

MENTAL HEALTH OF UNIVERSITY STUDENTS DURING THE COVID-19 PANDEMIC

SAÚDE MENTAL DE ESTUDANTES UNIVERSITÁRIOS DURANTE A PANDEMIA DE COVID-19

SALUD MENTAL DE LOS ESTUDIANTES UNIVERSITARIOS DURANTE LA PANDEMIA DE COVID-19

Vivian Andrade Gundim¹
Jhonatta Pereira da Encarnação²
Flávia Costa Santos³
Josenaide Engracia dos Santos⁴
Erika Antunes Vasconcellos⁵
Rozemere Cardoso de Souza⁶

How to cite this article: Gundim VA, Encarnação JP, Santos FC, Santos JE, Vasconcellos EA, Souza RC. Mental health of university students during the COVID-19 pandemic. Rev baiana enferm. 2021;35:e37293.

Objective: to identify the available evidence on ways of presenting psychological distress and actions to protect and promote mental health in university students during the COVID-19 pandemic. **Method:** integrative literature review, performed in stages: elaboration of the guiding question; establishment of inclusion and exclusion criteria; definition of the information to be extracted; critical analysis of studies and results; presentation of the review related to the impact of the pandemic on students and mental health protection and promotion actions. **Results:** among the seven articles investigated, published in 2020, emotional reactions were observed, described by stress, anxiety, grief, anger and panic, associated with concern about the delay of academic activities and fear of falling ill. **Conclusion:** the pandemic and its related aspects interfere in the academic life and health of students and their families, causing negative effects on their mental health.

Descriptors: Students. Psychological stress. Coronavirus.

Objetivo: identificar as evidências disponíveis sobre formas de apresentação do sofrimento psíquico e ações de proteção e promoção da saúde mental em estudantes universitários, durante a pandemia de COVID-19. Método: revisão integrativa de literatura, realizada por etapas: elaboração da pergunta norteadora; estabelecimento de critérios de inclusão e exclusão; definição das informações a serem extraídas; análise crítica dos estudos e dos resultados; apresentação da revisão relacionada ao impacto da pandemia aos estudantes e às ações de proteção e promoção da saúde mental. Resultados: dentre os 7 artigos investigados, publicados em 2020, observaram-se reações emocionais descritas por estresse, ansiedade, luto, raiva e pânico, associadas à preocupação com o atraso das atividades acadêmicas e ao medo de adoecer. Conclusão: é possível afirmar que a pandemia e os aspectos relacionados a ela interferem na vida acadêmica e na saúde dos estudantes e de seus familiares, causando efeitos negativos à sua saúde mental.

Descritores: Estudantes. Estresse psicológico. Coronavírus.

¹ Nursing Student. Universidade Estadual de Santa Cruz. Ilhéus, Bahia, Brazil. <http://orcid.org/0000-0003-3067-3516>.

² Nursing Student. Universidade Estadual de Santa Cruz. Ilhéus, Bahia, Brazil. <http://orcid.org/0000-0002-5331-3866>.

³ Nursing Student. Universidade Estadual de Santa Cruz. Ilhéus, Bahia, Brazil. <http://orcid.org/0000-0002-9909-6836>.

⁴ Psychologist and Occupational Therapist. PhD in Medical Sciences. Professora at the da Universidade de Brasília. Brasília, Distrito Federal, Brazil. <http://orcid.org/0000-0002-7712-8470>.

⁵ Psychologist. PhD in Medical Sciences. Professor at the Universidade Estadual de Santa Cruz. Ilhéus, Bahia, Brazil. <http://orcid.org/0000-0002-7382-820X>.

⁶ Nurse. PhD in Psychiatric Nursing and Mental Health. Professor at the Universidade Estadual de Santa Cruz. Ilhéus, Bahia, Brazil. rcsouza@uesc.br. <http://orcid.org/0000-0003-2705-1556>.

Objetivo: identificar la evidencia disponible sobre las formas de presentar angustia psicológica y acciones para proteger y promover la salud mental en los estudiantes universitarios durante la pandemia de COVID-19. Método: revisión integrativa de la literatura, realizada por etapas: elaboración de la pregunta guía; definición de criterios de inclusión y exclusión; definición de la información que se va a extraer; análisis crítico de estudios y resultados; presentación de la revisión relacionada con el impacto de la pandemia en los estudiantes y las acciones de protección y promoción de la salud mental. Resultados: entre los siete artículos investigados, publicados en 2020, se observaron reacciones emocionales descritas por el estrés, la ansiedad, el dolor, la ira y el pánico, asociadas con la preocupación por el retraso de las actividades académicas y el miedo a enfermarse. Conclusión: es posible afirmar que la pandemia y los aspectos relacionados con ella interfieren en la vida académica y la salud de los estudiantes y sus familias, causando efectos negativos en su salud mental.

