



Quality of life of medicine students in the pandemic: a prospective observational cross-sectional study

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Abstract

The COVID-19 pandemic has had major impacts on the mental and psychological health of young students. Stress, anxiety, depression, and a sedentary lifestyle are some of the consequences generated during the necessary social isolation. In this way, medical education has transformed due to the current Covid 19 epidemic, which has affected students and teachers of medical education in the country. In this way, the present research intends to collect data to evaluate the affected areas of the students in terms of quality of life, health, and other areas of their lives, thus being able to bring new information that can be used for a better approach to the theme. Therefore, this study evaluated the quality of life of medical students during the pandemic through the application of a remote questionnaire.

Keywords: Pandemic. COVID-19. Mental health.

Introduction

At the end of February 2020, the first case of the new Coronavirus (SARS-CoV2) in Brazil was confirmed. The rapid advance of the disease culminated in preventive measures by government authorities to reduce contagion by the virus. Among such actions, social distancing was strongly recommended, since close contact between individuals is the main route of contamination through respiratory particles [1].

In this way, several economic, social, and educational activities were suspended, resulting in a great change in the dynamics of Brazilians' lives.

Although social restriction is an important instrument in reducing the transmission rate of the virus, negative effects such as a sedentary lifestyle, stress, anxiety, depression, and worsening eating habits are a consequence of this way of containing the virus [2,3]. Issues such as fear of contracting the disease, and financial instability due to lack of work and family concerns aggravate the situation and directly influence the quality of life of citizens.

Among the risk factors related to the mental health of the general population during the pandemic, we can highlight the rapid spread of the new coronavirus, uncertainties about how to control the disease and its severity, and unpredictability about the duration of the pandemic and its consequences [2]. In a study carried out with the general population of China, Wang et al. (2020) revealed moderate to severe symptoms of anxiety (28.8%), depression (16.5%), and stress (8.1%) due to the fear generated due to the pandemic [4]. In addition, in this study, it was observed that being a woman, a student, and having symptoms of COVID-19 increased levels of anxiety, depression, and stress [4].

In the academic scenario, remote classes have become an alternative to the pandemic. On March 16, 2020, following the recommendations of the Government of the State of São Paulo, Centro Universitário Padre Albino suspended face-to-face activities from the 1st to the 4th year of the Medicine course at the Faculty of Medicine of Catanduva [4,5]. Therefore, students began to deal with the challenges of online teaching, lack of physical contact, doubts about educational advancement, fear of the future, and

the direct consequences of isolation.

Considered the most severe viral respiratory syndrome since the H1N1 influenza pandemic in 1918, its impacts related to isolation can unfold in lasting, prevalent, and negative psychological implications, such as post-traumatic stress resulting from the shortage of supplies and financial and academic losses – resulting in a loss of psychological well-being [3,4].

In this way, medical education has transformed due to the current COVID-19 epidemic, which has affected students and professors of medical education in the country. In this way, the present research intends to collect data to evaluate the affected areas of the students in terms of quality of life, health, and other areas of their lives, thus being able to bring new information that can be used for a better approach to the theme. Therefore, this study evaluated the quality of life of medical students during the pandemic through the application of a remote questionnaire.

Methods

Study Design

This work followed the STROBE rules for a prospective observational cross-sectional study. A quantitative study was carried out using a validated questionnaire on Quality of Life, "The World Health Organization Quality of Life- WHOQOL-bref", remotely using google forms with 26 multiple-choice questions, with which it was possible to obtain quantified information for an understanding and categorization of the data.

Questionnaire And Participants

The World Health Organization Quality of Life- WHOQOL-bref is a generic instrument for assessing the quality of life, easy to administer and understand, and consists of a multidimensional questionnaire consisting of 26 questions, the first two consisting of questions about the quality of life. life in general, the rest of the 24 questions are distributed in domains such as physical health, psychological health, health in personal relationships, and health in the environment. Your score is per item which is from 1 to 5 on a response scale, which is represented by the five-point Likert scale.

