

## **The level of Anxiety and associated factors during the COVID-19 pandemic among science undergraduates in selected state universities in Sri Lanka**

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**Background:** Various societal aspects including mental health were significantly disrupted by the COVID-19 pandemic and its consequences, globally. Undergraduates were major victims of COVID-19-related mental stressors such as anxiety.

**Objective:** This study aimed to assess the level of anxiety and associated factors among science undergraduates in Sri Lankan state universities during the COVID-19 pandemic.

**Methodology:** A descriptive cross-sectional study was conducted among 370 undergraduates at Faculties of Science in various universities; namely, the University of Colombo (UOC), Sri Jayewardenepura, Jaffna, Kelaniya, and Ruhuna. A purposive sample of 40 undergraduates at the Faculty of Nursing, UOC was pre-tested for the self-administered questionnaire. Participants' anxiety levels were measured using the 21 Depression Anxiety Stress Scale (DASS) 21. SPSS version 26.0 software was used to analyze the data.

**Results:** The mean age of the population was 24.43 ( $\pm 1.5$ ) years. Mild, moderate, severe, and extremely severe anxiety were identified as 3.5%, 14.9%, 8.9% and 41.1% respectively. A high percentage of males (51.18%) and females (49.38%) had severe to extremely severe anxiety. The prevalence of severe to extremely severe anxiety among science undergraduates was 50%. Majority of those who had extremely severe anxiety were Sinhalese (83.6%). High level of anxiety was significantly associated with living in university hostels, living with friends ( $p < 0.05$ ), studying in the fourth year ( $p < 0.05$ ), having no social relations ( $p < 0.05$ ), in a romantic relationship ( $p < 0.05$ ), having long term illnesses ( $p = 0.005$ ), inadequate family income ( $p < 0.05$ ), no scholarships ( $p < 0.05$ ), unemployed ( $p = 0.019$ ) and inadequate sleep ( $p < 0.05$ ).

**Conclusion:** A substantial proportion of undergraduates suffered from extremely severe levels of anxiety. Various psychosocial factors including living conditions, relationships, academic level, chronic comorbidities, financial status, and sleep quality were significantly related to anxiety. Steps should be taken to modify these associated factors among science undergraduates while educating them to identify effective coping strategies to overcome anxiety.

**Keywords:** Anxiety, COVID-19, Associated factors, Undergraduates