Growth pattern in Breast-fed and bottle-fed children in Neyshabur and comparison with National Center for Health Statistics indices in 2016

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Abstract
Background & Aim: Growth Chart is a clinical tool for assessing child's health and growth that can be affected by many factors including feeding method. The aim of this study was to compare growth parameters of breast-fed and bottle-fed infants and compare them with National Center for Health Statistics indices in 2016.

Methods: This cross-sectional study conducted on 186 children below 6 months through random sampling in urban and rural health centers in Neyshapur in 2016. Data were collected by a checklist in which the demographic characteristics and data on weight, height and head circumference of infants were recorded. Data were analyzed using SPSS 20 at significance level of P <0.05.

Results: There was a statistically significant difference between two groups of breast-fed and formula-fed infants at ages of two and six months, in terms of mean growth indices including weight, height and head circumference (p <0.05).The mean of weight gain index was higher in formula-fed infants than breast-fed ones. There was a significant difference between study infants (boys and girls) from birth to six months of age and similar cases in the NCHS standard curve in terms of mean weight, height and head circumference (p <0.05).

Conclusion: It seems that the percentiles of height and weight of children below two years of age in Neyshabur are constantly under the percentiles of NCHS which highlights the necessity of providing and applying curves which are in accordance with regional conditions.

Keywords: Growth, Breast-feeding, Feeding with formula milk, National Center for Health Statistics