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Respectful, evidence-based care for women with a high BMI increases satisfaction and reduces physical and psychological morbidity

“Health is never simply ‘health’; instead it can easily become a means of moralising, of normalising and of regulating.” (Parr 2002: 373, cited in Evans 2006: 259). Fatness, unlike smoking or drug use, is highly visible and, in our thinness – obsessed culture, often incurs immediate moralising and judgement. The language of official publications constructs women with a high BMI as a ‘problem’ to be managed¹, incurring a strain on the already over-stretched NHS (HOC 2004). As the state retreats from supporting the most vulnerable in society, and cuts funding for health services, it also perpetuates a discourse of individual responsibility for a ‘healthy lifestyle’, thereby creating feelings of guilt and shame for many who cannot achieve this for whatever reason.

Pregnant women with a high BMI are vulnerable to stigma during pregnancy care (Furness et al 2011, Russell et al 2010). Women with a BMI over 35, interviewed in one qualitative study, described feelings of humiliation in their interactions with health professionals (Furber and McGowan 2011); one woman reported: “I felt humiliated and unimportant during one of the biggest events of my life” (Russell et al 2010). Experiencing weight bias is known to have a serious negative impact on victims’ physical and psychological health (Mulherin et al 2013), and deters women from accessing care (Amy et al 2006). Stress and anxiety are well known to have a deleterious effect on pregnancy, as well as effects on the baby which extend into childhood (Talge et al 2007). Automatic categorisation of the pregnancy as ‘high risk’ increases the level of medical surveillance/ intervention without necessarily improving outcomes – indeed some interventions may in fact end up jeopardising women’s health and that of their babies. Labelling a woman ‘high risk’ can become a self-fulfilling prophecy (Williams 2011).

Evidence: complications of pregnancy and birth associated with obesity

The use of BMI as a measure is problematic; simple to calculate and document, it is an arbitrary number which cannot include other relevant factors relevant to the individual’s overall health. Certain pregnancy complications are indeed linked with high BMI; eg a higher likelihood of diabetes, hypertensive and thromboembolic disorders, miscarriage, and stillbirth. A large Scottish study (Denison et al 2013) discussed on Woman’s Hour on 18 Sept is the latest study to find raised BMI in pregnancy to be associated with an increased likelihood of a range of adverse outcomes. However, (as the authors themselves note) an **association** should not be assumed to be a **causal** relationship (see also Mander 2011). As obesity is far more common in socially deprived populations, poorer outcomes will also be related to other factors such as lack of adequate nutrition, higher exposure to pollution, smoking, increased stress and so on. The extent to which these factors interrelate has not been ascertained. A nourishing diet, fresh air, and moderate physical activity before and during pregnancy have long been known to maximise the chances of a healthy mother and baby. Despite preconception care being recommended in countless research publications, provision has reduced over the past two decades and antenatal education has also been heavily cut.

High BMI is linked with a greater likelihood of medical interventions such as induction and augmentation of labour, caesarean section, and adverse outcomes such as haemorrhage, infection, and babies needing neonatal care. Many studies report all adverse outcomes together, but the latter group should be analysed carefully to ascertain the extent to which they are related to problems caused by raised BMI itself or are problems caused by the type of maternity/obstetric care provided. Women with a high BMI are often subjected to a ‘cascade of interventions’ (Inch 1984) due to the labelling of the pregnancy as ‘high risk’. One study found that increased BMI was associated with an increase in the use of artificial oxytocin and epidurals, and with earlier decisions to perform caesarean sections (Abenhaim and Benjamin 2011). When the researchers adjusted for these differences in the management of labour, the rate of Caesarean section did not increase with increased BMI. So obstetricians manage labour differently and tend to intervene earlier in women with a high BMI, with resulting increased morbidity. Most studies show a reduction in forceps/ventouse deliveries and an increase in Caesarean section in women with a high BMI.

¹ CMACE/RCOG Joint Guidelines (2010) *Management of pregnant women with obesity*

The latest evidence from the Birthplace UK national cohort study (Hollowell et al 2013) contained some reassuring findings for women with a high BMI. It found that otherwise healthy multiparous women with a high BMI 'may have lower risks than previously anticipated'. For women with no complications of pregnancy, a 'nulliparous woman of normal weight had a higher risk of an intervention or adverse outcome than a multiparous very obese woman' (53% cf 21%). The way that birth is managed (or that birth is supported to unfold) particularly in nulliparous women, is therefore central to reducing adverse outcomes.

