HUMANITARIAN EVIDENCE PROGRAMME

The impact of mental health and psychosocial support programmes for populations affected by humanitarian emergencies: A systematic review protocol

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Picture

Rebuilding lives and hope in Pakistan, a year on from the floods by Vicki Francis/Department for International Development.

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EXECUTIVE SUMMARY

Humanitarian emergencies can impact the mental health and psychosocial well-being of local populations. Mental health and psychosocial support (MHPSS) are one way of seeking to manage the consequences, reduce the negative impact and provide support to affected populations. We aim to review existing primary research examining the extent to which MHPSS impacts mental health and psychosocial well-being and if the effectiveness and delivery of MHPSS varies and affected by characteristics of populations (e.g. age, gender, individual risks) and/or contextual factors (e.g. types of disasters or humanitarian emergencies, culture, geographical locations).

We will conduct a mixed-methods systematic review. A scoping exercise to identify and review existing MHPSS systematic reviews is complete (October –November 2015). The findings from the scoping exercise are used to inform the scope of the systematic review, aiming to identify effective MHPSS and implementation in humanitarian emergencies. Outcome evaluation studies will be limited to experimental trials with control groups reporting outcomes for populations affected by humanitarian emergencies. Studies evaluating implementation of MHPSS will seek the perspectives of both programme providers and recipients to understand barriers and facilitators of implementing MPHSS in humanitarian contexts. Studies will be limited to those published in English[1] from 1980 onwards. We will identify studies by conducting a bibliographic search of 12 databases. We will also draw on the grey literature by hand searching of more than 25 topic-specific websites and contact with experts in the field.

All studies will be data extracted and critically appraised using standardised and review specific coding tools. The coding will aim to capture: study aims and objectives, population characteristics, intervention components and implementation details, study methods, outcome data, and stakeholder perspective including on challenges, limitations, and recommendations. Methods of synthesis will include meta-analysis and thematic analysis. We will prepare 'summary of findings' tables for the quantitative and qualitative syntheses.

We will aim to produce academic and policy relevant review products including a 'plain language' summary, an executive summary and technical review. To support dissemination activities we will focus on identifying and ensuring review outputs are made known and freely available to our key audiences.

[1] A list of Non-English literature that meet all inclusion criteria will be available for future investigation.

LIST OF ABBREVIATIONS

AG	Advisory group
MHPSS	Mental Health and Psychosocial Support
PTSD	Post-Traumatic Stress Disorder
LMICs	Low and Middle Income Countries
GBV	Gender-Based Violence
IASC	Inter-Agency Standing Committee
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
EPPI-Centre	Evidence for Policy and Practice Information and Co-coordinating Centre
ESRC	Economic and Social Research Council
RR	Risk Ratio
SMD	Standardised Mean Differences
CI	Confidence Interval

1. BACKGROUND

This review will synthesise evidence on the effectiveness and implementation of mental health and psychological support (MHPSS) targeting populations affected by humanitarian emergencies. It will be informed by a scoping exercise of review-level evidence and guided by an advisory group. The advisory group comprised of topic and policy relevant experts was set up in November 2015. Full details of the advisory group members can be found in appendix 2.1.

1.1. THE IMPACT OF HUMANITARIAN EMERGENCIES ON MENTAL HEALTH AND PSYCHOSOCIAL WELL-BEING

The events leading to humanitarian emergencies have increased fourfold in the last 25 years.[1] In 2014 alone, 140.7 million people were affected by natural disasters [2] and 59.5 million displaced by violence and conflict.[3] The number of people affected by humanitarian emergencies is expected to increase, making it an international policy concern [4] and a research evidence priority.[5] In addition to the physical, environmental and financial costs, humanitarian emergencies can have a direct impact on the psychosocial wellbeing and mental health of children [6] and adults.[7,8]

Although the majority of people affected by humanitarian crises maintain good psychological health and do not develop mental health problems, a commonly set of diagnosed symptoms cited in the research literature, in both adults and children, following natural or man-made disasters is post-traumatic stress disorder (PTSD).[9-11] Recent meta-analyses have also identified a relationship between exposure to different types of disaster and conflict related events and mental health disorders and other psychological symptoms including anxiety [12], depression[13] and psychological distress.[14] Although severe mental health presentations (e.g. psychosis) are less commonly reported in the literature and their presence is often attributable to pre-existing mental health condition, access to MHPSS during or after a humanitarian crisis are still be required. [15]

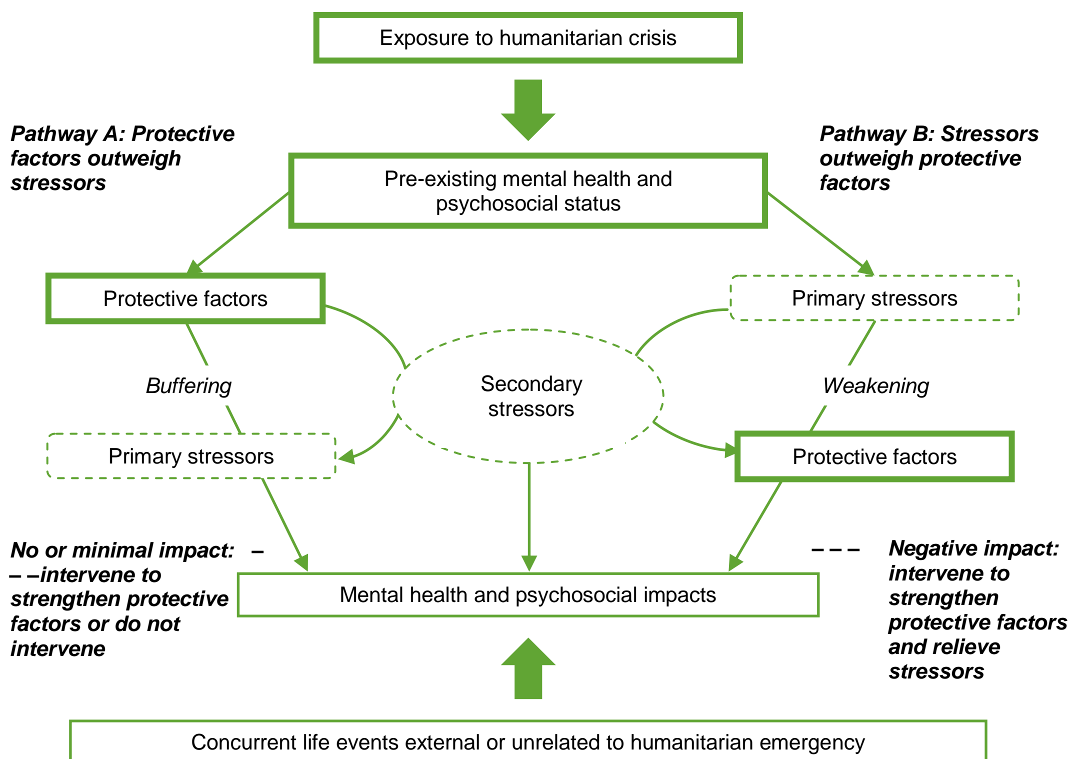
The psychosocial impact of humanitarian emergencies at an individual, family and community level can be sufficiently serious to limit a person's ability to function and cope with everyday life. Communities, often in a state of social flux with limited access to resources, may also find themselves with a reduced capacity to respond to the social support needs generated by the emergency. [16]

The possible pathways from a humanitarian emergency to mental health and psychosocial impact are outlined in Figure 1. This pathway takes into consideration the relationship between: 1) the negative and disruptive nature directly arising from a humanitarian emergency, conceptualised here as **'primary stressors'** (e.g. witnessing violence, death or destruction); 2) the role of "**secondary stressors"** (e.g. economic and material losses) often by-products of humanitarian emergencies, and 3) contextual and individual protective factors that potentially mediate the effects of exposure to humanitarian emergencies. **Protective factors** acting as a buffer to alleviate the impact of stressors leading to adverse mental health and psychosocial outcomes may include the type, severity, and longevity of the emergency, the availability of resources, at a national or local level, the political stability of the country, and the sociodemographic and individual attributes of a person (Pathway A).

However, in many instances stressors are not buffered or outweighed by the presence of protective factors, [17] they may have been reduced as a result of exposure to a humanitarian emergencies leading to a need to intervene to relieve stressors and strengthen protective factors (Pathway B). In addition, pre-existing mental health and psychosocial presentations, unrelated concurrent life events to humanitarian emergencies, and/or limited humanitarian

resources can further compound stressors or have a direct impact on the mental health and psychosocial needs of people affected by emergencies, also generating a need for access to MHPSS programmes. Further, the ongoing impact of humanitarian crises, such as unresolved issues of protection, safety, access to economic resources, may also inhibit individual and collective opportunities for self-reliance, social group cohesiveness which further impact mental health and psychological-wellbeing.[18]

Figure 1 Possible pathways in response to humanitarian events

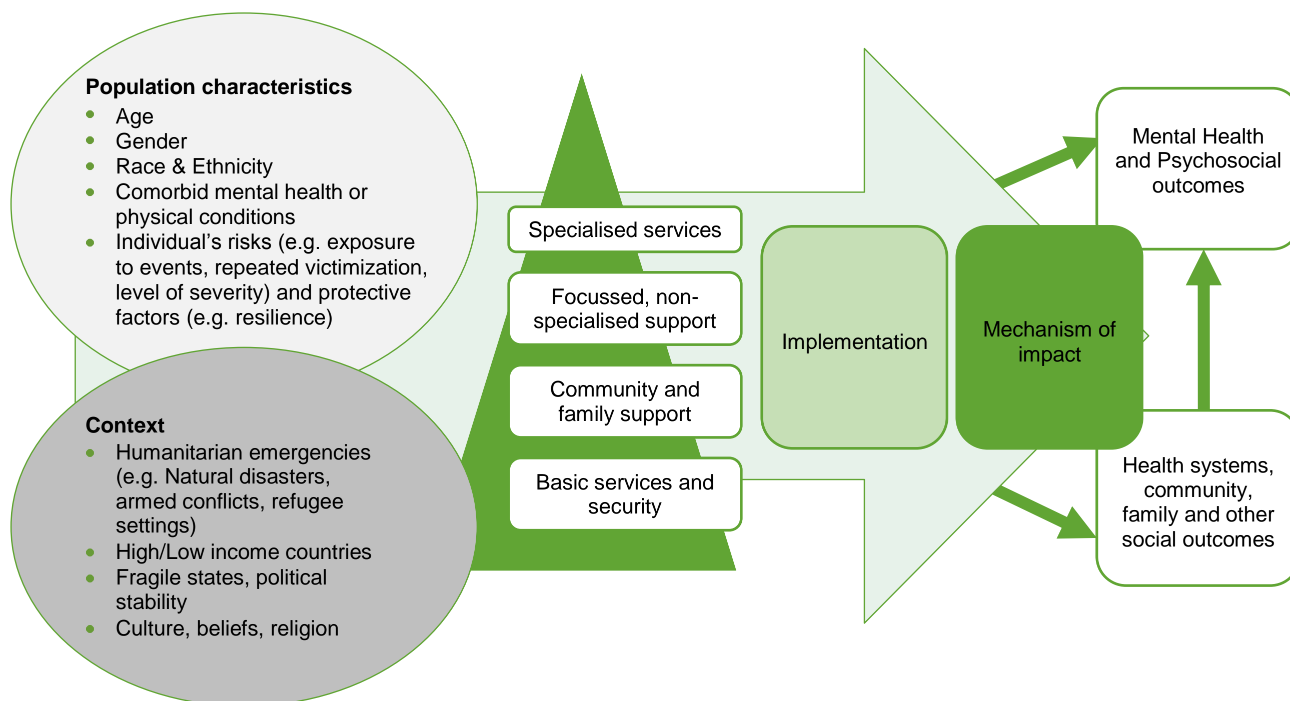


Source: Adapted from Johns Hopkins Bloomberg School of Public Health and the International Federation of Red Cross and Red Crescent Societies, 2007; and Lock et al. (2012)

1.2. INTERVENTIONS TO SUPPORT THE MENTAL AND PSYCHOSOCIAL SUPPORT NEEDS OF PEOPLE AFFECTED BY HUMANITARIAN EMERGENCIES

Addressing the mental and psychosocial support needs of people affected by humanitarian disasters is increasingly seen as a critical component in any humanitarian aid response, both during and after an emergency [19]. The scope and aims of mental health and psychosocial interventions targeting people affected by emergencies can range from individualised clinical-based approaches (e.g. psychosocial counselling, psychotherapy); family, community and school-level programmes; to economic, livelihoods and social development initiatives [20]. This breadth in the type of interventions that may constitute MHPSS is reflected in the Figure 2. Here, we adopt the definition of MHPSS as defined as 'any type of local or outside support that aims to protect or promote psychosocial well-being or to prevent or treat mental disorders' [21] (p.1). The MHPSS term defined above is widely used in the field of humanitarian emergencies to describe and capture a wide range of strategies and approaches designed to address mental health and psychosocial problems of affected populations in disaster and conflict environments [22].

Figure 2: Population characteristics, context, types of MHPSS and outcomes



Adapted from IASC (2007) p.12 and drawing on moderator analysis in systematic reviews

Given the ambitious nature and wide variety of MHPSS, their methods of intervention and potential outcomes, there is no *single* theory of change that can be applied for all possible types of MHPSS. However, drawing on the IASC pyramid which depicts a 'layered system of complementary supports' [21]p.11), and learning from existing systematic reviews, we have highlighted, in a simplified way to guide this review (see figure 2), the types of population characteristics, contextual and implementation factors or the combinations of these factors which may act as mediators or moderators to intervention effectiveness. Some MHPSS may attempt to alleviate mental health and psychological impacts by targeting singular presentations such as somatic or non-somatic panic attacks or flashbacks, or they may focus more broadly on reducing depressive, PTSD or anxiety-related symptoms.[23] Programmes may also seek to strengthen protective factors of those affected by

humanitarian emergencies by focusing on increasing feelings of empowerment, resilience and other family, community, economic and social outcomes.[24] Improving these broad range of outcomes by strengthening protective factors and addressing primary and secondary stressors may be achieved by supporting people to process their experiences, such as by re-framing them narratively or via cognitive processing; by facilitating greater social participation through contact with their families and/or the community; or by supporting people to access educational, employment, legal or other social welfare services, when available or appropriate.[25]

The extent to which MHPSS conceptualise the impact of humanitarian emergencies solely through a psychopathological lens, [26]a particular trauma model, or engage with wider social and cultural norms that might be underlying or shaping the expression of individual and community responses varies.[27,28] Humanitarian crises often occur in non-Western, limited resources settings where Western strategies and approaches may not be feasible or applicable [29], therefore MHPSS may be need to be adapted or developed to be context and culturally sensitive. This might include modifying the content and delivery of the interventions and in the case of impact evaluations developing culturally valid measures.[30] In other cases, the emphasis of MHPSS may focus less on the individual, and westernised concept of 'vulnerability' to concentrate on individual agency, family, community, and societal levels; [31,32] a trend also reflected in broader psychosocial and mental health service delivery.[33] [34]

A range of contextual factors can support or inhibit the implementation of MHPSS to children and adults in emergency settings. These include security, access to basic needs, capacity of humanitarian services providing for basics needs in a dignified way, availability of social supports, access to national or local resources, the availability of trained lay or professional providers, organisational support and greater coordination with community partners [35] including integration with local mental health and psychosocial support services [23] and broader social systems within which populations affected by humanitarian emergencies receive and engage with MHPSS (ecological context).

