
10f.	In the last 12 months, how often have you experienced	Not at all……………………………………….1 Single event………...……………………….2	

	this?	Occasional……………………………………….3 Most of the time…………………………………..4 On-going…………………………………………..5	
11a.	Has anyone in your family ever done things to scare you or intimidate you on purpose (e.g. by the way they looked at you, by yelling and smashing things)?	Yes…………………………………………………1 No…………………………………………………2	If '2' skip to question 12a.
11b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………………...1 During marriage but before pregnancy………….2 During pregnancy……………..……………..……..3 In the two months after pregnancy……………….4 In the last 12 months……………………………..….5	If '3' move to question 11c. If not, skip to question 11d.
11c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………...……..…...1 More than before……………………………….…2 Less than before…………………………………..3	
11d.	Who was the main person that did this?	Husband/partner…………………..……..………..1 In-laws……………………………………………...2 Natal family……………………………...………..3 Other………………………………………..……….4	
11e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner…………...…...…………………1 In-laws…………………….……………………..2 Natal family……………..…….……………….3 Other…………………………………………………4	
11f.	In the last 12 months, how often have you experienced this?	Not at all……………………….………………….1 Single event…………....……………………….2 Occasional……………………………………….3 Most of the time…………………………………..4 On-going…………………………………………..5	
12a.	Has anyone in your family ever threatened to hurt you or someone you care about?	Yes…………………………………………………1 No…………………………………………………2	If '2' skip to question 13a.
12b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………………...1 During marriage but before pregnancy………….2 During pregnancy……………..……………..……..3 In the two months after pregnancy……………….4 In the last 12 months……………………………..….5	If '3' move to question 12c. If not, skip to question 12d.
12c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………...……..…...1 More than before……………………………….…2 Less than before…………………………………..3	
12d.	Who was the main person	Husband/partner…………………..……..………..1	

	that did this?	In-laws…………………………….…………….2 Natal family…………………………..……….3 Other……………………………………….………4	
12e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………..….…………………1 In-laws………………….…………………….2 Natal family……………..……………………3 Other………………………………………………4	
12f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………….1 Single event…………...……………………….2 Occasional…………………………………….3 Most of the time……………………………...4 On-going………………………………………...5	
13a.	Has anyone in your family ever insulted you for not bringing dowry?	Yes…………………………………………………1 No……………………………………….……….2	If '2' skip to question 14a.
13b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………….…………...1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months……………………….…..5	If '3' move to question 13c. If not, skip to question 13d.
13c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before………………..……..…...1 More than before……………………….…2 Less than before…………………………..3	
13d.	Who was the main person that did this?	Husband/partner…………………..……..……….1 In-laws…………………………….…………….2 Natal family…………………………..……….3 Other……………………………………….………4	
13e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………..….…………………1 In-laws………………….…………………….2 Natal family……………..……………………3 Other………………………………………………4	
13f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………….1 Single event…………...……………………….2 Occasional…………………………………….3 Most of the time……………………………...4 On-going………………………………………...5	
14a.	Has anyone in your family ever insulted you for not having a male child?	Yes…………………………………………………1 No……………………………………….……….2	If '2' or '3' skip to question 15a.
14b.	When did you experience this?	Before marriage…………………….…………...1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4	If '3' move to question 14c. If not, skip to

	SELECT ALL THAT APPLY	In the last 12 months……………………………..…..5	question 14d.
14c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………….……..…...1 More than before……………………………….2 Less than before…………………………………..3	
14d.	Who was the main person that did this?	Husband/partner…………………..……..……….1 In-laws………………………………….……………...2 Natal family……………………………..………..3 Other…………………………………………..……..4	
14e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner…………..…..…………………1 In-laws………………………….…………………..2 Natal family……………..……..…………………..3 Other…………………………………………………..4	
14f.	In the last 12 months, how often have you experienced this?	Not at all…………………………………………….1 Single event…………....…………………………..2 Occasional…………………………………………..3 Most of the time…………………………………...4 On-going…………………………………………....5	
15a.	Has anyone in your family ever prevented you from or forced you not to attend school/college/other educational institution?	Yes……………………………………………………1 No……………………………………….…………….2	If '2' skip to question 16a.
15b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………………..1 During marriage but before pregnancy…………2 During pregnancy…………...………….……….3 In the two months after pregnancy……………….4 In the last 12 months……………………………..…..5	If '3' move to question 15c. If not, skip to question 15d.
15c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………….……..…...1 More than before……………………………….2 Less than before…………………………………..3	
15d.	Who was the main person that did this?	Husband/partner…………………..……..……….1 In-laws………………………………….……………...2 Natal family……………………………..………..3 Other…………………………………………..……..4	
15e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner…………..…..…………………1 In-laws………………………….…………………..2 Natal family……………..……..…………………..3 Other…………………………………………………..4	
15f.	In the last 12 months, how often have you experienced this?	Not at all…………………………………………….1 Single event…………....…………………………..2 Occasional…………………………………………..3 Most of the time…………………………………...4	

		On-going……………………………………………..5	
16a.	Has anyone in your family ever prevented you from taking up a job?	Yes……………………………………………………1 No…………………………………………….………2	If '2' skip to question 17a.
16b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………….…………….1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the last two months after pregnancy……………….4 In the last 12 months…………………………..…..5	If 3 move to 16c. if not, skip to 16d.
16c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………...……..…..1 More than before……………………………….…2 Less than before…………………………………..3	
16d.	Who was the main person that did this?	Husband/partner……………….……..………..1 In-laws……………………………….…………...2 Natal family…………………………..………..3 Other…………………………………….……….4	
16e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………..…..………………….1 In-laws………………….………………………..2 Natal family……………..……….…………….3 Other…………………………………………………4	
16f.	In the last 12 months, how often have you experienced this?	Not at all…………………………………………1 Single event…………....………………………..2 Occasional…………………………………………3 Most of the time……………………………….…4 On-going……………………………………….....5	
17a.	Has anyone in your family ever screamed at you or harassed you?	Yes……………………………………………………1 No…………………………………………….………2	If '2' skip to question 18a.
17b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………….…………….1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months…………………………..…..5	If '3' move to question 17c. If not, skip to question 17d.
17c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………...……..…..1 More than before……………………………….…2 Less than before…………………………………..3	
17d.	Who was the main person that did this?	Husband/partner……………….……..………..1 In-laws……………………………….…………...2 Natal family…………………………..………..3 Other…………………………………….……….4	
17e.	Have you ever experienced this from anyone else?	Husband/partner………..…..………………….1 In-laws………………….………………………..2 Natal family……………..……….…………….3	

	SELECT ALL THAT APPLY	Other……………………………………………….4	
17f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………...…………………………2 Occasional…………………………………………3 Most of the time…………………………………..4 On-going……………………………………………..5	
18a.	Has anyone in your family ever engaged in manipulative behaviours?	Yes…………………………………………………1 No…………………………………………………2	If '2' skip to question 19a.
18b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………………...1 During marriage but before pregnancy………….2 During pregnancy……………...………….………3 In the two months after pregnancy……………….4 In the last 12 months……………………….…..5	If '3' move to question 18c. If not, skip to question 18d.
18c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………...……...…..1 More than before……………………………….2 Less than before…………………………………..3	
18d.	Who was the main person that did this?	Husband/partner………………….……..……….1 In-laws………………………………………………..2 Natal family…………………………...………..3 Other……………………………………….…….4	
18e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………..…..…………………1 In-laws…………………….…………………….2 Natal family……………..……………………..3 Other…………………………………………………4	
18f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………...…………………………2 Occasional…………………………………………3 Most of the time…………………………………..4 On-going……………………………………………..5	
19a.	Have you ever experienced any other negative verbal, emotional or psychological behaviours from anyone in your family?	Y……………………………………………………1 No…..……….…………………………………………2	If 2 skip to question 20a.
19b.	What did you experience?	FREE TEXT RESPONSE	
19c.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………………….1 During marriage but before pregnancy………..…2 During pregnancy…………………………………...3 In the two months after pregnancy……………….4 In the last 12 months…………………………....5	If '3' move to question 19d. If not, skip to question 19e.
19d.	How often did you experience this during	Same as before……………………………………1 More than before…………………………………2	

	pregnancy compared to before pregnancy?	Less than before…………………………………..3	
19e.	Who was the main person that did this?	Husband/partner……………………………………1 In-laws……………………………………………...2 Natal family…………………………………………3 Other…………………………………………………4	
19f.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner…………………………………1 In-laws……………………………………………...2 Natal family…………………………………………3 Other…………………………………………………4	
19g.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………………………………………2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going………………..…………………………5	
20a.	Has anyone in your family ever withheld money from you/prohibited access to family income?	Yes……………………………………………………1 No……………………………………………………2	If '2' skip to question 21a.
20b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………….……………...1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months……………………………..…..5	If '3' move to question 20c. If not, skip to question 20d.
20c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………..……..…...1 More than before……………………………….2 Less than before…………………………………..3	
20d.	Who was the main person that did this?	Husband/partner……………….……..………..1 In-laws………………………………….………...2 Natal family………………………………..………..3 Other………………………………………….…….4	
20e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………..…..…………………1 In-laws……………………….………………….2 Natal family……………..……….………………..3 Other…………………………………………………4	
20f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………...………………………….2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going……………………………………………..5	
21a.	Has anyone in your family ever denied you or your children food or shelter?	Yes……………………………………………………1 No……………………………………………………2	If '2' skip to question 22a.
21b.	When did you experience	Before marriage…………………….……………...1	If '3' move

	this? SELECT ALL THAT APPLY	During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months…………………………..…..5	to question 21c. If not, skip to question 21d.
21c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………...……..…...1 More than before………………………….….2 Less than before…………………………….….3	
21d.	Who was the main person that did this?	Husband/partner…………………..……..……….1 In-laws…………………………………….………………..2 Natal family……………………………...……….3 Other………………………………………….……….4	
21e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………...…..………………….1 In-laws…………………….………………………..2 Natal family……………..…….………………..3 Other………………………………………………….4	
21f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………....…………………………2 Occasional…………………………………………3 Most of the time………………………………...4 On-going…………………………………………...5	
22a.	Has anyone in your family ever forced you out of the house?	Yes…………………………………………………1 No………………………………………….………2	If '2' skip to question 23a.
22b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………………...1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months…………………………..…..5	If '3' move to question 22c. If not, skip to question 23d.
22c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………...……..…...1 More than before………………………….….2 Less than before…………………………….….3	
22d.	Who was the main person that did this?	Husband/partner…………………..……..……….1 In-laws…………………………………….………………..2 Natal family……………………………...……….3 Other………………………………………….……….4	
22e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………...…..………………….1 In-laws…………………….………………………..2 Natal family……………..…….………………..3 Other………………………………………………….4	
22f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………....…………………………2 Occasional…………………………………………3	

		Most of the time…………………………………...4 On-going…………………………………………...5	
23a.	Has anyone in your family ever prevented you from accessing or using any part of the house?	Yes…………………………………………………1 No…………………………………………………2	If '2' skip to question 24a.
23b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………………...1 During marriage but before pregnancy………….2 During pregnancy………………………………3 In the two months after pregnancy……………….4 In the last 12 months…………………………….5	If '3' move to question 23c. If not, skip to question 23d.
23c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………………………1 More than before………………………………2 Less than before…………………………………..3	
23d.	Who was the main person that did this?	Husband/partner……………………………….1 In-laws………………………………………………..2 Natal family……………………………………….3 Other…………………………………………………4	
23e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………………………………1 In-laws……………………………………………..2 Natal family………………………………………..3 Other…………………………………………………4	
23f.	In the last 12 months, how often have you experienced this?	Not at all…………………………………………1 Single event……………………………………2 Occasional………………………………………3 Most of the time…………………………………...4 On-going…………………………………………...5	
24a.	Has anyone in your family ever sold/pawned/disposed of your stridhan, or any other valuables without your consent?	Yes…………………………………………………1 No…………………………………………………2	If '2' skip to question 25a.
24b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………………...1 During marriage but before pregnancy………….2 During pregnancy………………………………3 In the two months after pregnancy……………….4 In the last 12 months…………………………….5	If '3' move to question 24c. If not, skip to question 24d.
24c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………………………1 More than before………………………………2 Less than before…………………………………..3	
24d.	Who was the main person that did this?	Husband/partner……………………………….1 In-laws………………………………………………..2	

		Natal family……………………………..………..3 Other……………………………………….………4	
24e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………..…..…………………1 In-laws…………………….……………………..2 Natal family……………..……………………..3 Other…………………………………………………4	
24f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………...……………………………2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going…………………………………………...5	
25a.	Has anyone in your family ever forced you to hand over your income?	Yes……………………………………………………1 No……………………………………….……………2	If '2' skip to question 26a.
25b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage……………………………………...1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months……………………………..….5	If '3' move to question 25c. If not, skip to question 25d.
25c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………...……...…..1 More than before……………………………..…2 Less than before…………………………………..3	
25d.	Who was the main person that did this?	Husband/partner…………………..……..……….1 In-laws………………………………………………...2 Natal family……………………………..………..3 Other……………………………………….………4	
25e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………..…..…………………1 In-laws…………………….……………………..2 Natal family……………..……………………..3 Other…………………………………………………4	
25f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………...……………………………2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going…………………………………………...5	
26a.	Has anyone in your family ever refused to pay/contribute to household rent/bills?	Yes……………………………………………………1 No……………………………………….……………2	If '2' skip to question 27a.
26b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage……………………………………...1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months……………………………..….5	If '3' move to question 26c. If not, skip to question

