

## **The relationship between internet addiction, internet gaming and anxiety among medical students in a Malaysian public university during covid-19 pandemic**

### **ABSTRACT**

The internet has become an important medium for learning and communication during the COVID-19 pandemic, particularly for university students. Nevertheless, an increase in internet usage could predispose people to internet addiction (IA) and internet gaming (IG). Equally, there is concern that anxiety levels have increased during the pandemic. The aim of this study is to determine the prevalence of IA and IG, and their associations with anxiety among medical students during the pandemic. Data were collected during the second wave of the "Conditional Movement Control Order" (CMCO) in Malaysia between 12 November and 10 December 2020. A total of 237 students participated through proportionate stratified random sampling in this cross-sectional study. They completed a set of online questionnaires which consisted of a sociodemographic profile, the Malay version of the internet addiction test (MVIAT), the Malay version of the internet gaming disorder-short form (IGDS9-SF) and the Malay version of the depression, anxiety and stress scale (DASS-21). The prevalence of IA and internet gaming disorder (IGD) were 83.5% and 2.5%, respectively. A multiple logistic regression showed that those in pre-clinical years had a greater risk of anxiety than those in clinical years [(AOR) = 2.49, *p*-value 0.01, 95% CI = 1.22-5.07]. In contrast, those who scored high on IA were protected against anxiety [AOR = 0.100, *p*-value 0.03, 95% CI = 0.01-0.76]. In conclusion, IA was highly prevalent during the COVID-19 pandemic and its high usage might serve as a protective factor against anxiety among the medical students in this study sample.

**Keyword:** COVID-19; Anxiety; Internet addiction; Internet gaming; Medical students