The survey took place remotely using the Google Form, containing the Free and Informed Consent Form and 26 multiple-choice questions, the form link "https://forms.gle/XGrgd1HQVYXCdZ1EA" was sent to students enrolled at the Faculdade de Medicina de Catanduva from 1st to 6th grade, via email, private contact or groups in common. The data collection phase took place after consideration of the study project by the Research Ethics Committee of the Centro

Universitário Padre Albino-UNIFIPA, with approval through the Embodied Opinion.

Ethical Approval

This study was analyzed and approved by the Research Ethics Committee of UNIFIPA, Catanduva, Sao Paulo, according to a substantiated opinion number of 4.821.628/2022, and obtaining the patient's consent through the Informed Consent Form, according to CNS/CONEP Resolution 466/12.

Results

In the data collection phase of the survey, 112 responses to the questionnaire (conducted online) were obtained, being entirely (100%) students from the Faculdade de Medicina de Catanduva (FAMECA) and students who accepted the Term of Consent Free and Enlightened. The age of the interviewees varies between 17 and 28 years old (highest response rate of 20-year-olds – 24.1%), who are studying from the first to the sixth year of college (15.2% of the first year; 31.3% a second year; 19.6% a third year; 17.9% a fourth year; 9.8% a fifth year and 6.3% a sixth year).

According to the data obtained, about half of the interviewees (49.1%) rate their quality of life as good, while 43.8% as very good and 7.1% as average (neither very bad nor good), in addition to more than half of them, say they are satisfied with their health (52.7%), 20.5% are very satisfied, 17% are neither satisfied nor dissatisfied, 8.9% are dissatisfied and only 1% are very dissatisfied.

Respondents were asked "To what extent do you think your (physical) pain (if any) prevents you from doing what you need to do?" from this it was observed that 42.9% are not prevented from doing anything; 36.6% are prevented very little; 12.5% are prevented more or less; 6.3% very much and 1.8% extremely impeded. Regarding the need for some medical treatment, 41.1% believe that they are not very necessary; 36.6% do not feel needy; 15.2% more or less; 5.4% quit, and 1.8% need some medical treatment to carry out daily life.

Among students, most believe they enjoy life a lot (70.5%); 15.2% take advantage more or less; 13.4% extremely, and 0.9% very little enjoy life. Another theme addressed is how much the interviewees believe that their own lives have meaning, 47.3% think that life has an extreme meaning; 40.2% a lot; 10.7% more or less, and 1.8% no sense.

Regarding concentration, only 11.6% can concentrate extremely, 39.3% say they can concentrate a lot; 42.9% more or less and 6.3% very little. Regarding safety during a routine, 51.8% feel quite

safe; 36.6% more or less; 6.3% extremely and 5.4% very little. More than half of the students (56.3%) consider their physical environment to be very healthy (28.6% more or less; 14.3% extremely and 0.9% very little).

Students were asked if they had enough energy for the routine, only 12.5% said they had energy completely, 44.6% a lot; 39.3% average, and 3.6% very little energy. Among respondents, 45.5% are very accepting of their physical appearance; 16.1% completely; 29.5% average; 7.1% very little, and 1.8% do not accept the physical. Regarding finances, 35.7% have enough money to meet their needs; 33.9% have a lot; 27.7% average; 1.8% have very little and 0.9% do not have enough money.

Data collection found that 87.5% of students say that the information needed on a day-to-day basis is extremely or very available; 11.6% more or less and 0.9% very little available. Regarding the opportunity to perform physical activities, 42% have a lot of opportunity to perform the physical activity; 31.3% average; 22.3% completely and 4.5% very little. Regarding the mobility of the students, the majority (68.8%) consider moving very well; 21.4% well; 7.1% average; 1.8% bad, and 0.9% very bad.

Regarding the quality of sleep, 38.4% said they were satisfied with their sleep; 24.1% average; 23.2% dissatisfied; 13.4% very satisfied, and 0.9% very dissatisfied. More than half (53.6%) of respondents say they are satisfied with their ability to perform day-to-day activities; 9.8% very satisfied; 28.6% average; 8% are dissatisfied. The student's level of satisfaction with their ability to work was also asked, 55.4% are satisfied; 27.7% average; 9.8% were very satisfied; 6.3% were dissatisfied and 0.9% were very dissatisfied. The question "How satisfied are you with yourself?" generated the following statistics: 54.5% satisfied; 25% average; 10.7% very satisfied and 9.8% dissatisfied.

