

Supporting women with eating disorders during pregnancy and the postnatal period

Amanda Bye¹, Melita Walker², Dr Nicola Mackintosh³, Prof Jane Sandall¹ & Dr Abigail Easter¹

¹ King's College London, London, United Kingdom

² Institute of Health Visiting, London, United Kingdom

³ University of Leicester, Leicester, United Kingdom

Eating Disorders are a group of mental health disorders that are characterised by severely disturbed eating behaviours that significantly impact on an individual's health and psychosocial functioning. Eating behaviours range from severe restriction of eating to excessive and uncontrolled eating. Individuals who binge eat may experience severe emotional distress following these episodes of overeating and/or they may engage in behaviours such as self-induced vomiting, misuse of laxatives or excessive exercise to prevent weight gain. People with eating disorders can also be excessively concerned with their weight and shape, it may unduly influence their feelings of self-worth, or they may have a distorted perception of their body image such as feeling overweight when they are actually severely underweight. Eating disorders have been categorised into three main types: Anorexia Nervosa, Bulimia Nervosa and Binge Eating Disorder; and a further category to account for sub-threshold types known as Other Specified Feeding and Eating Disorders (OSFED), previously referred to as Eating Disorders Not Otherwise Specified (EDNOS) (See Box 1).¹

Prevalence rates vary and less is known about binge eating disorder and OSFED due to recent changes in the way eating disorders are classified, but findings suggest around 2% of women will experience anorexia nervosa at some stage during their lifetime, with similar rates for bulimia nervosa and binge eating disorder, and up to around 4% for sub-threshold types.² Women are more likely to experience an eating disorder during the reproductive years, although the typical onset for an eating disorder does vary between the different types, for example anorexia nervosa typically occurs during adolescence whereas bulimia nervosa and binge eating disorder more commonly occur in late adolescence and adulthood.³ The characteristics between the different types of eating disorders are very similar and affected individuals often shift between these diagnostic categories over time, for example an individual who experiences anorexia nervosa during adolescence may go on to experience bulimia nervosa or OSFED in adulthood.³

Research has not identified a single factor that precedes the onset of an eating disorder but more a range of factors that contribute to an increased risk, such as eating and digestive problems in childhood, high weight and shape concern in adolescence, and childhood sexual abuse.⁴ Eating disorders are often comorbid with other mental health disorders such as depression and anxiety, and they have the highest mortality rate of all psychiatric disorders, with suicide being the most common cause of death for women with anorexia nervosa.² Physical health complications often result from the disordered eating behaviours: starvation which is common to anorexia nervosa can lead to severe cardiac abnormalities due to heart muscle wastage; purging behaviours can lead to electrolyte abnormalities and cardiac dysfunction; and binge eating can contribute to obesity and obesity-related medical complications.^{2,5}

Eating disorders, particularly anorexia nervosa, can be associated with menstrual dysfunction and ovulation problems, which may negatively affect fertility and increase the need for assisted conception.^{6,7} Nonetheless, women with eating disorder can become pregnant and in one study around 7.5% of pregnant women were met diagnostic criteria for an eating disorder, with anorexia nervosa, bulimia nervosa and binge eating disorder effecting 0.5%, 0.1% and 1.8% of pregnant women, respectively, and sub-threshold eating disorders effecting 5%.⁸

The transition to motherhood can be challenging for any woman given the changes that are common to pregnancy, such as changes in appetite and body shape and weight. These challenges can be particularly pronounced for women with eating disorders. For the majority of women with eating disorders, symptoms tend to temporarily improve as pregnancy progresses, possibly due to a shift in focus to their baby's nutritional needs, though symptoms of anxiety and depression are still common.⁹⁻¹¹ However, for some women with eating disorders, particularly those with binge eating disorder, symptoms can persist throughout pregnancy and pregnancy can even exacerbate symptoms or trigger the onset of a new disorder.¹⁰⁻¹² The postnatal period can also be a difficult time for some women with eating disorders as they may struggle to identify with their new postnatal body shape and so they may start engaging in eating disorder related behaviours or they may find they are no longer able to manage their symptoms now their baby is no longer dependent on their nutritional intake.⁹⁻¹²

