Evaluating the Adaptation of the Growth Curve in Less Than Two-Year Old Children Referred to Health-Therapeutic Centers Using the World Growth Standards

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Abstract

Introduction: The World Health Organization presented two sets of child growth standards as international tools for growth assessment. According to the recent studies, about 43% of less than two-year old children are underweight. This study was designed to evaluate different growth factors (e.g., weight, length and head circumference) in under two-year old children in Amol City using the child growth standards.

Methods: In this descriptive-analytical study, 280 healthy children referred to 14 urban health-therapeutic centers were selected using the census method; they referred to the health centers at least six times during the two years. Data were collected from household records using a researcher-made questionnaire. The validity and reliability of the questionnaire had been previously proven. Then, the data were analyzed.

Results: From a total of 280 participants, 133 cases (47.5%) were males and 147 (52.5%) females. The results showed that different growth factors such as weight, height and head circumference were normal in 73.9% of the children. Also, during the referral months, there was a significant correlation between all the three growth factors (weight, height and head circumference) and children's gender. However, no significant correlation was found between the three growth factors and mothers' age, type of delivery, birth order and breast feeding.

Conclusions: Based on the findings of the present study, it seems that the growth factors of children referred to the health- therapeutic centers in Amol city are according to the two child growth standards. Most of the children under the study had normal weight, height and head circumference (73.9%).Hence, more specific growth curves can be designed based on different geographic areas and diverse ethnicity.

Keywords: Growth Curve, Less than Two-Year Old Children, Health- Therapeutic Centers