			26d.
26c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………..……..…..1 More than before………………………….….2 Less than before…………………………….3	
26d.	Who was the main person that did this?	Husband/partner………………….……..……….1 In-laws……………………………….…………...2 Natal family……………………………..……….3 Other……………………………………….…….4	
26e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………..…..………………1 In-laws………………….…………………..2 Natal family……………..…….……………..3 Other……………………………………………4	
26f.	In the last 12 months, how often have you experienced this?	Not at all……………………….………………1 Single event…………....…………………….2 Occasional…………………….……………3 Most of the time…………………………...4 On-going………………………………….....5	
27a.	Has anyone in your family ever forced you to obtain employment?	Yes……………………………………………1 No……………………………………….…………2	If '2' skip to question 28a.
27b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………...1 During marriage but before pregnancy………….2 During pregnancy…………..……….……….3 In the two months after pregnancy……………….4 In the last 12 months…………………….….5	If '3' move to question 27c. If not, skip to question 27d.
27c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………..……..…..1 More than before………………………….….2 Less than before…………………………….3	
27d.	Who was the main person that did this?	Husband/partner………………….……..……….1 In-laws……………………………….…………...2 Natal family……………………………..……….3 Other……………………………………….…….4	
27e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………..…..………………1 In-laws………………….…………………..2 Natal family……………..…….……………..3 Other……………………………………………4	
27f.	In the last 12 months, how often have you experienced this?	Not at all……………………….………………1 Single event…………....…………………….2 Occasional…………………….……………3 Most of the time…………………………...4 On-going………………………………….....5	
28a.	Has anyone in your family ever lied about financial	Yes……………………………………………1 No……………………………………….…………2	If '2' skip to question

	assets or debts?		29a.
28b.	When did this happen? SELECT ALL THAT APPLY	Before marriage……………………….………………..1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months……………………………..…..5	If '3' move to question 28c. If not, skip to question 28d.
28c.	How often did this happen during pregnancy compared to before pregnancy?	Same as before……………………..……..…..1 More than before……………………………….…2 Less than before………………………………….3	
28d.	Who was the main person that did this?	Husband/partner…………………..…….……….1 In-laws……………………………….………………...2 Natal family……………………………...………..3 Other…………………………………………..……….4	
28e.	Was there anyone else that did this? SELECT ALL THAT APPLY	Husband/partner………..…..…………………1 In-laws………………………….……………………..2 Natal family…………….……………………..3 Other………………………………………………….4	
28f.	In the last 12 months, how often did this happen?	Not at all……………………………………………1 Single event…………...…………………………2 Occasional…………………………………………3 Most of the time………………………………...4 On-going…………………………………………...5	
29a.	Has anyone in your family ever asked you for reasons for expenditure?	Yes……………………………………………………1 No……………………………………….……………2	If '2' skip to question 30a.
29b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage……………………….………………..1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months……………………………..…..5	If '3' move to question 29c. If not, skip to question 29d.
29c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………..……..…..1 More than before……………………………….…2 Less than before………………………………….3	
29d.	Who was the main person that did this?	Husband/partner…………………..…….……….1 In-laws……………………………….………………...2 Natal family……………………………...………..3 Other…………………………………………..……….4	
29e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………..…..…………………1 In-laws………………………….……………………..2 Natal family…………….……………………..3 Other………………………………………………….4	
29f.	In the last 12 months, how often have you experienced	Not at all……………………………………………1 Single event…………...…………………………2	

	this?	Occasional……………………………………….3 Most of the time…………………………………..4 On-going…………………………………………...5	
30a.	Has anyone in your family ever stolen money from you?	Yes…………………………………………………1 No………………………………………………….2	If '2' skip to question 31a.
30b.	When did this happen? SELECT ALL THAT APPLY	Before marriage…………………….……………..1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months…………………………..…..5	If '3' move to question 30c. If not, skip to question 30d.
30c.	How often did this happen during pregnancy compared to before pregnancy?	Same as before…………………...……..…..1 More than before………………………….…2 Less than before…………………………….3	
30d.	Who was the main person that did this?	Husband/partner…………………..……..………..1 In-laws…………………………………….………...2 Natal family……………………………..………..3 Other……………………………………….……….4	
30e.	Has anyone else ever done this? SELECT ALL THAT APPLY	Husband/partner…………..…..………………….1 In-laws…………………….……………………..2 Natal family……………..……..…………………3 Other………………………………………………….4	
30f.	In the last 12 months, how often has this happened?	Not at all…………………………………………1 Single event…………....…………………………2 Occasional…………………….………………….3 Most of the time…………………………………..4 On-going…………………………………………...5	
31a.	Has anyone in your family ever demanded money from you?	Yes…………………………………………………1 No………………………………………………….2	If '2' skip to question 32a.
31b.	When did this happen? SELECT ALL THAT APPLY	Before marriage…………………….……………..1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months…………………………..…..5	If '3' move to question 31c. If not, skip to question 31d.
31c.	How often did this happen during pregnancy compared to before pregnancy?	Same as before…………………...……..…..1 More than before………………………….…2 Less than before…………………………….3	
31d.	Who was the main person that did this?	Husband/partner…………………..……..………..1 In-laws…………………………………….………...2 Natal family……………………………..………..3 Other……………………………………….……….4	
31e.	Has anyone else ever done this?	Husband/partner…………..…..………………….1 In-laws…………………….……………………..2	

	SELECT ALL THAT APPLY	Natal family……………….……….………………..3 Other…………………………………………………4	
31f.	In the last 12 months, how often has this happened?	Not at all……………………………………………1 Single event…………...………………………….2 Occasional…………………………………………3 Most of the time………………………………...4 On-going……………………………………….....5	
32a.	Has anyone in your family ever placed dowry demands on you?	Yes…………………………………………………1 No…………………………………….……………2	If '2' skip to question 33a.
32b.	When did this happen? SELECT ALL THAT APPLY	Before marriage…………………….…………….1 During marriage but before pregnancy………….2 During pregnancy……………..……………..……3 In the two months after pregnancy……………….4 In the last 12 months…………………………..…..5	If '3' move to question 32c. If not, skip to question 32d.
32c.	How often did this happen during pregnancy compared to before pregnancy?	Same as before…………………...……..…..1 More than before……………………………..…2 Less than before………………………………..3	
32d.	Who was the main person that did this?	Husband/partner…………………..……..………..1 In-laws…………………………….………………...2 Natal family…………………………….………..3 Other…………………………………….……….4	
32e.	Has anyone else ever done this? SELECT ALL THAT APPLY	Husband/partner…………...…...…………………1 In-laws………………………….…………………..2 Natal family……………….……….………………..3 Other…………………………………………………4	
32f.	In the last 12 months, how often has this happened?	Not at all……………………………………………1 Single event…………...………………………….2 Occasional…………………………………………3 Most of the time………………………………...4 On-going……………………………………….....5	
33a.	Have you ever experienced any other financial or economic difficulties from anyone in your family?	Yes…………………………………………………1 No…………………….……………………………2	If '2' skip to question 34a.
33b.	What did you experience?	FREE TEXT RESPONSE	
33c.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………………..1 During marriage but before pregnancy…………2 During pregnancy………………………………...3 In the two months after pregnancy…………….4 In the last 12 months……………………………...5	If '3' move to question 33d. If not, skip to question 33e.
33d.	How often did you experience this during	Same as before……………………………………1 More than before…………………………………2	

	pregnancy compared to before pregnancy?	Less than before……………………………….3	
33e.	Who was the main person that did this?	Husband/partner……………………………………1 In-laws……………………………………………..2 Natal family……………………………………….3 Other……………………………………………….4	
33f.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner……………………………………1 In-laws……………………………………………..2 Natal family……………………………………….3 Other……………………………………………….4	
33g.	In the last 12 months, how often have you experienced this?	Not at all…………………………………………1 Single event……………………………………….2 Occasional………………………………………3 Most of the time…………………………………..4 On-going……………………….……………………5	
34a.	Has anyone in your family ever pushed you, shoved you, shaken you or twisted your arm?	Yes…………………………………………………1 No……………………………………….…………2	If '2' skip to question 35a.
34b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………….……………...1 During marriage but before pregnancy………….2 During pregnancy……………...……………..………3 In the two months after pregnancy……………….4 In the last 12 months…………………………..….5	If '3' move to question 34c. If not, skip to question 34d.
34c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………..……..…...1 More than before……………………………….2 Less than before……………………………….3	
34d.	Who was the main person that did this?	Husband/partner…………………..……..………..1 In-laws……………………………….…………...2 Natal family……………………………..………..3 Other…………………………………………….…….4	
34e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………..…..…………………1 In-laws……………………..……………………..2 Natal family……………..…….………………..3 Other…………………………………….…………….4	
34f.	In the last 12 months, how often have you experienced this?	Not at all…………………………………………1 Single event…………...……………………………2 Occasional…………………………………………3 Most of the time…………………………………..4 On-going…………………………………………...5	
35a.	Has anyone in your family ever beat, slapped or pinched you?	Yes…………………………………………………1 No……………………………………….…………2	If '2' skip to question 36a.
35b.	When did you experience	Before marriage…………………….……………...1	If '3' move

	this? SELECT ALL THAT APPLY	During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months…………………………..…..5	to question 35c. If not, skip to question 35d.
35c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………..……..…...1 More than before…………………………….…2 Less than before…………………………………..3	
35d.	Who was the main person that did this?	Husband/partner…………………..……..………..1 In-laws…………………………………….………………...2 Natal family……………………………...………..3 Other…………………………………………..……….4	
35e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………….…..…..………………1 In-laws…………………….……………………..2 Natal family……………..…….…………………..3 Other……………………………………………….…4	
35f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………....……………………………2 Occasional…………………………………………3 Most of the time………………………………...4 On-going…………………………………………...5	
36a.	Has anyone in your family ever thrown something at you?	Yes……………………………………………………1 No……………………………………….……………2	If ‘2’ skip to question 37a.
36b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………………...1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months…………………………..…..5	If ‘3’ move to question 36c. If not, skip to question 36d.
36c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………..……..…...1 More than before…………………………….…2 Less than before…………………………………..3	
36d.	Who was the main person that did this?	Husband/partner…………………..……..………..1 In-laws…………………………………….………………...2 Natal family……………………………...………..3 Other…………………………………………..……….4	
36e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………….…..…..………………1 In-laws…………………….……………………..2 Natal family……………..…….…………………..3 Other……………………………………………….…4	
36f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………....……………………………2 Occasional…………………………………………3	

		Most of the time…………………………………...4 On-going…………………………………………...5	
37a.	Has anyone in your family ever pulled your hair?	Yes…………………………………………………1 No…………………………………………………2	If ‘2’ skip to question 38a.
37b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………………...1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months……………………………..…..5	If ‘3’ move to question 37c. If not, skip to question 37d.
37c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………...……...…..1 More than before……………………………..…2 Less than before…………………………………..3	
37d.	Who was the main person that did this?	Husband/partner…………………..……..………..1 In-laws……………………………………………...2 Natal family…………………………………..………..3 Other……………………………………………….4	
37e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner…………..…..…………………1 In-laws…………………….……………………..2 Natal family……………..……..………………..3 Other…………………………………………………4	
37f.	In the last 12 months, how often have you experienced this?	Not at all…………………………………………1 Single event…………...……………………………2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going…………………………………………...5	
38a.	Has anyone in your family ever physically restrained you?	Yes…………………………………………………1 No…………………………………………………2	If ‘2’ skip to question 39a.
38b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………………...1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months……………………………..…..5	If ‘3’ move to 38c. If not, skip to question 38d.
38c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………...……...…..1 More than before……………………………..…2 Less than before…………………………………..3	
38d.	Who was the main person that did this?	Husband/partner…………………..……..………..1 In-laws……………………………………………...2 Natal family…………………………………..………..3 Other……………………………………………….4	
38e.	Have you ever experienced this from anyone else?	Husband/partner…………..…..…………………1 In-laws…………………….……………………..2	

	SELECT ALL THAT APPLY	Natal family……………….……….…………….3 Other…………………………………………….…4	
38f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………...………………………….2 Occasional…………………………………………3 Most of the time………………………………...4 On-going………………………………………...5	
39a.	Has anyone in your family ever banged your head?	Yes……………………………………………………1 No……………………………………….…………2	If '2' skip to question 40a.
39b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………….……………..1 During marriage but before pregnancy………….2 During pregnancy……………..……………..……3 In the two months after pregnancy……………….4 In the last 12 months…………………………..…..5	If '3' move to question 39c. If not, skip to question 39d.
39c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………...……...…..1 More than before……………………………….…2 Less than before…………………………………..3	
39d.	Who was the main person that did this?	Husband/partner…………………..……..………..1 In-laws………………………………….…………...2 Natal family…………………………….………..3 Other…………………………………….……….4	
39e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner…………..…..…………………1 In-laws……………………….……………………..2 Natal family……………….……….…………….3 Other…………………………………………….…4	
39f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………...………………………….2 Occasional…………………………………………3 Most of the time………………………………...4 On-going………………………………………...5	
40a.	Has anyone in your family ever punched you in the face, chest or abdomen?	Yes……………………………………………………1 No……………………………………….…………2	If '2' skip to question 41a.
40b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………….……………..1 During marriage but before pregnancy………….2 During pregnancy……………..……………..……3 In the two months after pregnancy……………….4 In the last 12 months…………………………..…..5	If '3' move to question 40c. If not, skip to question 40d.
40c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………...……...…..1 More than before……………………………….…2 Less than before…………………………………..3	

40d.	Who was the main person that did this?	Husband/partner……………………..……..………..1 In-laws…………………………………….…………….2 Natal family……………………………..………..3 Other…………………………………………..………4	
40e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner…………..…..…………………1 In-laws……………………….……………………..2 Natal family……………….………………………..3 Other…………………………………………………4	
40f.	In the last 12 months, how often have you experienced this?	Not at all…………………………………………1 Single event…………...……………………………2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going…………………………………………...5	
41a.	Has anyone in your family ever kicked you in the face, chest or abdomen?	Yes…………………………………………………1 No……………………………………….………….2	If '2' skip to question 42a.
41b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………….……………...1 During marriage but before pregnancy………….2 During pregnancy……………..………….………3 In the two months after pregnancy……………….4 In the last 12 months……………………….…..5	If '3' move to question 41c. If not, skip to question 41d.
41c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………...…….…...1 More than before……………………………….2 Less than before…………………………………..3	
41d.	Who was the main person that did this?	Husband/partner……………………..……..………..1 In-laws…………………………………….…………….2 Natal family……………………………..………..3 Other…………………………………………..………4	
41e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner…………..…..…………………1 In-laws……………………….……………………..2 Natal family……………….………………………..3 Other…………………………………………………4	
41f.	In the last 12 months, how often have you experienced this?	Not at all…………………………………………1 Single event…………...……………………………2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going…………………………………………...5	
42a.	Has anyone in your family ever used any instruments or weapons to threaten or harm you?	Yes…………………………………………………1 No……………………………………….………….2	If '2' skip to question 43a.
42b.	When did you experience this?	Before marriage…………………….……………...1 During marriage but before pregnancy………….2 During pregnancy……………..………….………3	If '3' move to question 42c. If not,

	SELECT ALL THAT APPLY	In the two months after pregnancy……………….4 In the last 12 months…………………………..…..5	skip to question 42d.
42c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………….……..…...1 More than before…………………………….…2 Less than before…………………………………..3	
42d.	Who was the main person that did this?	Husband/partner………………….……..……….1 In-laws……………………………….……………...2 Natal family……………………………..……….3 Other……………………………………….……….4	
42e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………..…..…………………1 In-laws………………………….…………………..2 Natal family……………..….…………………..3 Other…………………………………………………4	
42f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………....……………………………2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going……………………………………………..5	
43a.	Has anyone in your family ever hit you with a belt?	Yes……………………………………………………1 No……………………………………………………2	If '2' skip to question 44a.
43b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………………...1 During marriage but before pregnancy…………2 During pregnancy……………..………….………3 In the two months after pregnancy……………….4 In the last 12 months…………………………..…..5	If '3' move to question 43c. If not, skip to question 43d.
43c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………….……..…...1 More than before…………………………….…2 Less than before…………………………………..3	
43d.	Who was the main person that did this?	Husband/partner………………….……..……….1 In-laws……………………………….……………...2 Natal family……………………………..……….3 Other……………………………………….……….4	
43e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………..…..…………………1 In-laws………………………….…………………..2 Natal family……………..….…………………..3 Other…………………………………………………4	
43f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………....……………………………2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going……………………………………………..5	

44a.	Has anyone in your family ever bitten you?	Yes……………………………………………………1 No……………………………………………………2	If '2' skip to question 45a.
44b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………………..1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months……………………………..…..5	If '3' move to question 44c. If not, skip to question 44d.
44c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………...……...…..1 More than before…………………………….…2 Less than before…………………………………..3	
44d.	Who was the main person that did this?	Husband/partner…………………..……..……….1 In-laws……………………………………………...2 Natal family……………………………..………..3 Other…………………………………………….………4	
44e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………...…..…………………1 In-laws……………………….…………………..2 Natal family……………..………………………..3 Other…………………………………………………4	
44f.	In the last 12 months, how often have you experienced this?	Not at all…………………………………………1 Single event…………....…………………………2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going…………………………………………...5	
45a.	Has anyone in your family ever suffocated you or strangled you?	Yes……………………………………………………1 No……………………………………………………2	If '2' skip to question 46a.
45b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………………..1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months……………………………..…..5	If '3' move to question 45c. If not, skip to question 45d.
45c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………...……...…..1 More than before…………………………….…2 Less than before…………………………………..3	
45d.	Who was the main person that did this?	Husband/partner…………………..……..……….1 In-laws……………………………………………...2 Natal family……………………………..………..3 Other…………………………………………….………4	
45e.	Have you ever experienced this from anyone else?	Husband/partner………...…..…………………1 In-laws……………………….…………………..2 Natal family……………..………………………..3	