There is growing evidence that eating disorders can be associated with adverse obstetric outcomes, most notably the increased risk of early miscarriage, intrauterine growth restriction, premature birth and low birth weight.¹³⁻¹⁶ Although research is limited, differing outcomes have been associated with

the different types of eating disorders, such as low birth weight is more common for women with past or current anorexia nervosa, whereas high birth weight is more common for women with binge eating disorder.^{15,16} Evidence suggests that these adverse outcomes may be the consequence of modifiable risk factors, such as pre-pregnancy BMI, gestational weight gain and smoking, that are often associated with eating disorders rather than as a direct consequence of the eating disorder itself.¹⁵

Feeding a baby is one of the key early tasks of parenting and is an important means of parent-child communication. Evidence is mixed but suggests that early cessation of breastfeeding and subsequent introduction of formula milk is more common for women with eating disorders, particularly those with anorexia nervosa.^{17,18} Conversely, women with bulimia nervosa are more likely to continue breastfeeding beyond the first year.¹⁷ Infant feeding may continue to be a challenge as solid foods are introduced as research suggests women with eating disorders may be more likely to report that their infants experience eating problems and picky eating behaviours.¹⁹

How to provide the best care for pregnant women and mothers with Eating Disorders?

Given the risk of adverse maternal and infant outcomes associated with eating disorders, early identification and tailored antenatal and postnatal care are highly important. However, there are several barriers which can effect whether a healthcare professional is aware of the presence of an eating disorder and thus hinder their ability to provide the best care, for example women may be reluctant to openly discuss their difficulties because they feel shameful about their behaviours and they fear being judged by professionals.^{20,21}

Guidance from the National Institute for Health and Care Excellence has several recommendations for enhanced care of pregnant women and mothers with eating disorders.^{22,23,24} Below is a summary of the guidelines and learning from research:

1. All women at the first contact with maternity and health visiting services should be asked whether they have experienced any serious mental illness in the past or currently, ²² and this should include eating disorders. Active and supportive listening can help women begin to discuss this sensitive matter in a safe environment.
2. If a woman has reported a current or past eating disorder, or a healthcare professional is concerned, a referral for full assessment and treatment with a mental health service should be considered in discussion with the woman. Preferably a woman would be referred to an eating disorder service (see the UK directory of eating disorder services at <https://helpfinder.beateatingdisorders.org.uk/>) or a perinatal mental health service (see the

map of perinatal mental health services in England and Wales at <https://maternalmentalhealthalliance.org/campaign/maps/>). It is important to know what services are available in your area and some specialist eating disorder services accept local and national referrals. Pregnant women are likely to be prioritised in mental health services. The woman's GP and other healthcare professionals, who are involved in her care, need to be informed of a referral to a mental health service. It is important to follow up on the progress of a referral to know what support the woman is receiving and to inform how best to manage her care within your role.

3. It is important to offer an integrated package of care that has the woman and her family at the centre. The care plan should be developed in collaboration with the women and it should identify roles and responsibilities and identify a lead professional, which could be the GP, midwife or health visitor. Women will need consistent and ongoing monitoring and support during pregnancy and postnatally, especially because of concerns women may have about weight change and how to manage eating disorder symptoms and the increased risks to mother and child.²³
4. It is important to monitor a woman's mental and physical condition carefully throughout pregnancy and the postnatal period so that any changes in need and wellbeing are acted upon appropriately.²²
5. Health visitors may wish to consider offering a series of listening visits. They can also act as the coordinator of care, taking a whole family approach and engaging services as needed. For example, referring to housing, local children centres, or referring to a Specialist Health Visitor in Perinatal & Infant Mental Health (PIMH). They can also signpost women to local and online peer support (see online support available at <https://www.beateatingdisorders.org.uk/support-services>).
6. It is important to have a discussion with a woman about her diet and her eating behaviours.²⁴ This can provide an opportunity to address any concerns she may have, offer information on the benefits of a healthy balanced diet and deliver tailored advice on how to eat healthily during pregnancy and postnatally (see nutrition leaflets for women with eating disorders at <http://www.eatingdisordersandpregnancy.co.uk/nutrition-leaflets-women/>).
7. Pregnant women with eating disorders need sensitive advice and support about how they plan to feed their baby, which may include discussing the benefits of breastfeeding and practical advice on how to breastfeed. These discussions need following up when the baby is born with proactive support. This includes showing women who choose not to or who are unable to breastfeed, how to make up a feed.²⁴

