

Eating disorders in pregnancy: practical considerations for the midwife

Abstract

Women who have eating disorders represent up to 8% of pregnant women today. The risks to both a mother and her baby are significant if an eating disorder is present. It is important that midwives have the knowledge, skills and confidence to enquire about eating disorders with women early in the pregnancy, and are also aware of the clinical signs of eating disorders, in order to recognise these situations. Midwives should use sensitive and compassionate communication skills when caring for women who have eating disorders, who have complex psychological feelings that may affect their behaviour. The symptoms of eating disorders may improve during pregnancy but midwives should be aware of the effects of childbirth. The postnatal phase is an important period for a mother who has an eating disorder, as her symptoms may recur, and midwives should therefore work in partnership with key members of the multidisciplinary team.

Keywords

Eating disorder | Communication | Multidisciplinary working | Midwives

It is estimated that 5–8% of women may be experiencing an eating disorder in early pregnancy (Micali et al, 2016; Bye et al, 2018a). Eating disorders fall into four main categories: anorexia nervosa, bulimia nervosa, binge eating disorders and other specified feeding or eating disorders (OSFED). Prevalence rates of each are variable, however, and research indicates that there are similar numbers of women with anorexia nervosa, bulimia nervosa and binge

Eileen C Stringer (corresponding author)
Lead Midwife, Greater Manchester and Eastern Cheshire Strategic Clinical Network; Midwife Consultant, Salford Clinical Commissioning Group

Christine Furber
Reader and Lead Midwife for Education, University of Manchester

Eileen.stringer1@nhs.net

eating disorders, with an increased number of those with OSFED (Bye et al, 2018a). Although eating disorders can develop at any age, midwives should be aware that the risk is highest for young men and women aged between 13–17 years (National Institute for Health and Care Excellence (NICE), 2017), and that it may therefore have an effect across a woman's childbearing years.

The risks of poor outcomes for mother and baby are well documented (Franko et al, 2001; Solmi et al, 2014; Micali et al, 2016; Kimmel et al, 2016) and, dependent on the type of disorder, could include miscarriage, fetal anomaly, prolonged pregnancy and labour, growth-restricted fetus, higher rates of infection and venous thrombosis, lower rates of successful breastfeeding, and a high risk of perinatal depression and anxiety. It should be noted that eating disorder symptoms may improve during pregnancy and return after birth (Crow et al, 2008; Fogarty et al, 2018).

Identification of eating disorders

Early identification and awareness of the disorder in the antenatal and postnatal period is vital. NICE (2017) guidance recommends that midwives should enquire about any history of mental ill health early in pregnancy, and this should include eating disorders. However, disclosure may not always occur, as many women with an eating disorder find it difficult or distressing to discuss their condition with health professionals, due to stigma or a fear of being judged (Cantrell et al, 2009; Stringer et al, 2010; Bye et al, 2018a). The clinician may therefore need to rely on clinical indicators to help them establish the medical history (*Box 1*). If an eating disorder is not disclosed but is suspected after initial assessment, an attempt to discuss the matter with the woman should be made in order to elicit consent and refer her for further assessment and treatment as required. BMI is a clinical indicator that may predict possible eating disorders and is calculated by dividing bodyweight in kilograms by the square of height in metres (World Health Organization, 2019). A result of less than 18.5 kg/m² is considered underweight, while a measurement between 18.5–24.9 kg/m² is considered within the 'normal' range.

For many women, pregnancy and childbirth can be difficult, as weight gain, changes in body shape and increased appetite can challenge established thoughts and behaviours (Bye et al, 2018b), and it can be a time of great distress for those affected by eating disorders. Studies have found that an alleviation of symptoms and behaviours may occur with some disorders, such as bulimia nervosa, whereas other eating disorders might result in a continuation of certain behaviours, such as self-induced vomiting, restrictive eating or excessive exercise (Micali et al, 2007).

NICE (2017) has specific recommendations for enhanced monitoring and support for women with eating disorders before, during and after pregnancy. These advise the clinician on how to support a woman with an eating disorder to ensure that she is receiving care that accounts for both her pregnancy and her disorder.

A key element of antenatal care is nutrition. The importance of ensuring that mothers are well-nourished and know how nutrition influences the growth and development of the fetus, forming the foundations of a child's health, is widely acknowledged (Stanner, 2018). The mother's health, both in the short and long term, also depends on how well-nourished she is before, during and after pregnancy (NICE, 2015). It is therefore essential that effective history-taking and positive relationships with midwives enable women to disclose conditions that might affect their nutrition, preferably at the beginning of their pregnancy, so that they can then go on to receive appropriate advice and support (Cantrell et al, 2009).