	SELECT ALL THAT APPLY	Other…………………………………………………4	
45f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………...……………………………2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going…………………………………………...5	
46a.	Has anyone in your family ever doused you in kerosene?	Yes……………………………………………………1 No……………………………………………………2	If '2' skip to question 47a.
46b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………………...1 During marriage but before pregnancy…………2 During pregnancy……………..………….………3 In the two months after pregnancy………………4 In the last 12 months……………………….……5	If '3' move to question 46c. If not, skip to question 46d.
46c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………...……...…..1 More than before……………………………..…2 Less than before…………………………………..3	
46d.	Who was the main person that did this?	Husband/partner………………..……..………..1 In-laws………………………………………………..2 Natal family……………………………...………..3 Other……………………………………….………4	
46e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………...…...…………………1 In-laws……………………..……………………..2 Natal family……………..……………………..3 Other…………………………………………………4	
46f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………...……………………………2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going…………………………………………...5	
47a.	Have you ever experienced any other harmful physical behaviours from anyone in your family?	Yes……………………………………………………1 No……………………………………………………2	If '2' skip to question 48a.
47b.	What did you experience?	FREE TEXT RESPONSE	
47c.	When did you experience this? SELECT ALL THAT APPLY	Before marriage……………………………………..1 During marriage but before pregnancy………..…2 During pregnancy…………………………………...3 In the two months after pregnancy………..……4 In the last 12 months……………………………..5	If '3' move to question 47d. If not, skip to question 47e.
47d.	How often did you experience this during pregnancy compared to	Same as before…………………….…………………1 More than before……………………………………2 Less than before…………………………………..3	

	before pregnancy?		
47e.	Who was the main person that did this?	Husband/partner……………………..………………1 In-laws……………………………………………...2 Natal family…………………………………………3 Other……………………………………………….4	
47f.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner…………………………………1 In-laws……………………………………………...2 Natal family………………………..……………3 Other…………………….……………………….4	
47g.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event……………………………………2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going……………….……………………………5	
48a.	Has anyone in your family ever physically forced you to have sexual intercourse when you did not want to?	Yes……………………………………………………1 No……………………………………….……………2	If '2' skip to question 49a.
48b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage………………….……………...1 During marriage but before pregnancy………….2 During pregnancy…………...……….…..………3 In the two months after pregnancy……………….4 In the last 12 months……………………….…..5	If '3' move to question 48c. If not, skip to question 48d.
48c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………..……..…...1 More than before……………………………..…2 Less than before…………………………………..3	
48d.	Who was the main person that did this?	Husband/partner………………..……..………..1 In-laws………………………………….…………...2 Natal family……………………………..………..3 Other…………………………………….………..4	
48e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner………...…..…………………1 In-laws……………………..……………………..2 Natal family……………..….…………………..3 Other……………………………………….…………4	
48f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………....……………………………2 Occasional…………………………………………3 Most of the time…………………………………...4 On-going…………………………………………...5	
49a.	Did you ever have sexual intercourse you did not want to because you were afraid of what the person might do?	Yes……………………………………………………1 No……………………………………….……………2	If '2' skip to question 50a.
49b.	When was this?	Before marriage………………….……………...1	If '3' move

	SELECT ALL THAT APPLY	During marriage but before pregnancy…………2 During pregnancy……………..………….………3 In the two months after pregnancy……………….4 In the last 12 months…………………………..…..5	to 49c. If not, skip to question 49d.
49c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………...……..…...1 More than before…………………………….…2 Less than before…………………………………..3	
49d.	Who is the main person this happened with?	Husband/partner…………………..…….………..1 In-laws……………………………….……………...2 Natal family……………………………..………..3 Other…………………………………………..……..4	
49e.	Has this ever happened with anyone else? SELECT ALL THAT APPLY	Husband/partner………..…..…………………1 In-laws…………………….……………………..2 Natal family……………..….………………….3 Other……………………………………….…………4	
49f.	In the last 12 months, how often has this happened?	Not at all……………………………………………1 Single event…………....…………………………2 Occasional…………………………………………3 Most of the time………………………………...4 On-going……………………………………….....5	
50a.	Has anyone in your family ever forced you to do something sexual that you found degrading or humiliating?	Yes…………………………………………………1 No……………………………………….……………2	If '2' skip to question 51a.
50b.	When was this? SELECT ALL THAT APPLY	Before marriage…………………………………..1 During marriage but before pregnancy…………2 During pregnancy……………..………….………3 In the two months after pregnancy……………….4 In the last 12 months…………………………..…..5	If '3' move to question 50c. If not, skip to question 50d.
50c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………...……..…...1 More than before…………………………….…2 Less than before…………………………………..3	
50d.	Who is the main person this happened with?	Husband/partner…………………..…….………..1 In-laws……………………………….……………...2 Natal family……………………………..………..3 Other…………………………………………..……..4	
50e.	Has this ever happened with anyone else? SELECT ALL THAT APPLY	Husband/partner………..…..…………………1 In-laws…………………….……………………..2 Natal family……………..….………………….3 Other……………………………………….…………4	
50f.	In the last 12 months, how often has this happened?	Not at all……………………………………………1 Single event…………....…………………………2	

		Occasional……………………………………….3 Most of the time…………………………………..4 On-going…………………………………………..5	
51a.	Has anyone in your family ever forced you to perform any sexual acts that you did not want to?	Yes…………………………………………………1 No…………………………………………………2	If '2' skip to question 52a.
51b.	When was this? SELECT ALL THAT APPLY	Before marriage……………………………………..1 During marriage but before pregnancy………….2 During pregnancy……………..……………..…….3 In the two months after pregnancy……………….4 In the last 12 months…………………………..….5	If '3' move to question 51c. If not, skip to question 51d.
51c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………...……..…..1 More than before………………………………..2 Less than before…………………………………..3	
51d.	Who is the main person this happened with?	Husband/partner…………………..……..………..1 In-laws………………………………………………..2 Natal family…………………………….………..3 Other…………………………………….…………4	
51e.	Has this ever happened with anyone else? SELECT ALL THAT APPLY	Husband/partner…………...…...…………………1 In-laws……………………….……………………..2 Natal family……………..…….………………..3 Other………………………………………………….4	
51f.	In the last 12 months, how often has this happened?	Not at all…………………………………………1 Single event…………....……………………….…2 Occasional……………………………………….3 Most of the time…………………………………..4 On-going…………………………………………..5	
52a.	Has anyone ever withheld sexual pleasure from you on purpose?	Yes…………………………………………………1 No…………………………………………………2	If '2' skip to question 53a.
52b.	When was this? SELECT ALL THAT APPLY	Before marriage……………………………………..1 During marriage but before pregnancy………….2 During pregnancy……………..……………..…….3 In the two months after pregnancy……………….4 In the last 12 months…………………………..….5	If '3' move to question 52c. If not, skip to question 52d.
52c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………...……..…..1 More than before………………………………..2 Less than before…………………………………..3	
52d.	Who is the main person that did this?	Husband/partner…………………..……..………..1 In-laws………………………………………………..2 Natal family…………………………….………..3	

		Other…………………………………………….……….4	
52e.	Has this ever happened with anyone else? SELECT ALL THAT APPLY	Husband/partner…………..…..……………………1 In-laws……………………….………………………..2 Natal family……………….……………………….3 Other………………………………………………….4	
52f.	In the last 12 months, how often has this happened?	Not at all……………………………………………1 Single event…………....………………………….2 Occasional………………………………………….3 Most of the time…………………………………...4 On-going…………………………………………...5	
53a.	Has anyone in your family ever prevented you from using contraception?	Yes…………………………………………………….1 No…………………………………………………….2	If '2' skip to question 54a.
53b.	When was this? SELECT ALL THAT APPLY	Before marriage…………………….……………...1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months……………………………..….5	If '3' move to question 53c. If not, skip to question 53d.
53c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………….....……..…...1 More than before……………………………….…2 Less than before…………………………………..3	
53d.	Who is the main person that did this?	Husband/partner…………………..……..………..1 In-laws………………………………………………...2 Natal family……………………………...………..3 Other…………………………………………….……….4	
53e.	Has this ever happened with anyone else? SELECT ALL THAT APPLY	Husband/partner…………..…..……………………1 In-laws……………………….………………………..2 Natal family……………….……………………….3 Other………………………………………………….4	
53f.	In the last 12 months, how often has this happened?	Not at all……………………………………………1 Single event…………....………………………….2 Occasional………………………………………….3 Most of the time…………………………………...4 On-going…………………………………………...5	
54a.	Has anyone in your family ever forced you to have children?	Yes…………………………………………………….1 No…………………………………………………….2	If '2' skip to question 55a.
54b.	When was this? SELECT ALL THAT APPLY	Before marriage…………………….……………...1 During marriage but before pregnancy………….2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months……………………………..….5	
54c.	Who is the main person that did this?	Same as before…………………….....……..…...1 More than before……………………………….…2	

		Less than before……………………………….3	
54d.	Has this ever happened with anyone else? SELECT ALL THAT APPLY	Husband/partner……………………………….1 In-laws……………………………………………..2 Natal family……………………………………..3 Other……………………………………………….4	
54e.	During your marriage, how often has this happened?	Husband/partner……………………………….1 In-laws……………………………………………..2 Natal family……………………………………..3 Other……………………………………………….4	
55a.	Has anyone in your family ever forced oral sex against your will?	Yes………………………………………………….1 No…………………………………………………..2	If '2' skip to question 56a.
55b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage………………………………...1 During marriage but before pregnancy………….2 During pregnancy……………………………….3 In the two months after pregnancy……………….4 In the last 12 months…………………………….5	If '3' move to question 55c. If not, skip to question 55d.
55c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before……………………………….1 More than before……………………………….2 Less than before……………………………….3	
57d.	Who was the main person that did this?	Husband/partner……………………………….1 In-laws……………………………………………..2 Natal family……………………………………..3 Other……………………………………………….4	
55e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner……………………………….1 In-laws……………………………………………..2 Natal family……………………………………..3 Other……………………………………………….4	
55f.	In the last 12 months, how often have you experienced this?	Not at all…………………………………………1 Single event……………………………………….2 Occasional………………………………………..3 Most of the time…………………………………..4 On-going…………………………………………...5	
56a.	Has anyone in your family ever forced anal sex against your will?	Yes………………………………………………….1 No…………………………………………………..2	If '2' skip to question 57a.
56b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage………………………………...1 During marriage but before pregnancy………….2 During pregnancy……………………………….3 In the two months after pregnancy……………….4 In the last 12 months…………………………….5	If '3' move to question 56c. If not, skip to question 56d.
56c.	How often did you experience this during	Same as before……………………………….1 More than before……………………………….2	

	pregnancy compared to before pregnancy?	Less than before……………………………….3	
56d.	Who was the main person that did this?	Husband/partner…………………………………1 In-laws……………………………………………..2 Natal family……………………………………..3 Other……………………………………………….4	
56e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner…………………………………1 In-laws……………………………………………..2 Natal family…………………………………..3 Other…………………………………………………4	
56f.	In the last 12 months, how often have you experienced this?	Not at all…………………………………………1 Single event……………………………………2 Occasional………………………………………3 Most of the time………………………………..4 On-going…………………………………………..5	
57a.	Has anyone in your family ever forced you to watch pornography or other sexual material against your will?	Yes……………………………………………………1 No……………………………………………………2	If '2' skip to question 58a.
57b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage…………………………………..1 During marriage but before pregnancy………….2 During pregnancy…………………………………3 In the two months after pregnancy……………….4 In the last 12 months……………………………..5	If '3' move to question 57c. If not, skip to question 57d.
57c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………………………...1 More than before…………………………………2 Less than before……………………………….3	
57d.	Who was the main person that did this?	Husband/partner…………………………………1 In-laws……………………………………………..2 Natal family……………………………………..3 Other……………………………………………….4	
57e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner…………………………………1 In-laws……………………………………………..2 Natal family…………………………………..3 Other…………………………………………………4	
57f.	In the last 12 months, how often have you experienced this?	Not at all…………………………………………1 Single event……………………………………2 Occasional………………………………………3 Most of the time………………………………..4 On-going…………………………………………..5	
58a.	Has anyone in your family ever forcibly used you against your will to entertain others?	Yes……………………………………………………1 No……………………………………………………2	If '2' skip to question 59a.

58b.	When did you experience this? SELECT ALL THAT APPLY	Before marriage……………………………………..1 During marriage but before pregnancy…………2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months……………………………..…..5	If '3' move to question 58c. If not, skip to question 58d.
58c.	How often did you experience this during pregnancy compared to before pregnancy?	Same as before…………………...……..…...1 More than before…………………………….…2 Less than before………………………………..3	
58d.	Who was the main person that did this?	Husband/partner…………………..……..………..1 In-laws…………………………………….…………...2 Natal family……………………………...………..3 Other…………………………………………..……….4	
58e.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner…………..…..…………………1 In-laws………………………….………………..2 Natal family……………..……………………..3 Other……………………………………………….4	
58f.	In the last 12 months, how often have you experienced this?	Not at all……………………………………………1 Single event…………....…………………………2 Occasional…………………………………………3 Most of the time………………………………...4 On-going…………………………………………...5	
59a.	Has anyone in your family ever forced you to have an abortion?	Yes…………………………………………………1 No……………………………………….…………2	If '2' skip to question 60.
59b.	When did this happen? SELECT ALL THAT APPLY	Before marriage……………………………………..1 During marriage but before pregnancy…………2 During pregnancy……………..……………..………3 In the two months after pregnancy……………….4 In the last 12 months……………………………..…..5	
59c.	Who was the main person that did this?	Same as before…………………...……..…...1 More than before…………………………….…2 Less than before………………………………..3	
59d.	Have you ever experienced this from anyone else? SELECT ALL THAT APPLY	Husband/partner…………………..……..………..1 In-laws…………………………………….…………...2 Natal family……………………………...………..3 Other…………………………………………..……….4	
59e.	During your marriage, how often has this happened?	Husband/partner…………..…..…………………1 In-laws………………………….………………..2 Natal family……………..……………………..3 Other……………………………………………….4	
60 **SKIP**			IF ANSWERED YES (1) TO SUB-

			QUESTION (A) OF ANY OF THE QUESTIONS ABOVE, MOVE TO QUESTION 61a. IF NOT, SKIP TO QUESTION 64a.
Now I would like to ask you about causes of the behaviours and experiences discussed			
61a.	What have been the main underlying reason(s) for these experiences? SELECT ALL THAT APPLY	Financial constraints……………………………….1 Substance use (alcohol or drugs) by you..…….2 Substance use (alcohol or drugs) by family…...3 Suspicious behaviour by you……………………..4 Suspicious behaviour by family………………….5 Physical health problem for you………………...6 Physical health problem for family……………….7 Mental health problem for you…………………..8 Mental health problem for family…………………9 Extra-marital relationship by you…………….10 Extra-marital relationship by your partner..…11 Sexual incompatibility with your partner………12 Property issues………………………………….13 Reproductive health problems…………………14 Child custody issues……………………………..15 Other……………………………………………….16	If ‘16’, move to question 61b. If not, skip to question 62a.
61b.	Please specify	FREE TEXT RESPONSE	
Now I would like to ask you some questions on help-seeking			
62a.	Have you ever sought help for these issues from any of the following? SELECT ALL THAT APPLY	Natal family………………………………………….1 Marital family……………………………………2 Friends……………………………………….….3 Neighbours………………….…………………….4 Colleagues, employer…………………………...5 Caste, community panchayat…………………..6 Mahila Mandals……………………………………7 Women’s organisations…………………………..8 Political party social workers…………………..…9 Area social workers……………………………...10 Community leaders………………………………11 Shelter homes……………………………………12 Lawyers and courts………………………………13	If ‘16’, move to question 62b. If none selected move to question 62c. If any other selected, move to question

		Hospital/health professional…………………....14 Police……………………………………………..15 Other……………………………………………..16	63a.
62b.	Please specify	FREE TEXT RESPONSE	
62c.	What is the main reason for not seeking help?	FREE TEXT RESPONSE	
63a.	Are you aware that the SNEHA Centre can provide help for women experiencing violence?	Yes…………………………………………………1 No…………………………………………………2	If '2', skip to question 64a.
63b.	Have you ever asked for help from the SNEHA Centre?	Yes…………………………………………………1 No…………………………………………………2	
Now I would like to ask you about your husband's alcohol and drug use			
64a.	Does your husband drink alcohol?	Yes…………………………………………………1 No…………………………………………………2	If '2', skip to question 65a.
64b.	Has his alcohol consumption ever affected your child's care taking?	Yes…………………………………………………1 No…………………………………………………2	
64c.	Has he ever manhandled your child under the influence of alcohol?	Yes…………………………………………………1 No…………………………………………………2	
64d.	Has he ever manhandled you under the influence of alcohol?	Yes…………………………………………………1 No…………………………………………………2	
65a.	Does your husband use drugs or any other substances for recreational purposes?	Yes…………………………………………………1 No…………………………………………………2	If '2', skip to end of questionna ire
65b.	Has his drug or other substance use ever affected your child's care taking?	Yes…………………………………………………1 No…………………………………………………2	
65c.	Has he ever manhandled your child under the influence of drugs or other substances?	Yes…………………………………………………1 No…………………………………………………2	
65d.	Has he ever manhandled you under the influence of drugs or other substances?	Yes…………………………………………………1 No…………………………………………………2	

7.4. Interview topic guides

Version 1

Aims

- To explore the experiences of family violence, with a focus on intimate partner violence and common mental disorders
- To explore the coping mechanisms that women use to deal with family violence and common mental disorders
- To identify factors that are different between these women and those who seem to have been resilient to developing common mental disorders following experiences of family violence.

