

STUDENTS' MENTAL HEALTH DURING COVID-19

Enkhzaya Batkhuyag¹, Munkhzul Endonjamts², Enkhnarantumurbaatar³, Gantsetseg Tumur-Ochir^{3,4},
Xihua Zeng¹

¹Department of Psychology, School of Public Health, SMU, Guangzhou, China

²MNUMS, International Cyber Education Center

³Brian and Mind Research Institute, Scientific Academy of Mongolia

⁴Department of Mental Health, School of Medicine, MNUMS

Background: Numerous studies reported that Covid-19 has a strong impact on mental health such as stress-related symptoms, depression, and anxiety not only among health care specialists but in the general population. The strict quarantine and unexpected shift from classroom to e-learning have had a negative impact on students' academic achievements and mental health. The quarantine conditions have long restricted students' right to education and participation in social interactions, reducing social activity and adversely affecting their mental health. Therefore, it delivers the urgent need for studying students' mental health issues.

Purpose: The study is purposed to assess the mental health of Chinese and Mongolian medical students and to explore the difference in mental issues between the two countries.

Material and Method: The study was designed as a cross-sectional study with a self-report questionnaire and conducted between December 5th and February 5th of 2022. The scales Generalized Anxiety Disorder (GAD-7) and Patient Health Questionnaire (PHQ-9) were used to assess the anxiety and depression among students from both countries. Statistical analysis was performed using SPSS version 24. The present study was undertaken following ethical approval from the MNUMS scientific research ethics committee (approval number: 2021/3-06).

Results: The study recruited 2440 Chinese and 697 Mongolian students. Of these 65.7% (n = 2062) were female students including 1558 Chinese and 504 Mongolian female students. The mean score of the PHQ-9 was 5.86 ± 4.28 for Chinese students and 9.81 ± 5.27 for Mongolian students, and, the mean score for the GAD-7 was 4.00 ± 3.84 among Chinese students and 8.53 ± 4.86 among Mongolian students. The difference between the two countries student's depression and anxiety scores was statistically significant ($p < 0.001$). Result revealed that among the Chinese students 42.2% (n=1030) had mild, 12.1% (n=295) had moderate, 3.6% (n=89) had moderately severe, 0.7% (n=18) had severe level depression, while, among Mongolian students 37.7% (n = 263) had mild, 29.7% (n = 207) had moderate, 12.2% (n = 85) had moderately severe, and 5.5% (n = 38) had severe level depression. Comparing the depression severity in the two countries, a statistically significant ($p < 0.001$) difference was found at moderately severe levels and severe levels which Mongolians experienced a higher level of depression than the Chinese. By the anxiety level classification, 22.5% (n=157) of Mongolian students classified to no anxiety whereas 62.4% (n=1522) of Chinese students had no anxiety. Moreover, among the Chinese students 28.7% (n=701) had mild, 7.4% (n=181) moderate, 1.5% (n=36) had severe level, while, among Mongolian students 39.3% (n=274) had mild, 26.7% (n=186) had moderate, 11.5% (n=80) had severe level of anxiety. All anxiety level among Mongolian students was higher ($p < 0.001$) than the Chinese.

Conclusion: The experienced anxiety and depression levels of the students were significantly different in both countries, in which Mongolian students were affected more by mental health issues than the Chinese students.

Keywords: anxiety, depression, university students, comparative study, China, Mongolia