Humanitarian workers and service providers are often cited as a key component to understanding what contributes to the successful delivery of programmes, both in relation to understanding the barriers they face during implementation and in relation to how provider characteristics (e.g. age, gender, ethnicity) influences uptake and continued engagement in services. This is particularly relevant in the context of humanitarian emergencies, where programmes need to consider engaging at all levels: individuals, families and community members. For example it may be important that the psychological support provided by MHPSS with a gender-based violence (GBV) focus, targeting women, are delivered by women, but at the organisational level remain led by community leaders of either gender.[36]

Organisations may need additional financial and material resource to enable the delivery of MHPSS [37], particularly as there may be an urgent need to recruit and train staff, provide psychosocial education materials, and mobilise communities relatively quickly. Additional resource and skills may also be required to conduct needs assessment and ongoing monitoring to ensure programmes stay within the IASC guidelines of ensuring they 'do no harm'(p.35).[21]

Furthermore, the mechanisms to support liaison with local partners may be crucial when attempting to support people engage with services and achieve outcomes in those areas, such as legal, welfare, or education. The dynamic interplay of context and the shaping of implementation factors can inform the extent to which people can meaningfully access MHPSS programmes and lead to improvement in outcomes, key concerns in this review.

1.3. RATIONALE FOR CURRENT SYSTEMATIC REVIEW

This systematic review builds on existing research effort which to date has focused on establishing a relationship between exposure to humanitarian emergencies and mental health and psychosocial outcomes, or investigating the effectiveness of MHPSS programmes on outcomes for children and adults (see Box 1 and a full list of systematic reviews identified in Appendix 4).

Box 1: Systematic reviews of effectiveness of MHPSS in humanitarian emergencies: a scoping exercise

The scoping review identified 15 systematic reviews relevant to MHPSS in humanitarian emergencies. Four of the fifteen reviews focused on children and young people (Barry et al., 2013; Betancort et al., 2013; Tyrer et al., 2014; Newman et al., 2014). Newman et al. (2014) aimed to examine psychological interventions designed for children in both manmade and natural disasters, whilst Betancort and others (2013), published a year earlier, examined intervention studies delivered to children affected by war. Barry et al (2013) focused more broadly on mental health promotion interventions for children and young people in Low and Middle Income Countries (LMICs) but identified a set of MHPSS programmes in humanitarian emergencies. Tyrer and others (2014) focused specifically on school and community-based interventions designed for refugees and asylum seeking children.

Three systematic reviews (Patic et al., 2011; Clumlish et al., 2010; Gwozdziewucz et al., 2013) focused on psychological treatment interventions delivered to adult refugees and/or asylum seekers. One review by Asgary (2013) examined prevention and management strategies for gender-based violence in refugees.

Five systematic reviews aimed to systematically review evidence of MHPSS in armed conflicts and political violence settings: one reviewed studies of community-based mental health service interventions aimed at refugees in conflict areas (William and Thompson, 2011), one focused on psychosocial interventions in on-going violence (de Jong, 2014), two examined evidence of interventions for women (Dossa et al., 2012; Tol et al., 2013), and one focused on torture survivors (Patel et al.2014).

One systematic review examined evidence of psychosocial care interventions designed for chemical, biological, radiological, nuclear events (Gouweloos et al., 2014). Tol et al., (2011) examined more broadly research evidence on the effectiveness of MHPSS interventions on mental health outcomes for both adults and young people.

Despite this considerable research activity, the development of international and European best practice guidelines on the delivery of MHPSS [21,38,39] and a growing call to link research to the practice of MHPSS [40], there is a lack of review-level evidence on provider or recipient views on the factors contributing to the implementation and delivery of MHPSS programmes, [41] or the identification of culturally relevant MHPSS and deemed to be most effective, in what circumstances, and for whom.[42]

Moreover, there is a preponderance of reviews focused on measuring health-related rather than social outcomes, and a lack of critically appraised evidence on the extent to which MHPSS interventions may cause unintended consequences, particularly when interventions are implemented unnecessarily or not adapted to ensure they are contextually appropriate. [43,44] Similarly, the scoping exercise carried out as part of the current review protocol failed to identify any systematic reviews synthesising evidence from process evaluations or studies of people's experiences of engaging in MHPSS programmes during or after exposure to a humanitarian emergency (See Appendix 4). Thus, an examination of outcomes beyond psychological ill health and a synthesis of the views of participants and providers is essential to support fill this gap in the evidence base.

In this systematic review, we will aim to synthesis evidence and explore the relationship between MHPSS, outcomes, implementation and contextual factors. In doing so, we seek to provide important contextually relevant evidence to support the current and future work of

key stakeholders, such as policy makers and practitioners responsible for commissioning and delivering MHPSS in humanitarian emergency settings. Synthesizing the evidence on the effectiveness of MHPSS and examining how those effects may vary according to implementation and contextual factors, such as different settings or characteristics of participants, will not only support assessment and greater understanding of the potential of MHPSS to have a positive impact, but will also identify likely moderators to those impacts or potential unintended consequences.

1.4. REVIEW AIMS

The aim of this review is to systematically search for, appraise the quality of, and synthesise evidence on MHPSS delivered to populations affected by humanitarian emergencies, with a view to addressing the following research questions:

1. What are the barriers and facilitators of implementing and receiving mental health and psychosocial support interventions delivered to populations affected by humanitarian emergencies?
2. What are the effects of mental health and psychosocial support interventions delivered to populations affected by humanitarian emergencies?
3. What are the key features of effective MHPSS and how can they be successfully developed and implemented?
4. What are the gaps in research evidence for supporting delivery and achieving intended outcomes of MHPSS?

2. METHODS

The review will adhere to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidance [45] provided in Appendix 1. Where necessary it will be adapted to accommodate the mixed methods approach taken in this review.

2.1. TYPE OF REVIEW

The research will consist of **a two-stage systematic review process** (See Figure 3 and Figure 4). The first stage consists of a scoping exercise was carried out between October to November 2015. The aim of the scoping exercise is to identify existing systematic reviews and reviews undertaken in the field of MHPSS in humanitarian emergencies, as part of the protocol development. By drawing on the review-level evidence, the scoping exercise enables us to make informed decisions on the final scope of the systematic review and contributes to the development of a more sophisticated search strategy.

The development of this protocol involves consulting with the Humanitarian Evidence Programme team at Oxfam on the scope and conceptual framework for this review. Feedback received from the Oxfam programme team and peer reviewers will be incorporated into a revised draft of the protocol to ensure the final protocol meets the requirements of key stakeholders, and is sufficiently well focused to address the review questions prior to commencing the review.

Figure 3: Project stages

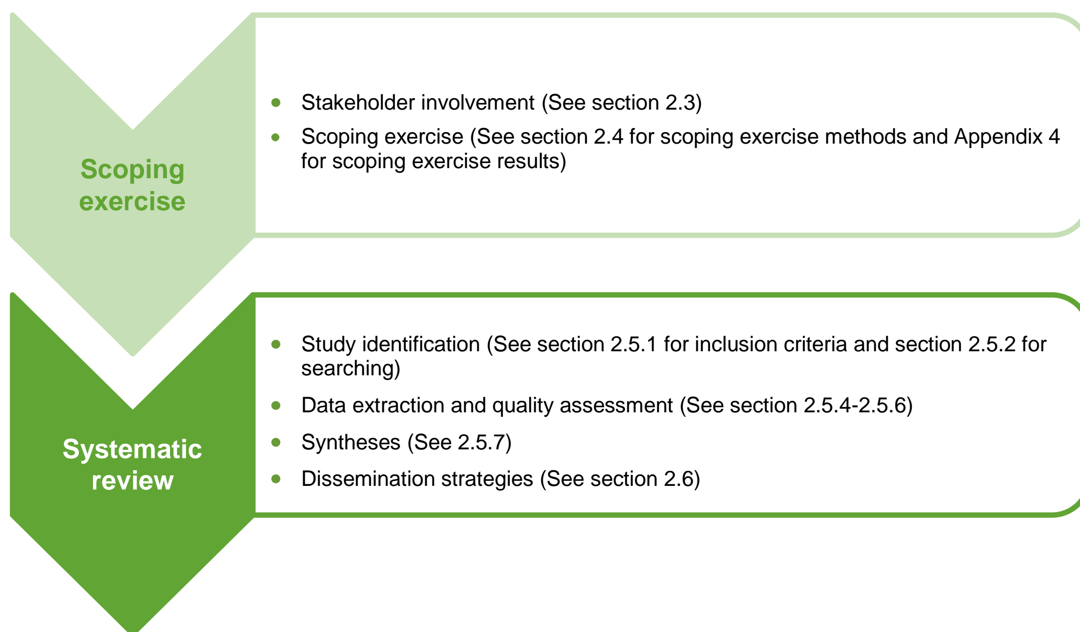
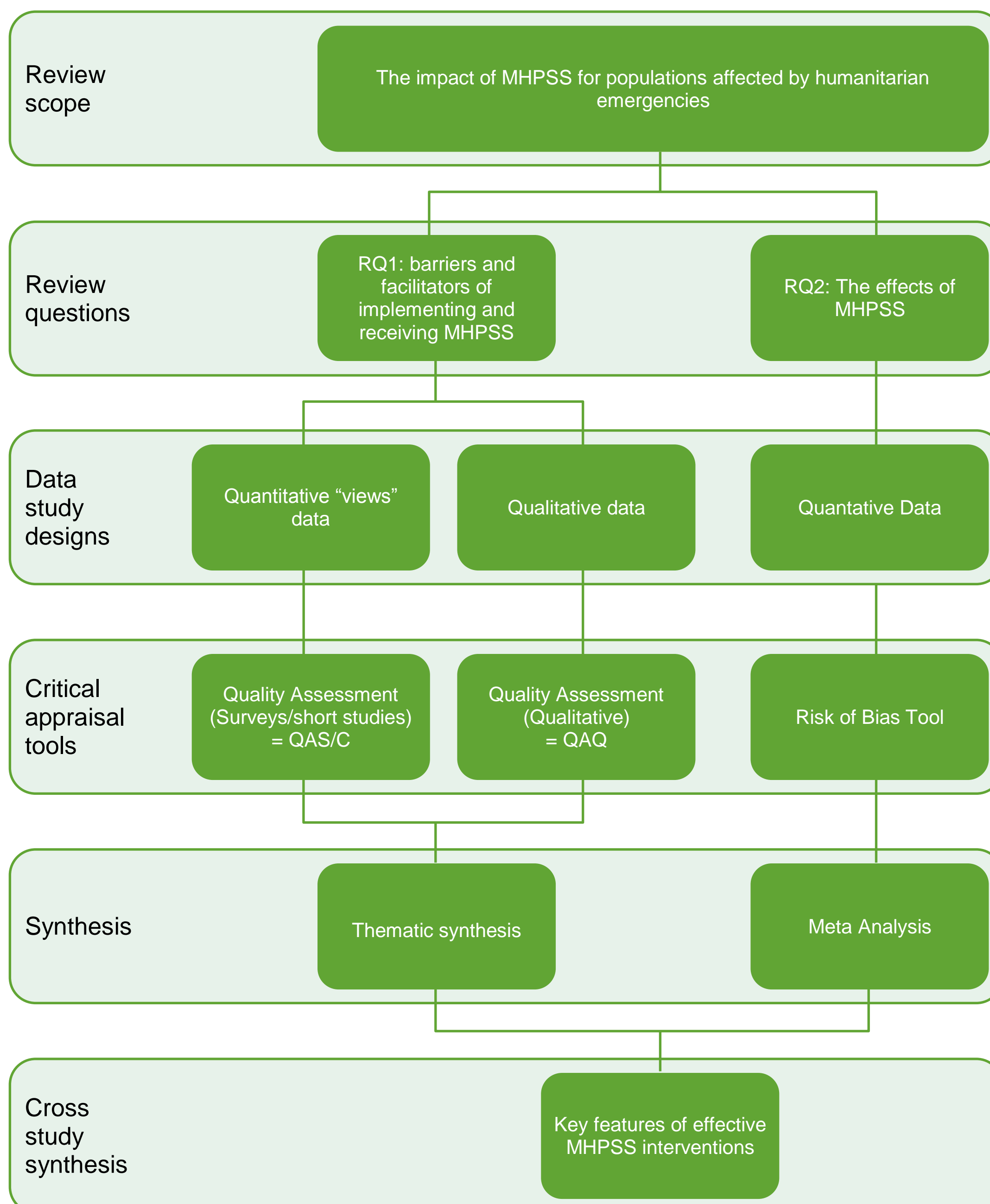


Figure 4: Key stages of the systematic review: an overview



2.2. REVIEW GOVERNANCE AND ETHICS

The principal investigator (PI) is Dr Mukdarut Bangpan and the Co-PI is Kelly Dickson, research officers at the EPPI-Centre, Social Science Research Unit, Department of Social science, Institute of Education, UCL. They are jointly responsible for the conduct and delivery of the review. The research consultants (AC, LF) will form part of the review team and work closely with the PI and the Co-PI. The review team will be responsible for ensuring the systematic review meets the requirements of the funders and key stakeholders. The systematic review will be registered at the Evidence for Policy and Practice Information and Co-coordinating Centre (EPPI-Centre and follow internationally recognized standards and procedures of conducting systematic reviews [46]. The protocol will be registering on

PROSPERO. All review outputs will be subject to a formal peer review and feedback process adhering to pre-determine financial payment milestones corresponding to key stages in the review (see project timetable in Appendix 7). As this systematic review will be collecting information freely available in the public domain, and will not be collecting any new data via participants, the potential for risk of harm to individuals or others affected by the research is minimal and therefore there is no official requirement to go through an ethical approval process. We will follow UCL research ethics framework, and will comply with the Economic and Social Research Council (ESRC) Research Ethics Framework to ensure all potential ethical considerations are identified and responded to.

2.3. STAKEHOLDER INVOLVEMENT

Involving stakeholders can support the research process by ensuring the scope and findings of the review are relevant, accessible, and reach appropriate audiences [47]. As part of scoping exercise, we contacted a range of possible stakeholders inviting them to join an advisory group (see Appendix 2). Their role will be to provide policy and practice perspectives to ensure the review remains contextually relevant, advise on the scope and identify any relevant research (particularly unpublished reports not easily available in the public domain). The advisory group will be invited to provide feedback, virtually via email or Skype meetings at three key points in the review process: (1) on the draft protocol, (2) during the review, commenting on emerging findings to inform policy and practice recommendations, and (3) on the final review products to inform the product outputs and support strategies for dissemination.

2.4. STAGE ONE: SCOPING EXERCISE (OCTOBER TO NOVEMBER 2015)

2.4.1. Identification of relevant systematic reviews and reviews in scoping exercise

We have searched key three bibliographic databases of research literature: Medline (Ovid), Cochrane Collaboration, and Web of Science, to identify potentially relevant systematic reviews or reviews on MHPSS in humanitarian emergencies. A combination of three key concepts, ‘systematic review’ AND ‘MHPSS interventions’ AND ‘humanitarian’, was employed (e.g. ‘literature review’ AND ‘psychosocial’ AND ‘humanitarian’). This bibliographic databases search will be supplemented by further suggestions of key literature in the field from topic experts and the AG.

2.4.2. Characterisation of systematic reviews/reviews in the scoping exercise

All systematic reviews or reviews were coded, when data available, according to five key dimensions of focus: i) population (e.g. children, refugees, older people); ii) types of humanitarian emergencies; iii) geographical location; and where applicable iv) types of MHPSS interventions; and v) outcome reported. The codes were applied to full-text reports by review authors (KD, MB). The results of the scoping exercise are reported in this protocol (see Appendix 4).

2.5. STAGE TWO: SYSTEMATIC REVIEW

2.5.1. Criteria for considering studies for this review

Settings

We will include primary studies conducted in the context of humanitarian emergencies. For this review, humanitarian emergencies refer to natural and/or manmade disasters, including both slow-onset and sudden crises. This may include, but are not limited to, earthquake, volcano, rock fall, avalanche, landslide, storm, tornado, typhoon, cyclone, hurricane, flood, extreme temperature, wildfire, drought, epidemic, war, terrorist attack, industrial accidents, pollution, political violence, armed conflict.