For example, a nulliparous woman with a high BMI is more likely to have her labour induced, to be encouraged to have an epidural 'just in case', to therefore be immobile and to receive continuous fetal heart monitoring, and have a far higher chance of a caesarean section as a result of all these factors. Tracy et al (2007) in a large population-based study of 753,895 'low risk' women demonstrated the effects of certain interventions on normal birth rates. In their study, only 29.6% of women who had both an induced labour and an epidural had a normal birth; 31.8% with epidural/no induction had a normal birth, 78.6 % of women who had induction and no epidural had a normal birth while 86.3% of women with no epidural/ no induction had a normal birth. This early recourse to intervention for women with a high BMI may be particularly detrimental: Acosta et al (2011) found induction and operative birth to be associated with a significantly increased rate of maternal sepsis and recommended limiting induction to clearly indicated cases. Sepsis rates were higher in women with a high BMI. In the most recent maternal mortality report, sepsis was found to be the leading cause of maternal mortality (Lewis 2007).

Discussing risk

Communication about risk should be objective and give the actual numerical risk of a complication occurring. It should also use positive framing as well as negative. For example, evidence suggests that the risk for gestational diabetes is around 10-15% or so in 'morbidly obese' women, compared to a risk of about 2-5% in the non-obese population. So although it is an increased risk, it also means that about 85-90% of these women will not experience this complication (Vireday 2011). NICE guidance (2012) advocates personalising risks and benefits as far as possible and using absolute risk rather than relative risk (for example, the risk of an event increases from 1 in 100 to 2 in 100, rather than the risk of the event doubles). Using language such as 'three to five times more likely to get gestational diabetes' can inflate the perception of risk and induce fear.

What is best evidence-based care for women with a high BMI?

Caregivers being positive and encouraging, and providing unbiased information

All women should be aware of courses of action that will optimise their chance of a normal birth, as a caesarean section carries a higher risk of complications such as sepsis, haemorrhage or thromboembolic disorders. For women with a high BMI, this knowledge may be even more important.

Continuous support in labour is well known to improve outcomes. The evidence is so compelling that as long ago as 1998 the late Prof John Kennell observed: 'If a doula were a drug, it would be unethical not to use it'. A recent systematic review of 22 studies (Hodnett et al 2013) has confirmed the beneficial effects of a supportive companion, finding that that women allocated to continuous support were more likely to have a spontaneous vaginal birth, less likely to have intrapartum analgesia including epidural, less likely to have a caesarean or instrumental vaginal birth or a baby with a low five-minute Apgar score. They were also less likely to report dissatisfaction. All women should be informed of this evidence but it may be especially important for women at higher risk of interventions.

Continuity of midwifery care Caseload midwifery care has been shown to improve outcomes. A recent systematic review of 13 studies (16242 'all risk' women) found women allocated to this kind of care had an increased chance of having a normal birth, a reduction in the use of epidural, and fewer episiotomies or instrumental births (Sandall et al 2013). Continuity of care would avoid the situation described by midwives in one small study where midwives meeting a woman with a high BMI for the first time on labour ward,

experienced what the researchers termed 'heartsink' at the prospect of trying to support the woman to mobilise and have a normal birth in a highly medicalised environment (Singleton and Furber 2011).

Other approaches to minimise the need for interventions and improve the birth experience

Avoidance of induction/augmentation of labour unless clinically indicated. Sytocinon administration is associated with an increased risk of postpartum haemorrhage (Grotegut et al 2011).

Mobility and upright positions shorten labour, reduce epidural use, reduce the risk of caesarean section and of the baby being admitted to neonatal unit (Lawrence et al 2013).

Use of water enhances mobility, reduces epidural use, increases satisfaction (Cluett and Burns 2012).

Avoidance of continuous electronic fetal monitoring which increases the chance of caesarean section without improving neonatal outcomes (Alfirevic et al 2013).

Privacy optimises hormonal balance and oxytocin production (Buckley 2004, 2009; Uvnas-Moberg 2011)

Respectful, positive attitudes as well as continuity have been found in one qualitative study to make a difference to women's use of pain relief, their confidence and satisfaction with care (Leap et al 2010).

Quote: "*Yes obese women are at higher risk for pregnancy complications but not all obese women incur these risks. Last year I, as a 'morbidly obese' woman, had a very healthy pregnancy with no complications and had a natural childbirth. My experience was transformative and gave me a whole new appreciation for my body. I was blessed to have such a supportive medical team with my midwife who never considered me 'high risk' and my doula who had more faith in my body than I had*" <http://www.scienceandsensibility.org/>

Followed by a photo case study of a positive normal birth for a woman with a high BMI from Becky Reed, ex-Albany midwife (Reed 2008).

Useful websites : <http://wellroundedmama.blogspot.co.uk/>

<http://www.scienceandsensibility.org/>

<http://www.lamazeinternational.org/HealthyBirthPractices>

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