Most university students interviewed (60.7%) consider themselves satisfied with their relationships; 25% are very satisfied; 11.6% are neither satisfied nor dissatisfied; 1.8% are dissatisfied and 0.9% are very dissatisfied. Furthermore, regarding personal satisfaction with their sex life, 68.7% say they are very or only satisfied with their sex life; 21.4% average and 9.8% are dissatisfied. About half of the students (51.8%) are satisfied with the support of their friends; 30.4% very satisfied; 16.1% are neither satisfied nor dissatisfied and 1.8% dissatisfied.

Regarding students' housing, the majority (63.4%) felt very satisfied; 30.4% satisfied; 4.5% average, and 1.8% very or only dissatisfied. Regarding satisfaction with access to health services, 93.8% are very or satisfied with access and 6.3% are neither satisfied nor

dissatisfied. In terms of satisfaction with their means of transport, 54.5% were very satisfied; 30.4% were satisfied; 8% were medium; 6.3% were dissatisfied and 0.9% were very dissatisfied. It was also asked how often they had negative feelings such as bad mood, despair, anxiety, and depression, 50.9% answered sometimes; 22.3% often; 13.4% very often; 8% always and 5.4% never.

Discussion

Studies carried out during the COVID-19 pandemic show a growing increase in the number of individuals who develop anxiety and depression, due to the period of social restriction and fear generated by the increasing number of deaths [5]. In our study, more than 90% of respondents reported having negative feelings, such as bad mood, despair, anxiety, and depression. This data is not isolated, studies carried out in the country show the dimension of the consequences generated by the pandemic, with mental health being the main one [6]. In line with mental health difficulties, sleep disorders are associated with increased psychosocial stressors - the same ones that lead to insomnia, nightmares, daytime sleepiness, and fatigue [7].

Because of the performance of the physical activity by the young people interviewed, only 42% have a lot of opportunity to perform physical activity, while the rest (58%) were classified between medium and very little opportunity. These data reveal an increase in sedentary lifestyles, partly caused by social restriction - a factor that led to the increased time spent on computers, televisions, and cell phones and a decrease in the practice of physical activity [3]. Furthermore, studies show that a sedentary lifestyle has been associated with harmful effects on cardiovascular function and structure [8].

Regarding the difficulty in concentrating on studies and the lack of energy for routine tasks, studies show that tiredness is the most prominent symptom and aggravation after the pandemic [9,10]. The tiredness and exhaustion of studying for hours in front of a computer screen have an impact on learning and the performance of daily tasks [10,11]. Our work in question converges with the literature so that the results obtained through the applied questionnaires confirm the psychological damage caused by the isolation necessary to contain the spread of the COVID-19 virus. A sedentary lifestyle, negative feelings, and difficulty concentrating to perform activities were the main consequences generated by the analyzed students.

Conclusion

Finally, we can emphasize the importance of social

isolation to reduce the spread of the COVID-19 virus, and that, despite the psychological damage generated by young people, the practice of physical activity is fundamental, even in a residential environment, to reduce the sedentary lifestyle and its harmful effects. Furthermore, to control negative feelings aroused after distancing, seeking psychological and family help is essential to reduce its negative effects. May the negative impacts generated by this pandemic become lessons learned for the future of dealing with other diseases that spread quickly and easily.

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Ethics approval

This study was analyzed and approved by the Research Ethics Committee of UNIFIPA, Catanduva, Sao Paulo, according to a substantiated opinion number of 4.821.628/2022, and obtaining the patient's consent through the Informed Consent Form, according to CNS/CONEP Resolution 466/12.

Informed consent

Was applied.

Data sharing statement

No additional data are available.

Conflict of interest

The authors declare no conflict of interest.

Similarity check

It was applied by Ithenticate@.

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