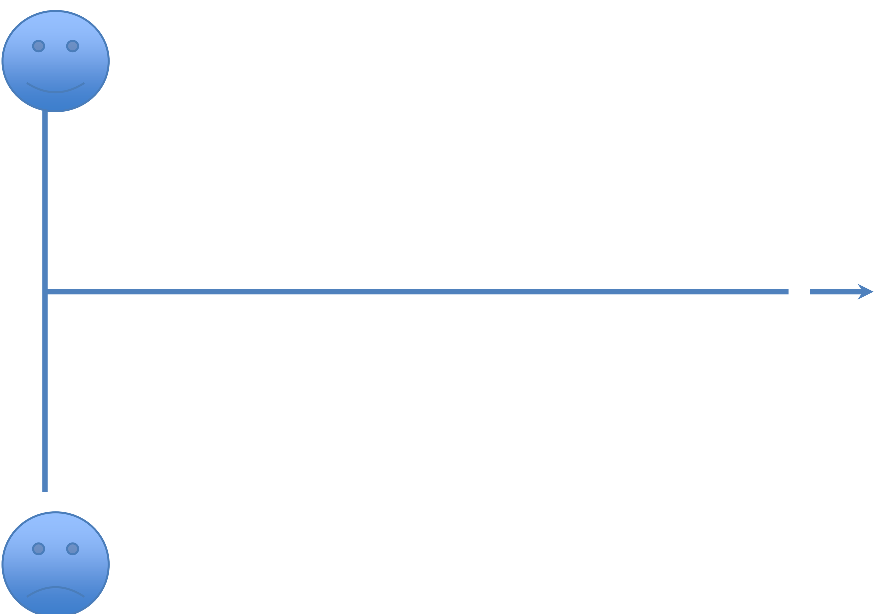
Facilitator to introduce themselves. Remind participant about the nature of the research and their right to terminate the interview ay any point or refusal to answer any questions. Also remind the participant of the confidential nature of the interview and that if the interview is interrupted, the subject of the conversation will be changed. Check that the participant is happy to continue.

<u>The marriage</u>

Thinking about your marriage, I'd like you to draw on the diagram a representation of how you have felt from the day you met your husband to the present day. Anything above the line represents feeling happy, loved, respected and anything below the line represents feeling sad, neglected, disrespected. Please also feel free to mark any significant events from your marriage on the diagram.

Interviewer to use to diagram to probe questions. Pick points that are high on the graph and ask the woman to explain what happened here, how she felt and why. Do the same for some low points on the graph.

Appendix 7



<u>Experiences</u>

Can you tell me about times of conflict with your husband?

Probe (if interviewee is struggling to find something to say):

-Reasons for conflict

-What happened

-How she feels

Can you tell me about how conflict with your husband has changed since you first met?

Probe (if interviewee is struggling to find something to say):

-Was there anything different about conflicts when they first met to today?

- How has the arrival of any children and/or the pregnancy process affected conflict?

Can you tell me about how you feel when you have conflict with your husband?

Probe (if interviewee is struggling to find something to say):

-Mood

-Time course of mood

-Origins of feelings

-Behaviour

-Worries

Can you describe a time when you have felt very worried or sad?

Can you tell me how you felt?

Probe (unless already mentioned):
-for the meaning of specific terms used ("weakness", "tension", "pain", "worry")
-how their daily life was affected (appetite, sleep, ability to work, relationships).

What do you think made you feel like this?

Probe (if interviewee is struggling to find something to say):
-Relationships
-Conflicts
-Thoughts about self

Coping mechanisms

Can you tell me what you do when you have conflict with your husband?

Probe (if interviewee is struggling to find something to say):
-Who did she ask for help and why?
-If nobody, why not?
-If did nothing at all, why not?
-If did something by herself but did not ask others for help, what did she do and why?

Can you tell me what you do when you feel very sad or worried?

Probe (if interviewee is struggling to find something to say):
-If nothing at all, why not?
-Who did she ask for help and why?
-If nobody, why not?
-If did something by herself but did not ask others for help, what did she do and why?

Who do you think could help when you have conflict with your husband or when you feel very sad?

Probe (if interviewee is struggling to find something to say):
-How family members, friends, neighbours, people in the community, SNEHA and health professionals could help.

<u>Resilience factors</u>

When you have conflict with your husband, what helps you to remain positive?

Probe (if interviewee is struggling to find something to say):
-*Is there anything that you do yourself to stop feeling sad? If so, what?*
- Is there anyone you go to? If so who and why?

When you have conflict with your husband, can you explain to me what happens with your sad or worried feelings?

Probe (if interviewee is struggling to find something to say):
-Do they get worse, if so why?
-Is conflict the cause of the sad feelings?
-*What is it about the conflict that makes her feel this way*

Why do you think some women are able to remain in good spirits even when they have conflict with their husbands?

Probe (if interviewee is struggling to find something to say):
-*What things would help them to remain in good spirits?*
-What might be different about their situation to hers?

Facilitator to inform the participant that the interview is now coming to an end and to ask if there is anything else she would like to add or any questions she may have. Facilitator to remind the woman about the importance of her contribution and to thank her for taking part.

Version 2

Aims:

1. To understand how women respond to and cope with violence and/or CMDs
2. To understand whether responses to and coping mechanisms of violence and/or CMDs differ between women who have high GHQ-12 scores and those who don't
3. To understand whether different types and severity of violence have different emotional/psychological impacts on women
4. To understand why some women who experience violence have high GHQ-12 scores and others do not.
5. To elicit illness narratives from women who experience violence

Interviewer introduce themselves. Remind participant about the nature of the research and their right to terminate the interview at any point or refusal to answer any questions. Also remind the participant of the confidential nature of the interview and that if the interview is interrupted, the subject of the conversation will be changed. Check that the participant is happy to continue.

1. GHQ-12

Administer the GHQ-12 and record responses

2. Patterns of distress

Can you describe to me in detail about any current or most recent health problems that you have

- *Somatic symptoms: sleep problems, weakness/tiredness, aches and pains, autonomic symptoms, lack of appetite, gynaecological symptoms*
- *Emotional symptoms: anger/irritation, sadness/low mood, lack of interest, feeling hopeless/fed-up, nervous/scared, suicidal thoughts*
- *Cognitive symptoms: thinking too much, worrying, forgetfulness, poor concentration*

How long have you had these problems for?

- *When did the problems start?*
- *How long do they usually last for?*

How does your life change when you experience health problems you have mentioned?

Tasks

Relations

Thoughts

Behaviour/reactions to situations and people

What name would you give to the problems you experience?

When you have tension, what happens to your health?

If not mentioned already

3. Perceived causes

What do you think is the cause of any health problems that you are experiencing?

Physical symptoms and move to other emotional/cognitive

What do you think can be done about these causes?

Realistic scenarios

Hypothetical scenarios

When you have tension, what is the main cause of this?

If not already mentioned

4. Coping and resilience

When you experience problems, what do you do?

Probe about health problems if not mentioned

When you have tension, what do you do?

If not already mentioned

When you experience these problems (health), what helps you to deal with them/remain positive?

Probe (if interviewee is struggling to find something to say):
-*Is there anything that you do yourself to stop feeling sad? If so, what?*
- *Is there anyone you go to? If so who and why?*

What helps you to deal with (violence) the causes of your problems/remain positive?
For example you just mentioned that XXX causes some of your health problems. How do you deal with XXX?
What helps you to remain strong/positive?

5. Help-seeking

Have you sought help for your problems?
Have you visited a doctor?
Have you visited any other type of health professional (e.g. traditional healer)
Family/friends
Other

Can you tell me about the last time that you sought help for your health?
What did you do?
Who did you go to?
What was the outcome?

Have you ever tried to fix your problems on your own? If so, what did you do?

How did you come to SNEHA?

6. Specific probes about situation

Dependent on case history

Do any of the acts of violence you experience (physical, sexual, emotional) affect your health differently?

Can re-phrase based on the case history but want to elicit the impacts of different types of violence

7. <u>General beliefs</u>

In general when women have aches and pains, sleeplessness, loss of appetite or sadness, what do you think are the causes?

Physical symptoms: aches/pains, weakness, gynaecological problems
Emotional symptoms: anger, low mood, frustration, sadness, suicidal thoughts
Cognitive symptoms: problems concentrating, worrying, forgetfulness

Do you think experiencing violence also affects health?

If a woman experiences the problems we have discussed, what advice would you give her to help her to deal with them?

Health problems
Violence

Why do you think some women are able to remain in good spirits even when they experience (health and violence) problems?

Probe (if interviewee is struggling to find something to say):
-*What things would help them to remain in good spirits?*
-What might be different about their situation to hers?

Closing question/comment highlighting the woman's strength based on the questions (keep recording)

7.5. Focus group discussion topic guides

Focus group with women survivors of violence

Aim

- To explore the women's understandings and opinions on family violence, with a focus on intimate partner violence and emotional distress (common mental disorders)
- To explore the coping mechanisms that women may use to deal with family violence and emotional distress (common mental disorders)
- To explore opinions about factors that may make a woman resilient to emotional distress (common mental disorders) when they are exposed to family violence.

Facilitator introduces self and observer to the group. Explains that they will be facilitating the discussion and that the observer will be taking notes.

Facilitator to explain that they will be introducing a hypothetical scenario to the group as they progress throughout the discussion and that we are interested in their thoughts and opinions about this scenario. Explain people are welcome to use personal examples, but that they will not be expected to do so.

Facilitator to remind the group that their responses will be kept confidential and that they do not have to answer any questions if they don't want to.

Samiksha is a 24 year old women from the community. She has been married to her husband Prakash for 3 years, and they have a 2 year-old daughter. Samiksha stays at home during the day to look after their daughter and maintain the house. Prakash does not allow her to work. One day, Prakash gets angry because Samiksha needed to visit the healthcare centre and did not have time to clean the house or prepare dinner.

- **What do you think happens next?**

- *Probe based on responses*

Samiksha and Prakash also live with Prakash's parents. His mother often insults Samiksha for not having had a male child, and criticizes the work that she does around the house. Prakash doesn't stand up for Samiksha.

- **What do you think about this situation?**
- **What do you think causes Prakash's mother to say those things?**
- *Probe based on their responses*

Sometimes Prakash comes home drunk and he and Samiksha fight. He calls her names and accuses her of having an affair. Sometimes he hits her and pulls her hair.

- **What do you think about Prakash's behaviour?**
- **What do you think causes Prakash to behave in this way?**
- *Probe based on their responses*

One day, Samiksha meets her friend Monisha at the market. She tells Monisha that she has been feeling sad a lot recently and that she is very tired. She is finding it hard to cope with her normal day-to-day activities and feels like she is worthless. She also tells Monisha about some of the fights she has had with her husband.

- **What would you call the problems that Samiksha is experiencing?**
- **What do you think has caused these problems?**
- **How severe do you think Samiksha's problems are?**
- *Probe based on their responses*

Monisha listens to Samiksha. She thinks that Samiksha is suffering from some emotional problems, and suggests some things that she could do to cope with these problems and the fights with Prakash.

- **What do you think about Monisha's opinion?**
- **If someone you knew was suffering from emotional problems, what words do you think they would use to describe them?**
- **What sort of coping mechanisms do you think Monisha suggests?**
- *Probe based on their responses*

During the same conversation, Monisha tells Samiksha that her husband also also beats her sometimes. But she says that she is still in good spirits, regardless of this.

- **What do you think might be different about Monisha's situation to prevent her from feeling sad about the fights with her husband?**
- *Probe based on their responses.*

Facilitator to thank the group for their responses and tell them that the discussion is now coming to an end. Ask if there anything else that anyone would like to add, or if are there any questions. Facilitator to remind the women about the importance of their contributions to the discussion.

Focus group with SNEHA community officers

Aim

- To explore the opinions of SNEHA staff and health professionals about the situation of family and intimate partner violence and common mental disorders within the community.
- To explore the opinions of SNEHA staff and health professionals about coping mechanisms that women may use to deal with violence and common mental disorders
- To explore opinions of SNEHA staff and health professionals about factors that may make a woman resilient to common mental disorders when they are exposed to violence.
- To get input from SNEHA staff and health professionals on the vignette to be used for the FGD with women.

Facilitator introduces self and observer to the group. Explains that they will be facilitating the discussion and that the observer will be taking notes.

Facilitator to explain that they will be asking questions about opinions on family violence, with a focus on intimate partner violence and common mental disorders within the community. Facilitator to also explain they will be introducing a hypothetical scenario be used in the later FGD with women and that we are interested in their opinions about this.

Facilitator to remind the group that their responses will be kept confidential and that they do not have to answer any questions if they don't want to.

Can you tell me about family violence, and in particular intimate partner violence within the community?

Probe if necessary:
-How much of a problem is it?
-What happens?
-How do they find out about it?

Can you tell me about the most common psychological consequences of violence among women who come to the crisis centre?

Probe if necessary:
-What words do women use to describe their problems?
-What symptoms do women describe?
-Anecdotally, what proportion of women describe such symptoms?

When a woman who comes to the crisis centre appears to have negative psychological symptoms, can you explain to me what you do?

Probe if necessary:
-About any standard procedures?
-About techniques that seem to be the most successful
-About any follow up and changes seen

Of women who experience family or intimate partner violence, why in your opinion do some develop common mental disorders and others do not?

Probe if necessary:
-What is different about the situations of the two groups of women?
-External help/social support
-Internal qualities

How do women in the community cope with family or intimate partner violence and common mental disorders?

Probe if necessary:
-What do they do?
-Do they seek help? If so from who?
-If they don't do anything, why not?
-What works/doesn't work?

Facilitator: I am now going to read to you the vignette, or hypothetical scenario that we want to use for the focus group with women. Please listen to the whole thing. I can repeat if necessary.

Samiksha is a 24 year old women from the community. She has been married to her husband Prakash for 3 years, and they have a 2 year-old daughter. Samiksha stays at home during the day to look after their daughter and maintain the house. Prakash does not allow her to work. One day, Prakash gets angry because Samiksha needed to visit the healthcare centre and did not have time to clean the house or prepare dinner.