Descriptores: Estudiantes. Estrés psicológico. Coronavirus.

Introduction

In December 2019, in Wuhan, China, the COVID-19 epidemic began, also recognized in several countries of the world, characterizing a major public health problem⁽¹⁾. In January 2020, the World Health Organization (WHO) declared this outbreak a public health emergency with international consequences⁽²⁾, and on March 11 of that same year, the WHO declared COVID-19 a pandemic. This term refers to the geographical distribution of a disease, recognizing that there are outbreaks of COVID-19 in several countries and regions of the world. By the end of May 2020, there were 5,803,416 confirmed cases worldwide, with 359,791 deaths reported. In Brazil, until May 28, 2020, there were 441,315 confirmed cases and 26,788 deaths reported⁽³⁾.

COVID-19 is the name given to the infection caused by the new coronavirus (SARS-CoV-2), whose symptoms are high fever, tiredness and dry cough. Other symptoms include: pain, nasal congestion, headache, conjunctivitis, sore throat, diarrhea, loss of taste or smell and rash on the skin or discoloration of the fingers or toes. The symptoms are usually mild and begin gradually⁽³⁾. In about 80% of cases, the disease evolves beneficently, without the need for hospital treatment. However, those who develop the severe form of the disease, characterized as Severe Acute Respiratory Syndrome (SARS), have a higher chance of hospitalizations and mortality. Coronavirus lethality, thus far, has been mainly associated with elderly patients or the presence of comorbidities, such as heart diseases, diabetes and diseases that affect the immune system⁽⁴⁾.

Currently, the moment is of restriction and social isolation, with measures to prevent infection, experienced by a large part of the world population. As a consequence, there is a need to deal with aspects that directly influence the mental health of the population before the current health crisis, such as fear and panic, distancing from friends and family, restriction of touch, and vulnerability of people who suffer violence⁽⁵⁾.

Psychological reactions to the crisis may include feelings of sadness, fear, oppression, helplessness and anger, as well as difficulties to concentrate or sleep. Fear of contacting other people, traveling on public transport or entering public spaces may increase, and some people may have physical symptoms, such as increased heart rate or stomach pain⁽⁶⁾.

Isolation also affects education. The United Nations Educational, Science and Culture Organization (UNESCO) estimates that the closure of educational institutions because of the pandemic is affecting half of the world's students, 890 million in 114 countries. The impact of this isolation will remain on global higher education for much longer after the outbreak's actual control. In the most affected areas, universities face the prospect of losing a semester or more. With this, many students already face anxiety and panic due to the numerous implications for postponed courses, tasks, seminars and defenses of theses⁽⁷⁾.

About half of the university students already face insecurity, fear, feeling of loss and mood swings as a consequence of the pandemic, compared to normal periods⁽⁸⁾. Analyzing

these factors, one refers to the relevance of psychological interventions to protect and promote mental health, referring to emerging needs in the current pandemic context⁽⁹⁾.

In this sense, in view of the changes in the living standards of the world population and, consequently, in the daily life of the students, this study questions the impacts of the COVID-19 pandemic on the mental health of university students, and which mechanisms can minimize and/or avoid possible suffering and/or psychic disorders in this population.

The national and international media have provided much information about the pandemic and its impacts on the population. This information is transmitted daily, following the flow of news and, in an unprecedented way, has approached scientists to the news, seeking updates and reliable information⁽¹⁰⁾. In turn, the scientific-based knowledge related to the COVID-19 pandemic has also been published at an increasing level, according to the achievement of results of researches and discussions in the scientific sphere⁽¹¹⁻¹⁴⁾.

Regarding mental health, scientific studies began to be published emphasizing the impact experienced in the current moment of pandemic, especially in the lives of people affected by COVID-19 and on the lives of health professionals who are on the front line⁽¹⁵⁻¹⁷⁾. Studies in psychology have referred to other studies addressing crisis situations experienced collectively, supporting the understanding of this moment of intense social mobilization^(9,18). It is also noteworthy the psychosocial approach of mental health care, with a multidisciplinary focus and the participation of nurses in the management of this support to affected people and the general population⁽¹⁹⁻²⁰⁾.

