

Idiopathic neonatal jaundice is predicted by differences between pre-birth intention and experience, not from maternal intention to solely breastfeed.

Nour Abuhwaila ^{a,*}, Nana Anokye ^b, Terence M. Dovey ^a

^a Division of Psychology, Department of Life Sciences, Marie Jahoda Building, Brunel University London, Uxbridge, UB8 3PH, United Kingdom

^b Division of Health Economics, Department of Health Sciences, Brunel University London, Uxbridge, UB8 3PH, United Kingdom

Abstract

Background:

Maternal intention to solely breastfeed has been reported to be the only predictor for developing idiopathic neonatal jaundice (INJ). Psychological factors such as maternal decision to initiate breastfeeding, self-efficacy, anxiety, and attitudes have been researched in the context of understanding breastfeeding behaviour. Yet, these have not been fully investigated in the context of the integrated behavioural model (IBM) to predict INJ, which was the aim of the current study.

Aim:

Predicting INJ based on psychological predictors of breastfeeding to explore the role of changes in breastfeeding behaviour in the development of INJ.

Methods:

1505 mothers recruited through maternal and parenting social media sites completed six questionnaires. Including breastfeeding self-efficacy, attitude, neuroticism, openness, childbirth experience and rigidity of maternal beliefs questionnaires. A binary logistic regression was used to investigate the experiential and psychological factors of breastfeeding to predict INJ.

Results:

This model emphasised that gestational age for over 40 weeks, having induced labour, assisted birth as well as having complications from birth are all predictors of INJ. Experiential factors that predicted INJ were psychological factors. The only psychological factor that predicted INJ is feeding actions different to intention (i.e, mothers who wanted to breastfeed but ended up formula or combi-feed or vice versa). Thus, had an increased risk for developing INJ compared to those fed as planned $p < 0.028$ [McFR2 = 0.0972. odds ratio (OR) = 0.629; 95% confidence intervals (CI)]. Interestingly, maternal intention to solely breastfeed was a non-significant predictor of INJ.

Conclusion:

This data indicates that guidance suggesting that intention to solely breast is a predictor of INJ may not be true. A more accurate and stronger predictor would be when the mother's feeding experience changes from their pre-birth intentions. Thus highlighted the importance

of considering feeding actions different to intention as the actual predictor of INJ in the NICE guidelines.