Interventions

We will include programmes which seek to provide MHPSS and are delivered in the context of humanitarian emergencies or for populations affected by humanitarian emergencies. This includes, but not be limited to, psychological interventions such as cognitive, analytical, narrative exposure; various types of experiential therapies; and / or social support interventions which may include educational or community-based activities. These interventions may be single or multi-component programmes and may be delivered at the individual, school, healthcare, family, community, and/or national level. MHPSS may vary regarding the extent to which they reflect the need to be responsive, particularly when delivering programmes during an emergency, or if they have been designed to follow an a priori programme manual or protocol with guidelines on implementation to ensure programme fidelity. To reflect this MHPSS interventions are broadly defined in this review as interventions to 'protect or promote psychosocial well-being and/or prevent or treat mental disorders' [21](p.11) and which fall solely outside of the remit of medication and pharmacology.

Population

For effectiveness studies of MHPSS, we are interested in populations affected by humanitarian emergencies including adults and young people. We will exclude effectiveness studies if the majority of participants are military personnel or those working in the context of humanitarian emergencies. For studies evaluating process, we are interested in provider's views on delivering and implementing MHPSS and recipient's views on engaging and participating in MHPSS.

Study design

We will include the following study designs:

To answer the review question on **the barriers and facilitators of implementing and receiving MHPSS interventions**, we will include: studies reporting quantitative and/or qualitative data on intervention planning and design, implementation, engaging in, or causal pathways of the interventions. Studies that seek stakeholders' perspectives (e.g. programme providers, recipients of MHPSS or their families) may report exclusively on evaluations on the 'process' of interventions or report the process evaluation data alongside outcome evaluation data.

To answer the question on **the effectiveness of MHPSS interventions,** we will include: evaluation studies employing *prospective* experimental and quasi-experimental studies including randomised controlled trials and non-randomised controlled trials with control groups. Comparison groups can be those with no intervention, on a waiting list, other active interventions, or usual care.

Outcomes and types of data

Process synthesis: No exclusions will be made based on the content of data provided on the process of delivering or receiving MHPSS interventions. Types of data will include participants perspectives captured by open-ended (e.g. interviews) or closed questions (e.g. surveys). We will aim to captures people's experiences by reporting of direct participant's quotes, author descriptions, either in narrative or numerical form, or by authors' conclusion.

Outcome synthesis: No exclusions will be made by outcome. To address the effectiveness of MHPSS interventions, we will include, but will not be limited to, post-traumatic stress disorder, other anxiety disorders, mood disorders, psychological well-being, and other physical health and social outcomes (e.g. family support, school attainment, employment) as reported in the studies.

Date and Language

We will include studies published on or after 1980 as a cut-off date when the humanitarian community began to increasingly engage in MHPSS services including provision to populations affected by conflicts in Western and Non-Western contexts [48-50]. Although we will include only studies published in English in the synthesis stage, a list of all relevant MHPSS, non-English publications identified during the searching stage, will be available in the main report.

2.5.2. Searching

We have developed a preliminary search strategy and identified sources during the scoping exercise stage that will be finalised in the second stage of the review. The search strategy develops and builds on from previous systematic reviews in the field (For example, see [28,34,36,40,51,52])

Sources

Key informants

We will contact authors of key published papers or researchers of intervention programmes and known MHPSS networks to identify relevant unpublished literature. This is particularly important for identifying 'grey literature' that may not be in the public domain.

Electronic databases

The following 12 bibliographic databases, across disciplines, will be undertaken: MEDLINE, ERIC, PsycINFO, Econlit, Cochrane Library, IDEAS, IBSS, Sociological Abstracts, Social Science Citation Index, CINAHL, EMBASE, Scopus, ASSIA

Special list databases and grey literature will also be searched through: Global Health Library; Health Management Information Consortium (HMIC); POPLINE; British Library for Development Studies; DfID (http://r4d.dfid.gov.uk/); International Initiative for Impact Evaluation (3ie); ELDIS, greylit.org, Google Scholar; PROSPERSO, WHO International Clinical Trials Registry Platform (ICTRP) , ISCTRN, Clinicaltrails.gov.

Websites

- The World Bank (http://www.worldbank.org/)
- The Overseas Development Institute (ODI), including the Humanitarian Policy Group http://www.odi.org/programmes/humanitarian-policy-group (HPG) and Humanitarian Practice Network http://odihpn.org/ (HPN)
- Institute of Development Studies http://www.ids.ac.uk/
- International Development Research Centre http://www.idrc.ca/EN/Pages/default.aspx

- Active Learning Network for Accountability and Performance in Humanitarian Action (ALNAP) http://www.alnap.org/
- Emergency Nutrition Network (Field Exchange) http://www.ennonline.net/
- Evidence Aid http://www.evidenceaid.org/
- Feinstein International Center, Tufts University http://fic.tufts.edu/
- Enhanced Learning and Research for Humanitarian Assistance http://www.elrha.org/
- International Association of Professionals in Humanitarian Assistance and Protection https://phap.org/
- Humanitarian Accountability Partnership http://www.hapinternational.org/
- The Network on Humanitarian Assistance http://nohanet.org/
- Harvard Humanitarian Initiative http://hhi.harvard.edu/
- Refugee Studies Centre, University of Oxford http://www.rsc.ox.ac.uk/
- European Commission's Humanitarian Aid and Civil Protection Department http://ec.europa.eu/echo/
- USAID Development Experience Clearinghouse (and related USAID sub-websites) https://dec.usaid.gov/dec/home/Default.aspx
- ReliefWeb http://reliefweb.int/
- Oxfam Policy and Practice Websites http://policy-practice.oxfam.org.uk/
- Mental Health and Psychosocial Support Network (http://mhpss.net/)
- UNHCR http://www.unhcr.org/cgi-bin/texis/vtx/home
- UNICEF http://www.unicef.org.uk/
- Asian Development Bank http://www.adb.org/about/main
- African Development Bank http://www.afdb.org/en/
- Inter-American Development Bank http://www.iadb.org/en/inter-american-development-bank,2837.html
- United Nation Office for the Coordination of Humanitarian Affairs (OCHA) http://www.unocha.org/hina
- International Committee of the Red Cross (ICRC) https://www.icrc.org/en/homepage
- Office of U.S Foreign Disaster Assistance (OFDA), USAID https://www.usaid.gov/who-we-are/organization/bureaus/bureau-democracy-conflict-and-humanitarian-assistance/office-us

Citation searching

We will scan citations in the reference section of systematic reviews and reviews identified during the scoping exercise stage, and of studies that are subsequently included in the review, for inclusion and synthesis.

Search strategy

Key search terms are determined by the review questions and the inclusion criteria and will be developed iteratively and piloted against papers already identified in the scoping exercise stage. Search strings will be developed for each database using combinations of the main key terms and their synonyms which denote key aspects of the review. The search uses the Boolean operator 'OR' to link each key aspect to their synonyms. Then, all key aspects are combined using 'AND' to identify relevant literature. Three key concepts will be included in the search strings, including humanitarian, mental health and psychological intervention, and study design.

For example, (humanitarian OR war OR conflict OR earthquake) **AND** (mental health OR psychosocial) **AND** (quantitative or effectiveness).

A table of the key search terms used and an example of their use in a specific search can be found in Appendix 6. We will present the full search strategy used for each database in the Appendix of the final report.

2.5.3. Selection of studies and quality assurance

Search results will be imported into the systematic review software, EPPI-Reviewer 4 [53]. We will pilot inclusion criteria by comparing decisions by two reviewers (KD and MB) using an inclusion worksheet with guidance notes. Any differences will be resolved through discussion. Each reference will be screened on the basis of titles and abstracts. Full reports will be obtained for the references judged as meeting the inclusion criteria or where there is insufficient information from the title and abstract to assess relevance.

2.5.4. Data extraction and Management

The reviewers will extract data from the included studies using tools developed specifically for this review. The data extraction tools will be piloted by two reviewers (MB and KD) on a set of the studies in the review to consider if any revisions or additional guidance is needed. Pairs of reviewers will extract and code studies. After coding, any disagreements will be resolved through discussion amongst those pairs of reviewers.

The following information will be extracted from all studies:

- **Bibliographic details:** publication details, date, and type of publication.
- **Study characteristics**: study aims and objectives, geographical location, types of humanitarian emergencies.
- **Population**: participant characteristics e.g. age, gender, other characteristics such as refugees, asylum seekers - as specified by the study.
- **Intervention characteristics**: types of MHPS, target population, focus of intervention (relieving stressors, strengthening protective factors), programme components, theory of change or logic model used, description of providers, programme timing, intensity, ecological context.

The following information will be extract from process evaluations:

- **Study methods:** details of research participants (e.g. programme providers or recipients), recruitment and sampling methods, sample size, and methods of data collection and analysis.
- **Implementation data**: e.g. feasibility, acceptability, adaptation, core programme, incentive, fidelity, coverage, context.

The following additional information will also be extracted from trials:

- **Study design:** unit of allocation, actual sample, type of control group, data collection and analysis, assessment of bias e.g. selection, detection, attrition, selective reporting.
- **Outcome measures**: all relevant outcomes measures and findings including clinical mental health outcomes, psychosocial outcomes, physical health outcomes and/or social outcomes.
- **Findings**: baseline and follow up response rates, effect sizes, any breakdown by socio-demographics of the sample.

2.5.5. Assessment of rigour in studies of stakeholder perspectives

Studies of stakeholder perspectives will be assessed using EPPI-Centre tools for qualitative or quantitative studies, such as those previously used in systematic review of barriers and

facilitators to engaging in health promotion programmes [54] including reviews with a mental health focus [55]. Quality assessments of studies using qualitative methods will address the rigour according to the following methodological dimensions: sampling; data collection; data analysis; the extent to which the study findings are grounded in the data; whether the study privileges the perspectives of participants; the breadth and depth of findings. Quality assessments of studies using quantitative methods will consider the following key dimensions: the use of representative sampling methods; reliability and validity or independent and dependent measurement tools, reporting of response rates, whether the study controlled for confounding factors, judgements on the soundness of the statistical methods used and if the follow up was sufficient for outcomes to occur (see Appendix 7).

Based on answers to these questions an overall judgement of high, medium or low on the reliability (e.g. the extent to which the methods employed were rigorous and therefore minimised bias in the findings), and the usefulness of the study (e.g. the extent to which the findings contribute to answering the review question), will be made.

2.5.6. Assessment of risk of bias in trials

Three review authors (KD, MB, LF) will independently assess risk of bias of trials using the criteria outlined in the Cochrane Handbook for Systematic Reviews of Interventions [56] according to the following domains:

- Random sequence generation
- Allocation concealment
- Blinding of participants and personnel and of outcome assessment
- Incomplete outcome data
- Selective outcome reporting
- Other bias

We will judge each potential source of bias as high, low or unclear and provide details from the study to support our judgments, to be included in the 'risk of bias' table. We will resolve any disagreements by discussion, consulting with a third author when required. We will summarise the risk of bias judgments across different studies for each of the domains listed. (See Risk of Bias tool in Appendix 6)

2.5.7. Synthesis of evidence

Thematic synthesis of stakeholder perspectives

Qualitative data contained in process evaluations will be analysed using thematic synthesis methods. The synthesis will aim to:

- Identify any characteristics of participants and context acting as potential barriers or facilitators to implementation and engagement in programmes, or;
- Identify any characteristics or components in the interventions participants or providers perceive as contributing to implementation, engagement or outcomes.
- Contribute to our understanding of any theory of change described in research on MHPSS interventions.

The data contained in studies, in the form of participant quotes, author description and/or author conclusions, will be extracted and coded by two reviews (KD, MB). They will read and re-read the data contained within studies, apply line-by-line codes to capture and interpret their meaning, and organise the coding of that data into themes and higher-order themes. They will meet to discuss their individual coding before agreeing a final set of themes. To facilitate a narrative synthesis of the findings, evidence tables will be prepared. These will contain the methodology quality of each study; contextual details of the programme examined; details about the population; and the final set of themes.

Synthesis of quantitative outcome data

- **Measures of treatment effect**

  For dichotomous data, we will report the results of relevant outcomes as risk ratio (RR) with 95% confidence interval (CI). For continuous data, we will report mean differences at baselines and post interventions measures or standardised mean differences (SMD) and their standard deviation (SD) if no common scales were used. When a study does not report SD, we will then try to obtain SD from other data such as t-statistics, p-value or confidence interval if available.

- **Unit of analysis issues**

  We will use individual data as the unit of analysis in meta-analysis. If the participants were not used as a unit of randomization, we will check whether the outcome data has been adjusted for intra-cluster correlation. When appropriate, the adjustment of clustering will be made using ICC data based on other included studies or other relevant studies in the field.

- **Dealing with missing data**

  During data extraction process, information, when available, about why data is missing or whether the missing data is at random will be explored and narratively reported in the review. Information on drop-outs and attrition rates will be extracted and whether intention-to-treat analysis have been performed will be assessed. We will contact study's authors to obtain further information on missing data. We will perform sensitivity analysis to explore the impact of studies with high attrition rates included in the meta-analysis.

- **Data synthesis**

  Synthesis of quantitative outcome data: we will produce a narrative account of the effectiveness of interventions, detailed information about the characteristics of included studies (for example, type of humanitarian emergency, type of interventions in a specific setting or context) and outcomes measured. Meta-analysis will be performed when there is a sufficient number of intervention studies that employ comparable designs and report conceptually similar outcome measures. Random-effects model will be applied in this review. Under a random-effects model, it is hypothesised that the true effect size may vary from study to study. An estimated summary of effect will be presented in a forest plot with 95 percent CI. Information on sample sizes, p-value, standard deviation and/or standard error of the outcomes will be recorded and presented in the report.

Subgroup analysis and investigation of heterogeneity

We will assess the extent of heterogeneity amongst the studies using the chi-squared test, with a p-value greater than 0.10 indicating significant heterogeneity. The I2 statistic will be used to quantify the magnitude of statistical heterogeneity.

When appropriate and possible, the impact findings will be classified and outlined, according to participant characteristics (age group, gender, socioeconomic status); study context (types of humanitarian emergencies), types of intervention and implementation (acceptability, fidelity). We acknowledge that using a number of subgroups can lead to misleading conclusions.

Sensitivity analysis

We will perform sensitivity analysis to test the impact of including studies judged as high risk of bias in the meta-analysis. To do so, we will perform the meta-analysis of all eligible studies, then exclude those that are judged to be high risk of selection bias, performance bias, and attrition bias.

Cross study synthesis

The cross study synthesis of outcome and process evaluation studies will comprise of a matrix that juxtaposes the characteristics of MHPSS interventions and stakeholders' views about factors that may influence the effectiveness of MHPSS interventions. The following questions will be used to interrogate the data and guide the cross-synthesis:

- Which characteristics of MHPSS correspond with themes emerged from qualitative synthesis?
- Do these themes suggest why and how the intervention does or does not work?
- Which themes derived from qualitative synthesis have yet to be addressed by MHPSS studies included in this review?

Summary of evidence

We will prepare 'Summary of findings' tables for the quantitative and qualitative syntheses. For quantitative trials we will use the methods and recommendations described in the Cochrane Handbook for Systematic Reviews of Interventions [57] using GRADEpro software [58]. Similarly, we will create a 'Summary of qualitative evidence' to summarise the key findings. This summary will be informed by the assessment of rigour, detailing the extent to which the findings are trustworthy, based on their reliability and usefulness, in answering the review question.

2.6. REVIEW OUTPUTS AND DISSEMINATION

We will aim to produce academic and policy relevant review products critically appraising the evidence base on the implementation and effectiveness of MHPSS targeting people affected by humanitarian emergencies. By synthesising evidence on the intended and unintended impact of MHPSS and the extent to which these are moderated by context and socio-demographics of participants, we will aim to provide a more comprehensive view of the factors potentially contributing to the feasibility and acceptability of MHPS, for different populations, in different international humanitarian aid settings.