In relation to the repercussions on academic life, the consequences of the pandemic also became the focus of attention, considering the risk of infection of students with participation in coping with the epidemic, the rupture of the study routine, the postponement of academic tasks and activities and the delay in the schedule of courses, reflecting on the plans of the future

professional and in the search for independence and financial stability, in some cases, based on the expectation of university education. Since the beginning of the pandemic in China, the university has been searching for alternatives for distance learning and problem-solving⁽²¹⁻²²⁾.

The academic population had already been the object of scientific studies that pointed to vulnerabilities related to mental health⁽²³⁻²⁶⁾. With the pandemic, one instigates the analysis of what has been discussed in the studies thus far, since this analysis will enable new preventive measures in the planning of innovative actions and resumption of academic activities in the post-pandemic period.

Thus, the present study aimed to identify the available evidence on ways of presenting psychological distress and actions to protect and promote mental health in university students during the COVID-19 pandemic.

Method

This is an integrative literature review. The integrative literature review can be considered as the broadest form of methodological approach, among the reviews⁽²⁷⁾. This type of review allows a critical evaluation and synthesis of scientific evidence on a research theme, in which the result obtained is the state of knowledge of this theme, besides allowing the identification of gaps and weaknesses that allow leading to the development of future investigations⁽²⁸⁾.

For this review, the following steps were performed: elaboration of the guiding question; establishment of inclusion and exclusion criteria for articles (sample selection); definition of the information to be extracted from the selected articles; critical analysis of the studies and discussion of the results⁽²⁹⁾; and presentation of the review related to psychological distress and actions to protect and promote mental health in university students during the COVID-19 pandemic.

For the elaboration of the fundamental question, the PICOS strategy was used, an acronym in the English language meaning "Patient, Intervention, Comparison and Outcomes", being

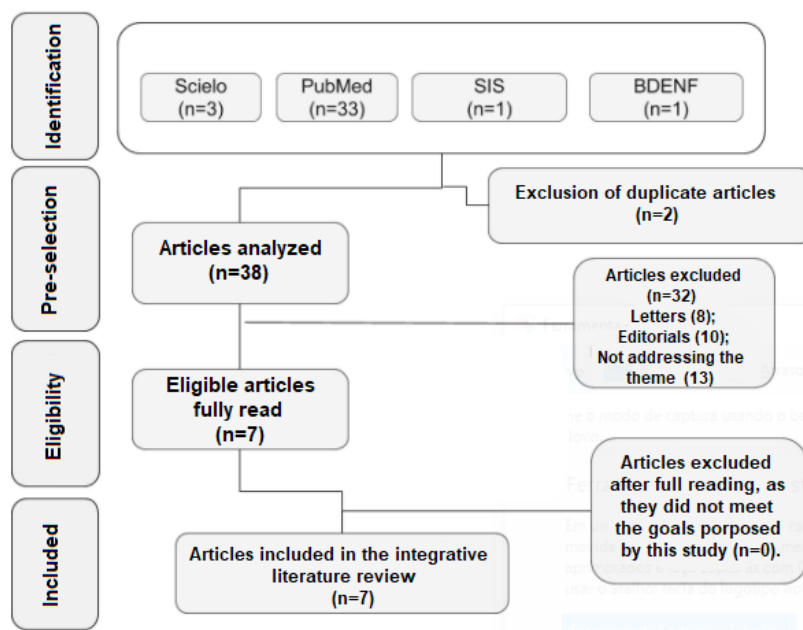
fundamental elements of the research question and the elaboration of the question to search for evidence in the literature⁽³⁰⁾.

Thus, P meant university students during the pandemic, I, the application of actions to protect and promote mental health in mental health care, C, the comparison between the results obtained, and O, the presence of evidence in the literature on the application of actions to protect and promote mental health during the context of the pandemic, which resulted in the following

guiding question: What is the evidence found in the literature on spaces and/or actions to protect and promote mental health available to university students during the COVID-19 pandemic?

Subsequently, the keywords were established and consulted in the Platform of Health Sciences Descriptors (DeCS), namely: Students, Psychological Stress and Coronavirus. Subsequently, the stages of searching and selecting articles were performed (Flowchart 1). Data were collected between May and June 3, 2020.