Samiksha and Prakash also live with Prakash's parents. His mother often insults Samiksha for not having had a male child, and criticizes the work that she does around the house. Prakash doesn't stand up for Samiksha. Sometimes Prakash comes home drunk and he and Samiksha fight. He calls her names and accuses her of having an affair. Sometimes he hits her and pulls her hair.

One day, Samiksha meets her friend Monisha at the market. She tells Monisha that she has been feeling sad a lot recently and that she is very tired. She is finding it hard to cope with her normal day-to-day activities and feels like she is worthless. She also tells Monisha about some of the fights she has had with her husband. Monisha listens to Samiksha. She thinks that Samiksha is suffering from some emotional problems, and suggests some things that she could do to cope with these problems and the fights with Prakash. During the same conversation, Monisha tells Samiksha that her husband also beats her sometimes. But she says that she is still in good spirits, regardless of this.

- **What do you think about the scenario?**
    - *Does this represent a situation that could occur within the community? If not, why not?*
- **What could be done to improve the scenario to help try and get good responses from the women?**
- **What do you think the reaction will be to this scenario from the women?**

Facilitator to thank the group for their responses and tell them that the discussion is now coming to an end. Ask if there anything else that anyone would like to add, or if are there any questions.

7.6. Framework developed for qualitative analysis

Category	Sub-category
1.0: Violence patterns	1.1 Negative behaviours or attitudes or acts of violence
	1.2 Details of victimisation
	1.3 Motivations or triggers
	1.4 Descriptive characteristics
	1.5 Violence in relation to others
	1.6 Protection from violence
2.0 Violence narratives and making sense of the situation	2.1 Individual meaning placed on violence and the situation
	2.2 Understanding violence and behaviour patterns
	2.3 Accepting vs condemning abuse
	2.4 Understanding why - active vs passive meaning making
	2.5 Awareness or understanding of self or responses vs no awareness
	2.6. My pain and your pain
3.0 Help seeking and support	3.1 Support received or offered
	3.2 Active help seeking
	3.3 Help seeking and support outcomes
	3.4 Reasons for or against seeking help or receiving support
	3.5 External factors influencing support
	3.6 Perceptions of support
	3.7 Not seeking help or receiving support
	3.8 Help seeking advice for others
4.0 Responses to and coping with the situation	4.1 Active vs passive responses
	4.2 Thinking or strategising
	4.3 Internalised responses
	4.4 Mental state
	4.5 Other's responses to abuse
	4.6 Perpetrators responses
	4.7 Context influencing coping
	4.8 Positive thinking
	4.9 Small acts of resistance
	4.10 Threshold for violence tolerance
	4.11 Unable or unsure of how to cope or what to do
5.0 Sources of strength	5.1 Practical situations or an ability to change
	5.2 Support
	5.3 Something to love or care for
	5.4 Religion
	5.5 Knowledge
	5.6 Characteristics and attributes
6.0 Health	6.1 Mental state in other people or situations
	6.2 Medication
	6.3 General health
	6.4 Effects of the situation on physical health
	6.5 Perceived contributors to poor health including poor mental health
7.0 Context	7.1 Individual context
	7.2 Relationship context
	7.3 Family or living context
	7.4 Family finances
	7.5 Day to day life
	7.6 Situation context
	7.7 Family stressors or causes of tension
8.0 Characteristics	8.1 Woman's personality or psychological traits
	8.2 This woman in comparison to others
	8.3 Husband characteristics

	8.4 Characteristics of others
9.0 Relationship dynamics	9.1 Relationship dynamics within the marital family
	9.2 Other relationship dynamics
10.0 Roles, norms, beliefs and traditions	10.1 Gender roles or norms
	10.2 Addressing or challenging gender roles, norms, beliefs and traditions
	10.3 Beliefs, practices, traditions and things of value
11.0 Perspectives	11.1 Expectations, opinions, wants/needs/desires, values and beliefs and worries
	11.2 Questions, challenges, defence
	11.3 Knowledge, learning, educating
12.0 Changes	12.1 Individual or situational changes
	12.2 No change
13.0 Interview context and procedure	13.1 Content
	13.2 Interaction between participants and interviewer

Appendix 8: data linkage process

There are two main types of data linkage: deterministic and probabilistic. Probabilistic linking of datasets involves the use of pre-specified identifiers for each record and uses mathematical rules and probability weights to determine whether identifiers from two different datasets belong to the same record (1). This method is often the preferred choice when records do not have joint identifiers across all datasets and linkage has to rely on information that may often be of poor quality or subject to errors such as names and addresses (2). Probabilistic linkage is usually carried out in computer software and involves three main steps: pre-processing of the data, the linkage itself, and a manual review of the matches created (3). As no standardised unique identifier existed for each woman across the datasets that I wanted to link, I sought to link records using the probabilistic method and a combination of cluster number, household number, household name, respondent name, and child name as identifiers.

Pre-processing

In order to give the linkage the best possible chance of finding correct matches across the datasets, identifiers needed to be standardised as best as possible. I assessed all string identifiers for the inclusion of special characters (full stops, commas, hyphens), which I removed and replaced with a blank space. Where multiple words existed in one variable (such as household names made from more than one word), I used parsing commands to split them into separate variables. Finally, I standardised all string variables to have the first letter as upper case and the rest as lower case.

Linking

Once the pre-specified identifiers had been standardised, they were used to link the two datasets. For each observation in the violence dataset, the linking process searched for the best-matched record from the birth cohort baseline data, based on the identifiers and their associated match weights. Weights were assigned to matches for each variable in the list dependent on their relative likelihood of a true match. For example, name variables may have a high weighting, whereas a city that could have a number of duplicates may

have a lower weighting (4). I specified a many-to-one option for the linkage, allowing records from the birth cohort baseline data to be matched to multiple records within the violence data. I used a sampling with replacement strategy, where a record in the violence dataset had only one chance of being matched. The top three potential matches for each record above the minimum matching score threshold were kept for clerical review. This is useful when using string identifiers that may be imperfect, because an incorrect match may get a higher score than a correct one. The matching score is a number between 0 and 1 where 1 represents a complete match. The default threshold used was 0.6. Retaining the top 3 matches removes the need for multiple passes (adjusting the weights and re-running the linking) following clerical review (4).

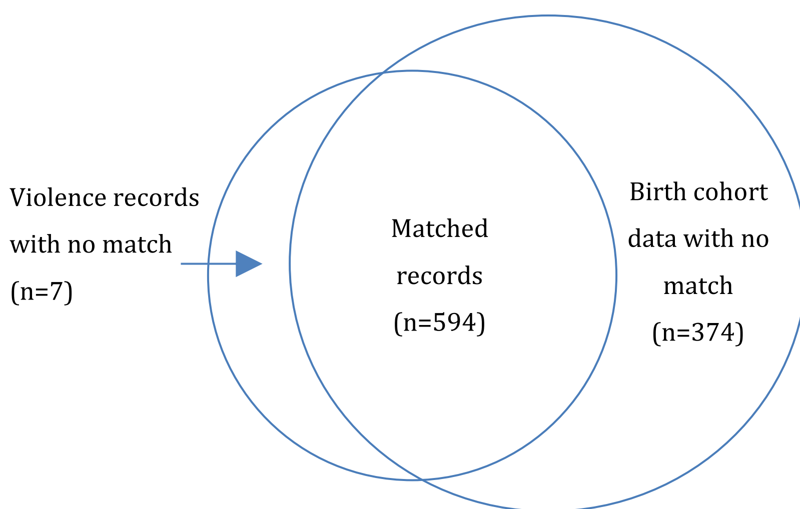
Clerical review

Once the linkage was completed, I performed a clerical review to check the matched records. Where multiple possible matches occurred, I made a decision about which match to keep by assessing the matching score and manually reviewing the identifiers from each record. I then removed excluded matches from the dataset.

Outcome of linkage

Prior to linkage, the current violence dataset contained 601 records and the birth cohort baseline dataset 975. After linkage, seven records from the violence dataset did not have a match in the birth cohort dataset, four of which contained violence data (had participated in the current survey). 594 records were matched across the two datasets, with 567 (95.5%) having an exact match. 374 records in the birth cohort baseline dataset did not have a match in the current violence survey. The results of the linkage are represented in Figure 1.

Figure 1. Linking of violence and birth cohort datasets



Of the 27 records that did not have an exact match, the match rankings ranged from 0.613 to 0.995, with 81% being at 0.80 or over. I manually reviewed these matches after the linking for quality purposes.

References

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3. Wasi N, Flaaen A. Record linkage using Stata: Preprocessing, linking, and reviewing utilities. Stata Journal. 2015;15(3):672-97.
4. Blasnik M. RECLINK: Stata module to probabilistically match records. 2010.

Appendix 9: Missing data analysis

As described in Chapter 4, data were missing from some of the demographic variables, for the frequency of violence in the past 12 months and for cases who were either lost to follow up or whom did not participate in the survey. This section outlines the investigation of missing data and any actions taken as a result.

Missing demographic data

Four women who participated in the violence survey had missing demographic data after the datasets were linked. Women who had information on violence but no demographic data could not be included in any analyses that adjusted for demographic covariates, which meant that the sample size would be reduced in these models. I therefore wanted to investigate these cases further to see if a solution could be found. Two of the women had names that were recorded differently in the cohort baseline dataset and the violence dataset. I was able to cross-check the names with the cohort endline dataset, and because it was clear these were the same women, I altered the spelling of their names to allow the records to match across the datasets and therefore pull in the demographic data.

For the other two women with missing demographic data, both records had another similar record within the dataset, based on the identifiers, and with almost identical violence data. The records were also created on the same day, but at different times and by different interviewers. I therefore believe that these women were interviewed twice by the team, by accident, and I dropped the two records that did not have demographic information matched. This left 599 records in the dataset.

Missing name variables

I identified one record that should not have been in the dataset because the woman's baby died not long after recruitment to the cohort. No violence data were collected for this woman so I dropped her record, leaving a total of 598 records in my dataset.

Missing household characteristics

Once linked with the cohort baseline data, there were records that had some demographic data but were missing other data on household characteristics, assets, and other household residents. I used the variable describing other men or women living in the house to construct a new variable indicating whether the woman lived in a joint or nuclear family. Household characteristics and assets were used to create a measure of socioeconomic status, as described in Chapter 4.

15 records had missing data on other men or women in the household, meaning that I could not create a new variable on family type. Within the cohort baseline, 23 women were missing some or all household characteristics and assets, meaning that a score for socioeconomic status could not be created for them and the sample size would therefore be reduced in any analyses using these variables.

All of the women in the cohort baseline dataset who were missing household characteristics and assets data were also missing information on other men and women in the household, and for almost all of these records there was another woman in the dataset with complete demographic data and with the same cluster number and household number, suggesting that she lived in the same house. Vyas & Kumaranayake's article on constructing socio-economic indices using principal components analysis suggested imputing missing values using the mean of the variable across the dataset (1){Vyas, 2006 #2308}{Vyas, 2006 #2308}{Vyas, 2006 #2308}, but I could not do this because the variables I used were mostly categorical. Whilst women living in the same household could feasibly own different assets, I decided that the most reliable option was to take the missing data from other women recorded as living in the same household, rather than to impute the average. Data on other men and women in the household were also taken from these other records.

The records for three women did not have another record from the same household. I imputed the data for these women using the median for categorical variables and the mode for binary variables.

Missing information about violence

During the survey, women were asked if they had experienced violence in the last 12 months and the last month, among other time points. If a woman reported experiencing violence in the last 12 months, the data collector asked about the frequency of violence in the last year. After data collection was completed, it became apparent that a number of women had reported experiencing violence in the last month, but not in the last 12 months. Intuitively, if violence has been experienced in the last month it has also occurred within the last year. This meant that where the past year experience of violence had not been selected, the questionnaire did not ask about frequency of violence, resulting in missing data. Whilst the experience of violence in the last 12 months can be imputed from violence experiences in the last month, the frequency of those experiences cannot be.

I investigated these missing data with the data collection team, but we could not find an explanation or think of a reason why women would have responded to the questions in this way. This suggests that the data could be missing at random, and the most likely explanation is that women did not count the last month as part of the last 12 months. If the data are missing at random, it is possible to use multiple imputation methods to impute missing data points (2). To explore whether the data were likely to be missing at random, I decided to compare demographic data for women who did or did not have frequency data.

7.4% (36) of women had missing 12-month frequency data for at least one act of violence, with the proportion missing across the whole dataset (i.e. the number of times the frequency question should have been asked but wasn't) standing at 0.42%. The number of questions with missing frequency data for each woman ranged from 1 to 13, and some data collectors had more missing data than others, as seen in Figure 1. This suggests that it could be something to do with the data collection methods of certain investigators, given that they had a higher proportion of missing data from their respondents than others.

Figure 1. Amount of missing data generated per data collector

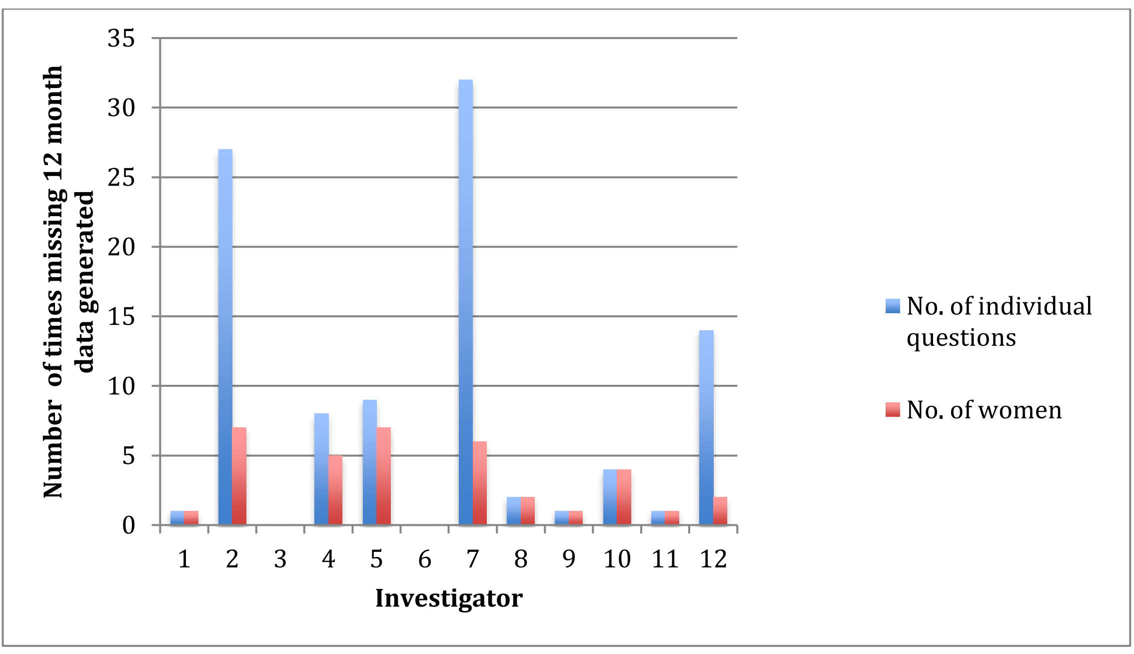

Table 1 displays the demographic characteristics of women who had at least one experience with missing 12-month frequency data (n=36).