We will produce three key outputs: 1) the protocol outlining the key stages in the review and the findings from the scoping exercise; 2) a 'technical' systematic review report which will contain a 'plain language' summary, an executive summary and the full review; and 3) journal articles. To support disseminations activities will devise a brief 'mapping of networks and opportunities for uptake' (see appendix 9), this will focus on identifying and ensuring review outputs are made known and freely available online to our key audiences. Online platforms will include publishing the protocol and technical report on the Oxfam and EPPI-Centre websites and submitting articles to open-access academic journals and in the UCL open access institutional repository. We will also disseminate the findings via conferences and seminars and promote the review through relevant academic and stakeholder networks and on individual and EPPI-Centre social media channels.

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APPENDIX 1: PRISMA CHECKLIST

Section/ topic		Checklist item	Reported
Title	1	Identify the report as a systematic review, meta-analysis, or both.	*Title page*
Abstract			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number	Abstract
Introduction			
Rationale	3	Describe the rationale for the review in the context of what is already known.	*Chapter 1, Rationale for this review*
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	*Chapter 1, Review aims and objectives*
Methods			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	*Chapter 2*
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	*Chapter 2, Criteria for considering studies for this review and Appendix 3 exclusion criteria and guidance*
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	*Chapter 2, Search strategy,*
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	*Appendix 5*
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	*Chapter 2, study selection,*
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	*Chapter 2, Data extraction*
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	*Chapter 2, Synthesis of results*
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	*Chapter 2, Synthesis of results*

Section/ topic		Checklist item	Reported
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	*Chapter 2, Synthesis of results*
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	*Chapter 2, Synthesis of results*
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	*Chapter 2, quality assessment and*
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	*To be completed in the full review*
Results			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	*To be completed in the full review*
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	*To be completed in the full review*
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	*To be completed in the full review*
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	*To be completed in the full review*
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	*To be completed in the full review*
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	*To be completed in the full review*
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	*To be completed in the full review*
Discussion			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	*To be completed in the full review*
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	*To be completed in the full review*
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	*To be completed in the full review*
Funding			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	*Acknowledgements*

APPENDIX 2: STAKEHOLDER INVOLVEMENT

Advisory group member	Organisation / Affiliation
Dan Ayliffe	UN Resident Coordinator, DFID, humanitarian advisor (Bangladesh)
Katie Dawson	Refugee Trauma & Recovery Program, UNSW Australia, Clinical Psychologist
Jeroen Jansen	Evidence Aid, Director
Leslie Snider	Peace in Practice, B.V, Global psychosocial consultant/ director
Mark Van Ommeren	WHO, Mental health in emergencies

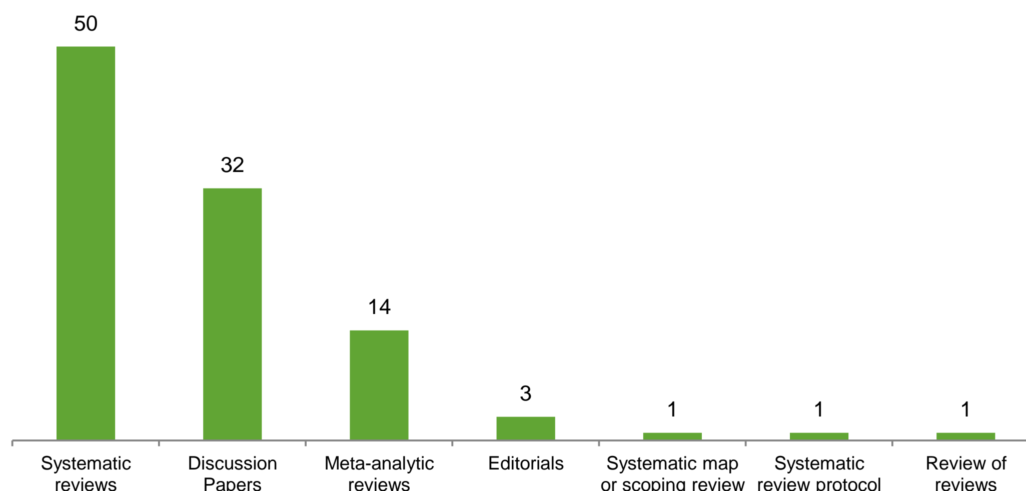
APPENDIX 3: EXCLUSION CRITERIA

Inclusion criteria	Exclusion criteria
Participants: studies aimed at populations affected by humanitarian emergencies or those who have been exposed to events leading to MHPSS impacts as a result of a humanitarian crisis.	We will exclude studies where: The population of interest is military personnel or those working in the context of humanitarian emergencies. However, their views on delivering and implementing MHPSS will be included for studies evaluating process.
Intervention: Programmes which seek to provide MHPSS delivered in the context of humanitarian emergencies or for populations affected by humanitarian emergencies.	We exclude studies: delivering **MHPSS** not in humanitarian the context of humanitarian emergencies or not for populations affected by humanitarian emergencies
Study design: **Process synthesis:** Quantitative and/or qualitative data on intervention planning and design, implementation, engaging in, or causal pathways of the interventions. **Outcome synthesis**: Prospective experimental and quasi-experimental studies including randomised controlled trials and non-randomised controlled trials with control groups. Comparison groups can be those with no intervention, other active interventions, or usual care.	We will exclude studies that DO NOT: **Process synthesis:** report a process evaluation of an MHPSS intervention OR **Outcome synthesis:** report an outcome evaluation of MHPSS interventions using: prospective experimental and quasi-experimental studies with control groups
Reported data: **Process data**: we will include narrative or numerical data on implementing or receiving MHPSS **Outcome data:** we include any type of mental health or psychosocial outcomes reported in the study (e.g. individual, family, community, social outcomes)	We will exclude studies which do not: **Process synthesis:** collect and report data on the process of delivering or receiving MHPSS interventions OR **Outcome synthesis**: collect and report outcome data on the impact of a MHPSS intervention
Language: Published in English	We will exclude studies: Not published in English
Date: Published on or after 1980	Published before 1980

APPENDIX 4: FINDINGS FROM SCOPING EXERCISE

Our search yielded 489 citations. After applying exclusion criteria,[2] 102 papers were included in the scoping exercise. Figure 4 shows that of the 102 papers included, nearly half (n=50; 49%) were classified as systematic reviews and just under a quarter (n=32) were literature reviews or discussion pieces relevant to MHPSS in humanitarian emergencies. A further 14 papers were classified as 'meta-analytic reviews'[3] and two documents were editorials (ISAC et al., 2007; Kessler and Wittchen, 2008; Tol et al., 2013). The remaining three papers (one each) were classified as a scoping review (Guruge and Butt, 2015), a systematic review protocol (Purgato et al 2014), and a review of reviews (Figueoa et al, 2010).

Figure 5: Type of literature identified in the scoping exercise (n=102*)



*codes mutually exclusive

The majority of the published research literature activity (69%, n=70) occurred in the last five years, specifically between 2010-2015, almost three times higher than those published between 2005-2009. Overall, more than 90% of the literature identified in the scoping exercise were published in the last ten years. (See Figure 5)

Of the 50 systematic reviews, the majority (n=33) aimed to statistically synthesise findings on the relationship between mental health/psychosocial problems and humanitarian emergencies, or examined the overall prevalence of mental health conditions as a result of exposure to humantitarian crises. We found 15 systematic reviews on the effectiveness of MPHSS interventions in humanitarian emergencies. We also identified two systematic reviews, one of which aimed to examine research in the areas of need asessments and care planning, while the other focused on methodological approaches used in MPHSS evaluation. (Figure 6). No systematic reviews of process evaluations or people's experiences of humanitarian emergencies were identified.

[2] Papers investigating mental health and psychosocial interventions or outcomes of manmade or natural disasters. No other limits were imposed.

[3] For the purpose of this review, meta-analytic papers refer to those describe review methods similar to systematic reviews but no quality assessment of included studies is reported in the paper.

Figure 6: Year of publication (n=101, one paper did not report year of publicaiton, codes are mutually exclusive)

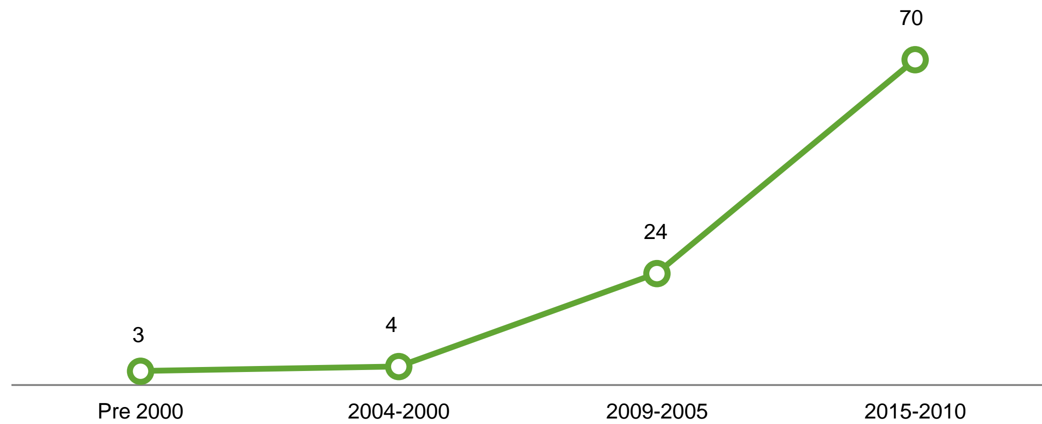


Figure 7: Types of literature (N= 50, Codes are mutually exclusive)

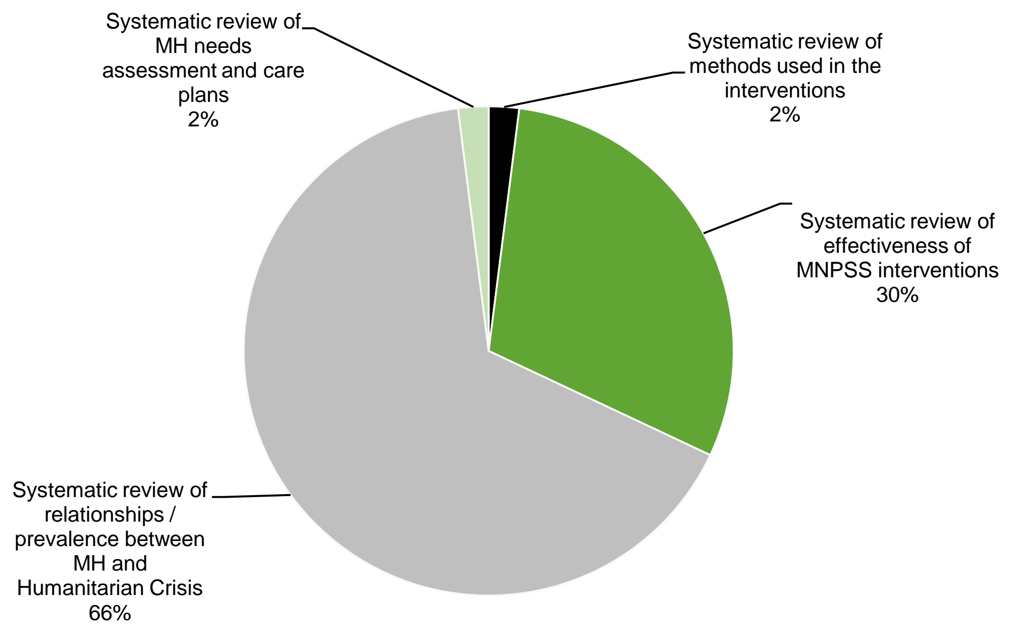


Table 4.1: Key characteristics of systematic reviews of effectiveness MHPSS interventions (n=15)

Study	Studies identification	Population	Geographical focus	Types of humanitarian emergencies	Examples of MHPSS interventions identified in the report	Examples of outcomes identified in the report
Asgary (2013) **Systematic review of prevention and management strategies for the consequences of gender-based violence in Refugees**	• Searched between April and September 2011 • No studies identified	**Age group** • No specific age group focus **Other marginalised groups** • Refugees/ Asylum seekers/ displaced person • Population exposed to sexual and gender-based violence **Gender** • No specific focus on gender	• No geographical focus	• Refugees	• Management and prevention strategies for GBV	• Various health outcomes
Barry (2013): A systematic review of the effectiveness of mental health promotion interventions for young people in low and middle income countries	• Studies employing RCTs and quasi experimental designs conducted in LMICS since 2000 • No. of studies included in the review: 22	**Age group** • Children and young people only **Other marginalised groups** • No specific focus on other marginalised groups **Gender** • No specific focus on gender	• LMICs-not specific	• Not specific (Humanitarian emergencies/ settings)	• CBT • Psychosocial interventions (school-based) • Psycho-education • Multi-disciplinary	• Anxiety • Coping • Communication • Depressive symptoms • Emotional well-being • Empowerment • Psychological symptoms or distress • Resilience • self-esteem • Self efficacy • Suicidal behaviour • Social support
Betancourt (2013) Interventions for children affected by war: an ecological perspective on psychosocial support and mental health care	• Searched for peer-reviewed publication from 1990 to 2011 • No. of studies included in the review: 40	**Age group** • Children and young people only **Other marginalised groups** • No specific focus on other marginalised groups **Gender** • No specific focus on gender	• No geographical focus	• Armed conflict/War/Combat	• CBT • Community-based psychological support/focused nonspecialised supports • Creative arts • Group or interpersonal Therapy • Multi-disciplinary • Narrative Exposure Therapy (NET) • Psychological interventions • Relaxation • Selective Preventive Psychosocial interventions • Social and family support-non focused, Schooling (education) • Social and family support-non-focused Safe space	• PTSD

Study	Studies identification	Population	Geographical focus	Types of humanitarian emergencies	Examples of MHPSS interventions identified in the report	Examples of outcomes identified in the report
Betancourt (2013) Interventions for children affected by war: an ecological perspective on psychosocial support and mental health care					• Trauma focused intervention (unspecified) • Individual prevention • Psychotherapy • Dance and movement therapy • Psycho-education	
Crumlish (2010) **A systematic review of treatments for post-traumatic stress disorder among refugees and asylum-seekers**	• Search period not specified • No. of studies included in the review: 10 RCTs	**Age group** • No specific age group focus **Other marginalised groups** • Refugees/ Asylum seekers/ displaced person • Asylum-seekers **Gender** • No specific focus on gender	• No geographical focus	• Refugees	• CBT • Exposure Therapy • Narrative Exposure Therapy (NET) • Pharmaco-therapy • Trauma focused intervention (unspecified)	• Anxiety • Depressive symptoms • PTSD
de Jong (2014): **The Efficacy of Psychosocial Interventions for Adults in Contexts of Ongoing Man-Made Violence—A Systematic Review**	• Searched until 31 January 2013 • No. of studies included in the review: 22	**Age group** • Adult only **Other marginalised groups** • No specific focus on other marginalised groups **Gender** • No specific focus on gender	• No geographical focus	• Armed conflict/War/ Combat	• Acute patient care/specialised service • CBT • Community-based psychological support/focused nonspecialised supports • Counselling • Creative arts • Multi-disciplinary • Narrative Exposure Therapy (NET) • Pharmaco-therapy • Psychological interventions • Trauma focused intervention (unspecified) • Psychotherapy • Psycho-education • Reconciliation	• Anxiety • Coping • Functioning • Physical health • PTSS: posttraumatic stress symptoms; symptomatology • PTSD • Quality of life • Resilience • Somatic symptom disorder • Social Behaviour • Disability
Dossa (2012): **Cognitive-behavioral therapy versus other PTSD psychotherapies as treatment for women victims of war-related violence: a systematic review**	• Search period not specified • No. of studies included in the review: 10	**Age group** • Adult only **Other marginalised groups** • Refugees/ Asylum seekers/displace d person **Gender** • Female only	• No geographical focus	• Armed conflict/War/ Combat	• CBT • Cognitive processing therapy (CPT) • Narrative Exposure Therapy (NET)	• Depressive symptoms • PTSD