Flowchart 1 – Integrative literature sampling



Source: Created by the authors.

Articles were searched on the following databases: SCIELO (3), PUBMED (33), LILACS (0), BDEF (1), SIS (Scientific Indexing Services) (1). Thirty-eight publications eligible for inclusion in the study were identified. After reading the abstracts and reading the articles in full, when the information contained in the abstract was not sufficient, seven articles were selected, which met the following inclusion criteria: complete articles available electronically free of charge, which presented the theme of study as the central subject of the work or with content relevant to the theme, in Portuguese, Spanish or English. Exclusion criteria were: letters to the editor, editorials, duplicate articles, or studies that did not meet the objectives of the study.

After selecting the search engines and inclusion/exclusion criteria, the aspects of the publications to be analyzed were selected: title, journal, year of publication, authors, objectives, characteristics and main results of the study. For the analysis, a succinct reading of the materials was made and an instrument describing these contents was used briefly, which allowed defining eligibility of the data for the preparation of the review, in order to achieve its objectives⁽³¹⁾.

Thus, the results are described in thematic categories, intertwining them with the literature investigated and the interpretation of the researchers, giving evidence to the diversity and recurring themes in the articles, as well as

their applicability to nursing and the field of psychosocial care.

Publications were briefly described for presentation and discussion of the results obtained, which allowed defining data eligibility in order to achieve its objectives. The results obtained were individually compared. Then, the results were discussed and presented in two categories: impact of the pandemic on students'

mental health; mechanisms for protection and promotion of mental health in the university context.

Results

The final bibliographic sample consisted of seven articles, published in 2020, presented in Chart 1, according to the objectives of this study.

Chart 1 – Selected articles, according to title, journal, year of publication, authors, main results and characteristics of the study. (continued)

N.	Author and year/ Country of origin	Journal	Context/ Participants	Type of research	Main results
1	Araújo FJO, Lima LSA, Cidade PIM, Nobre CB, Rolim Neto ML. 2020/ Brasil ⁽⁷⁾	Psychiatry Research	The authors did not specify the methodological criteria	Literature review	The psychological impact caused by the COVID-19 pandemic has been a critical disruptor, creating anxiety and depression, exacerbated by uncertainties and intensifying the flow of information. This highlights the need for institutions to consider large-scale preventive measures to keep students and professors healthy, physically and psychologically, as well as to create plans for when classes return and infections manifest on campuses.
2	Maia BR, Dias PC, 2020/ Brasil ⁽⁸⁾	Estudos de Psicologia	619 students from 2 Portuguese universities in 2 periods.	Cross-sectional, descriptive study	There was a significant increase in psychological disturbance (anxiety, depression and stress) among university students in the pandemic period, compared to normal periods. The authors do not address actions and methods of protection and promotion of mental health.
3	Schmidt B, Crepald MA, Bolze DAS, Neiva-Silva L, Demenech LM. 2020/ Brasil ⁽⁹⁾	Estudos de Psicologia	53 articles involving the overall population and students, found on databases ScienceDirect, PubMed, SciELO and Google Scholar.	Literature review	Studies have suggested that the fear of being infected by a potentially fatal, rapidly spreading virus, whose origins, nature and course are still little known, ultimately affects the psychological well-being of many people. Being a woman, student and presenting physical symptoms linked to COVID-19, or previous health problems, were factors significantly associated with higher levels of anxiety, depression and stress.

Chart 1 – Selected articles, according to title, journal, year of publication, authors, main results and characteristics of the study. (continued)

N.	Author and year/ Country of origin	Journal	Context/ Participants	Type of research	Main results
4	Wang C, Pan R, Wan X, Tan Y, Xu L, Ho CS, et al. 2020/ China e Sibéria ⁽¹⁵⁾	International Journal of Environmental Research and Public Health	1304 university students living in continental China during the COVID-19 pandemic	Cross-sectional, descriptive study	Most interviewees classified the psychological impact caused by the pandemic as moderate or severe. Uncertainty and the potential negative impact on academic progression can have an adverse effect on students' mental health. Female gender, student status, and specific physical symptoms were associated with greater psychological impact of the outbreak and higher levels of stress, anxiety, and depression. Reported support measures include: identifying high-risk groups for early psychological interventions, providing resources for psychological support, developing online support networks, web-based portals and applications for lectures or other teaching activities, and providing accurate, evidence-based information in diagrammatic format.
5	Teixeira MR, Dahl CM. 2020/ Brasil ⁽³²⁾	Revista Interinstitucional Brasileira de Terapia Ocupacional	Literature data crossing with the main international journals (CNN, ABC NEWS, CNBC, Inside Higher, The Hechinger, The World University Rankings, The Guardian and Lifestyle).	Literature review	Feelings of fear, stress, anxiety, grief, guilt, anger and helplessness were observed among students before uncertainty, identified as common emotional responses in emergency contexts. Actions to reduce these impacts were identified, such as: organization of a routine of study activities of interest, virtual meetings to perform integrative and complementary practices, academic and guidance activities remotely and psychosocial support, support groups, and virtual search for professionals.

