

# Association between Infant Feeding Practices and Nutritional Status in a Sample of Lebanese Newborns

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**Background:** Infant feeding practices and its association with infancy nutritional status is well recognized in the literature and malnutrition in early infancy is a matter of serious concern. The extent of the problem in developing countries, particularly Lebanon, remains not well elucidated. **Objective:** To provide a description of infant feeding practices in Lebanon and identify potential associations with subsequent infancy nutritional problems. **Participants:** A sample of 200 couples mother/infant meeting inclusion criteria were conveniently selected from different hospitals and private pediatricians' clinics in the region of Byblos, Lebanon. The infants were 6-23 months of age, free of congenital anomalies, born at term and weighed between 2500-4000 g. A consent form was signed by each infant's mother. **Design:** Cross-sectional, descriptive study. **Methods:** Infant feeding practices were measured via a questionnaire previously validated in Lebanon. Weight at birth was reported, and actual weight and height were measured by a trained dietician. The following scores were calculated and compared to WHO standards: Weight for height z-score (WHZ) as an indicator of stunting and BMI for age z-score as an indicator of overweight. Socio demographic variables were obtained by a questionnaire. Descriptive statistics were used for infant feeding practices and nutritional status. Linear regression controlling for socio-demographics was used to determine the association between infant feeding practices with WHZ and between infant feeding practices and BMI for age z-score. **Results:** 71.5% (N=143) of the mothers initiated breastfeeding, however only 7.5% (N=15) practiced exclusive breastfeeding for more than 6 months and 59.5% (N=119) had introduced solid foods between 4 and 6 months. Regression analyses showed that there was no significant association ( $p>0.05$ ) between infant feeding practices and nutritional status for both the BMI for age z-score and WHZ. Results showed that infants who were exclusively breastfed (N=57) had a lower BMI for age-z score than formula fed infants (N=57) ( $0.59\pm 1.76$  vs.  $1.01\pm 1.67$ ) however this association did not reach statistical significance. Infants who were offered solid foods at the age 6 months (N=119) had a lower BMI for age z-score compared to those offered solid foods at the age of 4 months (N=81) ( $0.85\pm 1.90$  vs.  $0.94\pm 1.74$ ); this association did not reach statistical significance. **Conclusion:** In our sample, there was no significant association between infant feeding practices and nutritional status in Byblos, Lebanon. Our results, however, do not recommend discarding proper infant feeding practices. Longitudinal studies and larger samples are needed to shed more light on our findings.