It must also be remembered that identification of an eating disorder during pregnancy may be the first time that a woman has disclosed, discussed or accepted her condition, so sensitivity and compassion are paramount in all encounters (Cantrell et al, 2009). Health professionals who lack information and education about eating disorder may feel reluctant to enquire, especially if they are not aware of pathways to support for women who disclose an eating disorder (Bye et al, 2018a).

Antenatal period

Pregnancy is likely to be stressful for women with an eating disorder (Martos-Ordóñez, 2005), and therefore women need information and support relevant to their needs. This includes recognising the importance of maintaining mental health and wellbeing, ensuring adequate nutrient intake and limiting risky behaviours such as binge eating, vomiting, using laxatives and excessive exercise (Fogarty et al, 2018). Information on the nature and risks of the particular eating disorder in the context of pregnancy, including how it is likely to affect the individual, is important, as is ensuring appropriate referral. Providing this advice in a clinical setting during pregnancy or in the postnatal period, when the woman is

Box 1. Clinical indicators

The clinician may be alerted to the possibility of an eating disorder being present when the following occurs:

- An unusually low or high BMI or body weight for their age
- Rapid weight loss
- Dieting or restrictive eating practices (such as dieting when they are underweight) that are worrying them, their family members or carers, or professionals
- Family members or carers report a change in eating behaviour
- Social withdrawal, particularly from situations that involve food
- Other mental health problems
- A disproportionate concern about their weight or shape (eg concerns about weight gain as a side effect of contraceptive medication)
- Problems managing a chronic illness that affects diet, such as diabetes or coeliac disease
- Menstrual or other endocrine disturbances, or unexplained gastrointestinal symptoms
- Physical signs of:
 - Malnutrition, including poor circulation, dizziness, palpitations, fainting or pallor
 - Compensatory behaviours, including laxative or diet pill misuse, vomiting or excessive exercise
- Abdominal pain that is associated with vomiting or restrictions in diet, and that cannot be fully explained by a medical condition
- Unexplained electrolyte imbalance or hypoglycaemia
- Atypical dental wear (such as erosion)

Source: National Institute for Health and Care Excellence (NICE) (2017)

previously unknown to the clinician, can be problematic, as a level of trust and familiarity is often required to discuss such sensitive issues (Cantrell et al, 2009).

Shared care with consistent continuity of carer between a named midwife and obstetrician can provide the opportunity to develop effective and trusting relationships with the woman (Harris, 2010), which is important for appropriate monitoring and support. Reassurance and understanding are essential, as are empathy, compassion and respect (Stringer et al, 2010). For example, a woman may well have concerns about gaining weight and this needs to be discussed sensitively, advising on the potential effect on the pregnancy in a way that is informative, supportive and understandable to her. Practical considerations should be in place, such as not verbally declaring the weight of the woman if others are present, or letting her step on scales with her back to the reading, agreeing to record it elsewhere, if she does not wish to know (Harris, 2010). Ward (2008) suggests that midwives use open-ended questions such as 'How is your mood?' or 'How do you feel about your weight?' to allow discussion and disclosure.

A more intensive obstetric appointment schedule may be required, particularly with ongoing or remitted anorexia nervosa, for adequate pregnancy nutrition and optimal fetal development. Linna et al (2014) explored outcomes in 2257 pregnant women attending an eating

disorder clinic in Finland and found that anaemia and slow fetal growth were more likely in women with anorexia nervosa, and hypertension was more likely in those who had a binge eating disorder. The early stages of a first pregnancy could be a unique window for intervention for women with an ongoing eating disorder (Taborelli et al, 2016). It is also essential that referral, shared care or a management plan from a named psychiatrist is in place for the most severe disorders to ensure that treatment is planned and managed by an appropriately qualified clinician (Bye et al, 2018b).

Dietary advice may already be in place and it is important to factor this in as part of a multidisciplinary approach. In addition, vitamin supplementation in pregnancy may also be considered. Many women with eating disorders also use herbal supplements or weight loss aides that can contain ephedrine and caffeine (Harris, 2010) and so it is important that herbal remedies, including laxatives, are discussed when asking the woman about medication and supplements.

Harris (2010) suggests that giving facts about the impact of some eating disorder behaviours (for example, that vomiting after bingeing still retains approximately 1100–1200 of calories consumed and causes dehydration; or that laxatives only decrease calorie absorption by about 10% but will disturb electrolyte balance and cause constipation through lower intestinal motility in the long term) will help a woman to adjust. Relevant information may provide the woman with sufficient knowledge to consider altering her eating disorder behaviour during the pregnancy.

