

# Influences of Different Feeding Patterns on Cognitive Development of Infants Aged 12 and 24 months in Primary Health Care Clinics, Nurseries and Public Parks

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## Abstract

**Background:** Many studies have recommended breastfeeding as the normative model among all alternative-feeding patterns as its composition diverges distinctly from other feedings, making it distinctively superior for infants feeding. Growing evidence is suggesting that breastfeeding improves the child's cognitive and motor development throughout the years of life, as well as improving other health benefits.

**Objective:** This study aims to investigate the influence of breastfeeding and other feeding patterns on the cognitive development and motor skills of infants aged 12 and 24 months.

**Methods:** A cross-sectional, observational study conducted among 100 infants aged 12 and 24 months from January until April 2016. A cognitive assessment validated test "Ages and Stages Questionnaire (ASQ)"<sup>®</sup>, (ASQ-3<sup>™</sup>) was utilized to compare exclusively breastfed, never breastfed and mixed fed infants as well as breastfeeding duration on ASQ scores and domains in multivariable linear models, controlling for a wide range of potential confounders.

**Results:** After adjustments, results showed a significant positive correlation between breastfeeding duration and cognitive assessment. Mainly, the total ASQ score ( $P = 0.003$ ) and personal-social domain ( $P = 0.001$ ) were the most significant variables associated with longer breastfeeding duration. Moreover, a significant difference in the BMI percentiles among the infants was found when compared according to their feeding types ( $P = 0.005$ ).

**Conclusion:** This study shows that longer breastfeeding duration was significantly associated with better cognitive and motor skills development at 12 and 24 months-old infants. This highlight the impact of breastfeeding on cognitive development of the infants and the importance of supporting breastfeeding for longer periods in UAE.

**Keywords:** Breastfeeding, cognitive development, motor skills, feeding patterns, Ages and Stages Questionnaire (ASQ).

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