

Assessment of Nutritional Status and Growth in School Children of Oran City (Western Algeria)

Introduction and objective. The nutrition transition results in malnutrition that exists in two aspects; under-nutrition and overnutrition; facing both the health and development, and define today as the double burden. The objective of this study was to evaluate the nutritional status and growth in schoolchildren of Oran city.

Population and methods. Children ($n = 835$) (sex ratio G/B = 430/405, 6 to 9 years) were recruited from seven public primary schools in Oran city. Schools were selected by epidemiological method of stratification. Weight and height were measured. The Body Mass Index (BMI) was calculated and classified according to the International Obesity Taskforce (IOTF): Underweight (UW), Normal Weight (NW), Overweight (OW) and Obesity (O). The anthropometric index Weight-for-Age (W/A), Height-for-Age (H/A) and Weight-for-Height (W/H) were calculated by z-score and % of median. Children growth was detected and classified according to WHO (2006, 2007). The nutritional status of mothers and their education level were evaluated.

Results. According to IOTF, 5.5%, 79.2%, 8.6% and 6.7% of children were UW, NW, OW and O, respectively. According to WHO (2006), 0.1%, 1.0%, 2.3% and 8.3% of the population presented significant growth retardation, stunting, very large and large size, respectively. According to WHO (2007), 1.3%, 27.1% and 71.6% were underweight, growth problem risk, and normal weight, respectively. Significant differences were noted between W/H, H/A, W/A when compared to gender ($p < 0.05$). A significant difference of mother nutritional status (18% NW, 78.2% OW, 3.8 O), when compared to WHO classifications (2007) ($p < 0.05$). Moreover, significant difference was observed between children moderate malnutrition (2nd degree), and maternal education level ($\alpha = 0.05$).

Conclusion. The double burden exists within the same family (mother, child). Stunting promotes obesity (abdominal) development, later in life, thus presenting a risk factor for cardiovascular diseases. Nutritional management is necessary early in childhood.

Country

Algeria

Institution

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