

An Audit Examining Mode of Birth in Obese Women in Regional NSW: Comparison to Established Data

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Introduction

In 2020, 15.1% of mothers in NSW were obese, and Murrumbidgee Local Health District had one of the highest overall rates in the state (21.1%).¹ The risks associated with obesity in pregnancy are well established, including risk of birth via emergency caesarean section.

Objectives

To audit mode of birth in women with a body mass index (BMI) of Obese Class I (30kg/m²), Class II (35kg/m²) and Class III (>40kg/m²) at Murrumbidgee Local Health District (MLHD) and compare performance against previously established data.²⁻³

Methods

A retrospective review of patients with singleton pregnancies and BMI at booking of 30 or above who birthed between May 2020 and April 2021. Exclusion criteria: multiple pregnancy and preterm birth. Study outcomes: mode of birth. Data was extracted from eMaternity databases and comparison made against existing data.

Results

During the study period 1293 women had singleton vaginal births at term in MLHD. Of these, 353 (27.3%) were Obese Class I or above at booking. The mode of birth for each obesity class and comparison rates are outlined in Table 1.

Table 1. Comparison of mode of birth for Obese women (%).

	Obese Class I			Obese Class II			Obese Class III		
	McIntyre et al	Ward et al	MLHD	McIntyre et al	Ward et al	MLHD	McIntyre et al	Ward et al	MLHD
NVB (%)	47.1	53.6	49.1	46.9	50.7	36.6	43.6	46.6	37.9
Assisted (%)	8.4	12.6	5.4	5.9	11.0	7.9	4.9	7.5	9.2
Em-CS (%)		17.4	21.8		19.2	28.7		20.2	21.8
Total CS (%)	44.5		45.5	47.1		55.4	51.5		52.9

NVB = normal vaginal birth; Assisted = ventouse or forceps; EM-CS = emergency caesarean section

Discussion

The rate of obesity in mothers during the study period was higher than the national average. Vaginal birth rates were similar to established data in Class I, but reduced in higher classes. Assisted birth rate increased with obesity class; and was higher than comparison data in Obese III. Emergency and total CS rates were similar to previous rates in Obese I/III but raised in Class II. Comparing mode of birth type for these patients allows us to review practices to help improve outcomes.

References:

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