

Original Paper

The Comparison of children Physical Growth Status Between Turkman and Non-Turkman in rural area in Gorgan, North of Iran

Gholamreza Veghari (MSc)*¹, Abdoljalal Marjany (PhD)², Aliakbar Abdollahy (MSc)³
 Hossein Rahmani (MSc)³, Eynollah Molaei (MSc)³, Seyyed Abedin Hosseiny (MSc)³
 Masoomeh Bemani (BSc)⁴, Mohammad Ebrahim Kordjazi (BSc)⁵

¹Assistant Professor, Department of Biochemistry and Nutrition and Golestan Cardiovascular Research Center Gorgan University of Medical Sciences, Gorgan, Iran. ²Associated Professor, Department of Biochemistry and Nutrition, Gorgan University of Medical Sciences, Gorgan, Iran. ³Academic Instructor, School of Nursing and Midwifery, Gorgan University of Medical Sciences, Gorgan, Iran. ⁴Exper, Member of Health Office, Gorgan University of Medical Sciences, Gorgan, Iran. ⁵Expert, Department of Biochemistry and Nutrition, Gorgan University of Medical Sciences, Gorgan, Iran.

Abstract

Background and Objective: Anthropometric indices are the best methods for determining of malnutrition and obesity in children and young adolescent worldwide. This study was designed to compare the physical growth status between Turkman and non-Turkman in rural area in Gorgan in North of Iran.

Materials and Methods: This cross – sectional descriptive was done on 551 children of 2-5 years of age, Turkman and 895 of non-Turkman in the rural area of Gorgan North of Iran during autumn 2005. Height, weight and personal identification recorded by questioners. BMI percentile and under -1sd, -2sd and -3sd from NCHS used for comparison. Data were analyzed by using Chi-Square and T-student tests.

Results: Mean±SD of height in female Turkman and non-Turkman were 95.3±8.1 and 90.5±8.4 cm respectively means±SD of height were 96.0±7.6 and 90.9±8.6 cm in Turkman and non-Turkman, respectively. Male childrens mean±SD of weight in were 14.5±2.4 and 14.2±2.9 and in male Turkman and non-Turkman children respectively. Also means±SD of weight were 15.0±2.03 and 14.5±2.3 cm in Turkman and non-Turkman male children, respectively. Turkman children are about 426 gram heavier and 4.9 cm taller than non-Turkman in all of age groups (P<0.05). Stunting and underweight were observed in 13.2% and 1.9% in Turkman group less than non-Turkman respectively by -2sd criterion. There was a significant differences between two groups by stunting (P<0.05). Obesity and overweight exist in Turkman group 24.5% and 2.6% less than in non-Turkman respectively. The difference in obesity statistically was significant between two groups (P<0.05). Underweight was shown in female more than male (7.2% vs 4.2%) and obesity in female less than male (25.6% vs 28.9%).

Conclusion: This study showed that secular growth in two groups is incompatible and it is better in Turkman group than non-Turkman group. Malnutrition in Turkmans was less than Non-Turkmans children.

Keywords: Children, Obesity, BMI, Ethnicity, Iran

* Corresponding Author: Gholamreza Veghari (MSc), E-mail: veghary@gmail.com

Received 25 Aug 2008

Revised 5 Apr 2009

Accepted 3 May 2009