



UWI
ST. AUGUSTINE
CAMPUS

FACULTY OF
MEDICAL SCIENCES

THE IMPACT OF THE COVID-19 PANDEMIC ON THE MENTAL HEALTH OF MEDICAL STUDENTS IN TRINIDAD



Christian Bahadur¹, Christian Carmona¹, Chezé Casimire¹, Christina Dipnarine¹, Chelsea Harripersad¹, Chelsie Lal¹, Christian Sookhan¹, Christopher Stephen¹, Dr. Kingsley Ekemiri²

¹Department of Para Clinical Sciences, Faculty of Medical Sciences, The University of the West Indies, St. Augustine

²Optometry Unit, Department of Clinical Surgical Science, The University of the West Indies, St. Augustine

e: chelsea.harripersad1@my.uwi.edu kingsley.ekemiri@sta.uwi.edu

Introduction

Coronavirus disease (COVID-19) is a contagious disease caused by a newly discovered virus in Wuhan, China in December 2019. Infected persons experience respiratory illnesses. With the virus rapidly spreading, reaching over 118,000 cases in over 110 countries, WHO declared COVID-19 a pandemic in March 2020. To reduce the spread of COVID-19, governments around the world implemented strategies including social distancing, self-isolation, border shutdowns and closure of all educational, religious and commercial institutions. Universities suspended face-to-face classes and transitioned to online schooling, resulting in many medical students exhibiting increased anxiety and depression due to social disconnection and uncertainty of their academic future.

Objective

- To investigate the prevalence of psychosocial distress among medical students during COVID-19 pandemic.
- To identify the associated risk factors that contributes to psychosocial distress amongst medical students in Trinidad due to the COVID-19 pandemic.
- To assess the severity of the impact of COVID-19 pandemic on medical student's mental health.

Methodology

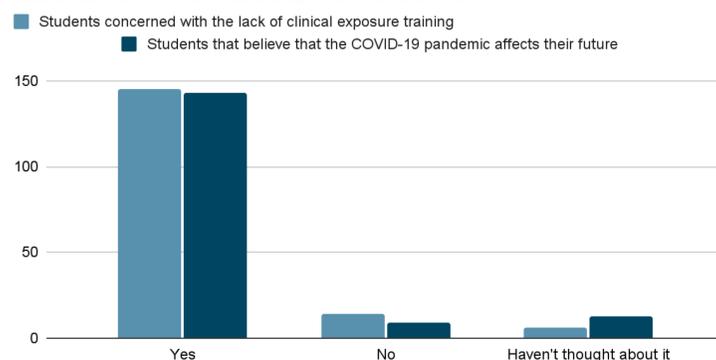
- This is a descriptive, cross-sectional study inclusive of 176 participants.
- Online questionnaires were made by researchers and the links were distributed via official WhatsApp group chats to Year 2- Year 5 Medical students at the University of the West Indies, St. Augustine (UWI-STA), Trinidad.
- The data collected pertained to:
 1. Demographics
 2. Psychosocial effects of the COVID-19 pandemic
 3. Patient Health Questionnaire (PHQ) and General Anxiety Disorders (GAD)
 4. Factors associated with the impact of the COVID-19 pandemic
- The data was analyzed using the SPSS software where descriptive statistics and linear regression were utilized.

Results

Within the sample population of 176 medical students, 62.7% were males and 36.7% females with 87% falling within the 18-25 age range. 71% of students reported feeling powerless over their lives and 50% felt overwhelmed fairly often and very often with self confidence and likelihood of things going their way almost never and sometimes. 75% of respondents felt a lack of control over important things in their life fairly often and sometimes.