Working with young women will require the clinician to be skilled in negotiating and working with family members and carers, and managing issues of information-sharing and confidentiality. It is also beneficial if a specialist young parent midwife is involved in the care, if available (NICE, 2015). It is likely that the young woman's emotional, education, employment and social needs will also need to be addressed, as often the pregnancy may not be her only concern (Cook and Cameron, 2017). Particular attention to confidentiality, privacy and dignity is essential and, if seeking consent for assessments or treatments for young people under 16 years of age, Gillick competency and Fraser guidelines should be considered (NICE, 2017). Safeguarding, both for the woman and the baby, will be a key consideration, and explaining the limits of confidentiality and information-sharing may be required (Cook and Cameron, 2017).

Intrapartum period

Several early studies exploring labour and birth outcomes in women who have eating disorders are noted to be of limited methodological rigour, mainly because of

low-powered samples (Krug et al, 2013). However, more recently Watson et al (2017) analysed 3 female generations (grandmother, mother and child) of data from the Norwegian mother and child cohort study and medical birth registry. Their analysis of more than 70 000 pregnancies indicated that eating disorders were associated with risks for both mother and child. For example, anorexia nervosa may result in a smaller baby (relative risk=1.62; 95% CI=1.20–2.14), and higher risk of caesarean birth (relative risk=1.52; 95% CI=1.10–2.10). Bulimia nervosa was associated with increased risk of induction of labour (relative risk=1.21; 95% CI=1.07–1.37). Binge eating disorders during pregnancy were associated with higher numbers of caesarean births (relative risk=1.19; 95% CI=1.06–1.35), induced labours (relative risk=1.18; 95% CI=1.09–1.28) and larger babies (relative risk=1.04; 95% CI=1.01–1.06).

Linna et al (2014) also found that binge eating disorders were associated with higher risks than anorexia nervosa and bulimia nervosa. For example, induction of labour was 26.4% in those who had a binge eating disorder, compared with 14.8% of women who had anorexia nervosa, and 18.2% who had bulimia nervosa. Linna et al also found that low birth weight was associated with both anorexia nervosa (mean=3302±562 g; adjusted $P<0.001$) and bulimia nervosa (mean=3464±563 g; adjusted $P<0.37$), whereas women who had binge eating disorders tended to have larger babies (mean=3812±519 g; adjusted $P<0.001$).

Women with binge eating disorders appear to be more likely to have a raised BMI and are at risk of complications of maternal obesity (BMI >30 kg/m²), gestational diabetes mellitus, hypertensive disorder, and fetal complications, such as poor or excessive growth, leading to intervention towards the end of pregnancy (Linna et al, 2014). Another large population-based study found that women with binge eating disorder were more likely to have induction of labour, large for gestational age infants and caesarean birth (Bulik et al, 2009). Maternity care during this period should reflect clinical assessment and subsequent application of the most suitable care pathway, with management of complications as necessary.

Postnatal period

For women with an active eating disorder during pregnancy, where nutrition may be restricted or laxatives used to purge, weakness and dehydration can hamper recovery from labour. Furthermore, birth complications may affect adequate mobilisation and hydration, and lead to infection and thrombosis (Wray and Steen, 2014).

Women with eating disorders may have difficulty in achieving successful breastfeeding. Bye et al (2018b) found that early cessation of breastfeeding and the use of artificial formula was more common in women with

anorexia nervosa, whereas those with bulimia nervosa were more likely to choose to breastfeed beyond 1 year. Skin-to-skin contact is important to foster development of the mother–baby relationship and breastfeeding (Wray and Steen, 2014). Additional help should be made available in the immediate postnatal period to assist with early attachment and techniques developed, and a proactive plan of support should be put in place when the woman is transferred home (Wray and Steen, 2014).

Additional postnatal appointments may need to be considered as women with an eating disorder may have higher levels of anxiety about their body image. This could be due to losing the ‘protective factor’ of being pregnant, managing infant feeding, or being able to care for their baby (Little and Lowkes, 2000). Eating disorders often exist alongside other types of mental ill health, such as depression and anxiety, and these have been found to be of higher incidence in the postpartum period (Little and Lowkes, 2000; Bye et al, 2018a). Early screening of mental health is important during this period (Ward, 2008), as well as referral to mental health services if necessary (NICE, 2017). Women with an eating disorder in the antenatal period and their partners should be made aware of the symptoms of postnatal depression so that they can seek help at an earlier stage (Ward, 2008). Early introduction to the health visitor and GP will also enable optimum support (Bye et al, 2018b). Ongoing support and monitoring by appropriate health professionals is vital, as the future mother–child relationship may be affected, with conflict at meal times being a key area of concern (Ward, 2008). In extreme circumstances, safeguarding may become an issue if the woman relapses and is unable to care for herself or her baby appropriately and appropriate referrals need to be made.

