INFLUENCE OF SOCIOECONOMICS AND ANTHROPOMETRIC FACTORS ON RESPIRATORY FUNCTION IN FEMALE UNIVERSITY STUDENTS

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The purpose of this study was to evaluate lung function among healthy female university students and determine potentially correlated factors such as socio-economic status and anthropometric parameters.

Spirometry tests, anthropometric measurers and questionnaire were performed in November 2015 among 152 female students.

First, lung function was analysed for any relationship with socio-economic factors and smoking. The output of a multi-factor variance analysis indicates significant differences in the FEV1/FVC index depending on father's level of education and the general socio-economic status. In the next phase of analysis, anthropometric and spirometric parameters were tested for correlations. A comparison of underweight, normal weigh, overweight and obese subjects revealed statistically significant differences for FVC% and FEV1/FVC. Highest values of the spirometric parameters were reported in normal weight subjects. A similar tendency was found also for FEV1%, although without a statistically significant difference. Individuals with abdominal obesity were characterized by lower FVC% and FEV1% levels and higher FEV1/FVC index.

The findings of our study confirm that both obesity and abdominal obesity are related to reduced lung function.