Study	Studies identification	Population	Geographical focus	Types of humanitarian emergencies	Examples of MHPSS interventions identified in the report	Examples of outcomes identified in the report
Gouweloos (2014): **Psychosocial care to affected citizens and communities in case of CBRN incidents: a systematic review**	• Searched between February 2013-January 2014. Studies published before 2000 were excluded • No. of studies included in the review: 39	**Age group** • No specific age group focus **Other marginalised groups** • No specific focus on other marginalised groups **Gender** • No specific focus on gender	• No geographical focus	• Chemical, biological, radiological or nuclear (CBRN)	• Psychosocial care interventions	• Unclear
Gwozdziewycz (2013): **Meta-analysis of the use of narrative exposure therapy for the effects of trauma among refugee populations**	• Search period not specified • No. of studies included in the review: 7	**Age group** • No specific age group focus **Other marginalised groups** • Refugees/ Asylum seekers/ displaced person **Gender** • No specific focus on gender	• No geographical focus	• Refugees	• Narrative Exposure Therapy (NET)	• PTSD
Newman (2014): **Meta-analytic review of psychological interventions for children survivors of natural and man-made disasters**	• Searched between 2011 and 2012 • No. of studies included in the review: 24	**Age group** • Children and young people only **Other marginalised groups** • No specific focus on other marginalised groups **Gender** • No specific focus on gender	• No geographical focus	• Armed conflict/War/ Combat	• CBT • Debriefing/crisis intervention • Exposure Therapy • Eye Movement Desensitization and Reprocessing EMDR • Eclectic • Grief interventions • Relaxation • Selective Preventive Psychosocial interventions	• PTSS: posttraumatic stress symptoms; symptomatology • PTSD
Palic (2011): **Psychosocial treatment of posttraumatic stress disorder in adult refugees: a systematic review of prospective treatment outcome studies and a critique**	• Search period not specified • No. of studies included in the review: 25	**Age group** • Adult only **Other marginalised groups** • Refugees/ Asylum seekers/ displaced person **Gender** • No specific focus on gender	• No geographical focus	• Not specific (humanitarian emergencies/ settings)	• CBT • Group or interpersonal Therapy • Music therapy • Multi-disciplinary • Narrative Exposure Therapy (NET) • Psychosocial care interventions • Short-term psychodynamic therapy • Trauma focused intervention (unspecified) • Thought field therapy	• Anxiety • Depressive symptoms • PTSD • Quality of life

Study	Studies identification	Population	Geographical focus	Types of humanitarian emergencies	Examples of MHPSS interventions identified in the report	Examples of outcomes identified in the report
Patel (2014): **Psychological, social and welfare interventions for psychological health and well-being of torture survivors**	• Searched between 2013 and 2014 • No. of studies included in the review: 9 RCTs	**Age group** • No specific age group focus **Other marginalised groups** • Torture victims • Asylum-seekers **Gender** • No specific focus on gender	• No geographical focus	• Not specific (humanitarian emergencies/ settings)	• Psychological interventions	• Depressive symptoms • PTSD
Tol (2011): **Mental health and psychosocial support in humanitarian settings: linking practice and research**	• Search period not specified • No. of studies included in the review: 13 RCTs	**Age group** • Children and young people only • Adult only **Other marginalised groups** • No specific focus on other marginalised groups **Gender** • No specific focus on gender	• No geographical focus	• Not specific (humanitarian emergencies/ settings)	• Community-based psychological support/focused nonspecialised supports • MHPSS (nonspecific)	• Coping • Depressive symptoms • Externalising scores • Functional impairment • Internalising scores • Maladaptive grief • Psychological symptoms or distress • PTSD • Quality of parental support • Somatic symptom disorder
Tol (2013): **Sexual and gender-based violence in areas of armed conflict: a systematic review of mental health and psychosocial support interventions**	• Searched between May-August 2011 • No. of studies included in the review: 7 RCTs	**Age group** • No specific age group focus **Other marginalised groups** • Population exposed to sexual and gender-based violence **Gender** • Female only	• No geographical focus	• Armed conflict/War/Combat	• MHPSS (non-specific)	• Anxiety • Depressive symptoms • Empowerment • Fear • Functioning • Psychological symptoms or distress • PTSD • Shame • Stigma • Trauma
Tyrer (2014) **School and community-based interventions for refugee and asylum seeking children: a systematic review**	• Searched until January 2013 • No. of studies included in the review: 21	**Age group** • Children and young people only **Other marginalised groups** • Refugees/ Asylum seekers/ displaced person **Gender** • No specific focus on gender	• No geographical focus	• Not specific (humanitarian emergencies/ settings)	• CBT • Creative arts • Exposure Therapy • Individual & family therapy • Interpersonal therapy • Narrative Exposure Therapy (NET) • Skills based groups • Trauma focused intervention (unspecified)	• Anxiety • Behavioural and emotional adjustment • Depressive symptoms • Emotional well-being • Functional impairment • Psychological well-being • PTSD • Traumatic grief

Study	Studies identification	Population	Geographical focus	Types of humanitarian emergencies	Examples of MHPSS interventions identified in the report	Examples of outcomes identified in the report
Williams (2011): **The use of community-based interventions in reducing morbidity from the psychological impact of conflict-related trauma among refugee populations: a systematic review of the literature**	• Searched for studies published between 1994-2009 • No. of studies included in the review: 14	**Age group** • No specific age group focus **Other marginalised groups** • Refugees/ Asylum seekers/ displaced person **Gender** • No specific focus on gender	• No geographical focus	• Armed conflict/War/Combat	• Community-based psychological support/focused nonspecialised supports • Social and family support-non focused, Schooling (education)	• Depressive symptoms • Functioning • PTSS • PTSD • Social support • Social behaviour • Trauma

Table 4.2: Systematic reviews of effectiveness MHPSS by population and humanitarian settings

Population	LMICs	War/Conflict	Refugees	CBRN	Disasters / Humanitarian settings
Children and young people	Barry (2013)	Betancort (2013)	Tyrer (2014)		Newman (2014)
Adult		de Jong (2014)			
Refugees		William (2011)	Patic (2011) Clumlish (2010) Gwozdziewucz (2013)		
Female/ Gender – Based Violence		Dossa (2012) Tol (2013)	Asgary (2013)		
Torture		Patel (2014)			
No population focus				Gouweloos (2014)	Tol (2011)

Systematic reviews of relationships between mental health and emergencies events

Thirty-three reviews systematically examined findings of studies that aimed to investigate a) the impact of humanitarian emergencies on mental health and psychosocial outcomes or b) the overall prevalence of mental health conditions as a result of exposure to humanitarian emergencies. Figure 7 displays the number of studies by population focus. Fourteen studies reviewed evidence on refugees, asylum seekers, and/or displaced populations, eight on children and young people, four on populations exposed to traumatic evinces, and three had gender (females only) population focus.

Figure 8: No. of studies by population focus (N= 33, Codes not mutually exclusive)

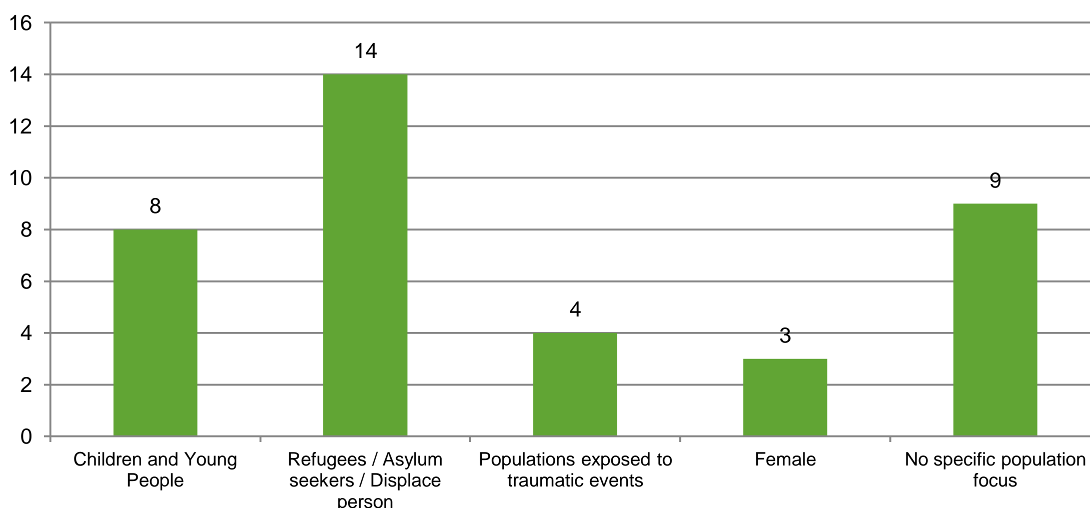


Figure 8 presents a wide range of mental health and psychosocial conditions reported in the systematic reviews. Post-traumatic stress disorder (PTSD), depressive symptoms and depression and anxiety conditions were commonly investigated in the systematic reviews identified. Figure 9 shows the number of systematic reviews by type of humanitarian events and the three most commonly reported mental health and psychological conditions in the systematic review.

Figure 9: Examples of mental health conditions investigated in the systematic reviews

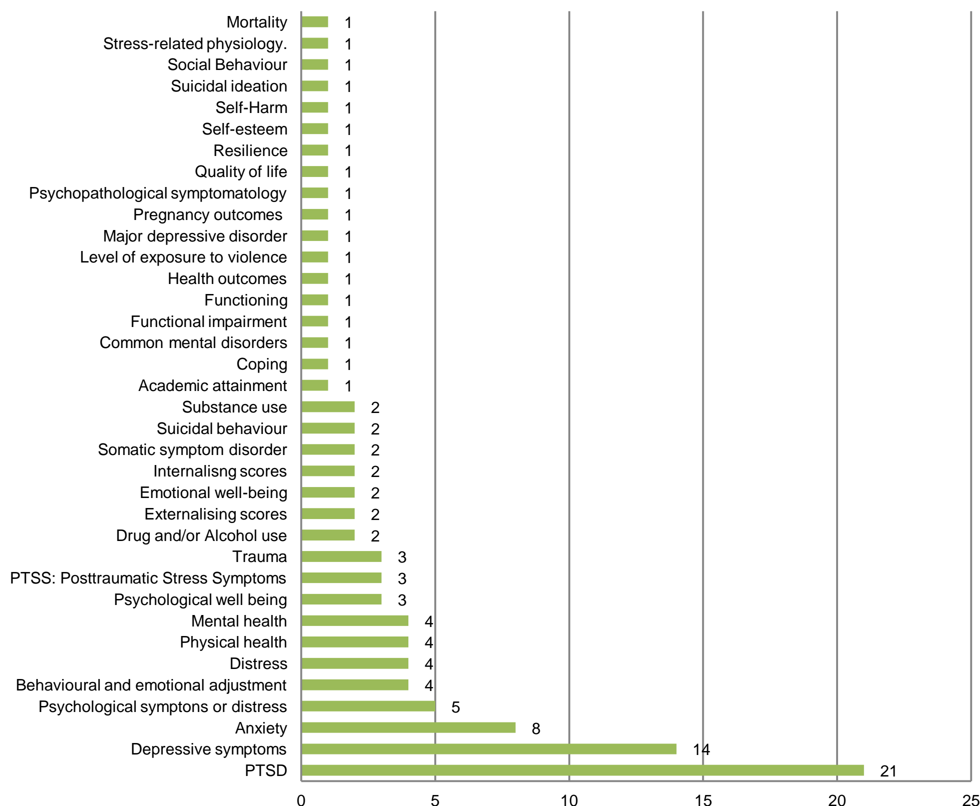
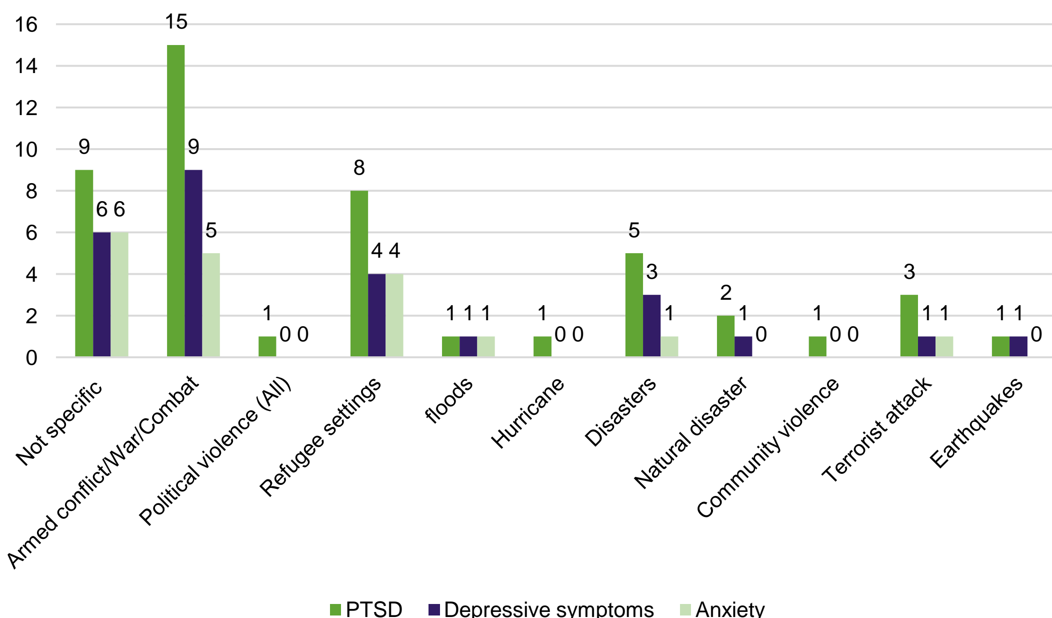


Figure 9: No. of systematic reviews by PTSD, depressive symptoms, and Anxiety and Types of humanitarian events (codes not mutually exclusive)



References of systematic reviews included in the scoping exercise

A: Systematic reviews of effectiveness MHPSS interventions

Asgary R, Emery E, Wong M (2013) Systematic review of prevention and management strategies for the consequences of gender-based violence in refugee settings. International Health. 5: 85-91.

Barry M M; Clarke A M; Jenkins R, Patel V (2013) A systematic review of the effectiveness of mental health promotion interventions for young people in low and middle income countries. BMC Public Health. 13: 835.

Betancourt T S; Meyers-Ohki S E; Charrow A P; Tol W A; (2013) Interventions for children affected by war: an ecological perspective on psychosocial support and mental health care. Harv Rev Psychiatry. 21: 70-91.

Crumlish N, O'Rourke K (2010) A systematic review of treatments for post-traumatic stress disorder among refugees and asylum-seekers. Journal of Nervous & Mental Disease. 198: 237-51.

de Jong , Kaz , Knipscheer Jeroen W; Ford Nathan, Kleber Rolf J; (2014) The Efficacy of Psychosocial Interventions for Adults in Contexts of Ongoing Man-Made Violence—A Systematic Review. Health. 2014

Dossa N I; Hatem M (2012) Cognitive-behavioral therapy versus other PTSD psychotherapies as treatment for women victims of war-related violence: a systematic review. The scientific world journal. 2012: 181847.

Gouweloos J, Duckers M, te Brake, H, Kleber R, Drogendijk A (2014) Psychosocial care to affected citizens and communities in case of CBRN incidents: a systematic review. Environment International. 72: 46-65.

Gwozdziewycz N, Mehl-Madrona L (2013) Meta-analysis of the use of narrative exposure therapy for the effects of trauma among refugee populations. Permanente Journal. 17: 70-6.

Newman E, Pfefferbaum B, Kirlic N, Tett R, Nelson S, Liles B (2014) Meta-analytic review of psychological interventions for children survivors of natural and man-made disasters. Current Psychiatry Reports. 16: 462.

Palic S, Elklit A (2011) Psychosocial treatment of posttraumatic stress disorder in adult refugees: a systematic review of prospective treatment outcome studies and a critique. Journal of Affective Disorders. 131: 8-23.

Patel N, Kellezi B, Williams A C; (2014) Psychological, social and welfare interventions for psychological health and well-being of torture survivors. Cochrane Database of Systematic Reviews. 11: CD009317.