The postnatal period is also an opportunity to influence the next pregnancy. Support with mental health, and support for active eating disorders in particular, is essential. Other areas of pre-conception advice include signposting to smoking cessation support, helping women to access appropriate vitamin supplementation and advising them on healthy levels of exercise before conceiving again (Wray and Steen, 2014).

Resources for clinicians

There are many resources available to clinicians caring for women with an eating disorder. The charity Tommy’s (2018) provides basic information and advice online to give to women regarding eating disorders in pregnancy, while a more detailed approach has been developed by The Health Foundation (2018). The aim of the project was to translate research findings into education for health professionals, who should be aware that eating disorders are a serious mental illness that can affect pregnancy and motherhood. The project uses the latest

Key points

- Midwives are likely to care for women with eating disorders
- Women with eating disorders often have complex psychological feelings and may not disclose to the midwife
- Midwives need an awareness of eating disorders and their manifestations, as well as sensitive communication skills to identify eating disorders and support women optimally
- Midwives should work in partnership with the multidisciplinary team when an eating disorder is disclosed

evidence and clinical guidance, incorporating women’s perspectives, enabling professionals to develop the skills and knowledge necessary to care for women with an eating disorder in pregnancy and postpartum. Bye and Easter (2018) also provide further information.

Conclusion

Pregnant women with an active eating disorder may have an increased risk of morbidity. Non-disclosure can prevent the appropriate care being given, and therefore practitioners need to foster a non-judgemental and supportive environment. Midwives should be aware of the clinical signs of eating disorders in order to investigate further and tailor care appropriately. Discussions of nutrition and safe levels of physical exercise in pregnancy are important, as is continuity of care, which is necessary for women to develop a trusting relationship with their caregivers. It is essential that midwives and obstetricians work in partnership with other caregivers, such as psychiatrists, dieticians and health visitors, to achieve the best possible outcome. Labour and birth may be complicated, therefore women with eating disorders may require more postnatal support, when issues such as infant feeding may be sensitive. Early screening of mental health is also important.

How well a woman manages her condition during and after the pregnancy, and the effectiveness of the support received, can affect mother and child health for many years to come. It is therefore essential that all women and maternity care providers are aware of how this can be achieved. **BJM**

Declaration of interests: *The authors have no conflicts of interest to declare.*

Review: *This article was subject to double-blind peer review and accepted for publication on 10 January 2019.*

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.

CPD reflective questions

- What risks may be present in both mother and her baby if the woman has an eating disorder?
- How will you develop the knowledge and skills to enquire about eating disorders in early pregnancy?
- How will you tailor the care of a woman with an eating disorder in order to support her?
- What other key partners in your area need to be part of the care package?

