Introduction

Obesity is a big problem getting bigger. The prevalence of obesity now exceeds the critical threshold of 15%, as defined by the World Health Organization (WHO), to be described as an epidemic. Obesity is defined as normal weight as a body mass index (BMI) 25.0-29.9 kg/m², overweight as a BMI >29.9 kg/m² and obese as a BMI >30.0 kg/m². In the UK House of Commons Health report on obesity in 2004, it was predicted that obesity would soon overtake smoking as the leading health problem in this country. A pregnancy associated with obesity is at increased risk of most major pregnancy complications. In a large cohort study in the North Thames Region, Sebire et al. found that gestational diabetes, pre-eclampsia, induction of labour, emergency Caesarean section, postpartum haemorrhage and gestational tract infection, wound infection, birth weight above the 90th centile and intranatal fetal death are all significantly more likely to occur in the obese parturient than her normal weight counterpart. Furthermore, it is well known that the incidence of obesity is increasing in pregnancy, with investigators in Scotland and in the USA recently recording increasing BMI in women in early pregnancy over a 10-year period and an up to two-fold increase in the number of obese pregnant women in the same time period.4,5

The ‘2005 American Committee on Obstetrics and Gynecology in Obesity’4 stated that one-third of pregnant women in the USA are obese and recognised that these women are at increased risk of complications that may be more severe and increased maternal and infant mortality in some cases.6 It emphasised the need for obstetricians to provide pre-pregnancy counselling for such women and encourage weight reduction programmes prior to pregnancy. Clearly, contraception in obese women is an important area for health professionals and, indeed, health care providers and politicians. Good contraception can give obese women the opportunity to optimise their health prior to pregnancy. It can allow time for the health professional to encourage weight loss and stabilise any other co-morbidities. It is also crucial from a health economic point of view. As a result, there have been an increasing number of studies addressing contraception in obese women. The following papers have been chosen to illustrate aspects of this health issue.

Contraceptive use by diabetic and obese women.


Chuang et al. from Pennsylvania performed a cross-sectional, retrospective study using data from 11500 patients. They analysed contraceptive use in 7943 sexually active non-stereilised women and compared that with BMI, age, ethnicity, marital status, education and socio-economic status. They found a significant increase in contraceptive non-use in overweight and obese women when compared with normal-weight women. When they controlled for the co-variables mentioned, obesity remained a significant predictor of contraceptive non-use (OR 1.34, 95% CI 1.16–1.55). The authors postulate that obese women perceive themselves as less fertile and as having a negative perception of contraception in the context of being overweight. This under-use may also illustrate the difficulties that some obese women have in accessing health care. Whilst possible weaknesses in the study may have occurred because the BMI was calculated from self-reported height and weight, and bias could have been introduced as data were only gathered from 11 states, it is an interesting paper and highlights the need for advice and action in relation to preventative health care and contraception in this group.


In this research article, the same multi-state database was accessed, but from 1999, and information on pregnancy intention, BMI and contraceptive use at the time of conception was analysed. Unintended pregnancy was defined as an ‘unwanted’ or ‘mistimed’ pregnancy. The BMI data were again self-reported and the method of contraception and the pill was not determined. The authors recognised that not all unintended pregnancies represent contraceptive failures and not all contraceptive failures are unintended. They state that of the 6 million pregnancies in the USA each year, 3 million are unintended. Half of them, however, occur in the 90% of women who use some form of contraception. The other half occur in women who are not using contraception despite an intention not to become pregnant. The women were analysed in two groups: those using and those not using contraception, and within those groups the authors determined which women had unintended pregnancies. Following multivariable logistic regression analysis, the authors found an association between BMI and unintended pregnancy in the group using contraception in overweight and obese women when compared to normal-weight women. Obese women who were non-smokers were more likely to have unintended pregnancies than lighter women who did not smoke. The authors hypothesise that as non-smokers were more likely to be using the combined oral contraceptive pill (COC) than smokers, the obese non-smokers were at greater risk of unintended pregnancy. The mechanism of contraceptive failure was more likely to fail due to problems with absorption and increased levels of free oestrogen affecting negative feedback mechanisms. The method of contraception was, however, not determined. Unfortunately the database only included women with live births and so no data were available about BMI, contraception and pregnancy intention in women who underwent induced abortion.

Conclusions

Few anti-obesity interventions including drugs, surgery, diet and behavioural therapies have been shown to be effective in the short term for the treatment of obesity.7 Therefore, obstetricians and gynaecologists need to develop strategies in order to care for women with obesity and related problems in order to maximise health and minimise complications.

Unfortunately, the above studies suggest that obese women may be more likely to display unhealthy or ‘high-risk’ sexual behaviours, are at greater risk of contraceptive failure and are more likely to report contraceptive non-use. Whilst there is a need for education and health promotion to tackle the rise in obesity, there is also clearly need for targeted education about contraception in addition to improved access to contraception for overweight and obese women. Further study of contraceptive use and outcomes of obesity intervention in this group would be of value.

References


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Claire I Alexander

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