

Nutrition Society Congress 2024, 2–5 July 2024

## Psychosocial predictors of infant and young child feeding practices among mother-infant dyads in Malawi

T.J. Smith<sup>1</sup>, C. Mchazime<sup>2</sup>, P. Makaka<sup>2</sup>, F. Nantongwe<sup>2</sup>, E. Namaheya<sup>2</sup>, A. Kadama<sup>2</sup>, G. Ghillia<sup>1</sup>, T. Mazubane<sup>3</sup>, Z. Goolam Nabi<sup>3</sup>, M.R. Zieff<sup>3</sup>, K.A. Donald<sup>3,4</sup>, E. Mbale<sup>2,\*</sup> and M.J. Gladstone<sup>1,\*</sup>

<sup>1</sup>Department of Women's and Children's Health, Institute of Life Course and Medical Sciences, University of Liverpool, UK

<sup>2</sup>Department of Paediatrics and Child Health, Kamuzu University of Health Sciences, Malawi

<sup>3</sup>Department of Paediatrics and Child Health, University of Cape Town, South Africa

<sup>4</sup>Neuroscience Institute, University of Cape Town, South Africa

Suboptimal feeding practices in the first two years of life are risk factors for poor child growth and development<sup>(1)</sup>. Sociodemographic predictors of infant and young child feeding (IYCF) practices are well documented (maternal age, education, marital status, sociodemographic status)<sup>(2)</sup>. However, psychosocial factors have received less attention, and few studies have considered complementary feeding practices. Therefore, this study aimed to explore associations between maternal depression, exposure to intimate partner violence, perceived social support, and stimulating home environments, and IYCF practices among mother-infant dyads in Malawi.

Khula is a longitudinal birth cohort that aims to characterise brain development across the first 1,000 days of life<sup>(3)</sup>. At the third study visit, when infants were approximately 10–16 months of age, mothers completed a series of psychosocial questionnaires: Edinburgh Postnatal Depression Scale (EPDS; score 0–30), Intimate Partner Violence Questionnaire (IPV), Multidimensional Scale of Perceived Social Support (MSPSS). The Family Care Indicators (FCI) was used to assess stimulation and support for early learning within the home (score 0–17). Information on infant's dietary intakes during the previous 24 hours was used to determine the WHO IYCF indicators: minimum dietary diversity (MDD), minimum meal frequency (MMF) and minimum acceptable diet (MAD)<sup>(4)</sup>. Logistic regression modelling was used to identify significant associations between maternal psychosocial measures and IYCF indicators.

Data were analysed for 153 dyads. Mean maternal age was  $27.0 \pm 6.0$  years, 84.1% were married, 52.8% had some/completed secondary education, and the majority were either employed (45.1%) or housewives (41.7%). The median (Q1, Q3) EPDS score was 2 (0, 6), 12% of women had been exposed to IPV in the previous 12 months, and mothers reported medium levels of perceived social support. The median FCI total score was 6 (5, 8). Among infants (mean age  $13.3 \pm 1.7$  months), 97.4% were still being breastfed, and 54.2%, 73.2% and 45.1% achieved MDD, MMF and MAD, respectively. Women with higher EPDS scores were less likely to breastfeed at around 1 year (OR 0.53, 95% CI 0.29, 0.96;  $p = 0.04$ ). However, this relationship was not significant after controlling for maternal age, education, marital status, and socioeconomic status. Exposure to IPV in the previous 12 months, MSPSS score and FCI total score were not associated with any IYCF indicators. Stimulation within the home environment was positively associated with dietary diversity score in unadjusted multiple regression ( $\beta$  0.17, 95% CI  $-0.002, 0.15$ ;  $p = 0.05$ ), although this was no longer significant in adjusted analyses.

In this study, we found little evidence of associations between psychosocial factors and IYCF practices. Early screening for postnatal depression may benefit women and infants and should potentially be considered during infant feeding counselling in low-resource settings. The indications of improved dietary diversity with greater familial interactions should be examined in larger, diverse populations.

### References

1. Black *et al.* (2013) *The Lancet* **382**, 427–451.
2. Shaker-Berbari *et al.* (2021) *Matern Child Nutr* **17**, e13223.
3. Zieff *et al.* (2024) *Wellcome Open Res* **9**, 157.
4. World Health Organization (2021) Indicators for assessing infant and young child feeding practices: definition and measurement methods. Geneva: World Health Organization [Available at: <https://www.who.int/publications/i/item/9789240018389>].

\*Contributed equally to this work.