- <https://doi.org/10.1002/eat.20578>
- Bye A, Easter A. Eating Disorders during Pregnancy and Motherhood. 2018. <http://www.eatingdisordersandpregnancy.co.uk/project/eating-disorders-pregnancy-motherhood/> (accessed 1 February 2019)
- Bye A, Shawe J, Bick D, Easter A, Kash-Macdonald M, Micali N. Barriers to identifying eating disorders in pregnancy and in the postnatal period: a qualitative approach. *BMC Pregnancy Childbirth*. 2018a;18(1):114. <https://doi.org/10.1186/s12884-018-1745-x>
- Bye A, Mackintosh N, Sandall J, Easter A, Walker M. Supporting women with eating disorders during pregnancy and the postnatal period. *Journal of Health Visiting*. 2018b;6(5):224–228. <https://doi.org/10.12968/johv.2018.6.5.224>
- Cantrell C, Kelley T, McDermott T. Midwifery management of the woman with an eating disorder in the antepartum period. *J Midwifery Womens Health*. 2009;54(6):503–508. <https://doi.org/10.1016/j.jmwh.2009.09.006>
- Cook SMC, Cameron ST. Social issues of teenage pregnancy. *Obstetrics, Gynaecology and Reproductive Medicine*. 2017;27(11):327–332. <https://doi.org/10.1016/j.ogrm.2017.08.005>
- Crow SJ, Agras WS, Crosby R, Halmi K, Mitchell JE. Eating disorder symptoms in pregnancy: A prospective study. *Int J Eat Disord*. 2008;41(3):277–9. <https://doi.org/10.1002/eat.20496>
- Fogarty S, Elmira R, Hay P, Schmied V. The experience of women with an eating disorder in the perinatal period: A meta-ethnographic study. *BMC Pregnancy Childbirth*. 2018;18(1):121. <https://doi.org/10.1186/s12884-018-1762-9>
- Franko DL, Blais MA, Becker AE et al. Pregnancy complications and neonatal outcomes in women with eating disorders. *Am J Psychiatry*. 2001;158(9):1461–1466
- Harris AA. Practical advice for caring for women with eating disorders during the perinatal period. *J Midwifery Womens Health*. 2010;55(6):579–586. <https://doi.org/10.1016/j.jmwh.2010.07.008>
- Kimmel MC, Ferguson EH, Zerwas S, Bulik CM, Meltzer-Brody S. Obstetric and gynecologic problems associated with eating disorders. *Int J Eat Disord*. 2016;49(3):260–275. <https://doi.org/10.1002/eat.22483>
- Krug I, Taborelli E, Sallis H, Treasure J, Micali N. A systematic review of obstetric complications as risk factors for eating disorder and a meta-analysis of delivery method and prematurity. *Physiol Behav*. 2013;109:51–62. <https://doi.org/10.1016/j.physbeh.2012.11.003>
- Linna MS, Raevuori A, Haukka J, Suvisaari JM, Suokas JT, Gissler M. Pregnancy, obstetric and perinatal health outcomes in eating disorders. *Am J Obstet Gynecol*. 2014;211(4):392.e1–8. <https://doi.org/10.1016/j.ajog.2014.03.067>
- Little L, Lowkes E. Critical issues in the care of pregnant women with eating disorders and the impact on their children. *J Midwifery Womens Health*. 2000;45(4):301–307. [https://doi.org/10.1016/S1526-9523\(00\)00031-3](https://doi.org/10.1016/S1526-9523(00)00031-3)
- Martos-Ordóñez C. Pregnancy in women with eating disorders: a review. *Br J Midwifery*. 2005;13(7):446–448. <https://doi.org/10.12968/bjom.2005.13.7.18372>
- 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. <https://doi.org/10.1016/j.jpsychores.2007.05.003>
- Micali N, Stemmann Larsen P, Strandberg-Larsen K, Nybo Andersen A-M. Size at birth and preterm birth in women with lifetime eating disorders: a prospective population-based study. *BJOG*. 2016;123(8):1301–1310. <https://doi.org/10.1111/1471-0528.13825>
- National Institute for Health and Care Excellence. Maternal and child nutrition [QS98]. London: NICE; 2015
- National Institute for Health and Care Excellence. Eating disorders: recognition and treatment treatment [NG69]. London: NICE; 2017
- 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(1):49–56. <https://doi.org/10.1093/epirev/mxt004>
- Stanner S. Nutrition pre-conception and during pregnancy. In: Buttriss JL, Welch AA, Kearney JM, Lanham-New SA (eds). *Public Health Nutrition*. 2nd edn. Chichester: John Wiley & Sons; 2018: 111–136
- Stringer E, Tierney SRE, Fox J, Butterfield C, Furber C. Pregnancy, motherhood and eating disorders: A qualitative study describing women's views of maternity care. *Evidence Based Midwifery*. 2010;4(8):112–121
- 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*. 2016;89(3):308–323. <https://doi.org/10.1111/papt.12076>
- The Health Foundation. Actionable research materials on the effects of eating disorders on pregnancy, birth and motherhood. 2018. <https://www.health.org.uk/research-projects/recognition-and-response-to-eating-disorders-in-the-perinatal-period> (accessed 25 January 2019)
- Tommy's. Eating disorders in pregnancy. 2018. <https://www.tommys.org/pregnancy-information/im-pregnant/mental-wellbeing/specific-mental-health-conditions/eating-disorders> (accessed 25 January 2019)
- Ward VB. Eating disorders in pregnancy. *BMJ*. 2008;336(7635):93–96. <https://doi.org/10.1136/bmj.39393.689595.BE>
- Watson HJ, Zerwas S, Torgersen L et al. Maternal eating disorders and perinatal outcomes: A three-generation study in the Norwegian Mother and Child Cohort Study. *J Abnorm Psychol*. 2017;126(5):552–564. <https://doi.org/10.1037/abn0000241>
- World Health Organization. Body Mass Index. 2019. <http://www.euro.who.int/en/health-topics/disease-prevention/nutrition/a-healthy-lifestyle/body-mass-index-bmi> (accessed 25 January 2019)
- Wray J, Steen M. Physical health and complications in the puerperium. In: Marshall J, Raynor M (eds). *Myles Textbook for Midwives*. 16th edn. Edinburgh: Churchill Livingstone; 2014: 499–514