Table 1: Demographic characteristics of women with missing 12-month frequency data

Characteristic		Mean (SD)	Median (IQR)	Number (%)
Age		27.4 (4.5)	26.5 (24-30)	-
Years of education		6.3 (4.1)	7 (4-10)	-
Employed		-	-	0 (100.0%)
Marital status	Married and living with husband	-	-	36 (100.0%)
	Married but not living with husband	-	-	0 (100.0%)
	Separated	-	-	0 (100.0%)
	Widowed	-	-	0 (100.0%)
Age at marriage		18.4 (2.4)	18 (17-20)	-
Number of years married		9.1 (5.6)	6 (5-12.5)	-
Living in Mumbai since birth		-	-	23 (64.0%)
Number of years living in Mumbai if not since birth		16.5 (7.2)	18 (13-22)	-
Number of children (parity)	One	-	-	3 (8.3%)
	Two	-	-	14 (38.9%)
	Three	-	-	8 (22.2%)

	Four	-	-	4 (11.1%)
	Five	-	-	3 (8.3%)
	More than five	-	-	4 (11.1%)
SES score		-0.32 (1.0)	-0.41 (-1.3-0.58)	-
SES quintile	1 (lowest)	-	-	11 (30.6%)
	2	-	-	8 (22.2%)
	3	-	-	7 (19.4%)
	4	-	-	7 (19.4%)
	5 (highest)	-	-	3 (8.3%)
Religion	Hindu	-	-	6 (16.7%)
	Muslim	-	-	30 (83.3%)
	Other	-	-	0 (0.0%)

On the whole, women with missing 12-month frequency data had similar demographics to the whole sample, although they appeared to be more heavily distributed in the lowest socioeconomic status quintile and have a lower average socioeconomic status score than the population as a whole. I decided to test whether this difference was statistically significant.

For women who had experienced violence in the past 12 months, with and without 12-month frequency data, socioeconomic status scores ranged similarly from -1.7 to 1.9 and -1.9 to 1.7, respectively. Box plots showed no outlying values for either group and the scores were largely normally distributed. An independent two-sample T test with equal variances gave a p-value of 0.002, suggesting that mean socioeconomic status scores differed between women with 12-month frequency data and women without, and that women with missing data were less well-off. This may have implications for the imputation of missing data and at this point I decided not to impute. I would summarise the frequency data using what was collected, but would not include this variable in any further models.

The learning to take from this if the survey were to be performed again is that the team would need additional training to highlight this potential problem, and the survey would need to include more automatic restrictions to ensure that follow-on questions were appropriately flagged if the data had not been entered.

Missing cases

When my data collection took place, three years after women were recruited into the birth cohort, a number were no longer available for data collection, for different reasons. A reason for loss to follow-up was recorded for 355 out of the 377 women no longer remaining in the cohort at the start of my data collection. These reasons are in table 2.

Table 2: Reasons for loss to follow-up prior to the violence survey

Reason for loss to follow-up	Frequency	Proportion
Migration	319	84.6%
Death of baby	15	4.0%
Refused	16	4.2%
Not found after 3 visits	5	1.3%
No reason recorded	22	5.8%
Total	377	100.0%

After the data collection in June and July 2016, 153 of the 598 women remaining in the cohort did not participate for various reasons. The data collection team gave a summary of why they were not interviewed, summarised in table 3.

Table 3: Reason for data not collected during June-July 2016

Reason for data not collected	Frequency	Proportion
Migration	77	50.3%
Respondent had gone to her home village	57	37.3%
At work	2	1.3%
Refused	12	7.8%
Not done	4	2.6%
Respondent had died	1	0.7%
Total	153	100.0%

An additional attempt at data collection was made in November 2016, at which point 37 of these women were interviewed. At the end of data collection, 482 women in total consented to participate in the violence study. I wanted to investigate further the women who did not participate, because they had been lost to follow-up before the start of my

study or were not interviewed as part of it, to see whether they differed from the women from whom we collected data.
A difference between the two groups of women could suggest that the ones who were missing were not missing at random.

I decided to look at the differences between the women in terms of their basic demographic characteristics, using the full cohort baseline survey data, within which I identified which women did and did not take part in the violence survey. In addition to demographic characteristics, I also chose to look at factors associated with the woman's entry into the birth cohort in the first place, including the birth weight of their child, miscarriages or abortions and measures of unplanned pregnancy, in case these gave any indication of a trend in the women lost to follow-up.

Difference between measures of central tendency

First, I looked at the distribution of the continuous variables to assess them for normality using histograms, quantile-normal plots, and Shapiro-Wilk tests. All of these suggested that the continuous variables did not display normal distributions and I used a Mann-Whitney U test to test for the difference in mean between the two sets of women. I also analysed the continuous count variables, such as the number of children, using a Mann Whitney U test and the categorical variables using chi-square tests. The results are displayed in table 4.

Table 4. Distribution of demographic characteristics, by women who did and did not participate in violence data collection (n=975)

	Overall	**Data**		***P***
	N=975	**Violence data collected (n=482)**	**Violence data not collected (n=493)**	
Mother's characteristics				
Age, mean (SD)[1]	25.7 (4.5)	26.3 (4.6)	25.1 (4.4)	<0.001*
Years of education, mean (SD)[1]	5.9 (4.2)	6.0 (4.2)	5.9 (4.2)	0.69
Age at marriage, mean (SD)[1]	19.1	19.0	19.2	0.18

	(2.6)	(2.6)	(2.5)	
Age at pregnancy, mean (SD)[1]	20.5 (2.6)	20.3 (2.7)	20.6 (2.6)	0.07
Number of years living in Mumbai if not born there, mean (SD) [N=369][1]	14.0 (6.8)	15.0 (6.4)	13.0 (7.0)	0.005*
Birth weight of the baby if known, mean (SD) [N=910][1]	2.9 (0.5)	2.9 (0.4)	2.8 (0.5)	0.11
Number of children under 18, mean (SD)[1]	2.4 (1.5)	2.7 (1.6)	2.2 (1.3)	<0.001*
Number of children under 3, mean (SD)[1]	1.4 (0.5)	1.5 (0.5)	1.4 (0.5)	0.002*
Number of miscarriages/abortions, mean (SD)[1]	0.22 (0.6)	0.26 (0.6)	0.18 (0.5)	0.01*
Unplanned pregnancy total scores, mean (SD)[1]	8.0 (3.1)	7.8 (3.2)	8.2 (3.1)	0.02*
Total number of under 5 children died, mean (SD)[1]	0.14 (0.4)	0.13 (0.4)	0.16 (0.4)	0.16
Mother's occupation, n (%)[2] Unskilled work	0 (0.0%)	0 (0.0%)	0 (0.0%)	0.55
Plant or machine operator	1 (0.1%)	1 (0.2%)	0 (0.0%)	
Skilled craftsperson	1 (0.1%)	0 (0.0%)	1 (0.2%)	
Agriculture or fishery worker	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Service worker/shop/sales	1 (0.1%)	0 (0.0%)	1 (0.2%)	
Clerk in an office	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Technician/teacher	4 (0.4%)	2 (0.4%)	2 (0.4%)	
Professional	1 (0.1%)	1 (0.2%)	0 (0.0%)	
High level government job	0 (0.0%)	0 (0.0%)	0 (.0.0%)	
Does not work	967 (99.2%)	478 (99.2%)	489 (99.2%)	
Both agreed to get pregnant, n (%)[2] Never discussed having children	230 (23.6%)	119 (24.7%)	111 (22.5%)	0.09
Discussed, but not agreed	94 (9.7%)	56 (11.6%)	38 (7.7%)	
Agreed to have children	650 (66.7%)	307 (63.7%)	343 (69.6%)	
. (missing)	1 (0.1%)	0 (0.0%)	1 (0.2%)	
Using contraception when got pregnant, n (%)[2] Always using contraception	26 (2.3%)	11 (2.3%)	15 (3.0%)	0.69
Using sometimes or failed at least once	71 (7.3%)	37 (7.7%)	34 (6.9%)	
Not using contraception	878 (90.1%)	434 (90.0%)	443 (90.1%)	
Right time to get pregnant, n (%)[2] Wrong time	167	90	77	0.03*

	(17.1%)	(18.7%)	(15.6%)	
OK, but not quite right time	90 (9.2%)	54 (11.2%)	36 (7.3%)	
Right time	718 (73.6%)	338 (70.1%)	380 (77.1%)	
Intent to get pregnant, n (%)[2] Did not intend to get pregnant	202 (20.7%)	110 (22.8%)	92 (18.7%)	0.14
Intentions kept changing	48 (4.9%)	27 (5.6%)	21 (4.3%)	
Intended to get pregnant	725 (74.4%)	345 (71.6%)	380 (77.1%)	
Intent to have a baby, n (%)[2] Did not want to have a baby	195 (20.0%)	105 (21.8%)	90 (18.3%)	0.09
Mixed feelings about having a baby	61 (6.3%)	36 (7.5%)	25 (5.1%)	
Wanted to have a baby	719 (73.7%)	341 (70.8%)	378 (76.7%)	
Preparedness to have the baby, n (%)[2] Did no preparatory behaviours	938 (96.2%)	466 (96.7%)	472 (95.7%)	0.64
Did 1 preparatory behaviour	26 (2.7%)	12 (2.5%)	14 (2.8%)	
Did 2 or more preparatory behaviours	11 (1.1%)	4 (0.8%)	7 (1.4%)	
Father's characteristics				
Age, mean (SD)[1]	30.2 (5.4)	30.8 (5.3)	29.6 (5.4)	<0.001*
Years of education, mean (SD)[1]	6.6 (4.2)	6.8 (4.0)	6.6 (4.3)	0.38
Father's occupation, n (%)[2] Unskilled work	147 (15.1%)	78 (16.2%)	69 (14.0%)	0.56
Plant or machine operator	165 (16.9%)	83 (17.2%)	82 (16.6%)	
Skilled craftsperson	535 (54.9%)	258 (53.5%)	277 (56.2%)	
Agriculture or fishery worker	2 (0.2%)	0 (0.0%)	2 (0.4%)	
Service worker/shop/sales	67 (6.9%)	34 (7.1%)	33 (6.7%)	
Clerk in an office	35 (3.6%)	17 (3.5%)	18 (3.7%)	
Technician/teacher	4 (0.4%)	3 (0.6%)	1 (0.2%)	
Professional	8 (0.8%)	4 (0.8%)	4 (0.8%)	
High level government job	2 (0.2%)	2 (0.4%)	0 (0.0%)	
Does not work	10 (1.0%)	3 (0.6%)	7 (1.4%)	
Household characteristics				
Number of other males in the household, mean (SD)[1]	1.7 (1.3)	1.9 (1.3)	1.7 (1.2)	0.04*
Number of other females in the household, mean (SD)[1]	0.8 (1.1)	0.8 (1.3)	0.7 (1.1)	0.38
Ownership of house, n (%)[2]				<0.001*
Own	533	318	215	

	(54.7%)	(66.0%)	(43.6%)	
Rented	442 (45.3%)	164 (34.0%)	278 (56.4%)	
Ownership of ration card, n (%)[2]				<0.001*
No	386 (39.6%)	146 (30.3%)	240 (48.7%)	
Yes	589 (60.4%)	336 (69.7%)	253 (51.3%)	
Type of house, n (%)[2]				0.67
Pucca	556 (57.0%)	281 (58.3%)	275 (55.8%)	
Semi-pucca	351 (36.0%)	170 (35.3%)	181 (36.7%)	
Kachha	68 (7.0%)	31 (6.4%)	37 (7.5%)	
Electricity supply, n (%)[2]				0.007*
None	1 (0.1%)	1 (0.2%)	0 (0.0%)	
Metered, family pay bill	608 (62.4%)	324 (67.2%)	284 (57.6%)	
Pay landlord	65 (6.7%)	24 (5.0%)	41 (8.3%)	
Other	301 (30.9%)	133 (27.6%)	168 (34.1%)	
Flooring of the house, n (%)[2]				0.92
Dirt, sand, mud	74 (7.6%)	37 (7.7%)	37 (7.5%)	
Concrete, brick, mud, tiled	901 (92.4%)	445 (92.3%)	456 (92.5%)	
Fuel, n (%)[2]				0.85
Wood, charcoal, dung	2 (0.2%)	1 (0.2%)	1 (0.2%)	
Kerosene, LPG	913 (93.6%)	448 (93.0%)	465 (94.3%)	
Electricity	58 (6.0%)	32 (6.6%)	26 (5.3%)	
Does not cook at home	2 (0.2%)	1 (0.2%)	1 (0.2%)	
Own a mattress, n (%)[2]				0.35
No	262 (26.9%)	136 (28.2%)	126 (25.6%)	
Yes	713 (73.1%)	346 (71.8%)	367 (74.4%)	
Own a pressure cooker, n (%)[2] No	163 (16.7%)	72 (14.9%)	91 (18.5%)	0.14
Yes	812 (83.3%)	410 (85.1%)	402 (81.5%)	
Own a gas cylinder, n (%)[2] No	975 (100.0%)	482 (100.0%)	493 (100.0%)	-
Yes	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Own a stove, n (%)[2]				0.16
No	425 (43.6%)	221 (45.9%)	204 (41.4%)	
Yes	550 (56.4%)	261 (54.2%)	289 (58.6%)	
Own a chair, n (%)[2]				0.17
No	848 (87.0%)	412 (85.5%)	436 (88.4%)	

Yes	127 (13.0%)	70 (14.5%)	57 (11.6%)	
Own a bed, n (%)[2] No	521 (53.4%)	261 (54.2%)	260 (52.7%)	0.66
Yes	454 (46.6%)	221 (45.9%)	233 (47.3%)	
Own a table, n (%)[2] No	815 (83.6%)	400 (83.0%)	415 (84.2%)	0.62
Yes	160 (16.4%)	82 (17.0%)	78 (15.8%)	
Own a clock, n (%)[2] No	232 (23.8%)	114 (23.7%)	118 (23.9%)	0.92
Yes	743 (76.2%)	368 (76.4%)	375 (76.1%)	
Own a mixer, n (%)[2] No	195 (20.0%)	84 (17.4%)	111 (22.5%)	0.047*
Yes	780 (80.0%)	398 (82.6%)	382 (77.5%)	
Own a fan, n (%)[2] No	92 (9.4%)	47 (9.8%)	45 (9.1%)	0.74
Yes	883 (90.6%)	435 (90.3%)	448 (90.9%)	
Own a bicycle, n (%)[2] No	955 (98.0%)	472 (97.9%)	483 (98.0%)	0.96
Yes	20 (2.1%)	10 (2.1%)	10 (2.0%)	
Own a radio, n (%)[2] No	973 (99.8%)	481 (99.8%)	492 (99.8%)	0.99
Yes	2 (0.2%)	1 (0.2%)	1 (0.2%)	
Own a sewing machine, n (%)[2] No	892 (91.5%)	436 (90.5%)	456 (92.5%)	0.25
Yes	83 (8.5%)	46 (9.5%)	37 (7.5%)	
Own a washing machine, n (%)[2] No	975 (100.0%)	482 (100.0%)	493 (100.0%)	-
Yes	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Own a phone, n (%)[2] No	975 (100.0%)	482 (100.0%)	493 (100.0%)	-
Yes	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Own a fridge, n (%%)[2] No	647 (66.4%)	289 (60.0%)	358 (72.6%)	<0.001*
Yes	328 (33.6%)	193 (40.0%)	135 (27.4%)	
Own a TV, n (%)[2] No	284	120	164	0.004*