Training Resources

Researchers at King's College London have been funded by the Health Foundation to translate research on eating disorders during pregnancy and motherhood into practical training resources to help healthcare professionals provide the best care for pregnant women and mothers. The resources include an animation co-designed by the research team, women with lived experience, healthcare professionals and key organisations, including the Institute of Health Visiting. Melita Walker, Perinatal Mental Health Lead at the Institute of Health Visiting says 'Having these resources available will help fill the current gap, enabling healthcare professionals to be more aware of eating disorders and understand how to work in partnership with mothers to ensure they get the right help at the right time.'

A variety of resources on eating disorders during pregnancy and beyond are available at: www.eatingdisordersandpregnancy.co.uk. The resources are free to access and they include an animation training film, a video recording of our recent training event, other training resources for health professionals, case studies of women who experienced eating disorders in the perinatal period, nutrition leaflets for women with eating disorders, and details of useful references and websites.

Box 1

Types of Eating Disorders

The following table provides an overview of the typical characteristics among individuals with eating disorders:

Anorexia Nervosa	<ul style="list-style-type: none">• Persistent restriction of food leading to a significantly low body weight.• An intense fear of gaining weight or of becoming fat.• A severely distorted body image (e.g. perceiving oneself as overweight when severely underweight).• Body weight or shape has an undue influence on self-worth.
Bulimia Nervosa	<ul style="list-style-type: none">• Regular episodes of binge eating (i.e. eating a large amount of food in a short period of time, accompanied by a feeling of being unable to stop or control the amount of food that is eaten).• Binge eating is followed by behaviours to compensate for overeating (e.g. fasting, self-induced vomiting, misuse of laxatives or excessive exercise).

	<ul style="list-style-type: none"> • Body weight or shape has an undue influence on self-worth. • Episodes occur, on average, at least once a week for three months. • Individuals will not have a significantly low body weight as with anorexia nervosa.
Binge Eating Disorder	<ul style="list-style-type: none"> • Regular episodes of binge eating, which are not followed by behaviours to compensate for overeating. • During an episode, an individual may eat more rapidly than normal, eat until they feel uncomfortably full, eat large amounts of food in the absence of feeling physically hungry, or eat alone because of feeling embarrassed by how much one is eating. • An episode is followed by feelings of severe emotional distress. • Episodes occurs, on average, at least once a week for three months.
Other Specified Feeding or Eating Disorder (OSFED)	<ul style="list-style-type: none"> • An individual may be classified as having OSFED if they have eating behaviours that cause clinically significant distress and impairment, but they do not meet the full criteria for any of the specific types. • For example, sub-threshold Bulimia Nervosa, (all the criteria are met, except episodes are less frequent), or Purging Disorder (individuals engage in regular purging behaviour but not in response to a binge eating episode).

References

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5TM) (5th ed.). Washington, D.C. 2013.
2. Smink FRE, van Hoeken D, Hoek HW. Epidemiology, course, and outcome of eating disorders. *Curr Opin Psychiatry*. 2013;26(6):543-548.
3. Fairburn CG, Harrison PJ. Eating disorders. *Lancet (London, England)*. 2003;361(9355):407-416.
4. Jacobi C, Hayward C, de Zwaan M, Kraemer HC, Agras WS. Coming to Terms With Risk Factors for Eating Disorders: Application of Risk Terminology and Suggestions for a General Taxonomy. *Psychol Bull*. 2004;130(1):19-65.
5. Rome ES, Ammerman S. Medical complications of eating disorders: an update. *J Adolesc*

