

Obesity is an independent predictor of breastfeeding initiation when socioeconomic status is controlled for

A. E. Bennett¹, D. McCartney¹ and J. M. Kearney¹

¹*School of Biological Sciences, Dublin Institute of Technology, Kevin Street, Dublin 8, Ireland*

Breastfeeding initiation rates vary across Europe, with rates as low as 56%⁽¹⁾ in Ireland and rates in excess of 90%⁽²⁾ in the Nordic countries. A host of factors, including demographic, social, psychological and physical factors, influence the initiation, intensity and duration of breastfeeding. The extent to which modifiable factors influence breastfeeding initiation should be ascertained in order to prioritise support services for breastfeeding. Obesity is a known modifiable factor which inhibits breastfeeding initiation. This study aimed to determine the extent to which obesity inhibits breastfeeding initiation while controlling for socioeconomic status and other confounding factors.

The Infant Cohort dataset from the *Growing Up in Ireland* study was used for this analysis. This dataset contains information on breastfeeding initiation for 11, 131 9-month-old infants. Factors that were significant ($p < 0.05$) in univariate analysis were entered singly into a binary logistic regression model. The final factors included in the multivariate model with maternal body mass index were: maternal age; maternal education; marital status; medical card holder; gender of the infant; social class; household type; and annual household income.

Of the 11, 131 infants, 56.0% ($n=6231$) of their mothers initiated breastfeeding. Only 14.4% ($n=859$) of obese women initiated breastfeeding compared with 53.8% ($n=3199$) of healthy weight women ($p=0.000$). In the multivariate analysis, obese women were 20% less likely (OR = 0.800; 95% CI 0.708–0.904; $p=0.005$) to initiate breastfeeding compared with healthy weight women while controlling for socioeconomic status and other confounding factors.

Maternal obesity is a potent inhibitor of breastfeeding. The initiation of breastfeeding may be more difficult among obese women, compared with normal weight women, due to lower prolactin concentrations⁽³⁾. Additionally, it has been suggested that obese women are more likely to have a negative attitude towards breastfeeding, which may be due to issues with self-image and being uncomfortable breastfeeding in public⁽⁴⁾. Post-partum depression is more common among obese women and is also associated with reduced lactation. It is important that weight control and breastfeeding promotion are reinforced before and during pregnancy. Breastfeeding should be carefully monitored and supported in obese women in the postpartum period.

1. Economic and Social Research Institute (2012) Perinatal Statistics Report 2010.
2. Hornell A, Aarts C, Kylberg E, *et al.* (2007) *Acta Paediatrica* **88**, 203–211.
3. Rasmussen KM & Kjolhede CL (2004) *Pediatrics* **113**, e465–471.
4. Barnes J, Stein A, Smith T *et al.* (1997) *JR Soc Med* **90**, 551–559.