	(29.1%)	(24.9%)	(33.3%)	
Yes	691 (70.9%)	362 (75.1%)	329 (66.7%)	
Own a two-wheeler, n (%)[2] No	928 (95.2%)	451 (93.6%)	477 (96.8%)	0.02*
Yes	47 (4.8%)	31 (6.4%)	16 (3.3%)	
Own a car, n (%)[2] No	969 (99.4%)	477 (99.0%)	492 (99.8%)	0.10
Yes	6 (0.6%)	5 (1.0%)	1 (0.2%)	
Source of drinking water, n (%)[2] Piped water into dwelling	226 (23.2%)	131 (27.2%)	95 (19.3%)	0.10
Piped water to yard plot	375 (38.5%)	180 (37.3%)	195 (39.6%)	
Public tap standpipe	292 (30.0%)	138 (28.6%)	154 (31.2%)	
Tubewell borehole	2 (0.2%)	1 (0.2%)	1 (0.2%)	
Cart with small tank drum	2 (0.2%)	1 (0.2%)	1 (0.2%)	
Tanker truck	67 (6.9%)	26 (5.4%)	41 (8.3%)	
Other	11 (1.1%)	5 (1.0%)	6 (1.2%)	
Treat water to make it safe for drinking, n (%)[2] No	553 (56.7%)	272 (56.4%)	281 (57.0%)	0.60
Yes	421 (43.2%)	210 (43.6%)	211 (42.8%)	
Don't know	1 (0.1%)	0 (0.0%)	1 (0.2%)	
Boil water, n (%)[2] No	797 (81.7%)	387 (80.3%)	410 (83.2%)	0.25
Yes	178 (18.3%)	95 (19.7%)	83 (16.8%)	
Bleach water, n(%)[2] No	973 (99.8%)	482 (100.0%)	491 (99.6%)	0.16
Yes	2 (0.2%)	0 (0.0%)	2 (0.4%)	
Strain water, n (%)[2] No	697 (71.5%)	344 (71.4%)	352 (71.6%)	0.94
Yes	278 (28.5%)	138 (28.6%)	140 (28.4%)	
Filter water, n (%)[2] No	945 (96.9%)	464 (96.3%)	481 (97.6%)	0.24
Yes	30 (3.1%)	18 (3.7%)	12 (2.4%)	
Solar disinfection of water, n (%)[2] No	975 (100.0%)	482 (100.0%)	493 (100.0%)	-
Yes	0 (0.0%)	0 (0.0%)	0 (0.0%)	

Let water stand and settle, n (%)[2] No	975 (100.0%)	482 (100.0%)	493 (100.0%)	-
Yes	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Other treatment of water, n (%)[2] No	974 (99.9%)	481 (99.8%)	493 (100.0%)	0.31
Yes	1 (0.1%)	1 (0.2%)	0 (0.0%)	
Don't know how water is treated, n (%)[2] No	975 (100.0%)	482 (100.0%)	493 (100.0%)	-
Yes	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Type of toilet facility, n (%)[2] Flush/pour flush	895 (91.8%)	441 (91.5%)	454 (92.1%)	0.36
VIP	77 (7.9%)	41 (8.5%)	36 (7.3%)	
Pit latrine with slab	2 (0.2%)	0 (0.0%)	2 (0.4%)	
No facilities/field/road	1 (0.1%)	0 (0.0%)	1 (0.2%)	
Share toilet facilities with other households, n (%)[2] No	161 (16.5%)	82 (17.0%)	79 (16.0%)	0.68
Yes	814 (83.5%)	400 (83.0%)	414 (84.0%)	
Religion, n (%)[2] Muslim	853 (87.5%)	423 (87.8%)	430 (87.2%)	0.97
Hindu	120 (12.3%)	58 (12.0%)	62 (12.6%)	
Other	2 (0.2%)	1 (0.2%)	1 (0.2%)	
Constructed variables				
Number of years married, mean (SD)[1]	6.6 (5.1)	7.3 (5.3)	5.9 (4.7)	<0.001*
SES score, mean (SD)[1]	$1.36e^{-09}$ (1)	0.16 (0.96)	-0.15 (1.0)	<0.001*
Recently migrated to Mumbai (<=10 years), n (%)[2] No	855 (87.7%)	438 (90.9%)	417 (84.6%)	0.003*
Yes	120 (12.3%)	44 (9.1%)	76 (15.5%)	
Living in Mumbai since birth, n (%) No	369 (37.9%)	172 (35.7%)	197 (40.0%)	0.17
Yes	606 (62.2%)	310 (64.3%)	296 (60.0%)	
Family set-up, n (%) Joint family	448 (45.9%)	226 (46.9%)	221 (44.8%)	0.52
Nuclear family	528 (54.1%)	256 (53.1%)	272 (55.2%)	
SES quintile, n (%) 1	195 (20.0%)	71 (14.7%)	124 (25.2%)	<0.001*

2	195 (20.0%)	94 (19.5%)	101 (20.5%)	
3	195 (20.0%)	101 (21.0%%)	94 (19.1%)	
4	195 (20.0%)	100 (20.8%)	95 (19.3%)	
5	195 (20.0%)	116 (24.1%)	79 (16.0%)	

* Statistically significant at a level of p=0.05

1 Mann-Whitney U test

2 Chi-Square test

Statistically significant differences were seen between women who participated in data collection on violence experiences and women who did not for a number of socio-demographic characteristics. Compared with women who did not participate, women who were interviewed about their experiences of violence were older, had been married for longer, and had lived in Mumbai for longer (if not since birth). A correspondingly lower proportion had migrated to Mumbai in the last 10 years. These women also had more children under the age of 18 and under the age of 3, had lower unplanned pregnancy scores, and a higher proportion believed that it was either the wrong time or an acceptable time to become pregnant.

The husbands of women who were interviewed about their violence experiences were also older and the corresponding households had a greater number of other males living in the house. A greater proportion of houses were owned rather than rented and more families owned a ration card, a mixer, a fridge, or a TV. Within these households, a greater proportion also had an electricity supply that was metered and paid for by themselves, rather than paying the landlord or having alternative electricity supply. The mean socioeconomic status score was also higher and a lower proportion of households fell into the bottom two socioeconomic quintiles.

Logistic regression

To investigate these associations further, I added the demographic characteristics into a univariable logistic regression model against each group of women (in the violence data collection or not). Variables that had response options omitted from the model due to perfect prediction (i.e. small numbers) were not assessed. Variables that were excluded on this basis were the woman's occupation and whether she treated drinking water by

bleaching or another method, none of which showed a difference in chi-square tests. The results of the logistic regression are displayed in table 5.

Table 5. Logistic regression of demographic characteristics against each group of women (in the violence survey or not), accounting for clustering

Demographic variables	Odds ratio	Robust standard error	Z	P>|z|	95% confidence interval	
Women's characteristics						
Mother's age	1.06	.018	3.6	0.000*	1.03	1.10
Mother's education	1.10	.015	0.7	0.50	.98	1.04
Mother's age at marriage	.97	.026	-1.1	0.26	.92	1.02
Mother's age at pregnancy	.96	.029	-1.3	0.19	.91	1.02
Current number of years lived in Mumbai, if not from birth (n=369)	1.05	.018	2.6	0.010*	1.01	1.08
Birth weight of baby	1.28	.189	1.7	0.097	.96	1.71
Number of children under 18	1.30	.084	4.0	0.000*	1.14	1.47
Number of children under 3	1.46	.16	3.5	0.001*	1.18	1.81
Number of miscarriages/abortions	1.28	.12	2.6	0.009*	1.06	1.55
Unplanned pregnancy total scores	.96	.026	-1.4	0.158	.91	1.01
Total number of under 5 children died	.84	.15	-1.0	0.330	.60	1.19
Both agreed to get pregnant						
Never discussed having children (reference)						
Discussed, but not agreed	1.37	.31	1.4	0.153	.89	2.13
Agreed to have children	.83	.17	-0.9	0.378	.56	1.25
Using contraception when got pregnant						
Always using contraception (reference)						
Using sometimes or failed at least once	1.48	.71	0.8	0.411	.58	3.80
Not using contraception	1.33	.42	0.9	0.366	.72	2.48
Right time to get pregnant						
Wrong time (reference)						
OK, but not quite right time	1.28	.34	1.0	0.341	.77	2.14
Right time	.76	.16	-1.1	0.191	.51	1.15
Intent to get pregnant						
Did not intend to get pregnant (reference)						
Intentions kept changing	1.08	.33	0.2	0.812	.59	2.00
Intended to get pregnant	.76	.16	-1.3	0.184	.51	1.14
Intent to have a baby						
Did not want to have a baby (reference)						
Mixed feelings about having a baby	1.23	.41	0.6	0.521	.65	2.35
Wanted to have a baby	.77	.17	-1.2	0.241	.50	1.19

Preparedness to have the baby						
Did no preparatory behaviours (reference)						
Did 1 preparatory behaviour	.87	.29	-0.4	0.668	.46	1.66
Did 2 or more preparatory behaviours	.58	.34	-0.9	0.347	.19	1.81
Father's characteristics						
Father's age	1.05	.014	3.3	0.001*	1.02	1.078
Years of education	1.02	.019	0.9	0.394	.98	1.05
Household characteristics						
Number of other males in the household	1.1	.061	2.0	0.046*	1.00	1.24
Number of other females in the household	1.08	.055	1.5	0.130	.98	1.20
Ownership of house						
Own (reference)						
Rented	.40	.064	-5.7	0.000*	.29	.55
Ownership of ration card						
No (reference)						
Yes	2.18	.37	4.6	0.000*	1.56	3.05
Type of house						
Pucca (reference)						
Semi-pucca	.92	.11	-0.7	0.489	.72	1.17
Kachha	.82	.17	-1.0	0.329	.55	1.23
Electricity supply						
None (reference)						
Metered, family pay bill	3.6e-06	3.66e-06	-12.5	0.000*	5.2e-07	.00
Pay landlord	1.9e-06	1.72e-06	-14.4	0.000*	3.1e-07	.00
Other	2.5e-06	2.63e-06	-12.5	0.000*	3.4e-07	.00
Flooring of the house						
Dirt, sand, mud (reference)						
Concrete, brick, mud, tiled	.98	.26	-0.09	0.928	.57	1.66
Fuel						
Wood, charcoal, dung (reference)						
Kerosene, LPG	.96	1.38	-0.03	0.979	.058	15.9
Electricity	1.239	1.83	0.14	0.889	.067	22.8
Does not cook at home	1	2.05	-0.00	1.000	.018	55.8
Own a mattress						
No (reference)						
Yes	.87	.13	-0.93	0.353	.66	1.16
Own a pressure cooker						
No (reference)						
Yes	1.29	.15	2.18	0.029*	1.03	1.62
Own a stove						
No (reference)						
Yes	.83	.11	-1.33	0.183	.64	1.09
Own a chair						
No (reference)						
Yes	1.30	.21	1.60	0.109	.946	1.79
Own a bed						
No (reference)						
Yes	.94	.12	-0.45	0.651	.74	1.20
Own a table						
No (reference)						
Yes	1.09	.15	0.62	0.537	.83	1.44
Own a clock						
No (reference)						

Yes	1.02	.160	0.10	0.921	.75	1.38
Own a mixer						
No (reference)						
Yes	1.38	.20	2.16	0.031*	1.03	1.84
Own a fan						
No (reference)						
Yes	.93	.15	-0.46	0.648	.68	1.27
Own a bicycle						
No (reference)						
Yes	1.02	.35	0.07	0.947	.52	2.01
Own a radio						
No (reference)						
Yes	1.02	1.51	0.02	0.988	.057	18.4
Own a sewing machine						
No (reference)						
Yes	1.30	.30	1.14	0.253	.83	2.04
Own a fridge						
No (reference)						
Yes	1.78	.28	3.62	0.000*	1.30	2.41
Own a TV						
No (reference)						
Yes	1.50	.290	2.12	0.034*	1.03	2.19
Own a two-wheeler						
No (reference)						
Yes	2.05	.52	0.004*	0.004*	1.25	3.36
Own a car						
No (reference)						
Yes	5.16	4.97	1.70	0.089	.78	34.0
Source of drinking water						
Piped water into dwelling (reference)						
Piped water to yard plot	.67	.13	-2.12	0.034*	.46	.97
Public tap standpipe	.65	.11	-2.50	0.012*	.46	.91
Tubewell borehole	.73	.11	-2.13	0.033*	.54	.97
Cart with small tank drum	.73	.11	-2.13	0.033*	.54	.97
Tanker truck	.46	.09	-3.88	0.000*	.31	.68
Other	.60	.18	-1.67	0.095	.33	1.09
Treat water to make it safe for drinking						
No (reference)						
Yes	1.03	.14	0.20	0.840	.79	1.35
Don't know (omitted)						
Boil water						
No (reference)						
Yes	1.21	.20	1.15	0.251	.87	1.68
Strain water						
No (reference)						
Yes	1.01	.15	0.08	0.939	.76	1.35
Filter water						
No (reference)						
Yes	1.55	.58	1.18	0.238	.75	3.24
Share toilet facilities with other households						
No (reference)						
Yes	.93	.12	-0.53	0.593	.72	1.21
Religion						
Muslim (reference)						
Hindu	.95	.23	-0.21	0.836	.59	1.53
Other	1.02	.091	0.18	0.855	.85	1.21
Constructed variables						
Number of years married	1.06	.02	3.52	0.000*	1.02	1.09
SES score	1.37	.085	5.09	0.000*	1.21	1.55
Recently migrated to Mumbai (<=10 years)						

No (reference)						
Yes	.55	.13	-2.52	0.012*	.35	.88
Living in Mumbai since birth						
No (reference)						
Yes	1.20	.19	1.12	0.261	.87	1.64
Family set-up						
Joint family (reference)						
Nuclear family	.92	.12	-0.63	0.526	.71	1.19
SES quintile						
1 (reference)						
2	1.63	.35	2.28	0.023*	1.07	2.47
3	1.88	.41	2.85	0.004*	1.22	2.89
4	1.84	.50	2.23	0.025*	1.08	3.14
5	2.56	.55	4.35	0.000*	1.68	3.92

**Statistically significant at a level of $p<0.05$*

Being older and being married for longer increased women's odds of being in the violence data collection, as did living in Mumbai for longer (if not since birth). Given that women needed to be living in the same place to be recruited for my study, women who had lived in Mumbai for longer may have been more settled and therefore less likely to migrate. Similarly, older women may be more settled in their lives and might be more likely to stay in one place and therefore not be lost to follow-up due to migration. By extension, older women are likely to have been married longer, which may explain this association, and women whose husbands were older or had additional men living in the household were more likely to have taken part in my survey.

Women with more children (both under the age of 18 and under the age of three) were more likely to be included in my survey, but so were women who had had a miscarriage or abortion. Given that the SNEHA Centres trial focused on maternal and child health, and the birth cohort monitored child nutrition, it is possible that women with more children, or even those having miscarriages or abortions, might have been more keen to access the services offered by the trial and were more willing to be included in the study for the duration of follow-up.

Women who lived in households that were comparatively wealthier, measured through owning rather than renting their home, owning certain assets, or with higher socioeconomic scores had greater odds of being included in the violence survey than not. If the house was rented rather than owned, the woman's odds of being in the violence data

collection were reduced by 60%. A woman's odds of being in the violence data collection were increased if the family owned a pressure cooker, a mixer, a fridge, a TV, a ration card, a two-wheeler, or a car. However, the number of families owning a car was very small and this latter result may be due to small numbers. Finally, a one-unit increase in socioeconomic status score increased a woman's odds of being in the violence data collection by 37%. Women who were in the highest socioeconomic quintile compared to the lowest had a 2.6 times greater odds of being in the violence data collection than of being lost to follow-up.

1. Vyas S, Kumaranayake L. Constructing socio-economic status indices: how to use principal components analysis. Health Policy Plan. 2006;21(6):459-68.
2. Carpenter JR, Kenward MG. Multiple Imputation And Its Application2012.

Appendix 10: Supplementary tables

Table 1: Variables to be included or excluded from the Principal Components Analysis, based on proportion positive.