- Health*. 2003;33(6):418-426.
6. Freizinger M, Franko DL, Dacey M, Okun B, Domar AD. The prevalence of eating disorders in infertile women. *Fertil Steril*. 2010;93(1):72-78.
 7. Easter A, Treasure J, Micali N. Fertility and prenatal attitudes towards pregnancy in women with eating disorders: results from the Avon Longitudinal Study of Parents and Children. *BJOG*. 2011;118(12):1491-1498.
 8. Easter A, Bye A, Taborelli E, et al. Recognising the symptoms: How common are eating disorders in pregnancy? *Eur Eat Disord Rev*. 2013;21(4).
 9. Taborelli E, Easter A, Keefe R, Schmidt U, Treasure J, Micali N. Transition to motherhood in women with eating disorders: A qualitative study. *Psychol Psychother*. October 2015.
 10. Bulik CM, Von Holle A, Hamer R, et al. Patterns of remission, continuation and incidence of broadly defined eating disorders during early pregnancy in the Norwegian Mother and Child Cohort Study (MoBa). *Psychol Med*. 2007;37(8):1109-1118.
 11. Micali N, Treasure J, Simonoff E. Eating disorders symptoms in pregnancy: a longitudinal study of women with recent and past eating disorders and obesity. *J Psychosom Res*. 2007;63(3):297-303.
 12. Easter A, Solmi F, Bye A, et al. Antenatal and postnatal psychopathology among women with current and past eating disorders: Longitudinal patterns. *Eur Eat Disord Rev*. 2015;23(1).
 13. Micali N, Simonoff E, Treasure J. Risk of major adverse perinatal outcomes in women with eating disorders. *Br J Psychiatry*. 2007;190(3):255-259.
 14. Koubaa S, Kouba S, Hällström T, Lindholm C, Hirschberg AL. Pregnancy and neonatal outcomes in women with eating disorders. *Obstet Gynecol*. 2005;105(2):255-260.
 15. Bulik CM, Von Holle A, Siega-Riz AM, et al. Birth outcomes in women with eating disorders in the Norwegian Mother and Child cohort study (MoBa). *Int J Eat Disord*. 2009;42(1):9-18.
 16. Solmi F, Sallis H, Stahl D, Treasure J, Micali N. Low birth weight in the offspring of women with anorexia nervosa. *Epidemiol Rev*. 2014;36:49-56. doi:10.1093/epirev/mxt004
 17. Micali N, Simonoff E, Treasure J. Infant Feeding and Weight in the First Year of Life in Babies of Women with Eating Disorders. *J Pediatr*. 2009;154(1):55-60.e1.
 18. Torgersen L, Ystrom E, Haugen M, et al. Breastfeeding practice in mothers with eating disorders. *Matern Child Nutr*. 2009;6(3):243-252.
 19. Reba-Harrelson L, Von Holle A, Hamer RM, Torgersen L, Reichborn-Kjennerud T, Bulik CM. Patterns of maternal feeding and child eating associated with eating disorders in the Norwegian Mother and Child Cohort Study (MoBa). *Eat Behav*. 2010;11(1):54-61.
 20. Hepworth N, Paxton SJ. Pathways to help-seeking in bulimia nervosa and binge eating

- problems: a concept mapping approach. *Int J Eat Disord.* 2007;40(6):493-504.
21. Stringer E, Tierney S, Fox J, Butterfield C, Furber C. Pregnancy, motherhood and eating disorders: a qualitative study describing women's views of maternity care. *Evid Based Midwifery.* 2010;8(4):112-121.
 22. National Institute for Health and Care Excellence (2014). Antenatal and postnatal mental health: clinical management and service guidance. NICE guideline (CG192).
 23. National Institute for Health and Care Excellence (2017). Eating disorders: core interventions in the treatment and management of anorexia nervosa, bulimia nervosa and related eating disorders. NICE guideline (NG69).
 24. National Institute for Health and Care Excellence (2008). Maternal and child nutrition. NICE guideline (PH11).