## JOURNAL OF INNOVATIONS IN SCIENTIFIC AND EDUCATIONAL RESEARCH VOLUME-7 ISSUE-3 (30- March)

## INVESTIGATING THE RELATIONSHIP BETWEEN SMOKING STATUS AND BODY MASS INDEX (BMI) IN STUDENTS: A CROSS-SECTIONAL STUDY AT TASHKENT MEDICAL ACADEMY 4<sup>TH</sup> HOSTEL \*\*

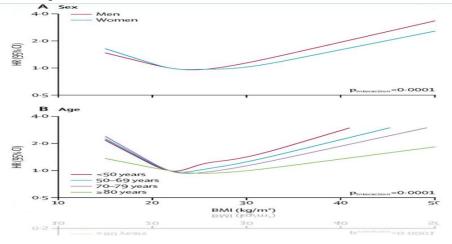
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Students of the Tashkent Medical academy

**Abstract:** This study investigated the association between smoking status and body mass index (BMI) among students residing in the 4th hostel of Tashkent Medical Academy. A cross-sectional study was conducted involving 33 students, 19 of whom were smokers and 14 non-smokers. Data on age, gender, height, weight, and smoking status were collected. BMI was calculated using weight divided by height squared. Statistical analyses included the Shapiro-Wilk test for normality, a t-test for comparing mean BMI between smokers and non-smokers, and calculation of the relative incidence for low BMI (< 18.5). Results showed no significant difference in BMI between smokers and nonsmokers (t(17.23) = 0.83, p = 0.42). However, the relative incidence of low BMI was slightly higher in smokers (0.7273) but not statistically significant. These findings suggest that smoking status may not be a major determinant of BMI among students at Tashkent Medical Academy.

#### **INTRODUCTION**

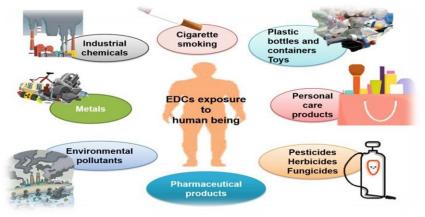
Understanding the relationship between smoking status and BMI is crucial, particularly among student populations susceptible to health behaviors like smoking. This study aims to contribute to this understanding by exploring the association between smoking status and BMI among students at Tashkent Medical Academy, specifically those residing in the 4th hostel. Investigating this subgroup can provide insights into how the hostel environment influences smoking behavior and its potential impact on BMI.



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#### Methodology:

Convenience sampling was used to recruit 33 students aged 19-23 years from Tashkent Medical Academy's 4th hostel, with 19 smokers and 14 non-smokers included. Participants completed self-report questionnaires providing demographic data, including age, gender, and smoking status. Height and weight measurements were obtained, and BMI was calculated. Statistical analysis included the Shapiro-Wilk test for normality, a t-test for comparing mean BMI between smokers and non-smokers, and calculation of the relative incidence for low BMI (< 18.5).

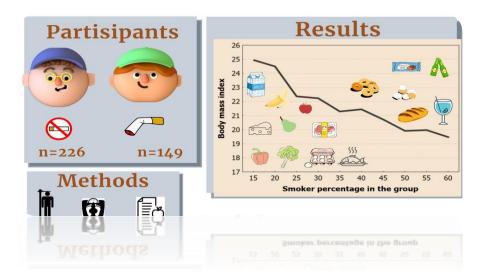


## Results:

Mean BMI was 24.00 (SD = 3.77) for smokers and 22.23 (SD = 1.61) for nonsmokers. The t-test revealed no significant difference in BMI between smokers and non-smokers (t(17.23) = 0.83, p = 0.42). The relative incidence of low BMI was slightly higher in smokers (0.7273) but not statistically significant.

Discussion:

This study adds to the literature on smoking status and BMI among students. While no significant BMI difference was found between smokers and non-smokers, the slightly higher relative incidence of low BMI among smokers warrants further exploration. Limitations include a small sample size and potential confounding variables like diet and physical activity. Future research with larger samples and longitudinal designs is needed.



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### Conclusion:

In conclusion, smoking status may not significantly influence BMI among students at Tashkent Medical Academy's 4th hostel. Further investigation is necessary to understand other factors impacting BMI in this population. These findings can inform health promotion efforts targeting smoking cessation and weight management among students.

### **REFERENCES:**

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