

Knowledge and Attitude of Health Sciences Students towards Cognitive Enhancers: A Cross-Sectional Study in Jeddah, Saudi Arabia

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ABSTRACT

Cognitive enhancers (CEs) have been emphasized by the growing interest in CEs among university students, which raised concerns about safety, ethical standards, and the accuracy of information about them. However, Saudi Arabian experience about CEs is scarce, particularly in academics. The aim of the current study was to investigate the knowledge and attitudes of the university students in Jeddah, Saudi Arabia toward CEs. University students conducted a validated self-administered online questionnaire within the framework of a cross-sectional study. The survey was conducted to evaluate sociodemographic traits, knowledge of CEs, and attitudes toward CEs. Statistical methods utilizing SPSS version 22 was conducted. The relationships between knowledge level and demographic variables were evaluated using descriptive statistics as well as relevant inferential analyses; a result of $p < 0.05$ was considered statistically significant. Participants' mean age was 20.72 ± 2.43 years, and women comprised 76.6% of the sample. In total, 62.9% of participants fully defined cognitive enhancers, and 65.7% of respondents had prior knowledge of them. Large gaps were found in identifying negative effects and risk perceptions, even though most participants recognized potential cognitive benefits. Attitudes toward CEs were mixed; though a majority noted the potential side effects, fewer participants recognized the risk of addiction, and many perceived potential benefits for cognitive capacity including improved focus and memory. Knowledge was significantly related to academic programs and the year of study ($p < 0.05$), with no association was found to be significant for age or sex. In summary, university students in Jeddah have moderate knowledge of and ambivalent attitudes toward cognitive enhancers, which leads to significant underestimation of the dangers associated with them. These results indicate the importance of focused educational education to raise awareness and facilitate empirically based decision-making regarding the implementation of cognitive enhancers.

Keywords: Cognitive enhancers; Neuroenhancement; University students; Knowledge; Attitudes; Saudi Arabia; Cross-sectional study

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