

## Patterns of Self-Reported Overweight, Obesity, and Other Chronic Diseases Among University Students in the United Arab Emirates: A Cross-Sectional Study

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**Abstract :** Obesity in the Middle East and North Africa (MENA) region has exponentially increased over the past five decades due to rapid urbanization and unhealthy lifestyle changes. It has been well established that overweight and obesity increase the risk of non-communicable diseases (NCDs) and are the leading cause of mortality and economic burden locally, and globally. In the United Arab Emirates (UAE), there is a growing epidemic of obesity and other chronic diseases like type 2 diabetes mellitus and cardiovascular diseases. Prevalence of overweight and obesity in UAE range up to 70% depending on the group being studied. Hence, there is a need to explore their patterns in the country for more targeted and responsive interventions. Our study aimed to explore the patterns of overweight and obesity and some self-reported chronic diseases among university students in Abu Dhabi, the capital city of UAE. A validated online self-administered questionnaire was used to collect data from UAE University (UAEU) students, 18years and above, from August to September 2021. Students' characteristics were summarized using appropriate descriptive statistics. Overweight, obesity and self-reported chronic diseases were described and compared between male and female students using chi-square and t tests. Other associated factors were also explored in relation to overweight and obesity. All analyses were conducted using STATA statistical software version 16.1 (StataCorp LLC, College Station, TX, USA). 902 students participated in the study. 79.8% were females and mean age was  $21.90 \pm 5.19$  years. Majority of the respondents were undergraduate students (80.71%). The prevalence of self-reported chronic diseases was 22.95%. Obesity ( $BMI \geq 30 \text{ kg/m}^2$ ), Diabetes Mellitus, and Asthma/Allergies were the commonest diseases (12.48%, 4.21% & 3.22%, respectively). Approximately 5% of the students reported more than one chronic disease. Out of the 833 participating students who had complete weight and height data, prevalence of overweight and obesity was 34.81% (22.33% and 12.48%, respectively). More than half of the male students (54.36%) were overweight or obese. This is significantly higher than in female students (30.56%,  $p=0.001$ ). Overweight/obesity when compared to normal weight is associated with increasing mean age [23.40 vs 21.01, respectively ( $p=0.001$ )]. In addition to gender and age, being married [57.63% vs 31.05% ( $p=0.001$ )], being a postgraduate student [51.59% vs 30.92% ( $p=0.001$ )] and having two or more chronic diseases [65.85% vs 33.21% ( $p=0.001$ )] were also significantly associated with overweight/obesity. Our study showed that almost a quarter of the participating university students reported at least one chronic disease. Obesity was the commonest and more than 1 in 3 students were either overweight or obese. This shows the need for intensive health promotion and screening programs on obesity and other chronic diseases to meet the health needs of these students. This study is also a basis for further research, especially qualitative, to explore the relevant risk factors and risk groups for more targeted interventions.

**Keywords :** chronic disease, obesity, overweight, students, United Arab Emirates

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