

## Prevalence of and Factors Associated with Painkiller Self-Medication among Students Undergoing Higher Education in Western Province, Sri Lanka

TMPS Tennakoon<sup>1</sup>, RARMMK Rajakaruna<sup>1</sup>, MS Vithanage<sup>1</sup>, KTD Fernando<sup>1</sup> SASM Sirimanna<sup>1</sup>, JD Dunukara<sup>1#</sup> and AJ Perera<sup>2</sup>

<sup>1</sup>Department of Biomedical Science, Faculty of Health Sciences, KIU, Sri Lanka <sup>2</sup>Department of Medical Microbiology and Immunology, Faculty of Medicine, University of Colombo, Sri Lanka

#jayani@kiu.ac.lk

Self-medication (SM) is an emerging practice commonly used for pain management among higher education students. However, unreliable self-medication may lead to severe complications. Therefore, this study aims to assess the prevalence and factors associated with painkiller self-medication practices. A descriptive crosssectional study was conducted with a recall period of 3 months among students in recognized universities and higher education institutes in Western Province, Sri Lanka. The study was conducted among 338 participants using a convenience sampling technique via a pre-tested online questionnaire after obtaining ethical approval (KIU/ERC/21/85) from KIU. Data were analyzed using descriptive statistics and Pearson's chi-square using SPSS software version 25. Among 338 participants, majority were females (n=234, 69.2%), aged between 22 to 25 years (n=283, 83.7%), residing in the Western Province (n=263, 77.8%), unemployed (n=239, 70.7%) and did not drink or smoke (n=288, 85.2%). The prevalence of SM in this study was 77.2% (n=261) of those; many recalled that they had mostly selfmedicated during the last month (n=86, 33%) for three main reasons; adequate knowledge about medication or minor symptoms (22.2%), convenience (20.9%)and the nearness to healthcare workers (13.4%). Major ailments for SM were headache (22.1%), cough or runny nose (15.2%), and fever (14.3%). Pharmacies (62.3%) were the primary source for obtaining painkillers for SM. This study revealed that self-mediation is a highly prevalent practice among students in higher education, and there is a significant association between SM practices and the study (p=0.000). The opinion on SM is significantly associated with the year of study (p=0.008); similarly, there is a significant association between physical activity and the knowledge of the correct dosage and frequency of taking painkillers (p=0.004). Further research into effective tools and regulations for drug surveillance and awareness of responsible SM practices are recommended to ensure safe SM behaviour.

Keywords: higher education, non-prescription, pain medication