



PREGNANCIES POST BARIATRIC SURGERY: AN AUDIT OF DIETETIC RECORDS FROM 2020-2022 AT THE NATIONAL MATERNITY HOSPITAL

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BACKGROUND

Higher maternal body mass index (BMI) may contribute increased risks for mothers and their infants^{1,2}. Bariatric surgery has been associated with greater reductions in BMI compared to medical treatment of obesity and infant birthweight post bariatric surgery may be lower than size-matched controls^{3,4}. Despite this, surgery may increase the risk of adverse pregnancy outcomes for mothers and their infants including small-for-gestational age, perinatal mortality, preterm birth and vitamin deficiencies⁵⁻⁷. Weight regain after bariatric surgery may also contribute to increased maternofetal risk in pregnancy⁸. Nutritional management is an important aspect of care^{9,10}. Breastfeeding can be successful when nutrient deficiencies are corrected and should be recommended¹¹.

References

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AIMS

The aim of this audit is to describe the rates and outcomes of pregnancies post bariatric surgery over a period of three years. This is the first of a series of audits planned.

METHODS

A clinical audit of hospital records on the Maternal & Newborn Clinical Management System (MN-CMS).

Pregnancies (n=48) were included if they were:

- Referred to dietetics due to a history of bariatric surgery
- Delivered between 2020-2022

Outcomes included the number of referrals by year, booking body mass index (BMI), mode of delivery, gestational age at delivery, birthweight, and rates of any breastfeeding in hospital.

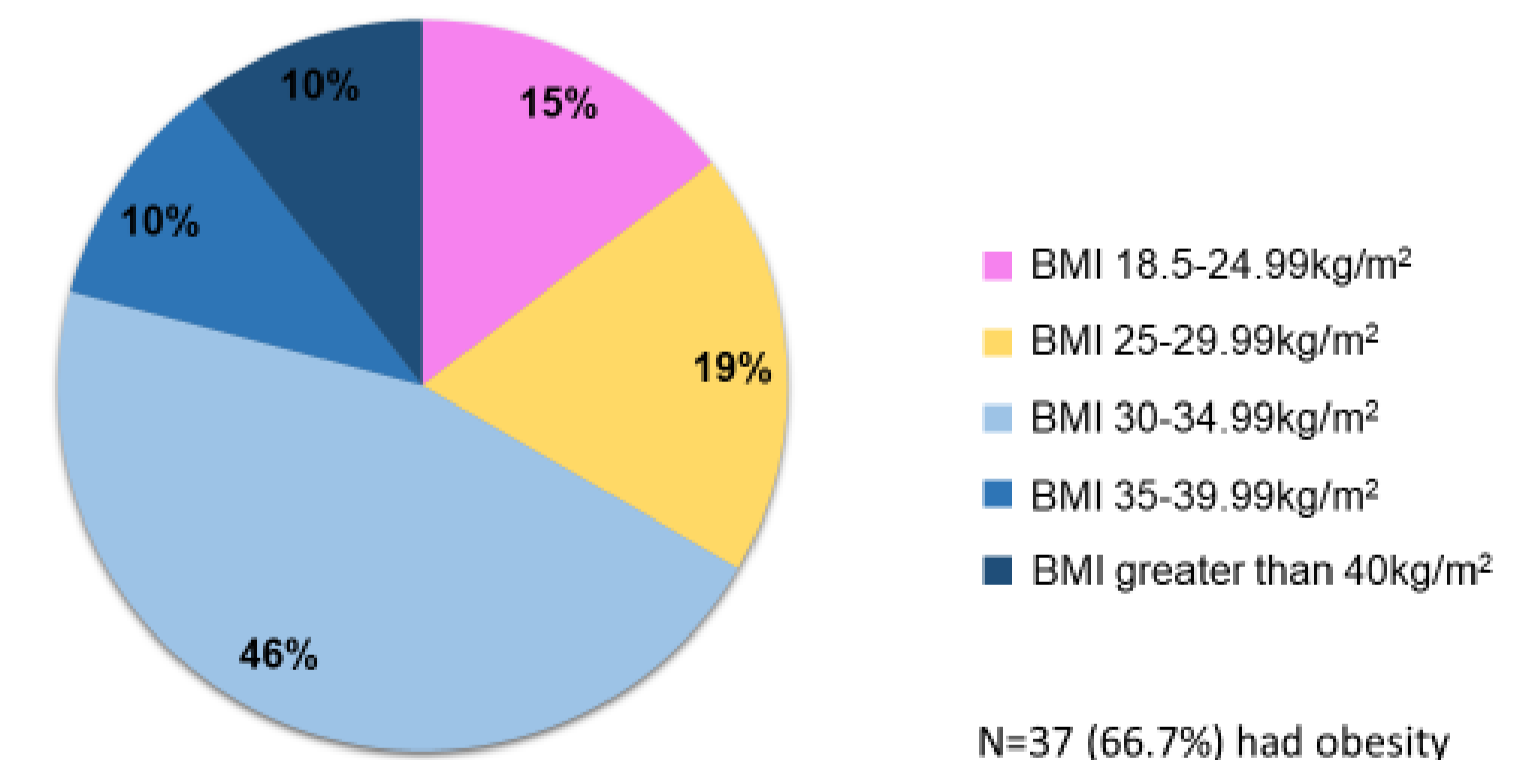
RESULTS

Baseline: Most of the n=48 pregnancies referred in the three-year period were nulliparous (n=35, 72.9%). The median (25th, 75th) BMI at booking was 31.04 (28.32, 34.32) kg/m². Most (n=32 (66.7%)) had obesity based on BMI (Fig. 1).

Pregnancy outcome: About half 23 (48.9%) of births were spontaneous vaginal delivery. There were 3 (6.4%) preterm live births. The mean±SD birthweight was 3449.69±669.53g, excluding one stillbirth at 23 weeks' gestation. There were 4 (8.5%) low birthweight live born infants and 11 (23.4%) cases of macrosomia.

Breastfeeding: Most reported some breastfeeding while in hospital (n=31, 70.5%), of which, only 2 (6.5%) reported mixed feeding. Exclusive formula feeding was reported by n-13 (27.08%).

Fig. 1 Booking body mass index category of women with history of Bariatric surgery 2020-2022 at the National Maternity Hospital (n=48)



Conclusion

The rate of pregnancies post bariatric surgery is increasing and obesity remains a factor. Most women were attempting exclusive breastfeeding. Appropriate multi-disciplinary resources are required to support optimum care. Future audits will explore resource use, rates of nutritional complications, and impact of interventions.