Variable description	% positive	Mean	SD	Keep or drop
Home ownership				
Own	54.7%	.5471311	.4980289	Keep
Rent	45.3%	.4528689	.4980289	Keep
House type				
Pucca	57.1%	.5706967	.4952305	Keep
Kachha	7.0%	.0696721	.2547242	Merge with semi
Semi-pucca	36.0%	.3596311	.4801383	
Ration card				
Ration card ownership	60.5%	.6045082	.4892068	Keep
Electricity				
None	0.1%	.0010246	.0320092	Merge with other
Metered, family pay	62.4%	.6239754	.4846347	Keep
Pay landlord	6.7%	.0665984	.249453	Merge with other
Other	30.8%	.3084016	.4620702	Keep
Floor material				
Dirt/sand/mud	7.6%	.0758197	.2648451	Drop
Concrete/brick/mud/tiled	92.4%	.9241803	.2648451	Drop
Cooking fuel				
Wood/charcoal/dung	0.2%	.0020492	.0452447	Drop
Kerosene/LPG	93.6%	.9364754	.2440292	Drop
Electricity	6.0%	.0594262	.2365419	Drop
No cooking at home	0.2%	.0020492	.0452447	Drop
Assets				
Mattress	73.1%	.7312821	.4435204	Keep
Pressure cooker	83.3%	.8328205	.3733275	Keep
Gas cylinder	0.0%	0	0	Drop
Stove	56.4%	.5641026	.4961283	Keep
Chair	13.0%	.1302564	.3367581	Keep
Bed	46.6%	.465641	.4990741	Keep
Table	16.4%	.1641026	.3705587	Keep
Clock	76.2%	.7620513	.4260461	Keep
Mixer	80.0%	.8	.4002053	Keep
Fan	90.6%	.905641	.2924775	Drop
Bicycle	2.1%	.0205128	.1418192	Drop
Radio	2.1%	.0020513	.0452678	Drop
Sewing machine	8.5%	.0851282	.2792156	Drop
Washing machine	0.0%	0	0	Drop
Phone	0.0%	0	0	Drop
Fridge	33.6%	.3364103	.4727236	Keep
TV	70.9%	.7087179	.4545864	Keep
Two wheeler	4.8%	.0482051	.2143094	Drop
Car	0.6%	.0061538	.0782448	Drop
Source of drinking water				
Piped to dwelling	23.2%	.2315574	.4220439	Merge as private
Piped to yard plot	38.4%	.3842213	.48666	Merge as private
Public tap standpipe	30.0%	.3002049	.4585819	Merge as public
Tube well/borehole	0.2%	.0020492	.0452447	Merge as public
Cart with small tank drum	0.2%	.0020492	.0452447	Merge as public
Tanker truck	6.9%	.0686475	.2529835	Merge as public
Other	1.1%	.0112705	.1056167	Merge as public
Water treatment				
Water treated	53.3%	.5333333	3.195329	Keep

Method of water treatment				
Boil water	18.3%	.1825641	.386507	Drop
Add bleach/chlorine	0.2%	.0020513	.0452678	Drop
Strain through a cloth	28.5%	.2851282	.4517072	Drop
Use water filter	3.1%	.0307692	.1727805	Drop
Solar disinfection	0.0%	0	0	Drop
Let it stand and settle	0.0%	0	0	Drop
Other	0.1%	.0010256	.0320256	Drop
Don't know	0.0%	0	0	Drop
Type of toilet				
Flush/pour flush	91.8%	.9180328	.2744554	Drop
Ventilated improved pit latrine	7.9%	.0788934	.2697106	Drop
Pit latrine with slab	0.2%	.0020492	.0452447	Drop
No facilities/field/road	0.1%	.0010246	.0320092	Drop
Toilet sharing				
Shared with other households	83.5%	.8348718	.3714868	Keep
Father's occupation				
Unskilled work	15.1%	.1507692	.3580074	Keep
Plant/machine operator	16.9%	.1692308	.3751481	Keep
Skilled craftsperson	54.9%	.5487179	.4978763	Keep
Agriculture/fishery worker	0.2%	.0020513	.0452678	Merge as other
Service worker	6.9%	.0687179	.2531037	Merge as other
Clerk in office	3.6%	.0358974	.1861299	Merge as other
Technician/KG/ primary school teacher	0.4%	.0041026	.0639525	Merge as other
Professional	0.8%	.0082051	.0902561	Merge as other
High-level government	0.2%	.0020513	.0452678	Merge as other
Does not work	1.0%	.0102564	.100805	Merge as other
Mother's occupation				
Plant/machine operator	0.1%	.0010256	.0320256	Drop
Skilled craftsperson	0.1%	.0010256	.0320256	Drop
Service worker	0.1%	.0010256	.0320256	Drop
Technician/KG/ primary school teacher	0.4%	.0041026	.0639525	Drop
Professional	0.1%	.0010256	.0320256	Drop
Does not work	99.2%	.9917949	.0902561	Drop

Table 2. Comparison of questions used in the NFHS and the current study to measure emotional, physical and sexual violence in ever married women aged 15-49:

	NFHS	Current study
Emotional violence	Said or did something to humiliate her in front of others	Belittled or humiliated her in front of others [humiliated20]
	Threatened to hurt or harm her or someone close to her	Threatened to hurt her or someone she cares about [threatened24]
	Insulted her or made her feel bad about herself	Insulted her or made her feel bad about herself [insulted19]
Physical violence	Pushed, shook or threw something at her	Pushed, shoved, shaken or thrown something at her [pushed40]
	Slapped her	Slapped, pinched or bitten her [slapped41]
	Twisted her arm or pulled her hair	Twisted her arm, banged her head or pulled her hair [twisted42]
	Punched her with his fist or with something that could hurt her	Hit or punched with fist or with something else that could hurt her [hit43]
	Kicked, dragged or beat her up	Kicked, dragged or beaten her up [kicked44]
	Tried to choke her or burn her on purpose	Suffocate, choke or burn on purpose [choke46]

	Threatened her or attacked her with a knife, gun or other weapon	Used instruments or weapons to threaten or harm her [weapons45]
Sexual violence	Physically forced her to have sexual intercourse even when she did not want to	Physically forced her to have sexual intercourse even when she did not want to [forcedsex58]
	Forced her to perform sexual acts she did not want to	Forced her to perform sexual acts that she did not want to [acts56]

Table 3. Relevant socio-demographic predictors of common mental disorders and self-esteem assessed in the literature

Lead author	Year	Study setting	Outcome	Tool used to assess outcome	Relevant socio-demographic predictors assessed
Common mental disorders					
Banerjee	2012	West Bengal	Depression	Beck Depression Inventory	**Age**, **years of schooling**, members in the family, **family income**
Bhattacharyya	2014	Goa	Psychological distress	K-10	**Age**, **marital status**, religion, living alone, **education**, **annual income**
Chan	2017	Chennai	Depressive symptoms	PHQ-9	Alcohol use, drug use, gender, age, education, marital status, employment status, urban/rural living,
Chandra	1998	Bangalore	Suicidal ideation and anxiety and depression	ICD-10 and HADS	Age, gender, habitat, income, marital status, number of children, alcohol intake
Chandran	2002	Tamil Nadu	Post partum depression	CIS-R	Housing, **income**, financial difficulties, family structure, **number of children**, husband's alcohol intake, **gender preference of child**
De Silva	2007	Andrah Pradesh* (Peru, Ethiopia, Vietnam)	Maternal CMD	SRQ-20	**Household wealth index**, debt, **owns house**, number of occupational activities done by mother, **maternal education, SES**, maternal age, ethnic group, religion, number of adults in household, number of living children, marital status,
Dubey	2012	Delhi	Peri-partum depression	EPDS	Parity, **family structure**, SES, **marital relationship**, male child at enrolment, **birth of female child**
Fahey	2016	Gujurat	CMDs	SRQ-20	Age, **income, education, marital status**
George	2016	South India	Antenatal depression	CIS-R	Number of children, **financial difficulties**, family structure, husband's problem drinking, desired gender of child, **pressure to have male child**, low self-esteem, **type of marriage**
Kamimura	2014	Gujurat	Mental health; anxiety and depression	PHQ-9; DUKE	Age, **education**, employment status, marital status, household income, number of people living in the household, religion, **caste**, number of children, type of house, urban/rural living
Kumar	2005	Across India	Mental health status	SRQ	**Age, education, differences in employment between husband and wife**, rural/urban/urban slum, SES, **husband's alcohol consumption**
Nayak	2010	Goa	CMDs	GHQ-12	**Age,** ethnicity, religion, marital status, **education**, **employment** , experiencing hunger due to money problems, household assets, **number of children**
Panigrahi	2017	Odisha	Mental disorders	SRQ	**Age, age at marriage, parental status**, education, **occupational status**, income, **addiction of husband/family member**
Patel G	2015	Gujurat	Postnatal depression	EPDS	**Age**, religion, education, **SES**, **type of housing**, **family type**, **addiction in husband**, **sex of infant**
Patel V*	1999	Goa (Harare, Santiago, Pelotas, Olinda)	CMD	CIS-R	**Economic indicators** (debt, unable to buy food due to lack of money), **gender, age**, **educational status**

Patel V	2006 a	Goa	CMD	CIS-R	Residence, age, **education, literacy**, religion, **marital status**, type of housing, **household size**, **access to water and sanitation facilities**, **household income**, **own/rent home**, employment status, **indebtedness, experience of hunger in previous 3 months**
Patel V	2006 b	Goa	CMD	CIS-R	**Age, education**, religion, **marital status**, economic status, **employment**, **income**, **running water in house**, **hunger in past 3 months, managing financially**
PS A	2017	Kerala	Depression	PHQ-9	Age, education, marital status, family type, family size, alcoholism of husband
Roberts	2016	Chhattisgarh	Symptoms of anxiety and depression	Hopkins symptom checklist-10	Age, **ethnicity**, education, religion,
Shidhaye	2017	Rural Maharashtra	Antenatal depression	EPDS	Age, **education**, occupation, **caste**, religion, type of house, type of family, family size, income, **age at marriage**, duration of marriage, number of children, number of boys
Shidhaye	2010	Bihar, Jharkand, Maharashtra, Tamil Nadu	CMD	GHQ-12	**Standard of living**, **age**, **education**, employment status, place of residence, caste, marital status, husband's age, husband's education, husband's employment, age at marriage, **husband's alcohol intake**
Shivalli	2015	Karnataka	Postnatal depression	EPDS	Age, religion, education, **working status**, **economic status**, **husband's occupation**, **family type**, duration of married life, parity, **gender of baby**
			Self-esteem		
Ayyash-Abdo	2007	Lebanon	Self-esteem	RSES	Gender, religion, SES
Carvalho	2016	Brazil	Self-esteem	RSES	**Sex**, age, having a spouse/partner, income, occupation
Chedraui	2010	Ecuador	Self-esteem	RSES	Age, parity, marital status, education, smoking habit, partner status, use of drugs, partner's age, partner's education, partner's alcoholism
Connelly	1998	United States	Self-esteem	RSES	Ethnicity, residence, **age, SES**
Da Silva	2008	United States	Self-esteem	RSES	**Age**, marital status, ethnicity, number of children
Daniailli	2013	Iran	Self-esteem	RSES	Age, marital status, **educational** status, parity, **income**
De Niet	2010	The Netherlands	Self-esteem	RSES	**Age, ethnicity**
Haber	1991	United States	Self-esteem	RSES	Employment, **income**, religion
Lipton	2006	London	Self-esteem	RSES	Age, employment, education, ethnicity
Liu	2016	Hong Kong	Self-esteem	RSES	**Age**, housewife, **marital status**, **education**, **income**, **living space per capita**
Loto	2010	Nigeria	Self-esteem	RSES	**Being single**
Loto	2009	Nigeria	Self-esteem	RSES	Age, occupation, education, marital status, religion, SES, **type of marriage**, parity
Murakami	2015	Hawaii	Self-esteem	RSES	BMI, age, ethnicity, gender
Noyan	2006	Turkey	Self-esteem	RSES	Age, marital status, **education, occupation**, **household income, residential area**
Pakriev	2002	Finland	Self-esteem	RSES	**Age**, marital status, **education**, **income**, problems with alcohol, less than 3 children under 14 years, **retired/pension**, **dissatisfaction with housing**, distressing work
Tae	2012	Korea	Self-esteem	RSES	Age, education, occupation, marital status, **religion**, **economic status**
Woods	1994	United States	Self-esteem	RSES	Asian women: **number of children**; Black women: **education**; White women: **income**

*Results presented only for India
Variables in bold are the ones that showed a statistically significant relationship with the outcome variable.

Table 4. Two-way table of emotional violence and GHQ-12 scores for the past year and past month

Grouped GHQ scores	Past 12 months			Past month		
	No	Yes	Total	No	Yes	Total
0-1	283 (69.9%)	9 (12.2%)	177 (37.0%)	284 (68.6%)	8 (12.3%)	177 (37.0%)
2-3	81 (20.0%)	22 (29.7%)	103 (21.5%)	83 (20.1%)	20 (30.8%)	103 (21.5%)
4-5	30 (7.4%)	18 (24.3%)	48 (10.0%)	33 (8.0%)	15 (23.1%)	48 (10.0%)
6+	11 (2.7%)	25 (33.8%)	36 (7.5%)	14 (3.4%)	22 (33.9%)	36 (7.5%)
Total	405 (100.0%)	74 (100.0%)	479 (100.0%)	414 (100.0%)	65 (100.0%)	479 (100.0%)
P-value	<0.001*			<0.001*		

Table 5. Two-way table of economic violence and GHQ-12 scores for the past year and past month

Grouped GHQ scores	Past 12 months			Past month		
	No	Yes	Total	No	Yes	Total
0-1	282 (66.0%)	10 (19.2%)	177 (37.0%)	284 (65.7%)	8 (17.0%)	177 (37.0%)
2-3	86 (20.1%)	17 (32.7%)	103 (21.5%)	87 (20.1%)	16 (34.0%)	103 (21.5%)
4-5	36 (8.4%)	12 (23.1%)	48 (10.0%)	38 (8.8%)	10 (21.3%)	48 (10.0%)
6+	23 (5.4%)	13 (25.0%)	36 (7.5%)	23 (5.3%)	13 (27.7%)	36 (7.5%)
Total	427 (100.0%)	52 (100.0%)	479 (100.0%)	432 (100.0%)	47 (100.0%)	479 (100.0%)
P-value	<0.001*			<0.001^		

*Chi-squared test
^Fisher's exact test

Table 6. Two-way table of physical violence and GHQ-12 scores for the past year and past month

Grouped GHQ scores	Past 12 months			Past month		
	No	Yes	Total	No	Yes	Total
0-1	284 (63.7%)	8 (24.2%)	177 (37.0%)	289 (63.0%)	3 (15.0%)	177 (37.0%)
2-3	96 (21.5%)	7 (21.2%)	103 (21.5%)	100 (21.8%)	3 (15.0%)	103 (21.5%)
4-5	42 (9.4%)	6 (18.2%)	48 (10.0%)	44 (9.6%)	4 (20.0%)	48 (10.0%)
6+	24 (5.4%)	12 (36.4%)	36 (7.5%)	26 (5.7%)	10 (50.0%)	36 (7.5%)
Total	446 (100.0%)	33 (100.0%)	479 (100.0%)	459 (100.0%)	20 (100.0%)	479 (100.0%)
P-value	<0.001^			<0.001^		

^Fisher's exact test

Table 7. Two-way table of sexual violence and GHQ-12 scores for the past year and past month

Grouped GHQ scores	Past 12 months			Past month		
	No	Yes	Total	No	Yes	Total
0-1	286 (64.0%)	6 (18.8%)	177 (37.0%)	287 (63.6%)	5 (17.9%)	177 (37.0%)
2-3	94 (21.0%)	9 (28.1%)	103 (21.5%)	96 (21.3%)	7 (25.0%)	103 (21.5%)
4-5	44 (9.8%)	4 (12.5%)	48 (10.0%)	45 (10.0%)	3 (10.7%)	48 (10.0%)
6+	23 (5.2%)	13 (40.6%)	36 (7.5%)	23 (5.1%)	13 (46.3%)	36 (7.5%)
Total	447 (100.0%)	32 (100.0%)	479 (100.0%)	451 (100.0%)	28 (100.0%)	479 (100.0%)
p	<0.001^			<0.001^		

^Fisher's exact test