

Relationship between Age and the Prevalence of Obesity and Overweight in Saudi Population

Mohsen AF El-Hazmi, PhD, FRCPath, FACB*, Arjumand S Warsy**

Objective: Obesity and overweight occur at a high prevalence in the adult population in different regions of Saudi Arabia. This study was aimed to determine the relationship between age and the prevalence of obesity and overweight in Saudi males and females.

Methods: The study group included 11208 individuals (males = 4628; females =6580) with age ranging from 20-70 years. Height and weight were measured and Body Mass Index (BMI) was calculated.

Results: The overall prevalence, in this adult Saudi community, of obesity and overweight was 15.12% and 32.82% in males and 23.97% and 29.09% in females, respectively. Further grouping was carried out according to age into 20-29, 30-39, 40-49 and ≥ 50 years age groups and the prevalence of obesity and overweight was determined in each age group. In the males the highest prevalence of obesity and overweight was 19.2% and 38.6% in the 40-49 years age group, while in the females overweight was most common in the > 50 years age group (34.8%) and obesity was highest in the 40-49 years age group (36%). A statistically significant increase was observed in the prevalence of both obesity and overweight with age. The correlation coefficient "r" was determined using General Linear Model Programme. The 'r' between age and obesity was 0.9066 and 0.9593 and between age and overweight was 0.8864 and 0.8790 in the males and females, respectively, with a $p < 0.005$ in all groups.

In all age groups, obesity was significantly more in the females compared to males. Overweight was more prevalent in the females 20-29 years of age as compared to men, but the 30-49 years male had a higher prevalence of overweight. Male and female >50 years had almost an equal prevalence of overweight.

Conclusion: This study highlights the significant increase in the prevalence of obesity and overweight with age in both Saudi males and females. It stresses the need for extensive awareness programmes for the general public, highlighting the causes and complications of overweight and obesity. In addition, it is also necessary to make the Saudi public aware of the ways, means and significance of weight control.