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Original Research Article

## Impact of the coronavirus disease on the mental health and physical activity of pharmacy students at the University of Zambia: a cross-sectional study

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### ABSTRACT

**Background:** The novel coronavirus disease (COVID-19) is a serious global health problem that has negatively impacted the mental health of students.

**Methods:** We conducted an online descriptive cross-sectional study among 273 undergraduate pharmacy students at the University of Zambia from August to September 2020. A partial proportional odds regression model was used to determine the predictors of anxiety. All statistical tests were set at 95% confidence level ( $p < 0.05$ ).

**Results:** A response rate of 70% was obtained with the majority of the students being female 51.6%. Of the 273 respondents, 23.8% did not experience anxiety, 34.4% experienced mild anxiety, 24.9% experienced moderate anxiety while 16.9% experienced severe anxiety about COVID-19. It was also found that 61.2% of students reported that their attention to mental health increased during the COVID-19 pandemic whereas 44.3% reported an increased resting time with a significant reduction in relaxation 51.3% and physical activity 45.4% time. Factors that affected mental health included; reduced family care (OR: 2.27; 95% CI: 1.09-4.74), not changing attention to mental health (OR: 0.33; 95% CI: 0.18-0.62), being in the final year of study (OR: 0.33; 95% CI: 0.13-0.84), reduced time of resting (OR: 2.10; 95% CI: 1.26-3.50) and feeling helpless (OR: 0.42; 95% CI: 0.23-0.75).

**Conclusions:** COVID-19 negatively impacted the mental health and physical activity of pharmacy students at the University of Zambia. This can have negative health and academic outcomes for students going forward. Higher learning institutions and key stakeholders should implement measures to aid students to recover from the impact of COVID-19 on their mental health and physical activity.

**Keywords:** Coronavirus disease, COVID-19, Mental health, Physical activity, Pharmacy students, Anxiety

