



**An-Najah National University (ANNU)**

**Eating Disorders and the Use of Cognitive Enhancers and Psychostimulants Among  
University Students: A Cross-Sectional Study**

**A Thesis presented to**  
School of Medicine in Partial Fulfilment  
of the Requirements for the Degree of Doctor of Medicine

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## **Abstract**

**Background:** University students at risk of eating disorders (ED) are more liable to use cognitive enhancers and psychostimulants to improve their cognitive functions and lose weight. ED in Palestinian male students is a neglected health issue. We aimed to investigate the prevalence and the association between ED and cognitive enhancers, and psychostimulants use among An-Najah National University students (ANNU).

**Methods:** In a cross-sectional study conducted in 2020 at ANNU, 1047 students completed anonymous surveys for cognitive enhancers practice, the Eating attitude test-26 (EAT-26), Sick, Control, One, Fat and FOOD (SCOFF) screening tests.

**Results:** The prevalence of ED among ANNU students was 21.2% based on EAT-26 (17.1% in males, 23.8% in females) and 31.5% based on SCOFF (24.0% in males, 36.3% in females). The binary logistic regression revealed that students at risk to have ED were water-pipe smokers (OR: 1.471, p-value0.047), especially males, while students who were less likely to have ED were males (OR:0.341, p-value<0.001), coffee (OR: 0.581, p-value0.014) and chocolate (OR: 0.530, p-value0.041) users than nonusers. Moreover, the risk of ED increased with increasing body mass index (p-value<0.01). Clinical medical students showed the lowest prevalence (11.1%) compared to preclinical (22.5%), health sciences (23.7%), and non-medical students (20.9%) (p-value0.059).

**Conclusion:** Our findings highlight water-pipe smoking as a significant health problem in males with ED, which may require unique treatment and prevention strategies. Moreover, coffee and chocolate consumption were associated with decreased risk of ED, only among males. The gender-gap in ED prevalence was very narrow compared to international results. These results prompt the need to focus on both genders in future studies instead of females. They also suggest the urgent

need to address ED among Palestinian university students by educating students about mental health, identifying high-risk students, and offering easily accessible psychological help.

Keywords: Cognitive enhancers, psychostimulants, eating disorders, tobacco smoking, waterpipe smoking