

### Factors Associated With Breastfeeding Practices Around Childbirth: A Cross-Sectional Population-Based Study in Vietnam

Tuan Nguyen,<sup>1</sup> Jennifer Cashin,<sup>1</sup> Hoang Tran,<sup>2</sup> Hoang Tuan,<sup>3</sup> Roger Mathisen,<sup>1</sup> Amy Weissman,<sup>4</sup> and John Murray<sup>5</sup>

<sup>1</sup>FHI 360/Solutions; <sup>2</sup> Da Nang Hospital for Women and Children; <sup>3</sup>Vietnam Ministry of Health; <sup>4</sup>FHI 360; and <sup>5</sup>International consultant

**Objectives:** To determine factors associated with breastfeeding practices around childbirth, namely early initiation of breastfeeding (EIBF) and exclusive breastfeeding for the first three days after birth (EBF3D).

**Methods:** A population-based, cross-sectional survey of 726 mothers with children aged 0–11 months in two provinces and one municipality was conducted between May and July 2020. Multinomial logistic regression controlling for potential confounding factors was used to examine factors associated with EIBF and EBF3D.

**Results:** Rates of EIBF (49.7%) and EBF3D (18%) were low. Many mothers (88.0%) brought formula to the birth hospital or purchased it after arrival. Mothers reported high rates of cesarean section (44.6%) and vaginal birth with episiotomy (46.1%), with 49.3% receiving immediate skin-to-skin contact (SSC) after birth. Factors associated with reduced likelihood of EIBF were giving birth by cesarean (OR:

0.24; 95% CI: 0.12, 0.50), bringing formula to the birth facility (OR: 0.48; 95% CI: 0.30, 0.76), or purchasing it after arrival (OR: 0.36; 95% CI: 0.23, 0.58). EIBF was significantly more likely to occur if immediate and uninterrupted SSC was applied for 10–29 minutes (OR: 2.49; 95% CI: 1.45, 4.28), 30–59 minutes (OR: 4.15; 95% CI: 2.07, 8.33), 60–80 minutes (OR: 4.23; 95% CI: 1.60, 11.19), or  $\geq$  90 minutes (OR: 5.66; 95% CI: 3.09, 10.35). EBF3D was less likely among mothers who gave birth by cesarean section (OR: 0.15; 95% CI: 0.06, 0.38), had a vaginal birth with episiotomy (OR: 0.40; 95% CI: 0.18, 0.87), brought infant formula to the maternity facility (OR: 0.03; 95% CI: 0.01, 0.07) or purchased it after arrival (OR: 0.02; 95% CI: 0.01, 0.06), and received a free commercial milk formula sample during their hospital stay (OR: 0.12; 95% CI: 0.03, 0.62).

**Conclusions:** The prevalence of early initiation and exclusive breastfeeding in the first days after birth are low and associated with factors at the individual, health provider, and health facility environment level. Policy actions should be directed at eliminating commercial milk formula from birthing environments, reducing unnecessary cesarean sections and episiotomies, ensuring immediate and uninterrupted SSC for all births, and improving the quality of breastfeeding counseling and support.

**Funding Sources:** Bill & Melinda Gates Foundation (Grant Number OPP50838) and Irish Aid.