Tol W A; Barbui C, Galappatti A, Silove D, Betancourt T S; Souza R, Golaz A, van Ommeren, M (2011) Mental health and psychosocial support in humanitarian settings: linking practice and research. Lancet. 378: 1581-91.

Tol W A; Stavrou V, Greene M C; Mergenthaler C, van Ommeren , M , Garcia Moreno, C (2013) Sexual and gender-based violence in areas of armed conflict: a systematic review of mental health and psychosocial support interventions. Confl Health. 7: 16.

Tyrer R A; Fazel M (2014) School and community-based interventions for refugee and asylum seeking children: a systematic review.[Erratum appears in PLoS One. 2014;9(5):e97977]. PLoS ONE [Electronic Resource]. 9: e89359.

Williams M E; Thompson S C; (2011) The use of community-based interventions in reducing morbidity from the psychological impact of conflict-related trauma among refugee populations: a systematic review of the literature. Journal of Immigrant & Minority Health. 13: 780-94.

B: Systematic reviews of relationship between mental health and psychosocial conditions and humanitarian emergencies

Attanayake V, McKay R, Joffres M, Singh S, Burkle F, Jr , Mills E (2009) Prevalence of mental disorders among children exposed to war: a systematic review of 7,920 children. Medicine, Conflict & Survival. 25: 4-19.

Barel E, Van IJzendoorn M. H; Sagi-Schwartz A, Bakermans-Kranenburg M J; (2010) Surviving the Holocaust: a meta-analysis of the long-term sequelae of a genocide. Psychological Bulletin. 136: 677-98.

Betancourt T S; Borisova I, Williams T P; Meyers-Ohki S E; Rubin-Smith J E; Annan J, Kohrt B A; (2013) Psychosocial adjustment and mental health in former child soldiers--systematic review of the literature and recommendations for future research. Journal of Child Psychology & Psychiatry & Allied Disciplines. 54: 17-36.

Bronstein I, Montgomery P (2011) Psychological distress in refugee children: a systematic review. Clinical Child & Family Psychology Review. 14: 44-56.

Chan C S; Rhodes J E; (2014) Measuring exposure in Hurricane Katrina: a meta-analysis and an integrative data analysis. PLoS ONE [Electronic Resource]. 9: e92899.

Das-Munshi J, Leavey G, Stansfeld S A; Prince M J; (2012) Migration, social mobility and common mental disorders: critical review of the literature and meta-analysis. Ethnicity & Health. 17: 17-53.

Dimitry L (2012) A systematic review on the mental health of children and adolescents in areas of armed conflict in the Middle East. Child: Care, Health & Development. 38: 153-61.

Fazel M, Wheeler J, Danesh J (2005) Prevalence of serious mental disorder in 7000 refugees resettled in western countries: a systematic review. Lancet. 365: 1309-14.

Fazel M, Reed R V; Panter-Brick C, Stein A (2012) Mental health of displaced and refugee children resettled in high-income countries: risk and protective factors. Lancet. 379: 266-82.

Fernandez A, Black J, Jones M, Wilson L, Salvador-Carulla L, Astell-Burt T, Black D (2015) Flooding and Mental Health: A Systematic Mapping Review. Plos One. 10: 20.

Furr J M; Comer J S; Edmunds J M; Kendall P C; (2010) Disasters and youth: a meta-analytic examination of posttraumatic stress. Journal of Consulting & Clinical Psychology. 78: 765-80.

Gagnon A J; Tuck J, Barkun L (2004) A systematic review of questionnaires measuring the health of resettling refugee women. Health Care for Women International. 25: 111-49.

Gilliver S C; Sundquist J, Li X, Sundquist K (2014) Recent research on the mental health of immigrants to Sweden: a literature review. European Journal of Public Health. 24 Suppl 1: 72-9.

Harville E, Xiong X, Buekens P (2010) Disasters and perinatal health: a systematic review. Obstetrical & Gynecological Survey. 65: 713-28.

Jack H, Masterson A R; Khoshnood K (2014) Violent conflict and opiate use in low and middle-income countries: a systematic review. International Journal of Drug Policy. 25: 196-203.

Kolves K, Kolves K E; De Leo, D (2013) Natural disasters and suicidal behaviours: a systematic literature review. Journal of Affective Disorders. 146: 1-14.

Lambert J E; Holzer J, Hasbun A (2014) Association between parents' PTSD severity and children's psychological distress: a meta-analysis. Journal of Traumatic Stress. 27: 9-17.

Lindert J, Ehrenstein O S; Priebe S, Mielck A, Brahler E (2009) Depression and anxiety in labor migrants and refugees--a systematic review and meta-analysis. Social Science & Medicine. 69: 246-57.

Liu B, Tarigan L H; Bromet E J; Kim H (2014) World Trade Center disaster exposure-related probable posttraumatic stress disorder among responders and civilians: a meta-analysis. PLoS ONE [Electronic Resource]. 9: e101491.

Neria Y, Nandi A, Galea S (2008) Post-traumatic stress disorder following disasters: a systematic review. Psychological Medicine. 38: 467-80.

Porter M, Haslam N (2001) Forced displacement in Yugoslavia: a meta-analysis of psychological consequences and their moderators. Journal of Traumatic Stress. 14: 817-34.

Porter M, Haslam N (2005) Predisplacement and postdisplacement factors associated with mental health of refugees and internally displaced persons: a meta-analysis. JAMA. 294: 602-12.

Ren J H; Chiang C L; Jiang X L; Luo B R; Liu X H; Pang M C; (2014) Mental disorders of pregnant and postpartum women after earthquakes: a systematic review. Disaster Medicine & Public Health Preparedness. 8: 315-25.

Roberts B, Browne J (2011) A systematic review of factors influencing the psychological health of conflict-affected populations in low- and middle-income countries. Global Public Health. 6: 814-29.

Robjant K, Hassan R, Katona C (2009) Mental health implications of detaining asylum seekers: systematic review. British Journal of Psychiatry. 194: 306-12.

Rytwinski N K; Scur M D; Feeny N C; Youngstrom E A; (2013) The co-occurrence of major depressive disorder among individuals with posttraumatic stress disorder: a meta-analysis. Journal of Traumatic Stress. 26: 299-309.

Siriwardhana C, Ali S S; Roberts B, Stewart R (2014) A systematic review of resilience and mental health outcomes of conflict-driven adult forced migrants. Confl Health. 8: 13.

Steel Z, Chey T, Silove D, Marnane C, Bryant R A; van Ommeren , M (2009) Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: a systematic review and meta-analysis. JAMA. 302: 537-49.

Tang B, Liu X, Liu Y, Xue C, Zhang L (2014) A meta-analysis of risk factors for depression in adults and children after natural disasters. BMC Public Health. 14: 623.

Tol W A; Song S, Jordans M J; (2013) Annual Research Review: Resilience and mental health in children and adolescents living in areas of armed conflict--a systematic review of findings in low- and middle-income countries. J Child Psychol Psychiatry. 54: 445-60.

Uscher-Pines L (2009) Health effects of relocation following disaster: a systematic review of the literature. Disasters. 33: 1-22.

Wang C W; Chan C L; Ho R T; (2013) Prevalence and trajectory of psychopathology among child and adolescent survivors of disasters: a systematic review of epidemiological studies across 1987-2011. Social Psychiatry & Psychiatric Epidemiology. 48: 1697-720.

Weaver H, Roberts B (2010) Drinking and displacement: a systematic review of the influence of forced displacement on harmful alcohol use. Substance Use & Misuse. 45: 2340-55.

Systematic review of need assessments

North C S; Pfefferbaum B (2013) Mental health response to community disasters: a systematic review. JAMA. 310: 507-18.

Systematic review of methods used in MHPSS research

Pfefferbaum B, Newman E, Nelson S D; Liles B D; Tett R P; Varma V, Nitiema P (2014) Research methodology used in studies of child disaster mental health interventions for posttraumatic stress. Comprehensive Psychiatry. 55: 11-24.

APPENDIX 5: SEARCH STRATEGY

5.1 Search strategies for scoping exercise

Medline (OVID) searched on 15/09/15

1. exp Disasters/ or exp War/ or humanitarian.mp.
2. displacement.mp. or exp "Displacement (Psychology)"/
3. earthquake.mp. or exp Earthquakes/
4. Typhoon.mp. or exp Cyclonic Storms/
5. draught.mp.
6. flood.mp. or exp Floods/
7. Refugees/ or political violence.mp.
8. Post conflict.mp.
9. armed conflict.mp.
10. conflict affected.mp.
11. Mass conflict.mp.
12. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11
13. Mental health.mp. or exp Mental Health/
14. exp Mental Health Services/ or exp Mental Disorders/ or mental health disorder.mp.
15. psychosocial.mp. or exp Psychosocial Deprivation/
16. social support.mp. or exp Social Support/
17. family support.mp.
18. psychiatric.mp. or exp Emergency Services, Psychiatric/
19. exp Psychotherapy/ or psychotherapy.mp.
20. 13 or 14 or 15 or 16 or 17 or 18 or 19
21. systematic review.mp.
22. meta analysis.mp. or Meta-Analysis/
23. literature review.mp.
24. systematic map.mp.
25. critical review.mp.
26. synthesis.mp.
27. (integrative review or realist review or scoping review or meta ethnography).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]
28. 21 or 22 or 23 or 24 or 25 or 26 or 27
29. 12 and 20 and 28

Web of Science (searched on 16/09/15)

#4 (#1 AND #2 AND #3)

#3 (TS= (("evidence review") OR ("literature review") OR ("systematic review") OR ("systematic map") OR ("critical review") OR (synthesis) OR ("meta-analysis") OR ("meta analysis") OR ("meta synthesis") OR ("integrative review") OR ("realist review") OR ("scoping review") OR ("mapping review") OR ("meta-ethnography")))

#2 (TS= (("mental health") OR ("mental health disorder*") OR psychosocial OR ("social support") OR psychiatric OR psychotherapy OR ("health systems") OR ("health promotion")))

#1 (TS= ((humanitarian) OR ("armed conflict*") OR disaster* OR ("political violence") OR (earthquake) OR typhoon OR tsunami OR drought OR flood OR war OR displacement OR refugees OR ("post conflict*") OR ("conflict affected") OR ("mass conflict*")))

Cochrane library (searched on 17/09/15)

(Humanitarian or armed conflicted or disaster or political violence or earthquake or typhoon or tsunami or drought or flood or war or displacement or refugees) AND (Mental health or PTSD or psychotherapy or psychosocial)

5.2 Key terms (as of 20/10/15)

Concept 1: Emergency settings	Concept 2: Mental health and psychosocial interventions/conditions	Concept 3: Study design (quantitative/qualitative/process evaluation)
Armed conflict	Mental health	Non-randomized controlled trials
Post conflict	Psychosocial	Interrupted time series analysis
Conflict affected	Mental health disorders	Controlled before and after studies
Mass conflict	Psychiatric	Pragmatic clinical trial
War conflict	Psychotherapy	Program evaluation
War	Psychological treatment	Pilot schemes
Civil war	Mental health services	Outcome evaluation
War exposed	Social support	Clinical trials
War affected	Acute patient care	Randomized controlled trial
Post war	Specialised care/service	Pilot study
Displacement	Primary care	Feasibility study
Refugee	Cognitive Behavioural Therapy	Multi-centre study
Mass killing	Community-based psychosocial support	Programme scheme
Genocide	Counselling	Effectiveness intervention
Disaster	Cognitive processing therapy	Outcome assessment
Natural disaster	Creative arts	Process assessment
Earthquake	Debriefing	Controlled trial
Typhoon	Crisis intervention	Control group
Draught	Economic support	Comparison group
Flood	Exposure therapy	Comparison studies
Industrial disaster	Eye movement Desensitization and Reprocessing (EMDR)	Repeated measure

Concept 1: Emergency settings	Concept 2: Mental health and psychosocial interventions/conditions	Concept 3: Study design (quantitative/qualitative/process evaluation)
Political violence	Eclectic	Performance assessment
Humanitarian setting	Group therapy	Cross over trial
Hurricane	Interpersonal therapy	Double blind
Displaced populations	Grief Intervention	Quasi experiment
Displacement	Individual therapy	Policy experiment
mass adversity	Family therapy	Comparative analysis
Industrial accidents	Family-based intervention	Natural experiment
Volcano	Narrative exposure therapy	Social experiment
Landslide	Music therapy	Propensity score
Avalanche	Gender-based violence	Regression discontinuity
Tsunami	Pharmacotherapy	Ethnography
Explosion	Psychological intervention	Content analysis
Storm surges	Psychosocial care intervention	Observational methods
Tornado	Relaxation	Participant observation
Cyclone	Preventive psychosocial intervention	Field notes
epidemic	Self care	Process evaluation
Infestation	Family care	Monitoring and evaluation
Wildfire	Psychodynamic therapy	Ethnopsychology
extreme temperature	Skill based group	Focus group
Terrorist attack	Schooling	Narration
Terrorism	Safe space	Qualitative
	Family support	Interview
	Trauma focused intervention	Case studies
	Thought field therapy	Thematic synthesis
	Individual prevention	Framework synthesis
	Dance and movement therapy	Phenomenology
	Psychoeducation	Grounded theory
	Prolonged exposure therapy	Grounded research
	Stress Inoculation Therapy	Grounded studies
	KIDNET	Constant comparative
	Specialised psychotherapeutic intervention	Field research
	Interpersonal psychotherapy	Conservation analysis
	Testimony Therapy	Theoretical saturation
	Trauma healing	Realist
	Reconciliation	Constructionist
	Psychopharmacological treatment	Inductive
	Physiotherapy	Mixed-methods
	Psychological care	Pragmatism
	Community-based psychological support	Realism

Concept 1: Emergency settings	Concept 2: Mental health and psychosocial interventions/conditions	Concept 3: Study design (quantitative/qualitative/process evaluation)
	Acute patient care	Feminism
	Sport and recreation	Social construction
	Case management	Stakeholder views
	Human right advocacy	Barrier
	Legal services	Facilitator
	Vocational training	Implementation science
	Mentoring	Participatory research
	community oriented public mental health service	Intervention delivery
	Resettlement assessment	Fidelity
	Outreach	Adaptation
	Self-help	Participant engagement
	Psychotherapeutic intervention	Attitudes
	Surveillance	Perspectives
	Risk communication	

APPENDIX 6: CODING TOOLS

6.1 CODING FOR SCOPING EXERCISE

A: Types of reviews

A.1 Systematic Review of effectiveness of MHPSS interventions
Please complete all section under Scoping exercise code including population, types of MHPS, and outcome sections

A.2 Systematic Review of relationships/Prevalence between mental health and psychosocial conditions and Humanitarian Crisis

A.3 Systematic Review of barriers/facilitators of implementing or participating in the MHPSS interventions

A.4 Systematic review of MH needs assessment and care plans

A.5 Literature reviews/overviews/discussion papers
Do not need to do Population Outcome coding

A.6 Systematic Map or Scoping Review

A.7 Meta-analytic review (no critical appraisal)

A.8 Systematic review protocol

A.9 Guideline

A.10 Editorials

A.11 Review of reviews

A.12 Systematic review of methods used in the interventions

B: Aims/objectives of the paper (as reported)

Line-by-line coding

C: Population

C.1 Age group *(focus of the review if specified)*

- Children and young people only
  Children and young people aged between 0-25 or as specified in the paper
- Adult only
  as specified in the paper
- Older people only
  As specified in the paper
- No specific age group focus
  If there is no age group focus or stated in the paper

C.2 Other marginalised groups (As reported in the paper)

C.3 Gender

- Female only
- Male only
- No specific focus on gender

D: MHPS: Types of MHPSS interventions included in/focus of the review (As reported in the paper)

E: Types of humanitarian emergencies *(As reported in the paper)*

F: Publication date

- 2015-2010
- 2009-2005
- 2004-2000
- Pre 2000

G: Geographical focus *(As reported in the paper)*

H: Optional (for SRs) findings from the synthesis
Line-by -Line coding

I: Optional (for SR only) Search period (end year)