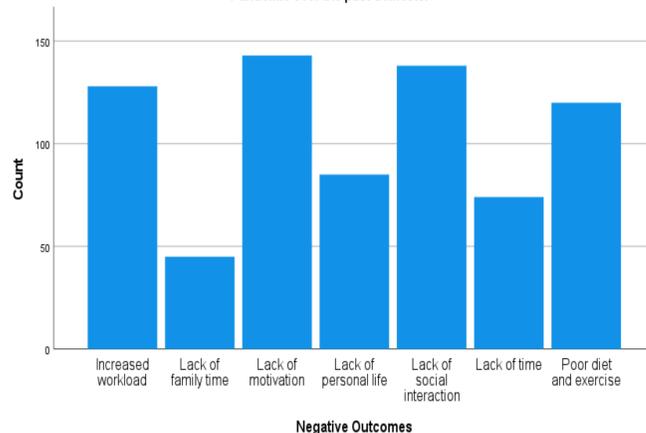
The most significant finding consisted of regression analysis between independent variable of feelings of inability to control important things in student's life within last month with dependent variable of feelings of depression, hopelessness and sadness over the last two weeks with a P value of 0.000, standard error of estimate of , and a T value of 2.044. Within the regression analysis, our least significant finding consisted of the relationship between COVID-19 negatively affecting students' physical health over the past semester possessing a lesser correlation significance with feelings of nervousness, anxiety and being on edge, with a P value of 0.43 and 2.044. However, this is still falling within ranges of alpha value of 0.05 and T value greater than 1.96 hence it is still valid results.

Bar Graph Showing Student's Concerns over the past Semester associated with the COVID-19 Pandemic

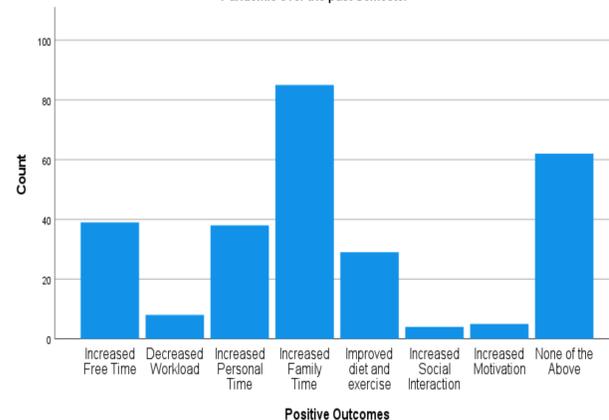


Results revealed 87.9% of students were concerned with lack of clinical exposure 86.7% worried about their future being affected due to the COVID-19 pandemic.

Bar Graph Showing Responses for the Negative Outcomes that Students Experienced during the COVID-19 Pandemic over the past Semester



Bar Graph Showing Responses for the Positive Outcomes that Students Experienced during the COVID-19 Pandemic over the past Semester



Discussion

- This study found that the COVID-19 Pandemic has had an immense impact on the mental health of medical students at the UWI-STA. Some of these impacts included increased stress, anxiety and depression - all leading to reduced quality of life.
- The outcomes from the pandemic were predominantly negative for medical students, with factors such as increased workload, lack of social interaction and poor diet contributing to their negative emotions. Alternatively, the most notable positive outcome was the increased family time that students experienced.
- Majority of students answered that the COVID-19 Pandemic severely and negatively impacted their academic performance, mental health, physical health and social interaction. Students were also concerned about their lack of clinical exposure training due to public health restrictions made during the pandemic.
- Through linear regression analysis, it was determined that independent variables during the semester produced negative psychosocial emotions among students and the relationship was linear.
- Overall, mental health and general well-being were considered low with a staggering 97% of medical students finding their well-being diminished due to feelings of loneliness and lack of freedom.

Conclusion

The majority of medical students in Trinidad experienced anxiety and depression during the COVID-19 pandemic. Increased workload, lack of motivation, poor diet and exercise were the most common negative factors affecting their mental health. These issues require immediate attention and strategic solution implementation.

References

- Alsoufi A, Alsuyhili A, Msherghi A, Atiyah H, Ashini A, Ashwieb A et al. Impact of the COVID-19 pandemic on medical education: Medical students' knowledge, attitudes, and practices regarding electronic learning. PLoS One [Internet]. 2021 [cited 14 July 2021]; Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7688124/>
- Hajar Essangri, Maria Sabir, Amine Benkabbou, Mohammed Anass Majbar, Laila Amrani, Abdelilah Ghannam, Brahim Lekehal, Raouf Mohsine, and Amine Souadka, Predictive Factors for Impaired Mental Health among Medical Students during the Early Stage of the COVID-19 Pandemic in Morocco, November 17th, 2020. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7790070/>

Acknowledgments

Special thanks to:

- Principle Investigator/ Supervisor: Dr. Kingsley Ekemiri
- Students who volunteered and participated in the study
- All organizations that allowed Ethical Approval and the conduction of the study