J: Optional (for SRs) How many and types of studies include in the review (as reported)
Line-by-line coding

K: Optional (only for effectiveness review papers and relationship papers) Outcomes as reported in the review

6.2 DRAFT DATA EXTRACTION FOR SYNTHESIS

Section A–D applies to all studies

Section A: Administrative details	
Identification of report (or reports) *Please use as many keywords as apply*	• Citation *Please use this keyword if the report was identified from the bibliographic list of another report.* • Contact *Please use this keyword if the report was found through a personal/professional contact.* • Handsearch a journal *Please use this keyword if the report was found through handsearching a journal.* • Unknown *Please use this keyword if it is unknown how the report was found.* • Electronic database *Please specify* • Websites
Type of documents *Please use ONE keyword only*	• Journal articles • Research reports • Programme documents (e.g. monitoring and evaluation reports) • Needs assessments • Conferences • Dissertations/Thesis • Other unpublished documents
Section B: Study aims and descriptive details	
What are the aims of the study?	• Not stated • Details
What is the objective of the study?	• To evaluate the effectiveness of an interventions • To evaluate the delivery or receipt of participating in an intervention
When was the study conducted? (e.g. including how long after the emergency and/or the delivery of the intervention)	• Not stated • Details
In which country/countries was the study carried out? (please specify)	• Not stated • Details
Types of humanitarian emergencies	• Not stated • Details
Funding details	• Not stated • Details
Was ethical approval gained?	• Not stated • Details
Are there any ethical concerns about the study?	• Not stated • Details

Section C: Population	
Age group (sample focus of the study if specified – for trials, specify who data is collected on. For process evaluations, specify the same. E.g. adult or children providing views as recipients. If the sample is collecting data from children – as peer deliverers of MHPSS still apply 'children and young people only.)	• Children and young people only Children and young people aged between 0-25 or as specified in the paper • Adults only (as specified in the paper) • Older people only (as specified in the paper) • No specific age group focus (if there is no age group focus or stated in the paper)
Other marginalised groups (as reported in the paper)	• Not applicable • Details
Gender	• Female only • Male only • No specific focus on gender
Section D: Details of the intervention	
Types of MHPSS interventions (as reported in the paper)	• Not stated • Details
Target population – not details of the actual sample – but if the interventions is aimed at all young people or adults, etc.	
Description of intervention(s)/components	• Not stated • Details
Description of how the intervention was designed or developed, including any theory of change and / or how intervention was developed	• Not stated • Details
Details of any contextual adaption to MHPSS (e.g. did the programme consider the setting, population, language, culture or other contextual factors	• Not stated • Details
Description of providers (including training, qualifications, etc.)	• Not stated • Details
Timing of the programme delivery (e.g. in relation to the emergency)	• Not stated • Details
Intervention duration: (e.g. 2 weeks, 2 months, 2 years)	• Not stated • Details
Intervention intensity (e.g. number of 'sessions',	• Not stated • Details
Medium of programme	• Individual • Group
Programme site	• Not stated • Details
Other: please provide any other details relevant to the intervention	• Not stated • Details

Section E–G applies to PROCESS EVALUATIONS: methodological characteristics and study findings

Section E: Sample details	
Study design	• Quantitative (Please specify) • Qualitative (Please specify) • Mixed-methods (Please specify)
Sample focus	• Programme implementers/providers • Programme recipients
Sampling and recruitment methods (including recruitment) *How were the subjects selected for the study?*	• Not stated • Details
Sample size	• Not stated • Details
Socio-demographic characteristics of participants	• Not stated • Details
Section F: Data collection and analysis	
Methods of data collection (please specify based on description in the paper)	• Not stated • Unclear • Survey • In-depth interviews • Semi-structured interviews • Participant observation • Focus groups • Diary study • Document analysis • Others (Please specify)
Methods of data analysis (please specify based on description in the paper)	• Not stated • Unclear • Statistical analysis • Grounded theory • Framework analysis • Thematic analysis • IPA • Others (Please specify)
Section G: Findings on process	
Data/findings on contextual / facilitators /barriers to intervention processes (extract findings including page numbers and if participation quotes, author description or author conclusions).	• Add themes / sub-themes • Feasibility • Fidelity • Accessibility • Acceptability • Satisfaction • Intensity/dose • Cultural sensitivity

Section H-N applies to OUTCOME EVALUATIONS: methodological characteristics and study findings

Section H: Study design and actual sample	
Outcome evaluation study design	• RCT • nRCT • Mixed-methods
Unit of allocation	• Not stated • Unclear • Individuals • Family • Group • Institution/organisation (E.g., school, hospital, company) • Region (specify) E.g., district, local authority, country
Type of control group	• Waitlist/delayed treatment • Attention placebo/alternative intervention (please specify) • Usual treatment/care, with assignment • Matched group from target population or other inactive, without assignment
Number of people in sample at baseline *Number of participants in each intervention and control/comparison group at baseline*	• Not stated • Unclear • Reported treatment group (specify number) • Reported control/comparison group (specify number) • Reported other groups (specify) • If 3 or more groups, record number of participants in additional groups here • Reported total sample (specify) • Number identified as eligible
Number of respondents when intervention finishes *Number of participants in each intervention and control/comparison group at the time intervention finishes (NOT at last evaluation)*	• Not stated • Unclear • Reported treatment group (specify number) • Reported control/comparison group (specify number) • If 3 or more groups, record number of participants in additional groups here • Reported total sample (specify)
Number of respondents at follow-up *Number of participants in each intervention and control/comparison group at follow-up*	• Not applicable - no follow-up e.g. participants were only measured directly after receiving the intervention • Not stated • Unclear • Reported treatment group (specify number) • Reported control/comparison group (specify number) • Reported other groups (specify) • If 3 or more groups, record number of participants in additional groups here) • Reported total sample (specify)

Section I: data collection and analysis	
What type of measurement tool(s) is/are used to collect outcome data? *Tick all that apply*	• Not stated • Unclear • Standardised clinical test (e.g. Beck's Depression scale, Mental Health SF-36) • Culturally adapted clinical test • Self-reported measure • Secondary data (e.g. from existing data sets) • Administrative records (e.g. school records, hospital records) • Others (Please specify)
Was the instrument used to assess outcomes piloted/validated?	• Not stated • Unclear • Yes - validated scales • No
Number of (POST) outcome assessment periods *How many times were data on outcome variables collected after the intervention for both treatment and comparison groups?*	• Not stated • Unclear • One • Two • Three
Timing/s of post-intervention measurement/s *Choose all that apply and indicate the exact timings if specified in the report*	• Not stated • Unclear • Immediately after intervention • Up to 1 month • 1-3 months • 3-6 months • 6-12 months • 1-2 years • 2-3 years • 3-5 years • >5 years • No post-intervention measures – exclude
Did the study use an ‘intention to treat’ or ‘intervention received’ approach to analysis?	• Not stated • Unclear • Intention to treat *Intention to treat means that data were analysed on the basis of the original number of participants recruited into the different groups* • Intervention received *Intervention received means the data were analysed on the basis of the number of participants remaining in the groups at the time of measurement*

Unit of data analysis *Were the results reported according to the unit of allocation? For example, if individuals were allocated to different groups, results from individuals should be analysed and reported, whereas if schools were allocated to different groups then results from each school should be analysed and reported*	• Not stated • Unclear • Same as unit of allocation • Different from unit of allocation
If a cluster trial, do the authors report an intraclass / intracluster correlation?	• Not relevant (not a cluster trial) • Not reported • Reported (please specify)
Were the data weighted to correct for design issues in the analyses?	• Unclear *Use this if the analyses are too poorly reported to tell if weights were required and /or used* • Yes – weights applied (specify weighting variable) • No – weights clearly not applied *Use this if obvious that weights were not used, either because author says so or because the analysis methods are sufficiently described and the data did not have design faults that required weighting* • Not applicable
Section J: Selection bias	
How was the study sample selected?	• Other: non-randomly (provide any details) • Not stated • Unclear which type • Simple random sample *Each unit in the population has an equal chance of being selected* • Systematic random sample *Selecting one unit on a random basis and choosing additional elementary units at evenly spaced intervals until the desired number of units is obtained* • Stratified sample *Selecting a separate simple random sample from each population stratum, based on selection criteria (e.g. age, gender)* • One-stage cluster sample *Selecting clusters (e.g., geographic location, schools) from the population on the basis of simple random sampling. Every person within the selected clusters is then included Intention to treat means that data were analysed on the basis of the original number of participants recruited into the different groups* • Two-stage cluster sample *Selecting clusters (e.g., geographic location, hospitals) from the population on the basis of simple random sampling. Then people within the selected clusters are selected on the basis of simple random sampling*

How participants were allocated to intervention and control/comparison groups?	• Other/not applicable: non randomly • Unclear • Random, no information given *Author/s just state they used "random sampling" with no details* • Random, information given (specify) *E.g. table of random numbers, computer-generated random sequences*
Were major prognostic factors at baseline values reported for?	• Not stated • Details
Were baseline values of major prognostic factors reported for each group as allocated (e.g. intervention and control group)?	• No, values not reported by group • Yes for all individuals in study at baseline measurement • Yes for all individuals remaining in study for post-test and/or follow-up • Yes for some other subgroup of individuals
Are baseline values of major prognostic factors balanced between the groups in the trial? I*n the reviewer's judgement—provide justification. Note: Major prognostic factors are balanced between groups if the groups are drawn from similar populations and have similar sociodemographic variables and baseline values of all outcome measures. Record the extent to which your decision is supported by presented data on outcomes and/or by other information in the report (e.g. statements in text)*	• Unclear • Balanced (specify how they matched) • Groups are equivalent • Not balanced (specify how they differed) • Groups are not equivalent • Other (specify)
How did the authors assess equivalence of the groups?	• Not assessed • Unclear • Compared descriptive data • Used statistical tests E.g., conducted a t-test on key variables
Did the analysis adjust for baseline imbalances in major prognostic factors between groups?	• Not relevant (groups were balanced/equivalent) • Unclear because analysis is poorly described • Yes (specify) • No (Use this if obvious that no adjustments have been made, either because the author states it or it is clear from the analysis methods described e.g., no prognostic factors are included as variables in a model)
Section K: Detection bias	
Was the allocation to intervention and control/ comparison groups done blind? *e.g. participants and investigators enrolling participants could not foresee assignment because one of the following, or an equivalent method, was used to conceal allocation: Central allocation); Sequentially numbered, opaque, sealed envelopes*	• Other / not applicable / not randomised • Yes • No • Unclear (Please specify) • Not stated

Was outcome measurement done blind? *That is, were those assessing the outcomes aware whether the participant had been in a control/comparison group or intervention group? (Usually described as a 'double blind' study)*	• Unstated • Unclear (Please specify) • Yes • No
Section L: Attrition bias	
Is the attrition rate reported separately according to allocation group?	• Yes, reported separately for all groups • No (specify which group/s are not reported) • Not applicable, no drop outs
What was the attrition rate?	• Not stated • Unclear • For the intervention group/s (specify) • For the control/comparison group/s (specify) • Overall (specify) • Not applicable, no drop outs
Was any information provided on those who dropped out of the study?	• No, not stated • Unclear • Not applicable, no drop outs • Not relevant (specify) E.g. no drop outs? • Yes, reported (specify)
Section M: Selective reporting bias	
What outcomes did the authors say they were intending to measure? *That is, as described in the aims of the evaluation. Select as many as possible and specify data collection instrument used where possible*	• Details
For whom were outcomes reported? *E.g. was there missing data?*	• Unclear (explain) • Information for some individuals/groups only (specify) • Information for all individuals/groups
For which outcomes were data collected at follow-up presented? *Compare the outcomes reported with your answers above*	• Unclear • Information for some outcomes only • Information for all outcomes
Are there any obvious errors in the numerical reporting? *E.g., numbers in tables don't match those in text*	• Yes (specify) • No
Section N: findings and conclusions	
Outcomes	• Baseline response rates • Follow up response rates • Effect sizes / data • Overall • by Gender • by Age • by other participant characteristic • No data
Author conclusions or reflections on delivering or implementation	• Details

APPENDIX 7: QUALITY APPRAISAL TOOLS

1. QUALITY APPRAISAL TOOL FOR OUTCOME EVALUATIONS STUDIES

Table 1: Risk of bias tool for assessing risk of bias (Julian PT Higgins, Douglas G Altman and Jonathan AC Sterne on behalf of the Cochrane Statistical Methods Group and the Cochrane Bias Methods Group)

<table>
<tr><td colspan="2">Domain 1: Selection bias
Selection bias (biased allocation to interventions) due to inadequate generation of a randomised sequence and inadequate concealment of allocations prior to assignment</td></tr>
<tr><td rowspan="2">Random sequence generation.
Describe the method used to generate the allocation sequence in sufficient detail to allow an assessment of whether it should produce comparable groups.</td><td>Criteria for a judgement of ‘Low risk’ of bias.
The investigators describe a random component in the sequence generation process such as:
• Referring to a random number table;
• Using a computer random number generator;
• Coin tossing;
• Shuffling cards or envelopes;
• Throwing dice;
• Drawing of lots;
• Minimization*.
*Minimization may be implemented without a random element, and this is considered to be equivalent to being random.</td></tr>
<tr><td>Criteria for the judgement of ‘High risk’ of bias.
The investigators describe a non-random component in the sequence generation process. Usually, the description would involve some systematic, non-random approach, for example:
• Sequence generated by odd or even date of birth;
• Sequence generated by some rule based on date (or day) of admission;
• Sequence generated by some rule based on hospital or clinic record number.
Other non-random approaches happen much less frequently than the systematic approaches mentioned above and tend to be obvious. They usually involve judgement or some method of non-random categorization of participants, for example:
• Allocation by judgement of the clinician;
• Allocation by preference of the participant;
• Allocation based on the results of a laboratory test or a series of tests;
• Allocation by availability of the intervention.</td></tr>
</table>

Domain 1: Selection bias Selection bias (biased allocation to interventions) due to inadequate generation of a randomised sequence and inadequate concealment of allocations prior to assignment	
	Criteria for the judgement of 'Unclear risk' of bias. Insufficient information about the sequence generation process to permit judgement of 'Low risk' or 'High risk'.
Allocation concealment. Describe the method used to conceal the allocation sequence in sufficient detail to determine whether intervention allocations could have been foreseen in advance of, or during, enrolment.	**Criteria for a judgement of 'Low risk' of bias.** Participants and investigators enrolling participants could not foresee assignment because one of the following, or an equivalent method, was used to conceal allocation: • Central allocation (including telephone, web-based and pharmacy-controlled randomization); • Sequentially numbered drug containers of identical appearance; • Sequentially numbered, opaque, sealed envelopes.
	Criteria for the judgement of 'High risk' of bias. Participants or investigators enrolling participants could possibly foresee assignments and thus introduce selection bias, such as allocation based on: • Using an open random allocation schedule (e.g. a list of random numbers); • Assignment envelopes were used without appropriate safeguards (e.g. if envelopes were unsealed or no opaque or not sequentially numbered); • Alternation or rotation; • Date of birth; • Case record number; • Any other explicitly unconcealed procedure.
	Criteria for the judgement of 'Unclear risk' of bias. Insufficient information to permit judgement of 'Low risk' or 'High risk'. This is usually the case if the method of concealment is not described or not described in sufficient detail to allow a definite judgement – for example if the use of assignment envelopes is described, but it remains unclear whether envelopes were sequentially numbered, opaque and sealed.

Domain 2: Performance bias Performance bias due to knowledge of the allocated interventions by participants and personnel during the study	
Blinding of participants and personnel Describe all measures used, if any, to blind study participants and personnel from knowledge of which intervention a participant received. Provide any information relating to whether the intended blinding was effective.	Criteria for a judgement of 'Low risk' of bias. Any one of the following: • No blinding or incomplete blinding, but the review authors judge that the outcome is not likely to be influenced by lack of blinding; • Blinding of participants and key study personnel ensured, and unlikely that the blinding could have been broken.
	Criteria for the judgement of 'High risk' of bias. Any one of the following: • No blinding or incomplete blinding, and the outcome is likely to be influenced by lack of blinding; • Blinding of key study participants and personnel attempted, but likely that the blinding could have been broken, and the outcome is likely to be influenced by lack of blinding.
	Criteria for the judgement of 'Unclear risk' of bias. Any one of the following: • Insufficient information to permit judgement of 'Low risk' or 'High risk'; • The study did not address this outcome.

Domain 3: Detection bias Detection bias due to knowledge of the allocated interventions by outcome assessors.	
Blinding of outcome assessment Describe all measures used, if any, to blind outcome assessors from knowledge of which intervention a participant received. Provide any information relating to whether the intended blinding was effective.	**Criteria for a judgement of 'Low risk' of bias.** Any one of the following: • No blinding of outcome assessment, but the review authors judge that the outcome measurement is not likely to be influenced by lack of blinding; • Blinding of outcome assessment ensured, and unlikely that the blinding could have been broken.
	Criteria for the judgement of 'High risk' of bias. Any one of the following: • No blinding of outcome assessment, and the outcome measurement is likely to be influenced by lack of blinding; • Blinding of outcome assessment, but likely that the blinding could have been broken, and the outcome measurement is likely to be influenced by lack of blinding.
	Criteria for the judgement of 'Unclear risk' of bias. Any one of the following: • Insufficient information to permit judgement of 'Low risk' or 'High risk'; • The study did not address this outcome.

<table>
<tr><th colspan="2">Domain 4: Attrition bias
Attrition bias due to amount, nature or handling of incomplete outcome data.</th></tr>
<tr><td rowspan="3">Incomplete outcome data

Describe the completeness of outcome data for each main outcome, including attrition and exclusions from the analysis. State whether attrition and exclusions were reported, the numbers in each intervention group (compared with total randomized participants), reasons for attrition/exclusions where reported, and any re-inclusions in analyses performed by the review authors.</td><td>Criteria for a judgement of ‘Low risk’ of bias.

Any one of the following:
• No missing outcome data;
• Reasons for missing outcome data unlikely to be related to true outcome (for survival data, censoring unlikely to be introducing bias);
• Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups;
• For dichotomous outcome data, the proportion of missing outcomes compared with observed event risk not enough to have a clinically relevant impact on the intervention effect estimate;
• For continuous outcome data, plausible effect size (difference in means or standardized difference in means) among missing outcomes not enough to have a clinically relevant impact on observed effect size;
• Missing data have been imputed using appropriate methods.</td></tr>
<tr><td>Criteria for the judgement of ‘High risk’ of bias.

Any one of the following:
• Reason for missing outcome data likely to be related to true outcome, with either imbalance in numbers or reasons for missing data across intervention groups;
• For dichotomous outcome data, the proportion of missing outcomes compared with observed event risk enough to induce clinically relevant bias in intervention effect estimate;
• For continuous outcome data, plausible effect size (difference in means or standardized difference in means) among missing outcomes enough to induce clinically relevant bias in observed effect size;
• ‘As-treated’ analysis done with substantial departure of the intervention received from that assigned at randomization;
• Potentially inappropriate application of simple imputation.</td></tr>
<tr><td>Criteria for the judgement of ‘Unclear risk’ of bias.

Any one of the following:
• Insufficient reporting of attrition/exclusions to permit judgement of ‘Low risk’ or ‘High risk’ (e.g. number randomized not stated, no reasons for missing data provided);
• The study did not address this outcome.</td></tr>
</table>

Domain 5: Reporting bias Reporting bias due to selective outcome reporting	
Selective reporting State how the possibility of selective outcome reporting was examined by the review authors, and what was found.	Criteria for a judgement of 'Low risk' of bias. Any of the following: • The study protocol is available and all of the study's pre-specified (primary and secondary) outcomes that are of interest in the review have been reported in the pre-specified way; • The study protocol is not available but it is clear that the published reports include all expected outcomes, including those that were pre-specified (convincing text of this nature may be uncommon).
	Criteria for the judgement of 'High risk' of bias. Any one of the following: • Not all of the study's pre-specified primary outcomes have been reported; • One or more primary outcomes is reported using measurements, analysis methods or subsets of the data (e.g. subscales) that were not pre-specified; • One or more reported primary outcomes were not pre-specified (unless clear justification for their reporting is provided, such as an unexpected adverse effect); • One or more outcomes of interest in the review are reported incompletely so that they cannot be entered in a meta-analysis; • The study report fails to include results for a key outcome that would be expected to have been reported for such a study.
	Criteria for the judgement of 'Unclear risk' of bias. Insufficient information to permit judgement of 'Low risk' or 'High risk'. It is likely that the majority of studies will fall into this category.

Domain 6: Other bias Bias due to problems not covered elsewhere in the table.	
Other sources of bias. State any important concerns about bias not addressed in the other domains in the tool. If particular questions/entries were pre-specified in the review's protocol, responses should be provided for each question/entry.	**Criteria for a judgement of 'Low risk' of bias.** The study appears to be free of other sources of bias.
	Criteria for the judgement of 'High risk' of bias. There is at least one important risk of bias. For example, the study: • Had a potential source of bias related to the specific study design used; or • Has been claimed to have been fraudulent; or • Had some other problem.
	Criteria for the judgement of 'Unclear risk' of bias. There may be a risk of bias, but there is either: • Insufficient information to assess whether an important risk of bias exists; or • Insufficient rationale or evidence

2. QUALITY APPRAISAL TOOLS FOR PROCESS EVALUATIONS

Table 2.1: Quality Assessment (Qualitative studies) = QAQ

Quality criteria	Guidance and criteria for informing judgements
QAQ1. Were steps taken to strengthen rigour in the sampling?	*Consider whether:* • *the sampling strategy was appropriate to the questions posed in the study (e.g. was the strategy well-reasoned and justified)* • *attempts were made to obtain a diverse sample of the population in question (think about who might have been excluded who might have had a different perspective to offer).* • *characteristics of the sample critical to the understanding of the study context and findings were presented (i.e. do we know who the participants were in terms of for example, basic socio-demographics, and characteristics relevant to the context of the study?)* Yes, a fairly thorough attempt was made (*Please specify*) Yes, several steps were taken (*Please specify*) Yes, minimal few steps were taken (*Please specify*) Unclear (*Please specify*) No, not at all / Not stated / Can't tell (*Please specify*)
QAQ2. Were steps taken to strengthen rigour in the data collected?	*Consider whether:* • *Data collection was comprehensive, flexible and/or sensitive enough to provide a complete and/or vivid and rich description of people's perspectives and experiences (e.g. did the researchers spend sufficient time at the site/ with participants? did they keep 'following up'? Was more than one method of data collection used?* • *Steps were taken to ensure that all participants were able and willing to contribute (e.g. processes for consent see D4), language barriers, power relations between adults and children/ young people.* Yes, a fairly thorough attempt was made (*Please specify*) Yes several steps were taken (*Please specify*) Yes, minimal few steps were taken (*Please specify*) Unclear (*Please specify*) No, not at all / Not stated / Can't tell (*Please specify*)

Quality criteria	Guidance and criteria for informing judgements
QAQ3. Were steps taken to strengthen the rigour of the analysis of data?	*Consider whether:* • *data analysis methods were systematic (e.g. was a method described/ can a method be discerned?* • *diversity in perspective was explored* • *The analysis was balanced in the extent to which it was guided by preconceptions or by the data* • *quality analysis in terms of inter-rater reliability/agreement* • *the analysis sought to rule out alternative explanations for findings (in qualitative research this could be done by, for example, searching for negative cases/ exceptions, feeding back preliminary results to participants, asking a colleague to review the data, or reflexivity* Yes, a fairly thorough attempt was made (*Please specify*) Yes, several steps were taken (*Please specify*) Yes, minimal steps were taken (*Please specify*) Unclear (*Please specify*) No, not at all / Not stated / Can't tell (*Please specify*)
QAQ4. Were the findings of the study grounded in / supported by the data?	*Consider whether:* • *enough data are presented to show how the authors arrived at their findings* • *the data presented fit the interpretation/ support the claims about patterns in data* • *the data presented illuminate/ illustrate the findings* • *(for qualitative studies) quotes are numbered or otherwise identified and the reader can see they don't come from one or two people.* Well-grounded / supported (*Please specify*) Fairly well grounded / supported (*Please specify*) Limited grounding / support (*Please specify*)
QAQ5. Please rate the findings of the study in terms of their breadth and depth	*Consider whether :* *(NB it may be helpful to consider 'breadth' as the extent of description and 'depth' as the extent to which data has been transformed/ analysed)* • *A range of issues are covered* • *The perspectives of participants are fully explored in terms of breadth (contrast of two or more perspectives) and depth (insight into a single perspective)* • *richness and complexity has been portrayed (e.g. variation explained, meanings illuminated)* • *There has been theoretical/ conceptual development* Good / Fair breadth, but little depth Good / fair depth but very little breadth Good / fair breadth and depth Limited breadth and depth

Quality criteria	Guidance and criteria for informing judgements
QAQ6. Privileges participant's perspectives/experiences?	*Consider whether:* • *there was a balance between open-ended and fixed response questions* • *whether participants were involved in designing the research* • *There was a balance between the use of an a priori coding framework and induction in the analysis.* • *The position of the researchers (did they consider it important to listen to the perspectives of children?)* • *steps were taken to assure confidentiality and put young people at ease* Not at all (*Please specify*) A little (*Please specify*) Somewhat (*Please specify*) A lot (*Please specify*)
Reliability (rigour) and usefulness	
QAQ7. Reliability	*Guidance: Think (mainly) about the answers you have given to questions above* *Using the ratings score 3 for top answer, 2 for middle answer, and 1 for bottom answer, 0 for no answer* *11-15=high* *6-10 = medium* *0-5 = low* Low reliability Medium reliability High reliability
QAQ8. Usefulness	*Guidance: Think (mainly) about the answers you have given to questions 4-6 above and consider: * the match between the study aims and findings and the aims and purpose of the synthesis and *its conceptual depth/ explanatory power* Low usefulness Medium usefulness High usefulness

Table 2.2: Quality Assessment (Surveys/cohort studies) = QAS/C

Quality criteria	Guidance and criteria for informing judgements
QAS1. Was the sampling method appropriate / was the sample representative of the population under study?	Probability sampling - Score 1 (Including: simple random / systematic / stratified / cluster / *two-stage / multi-stage sampling*) Non-probability sampling - Score 0 (*Including: purposive / quota / convenience / snowball sampling*)
QAS2. Was the measurement of the independent variable(s) likely to be reliably assessed and validated?	*The dependent variables (sources) are those that are observed to change in response to the independent variables (e.g. age, sex).* *Reliability pointers:* *Do authors describe how the information was collected?* *Do they describe ways they tried to ensure it was consistently collected?* *Was data collection piloted?* *Were data collection tools previously developed or tested?* *Was data collection tape recorded and/or transcribed?* *Validity pointers:* *Do authors describe why they collected the information they did? Does it fit with the study's aims?* *Was the information they collected what you would consider to be important to answer their research question?* *Do they mention previous validation of tools?* *Were previously piloted/developed tools used?* *Was the target population involved in development of the tools?* *Did researchers use more than one method of data collection?* Yes - Score 1 No - Score 0 Not applicable
QAS2a. Dependent variable(s) reliable/valid measurement?	Yes - Score 1 No - Score 0 Not applicable
QAS3. Did the study report any response rate?	*If the reported response rate is below 60%, the question should be answered 'no'* No - Score 0 Yes - Score 1
QAS4. Did the investigator(s) control for confounding factors in analysing the associations?	*e.g. stratification / matching / restriction / adjustment* No - Score 0 Yes - Score 1 Not applicable - Score 1

Quality criteria	Guidance and criteria for informing judgements
QAS5. Do you have any concerns about the statistical methods used?	No - Score 1 Yes - Score 0 *Please specify*
QAS6. Was follow-up long enough for the outcomes to occur?	No - Score 0 Yes - Score 1 Not applicable - Score 1
Overall quality and usefulness	
QAS7. What is the overall grade of the study?	*0-2 = LOW QUALITY* *3-4 = MEDIUM QUALITY* *5-6 = HIGH QUALITY*
QAS8. Overall how useful is the study for this review?	*Please assess the usefulness of the study checking answers to the following questions* *a8 – aims; b9 - actual sample; c11 - sampling/recruitment/consent; d9 - data collection; f8 - findings* High overall usefulness Medium overall usefulness Low overall usefulness

APPENDIX 8: PROJECT TIMETABLE

Week	Deliverables/activities
Wk 1: 31 Aug 2015	(A) Finalising the title and signing the contract
Wk2 – Wk6: 7 Sep 2015 – 5 Oct 2015	(B) A list of Advisory Board members (AB) with ToR
Wk2 – Wk10: 7 Sep 2015 – 2 Nov 2015	(C) Draft protocol
Wk11 – Wk 14: 9 Nov 2015 – 30 Nov 2015	Peer reviewed protocol and (D) map of networks for research uptake
Wk15 – Wk17: 7 Dec 2015 – 21 Dec 2015	(E) Revised protocol
Wk2 – Wk17: 7 Sep 2015 – 21 Dec 2015	Scoping exercise as part of protocol development
Wk19: 4 Jan 2016	Executed searches
Wk20 – Wk21: 11 Jan 2016- 18 Jan 2016	Screened titles and abstracts
Wk22 – Wk24 25 Jan 2016 – 8 Feb 2016	Assessed full-text articles
Wk25 – Wk26 15 Feb 2016v22 Feb 2016	Extracted data and evaluation of risk of bias
Wk27 – Wk28 29 Feb 2016 – 7 Mar 2016	Synthesis including statistical meta-analysis where appropriate
Wk29 – Wk33: 14 Mar 2016- 11 April 2016	(F) Draft report and plain-language summary
Wk34 – Wk39 18 April 2016-23 May 2016	Externally reviewed report
Wk40 – Wk41 30 May 2016-6 June 2016	Final report
Wk42: 6 June 2016	(G) Publication of the final report and a plain-language summary

APPENDIX 9: DRAFT MAPPING OF NETWORKS AND OPPORTUNITIES FOR DISSEMINATION

Activity	Network details	Lead/ Link person
Promoting the protocol / review online via social media / networks and blogs	Twitter: via EPPI-Centre, and individual accounts	Kelly Dickson Mukdarut Bangpan
	Twitter via organisations e.g. Evidence Aid; DfID; MentalElf	
	LinkedIN networks e.g. ReliefWeb humanitarian discussion group	
	Mental health and psychosocial support network http://www.mhpss.net https://www.facebook.com/MHPSSN	
	Public health in humanitarian crises group http://crises.lshtm.ac.uk/	
	Evidence Aid	
	Submit an article to The Humanitarian Space	
	EPPI-Centre blog	
Local seminars	3ie-LIDC Seminar Series	Kelly Dickson Mukdarut Bangpan
	EPPI-Centre: "London systematic review and evidence use"	
Conferences	2017 International Disaster Psychosocial (DPS) Conference	
	Cochrane Seoul 2016	
	Campbell London 2016	
Publishing papers in open access journals	Protocol Scoping exercise	Kelly Dickson Mukdarut Bangpan
	Outcome papers	Mukdarut Bangpan
	Process paper	Kelly Dickson

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The EPPI-Centre was established in 1993 to address the need for a systematic approach to the organisation and review of evidence-based work on social interventions. The work and publications of the Centre engage health and education policy makers, practitioners and service users in discussions about how researchers can make their work more relevant and how to use research findings.

Founded in 1990, the Social Science Research Unit (SSRU) is based at the Institute of Education, University of London. Our mission is to engage in and otherwise promote rigorous, ethical and participative social research as well as to support evidence-informed public policy and practice across a range of domains including education, health and welfare, guided by a concern for human rights, social justice and the development of human potential.

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