Chart 1 – Selected articles, according to title, journal, year of publication, authors, main results and characteristics of the study. (conclusion)

N.	Author and year/ Country of origin	Journal	Context/ Participants	Type of research	Main results
6	Yuan S, Liao Z, Huang H, Jiang B, Zhang X, Wang Y, Zhao M. 2020/ China ⁽³³⁾	International Medical Journal of Experimental and Clinical Research	Population from the chinese province of Hubei and from non-endemic provinces	Cross-sectional descriptive study	Of the study population, 65.92% were university students. Most study participants, two weeks after the onset of the pandemic, reported that their emotional state remained unchanged during the two-week study period. The authors emphasize the importance of developing actions that minimize the impact on mental health for those who have manifested changes.
7	Cao W, Fang Z, Hou G, Han M, Xu X, Dong J, Zheng J. 2020/ China ⁽³⁴⁾	Psychiatry research	7143 Medical students from Changzhi.	Cross-sectional, descriptive study	The study shows that the mental health of college students was affected at varying degrees during the outbreak. The survey indicated that 24.9% of university students were suffering from anxiety due to the COVID-19 outbreak associated with factors as: stability of family income, psychological and economic pressure, concern about academic delays and the influence of the epidemic on daily life, concern about studies and future employment, lack of interpersonal communication and fake news. The increasing number of patients and suspected cases, as well as the growing number of provinces and countries affected by the outbreak, raised public concern, which increased anxiety.

Source: Created by the authors.

The articles analyzed were mostly affiliated to China (3) and Brazil (3); the other occurred in Portugal (1). Regarding the journal of publication of the articles, 2 articles were published in the journal *Estudos de Psicologia*, and the others were distributed among the journals: *Psychiatry Research* (2), *Revista Interinstitucional Brasileira de Terapia Ocupacional* (1), *International*

Journal of Environmental Research and Public Health (1) and *International Medical Journal of Experimental and Clinical Research* (1).

Most studies were cross-sectional and descriptive (4), and the others used the literature review method (3). The population of most studies was university students (4), and in three studies, the overall population, with specifications about

the mental health of students. In two studies, the participants were interviewed before and during the pandemic period, performing a comparative description in relation to the periods.

Different scales were used to assess the psychic impacts caused to students, including: Depression, Anxiety and Stress Scale (EADS-21)^(8,15), Generalized Anxiety Disorder 7-item Scale (GAD-7)⁽³⁴⁾, Self-reporting Questionnaire (SRQ-20) in association with the Pittsburgh Sleep Quality Index (PSQI) (study 6). Studies from 1, 3 and 5 did not use scales because they were not descriptive studies^(7,9,32).

Pandemic impact on students' mental health

During the pandemic period, there have been changes in the psychic well-being of university students⁽⁸⁾. It is noteworthy that certain measures imposed on the population unexpectedly resulted in an abrupt social reorganization, thus, one of the various consequences is reflected in the mental health of overall population and university students⁽⁹⁾.

A study conducted in China reveals that before the scenario of public health calamity, it is normal that people feel afraid of falling ill or dying, and most likely they will present feelings of helplessness and stigma with the stoppage of activities, commerce, schools, transportation, causing negative emotions to be aggravated. A study addressing the factors associated with the students' psychic suffering describes that 70% were concerned about the possibility of their relatives contracting COVID-19⁽¹⁵⁾. It is still possible to observe other emotional reactions, such as: stress, anxiety, grief, guilt and anger⁽³²⁾.

Upon comparing the normal and the pandemic periods, statistically significant differences were found in the levels of anxiety, depression and stress among the students⁽¹⁴⁾. Strict isolation measures used as a method of preventing the virus have caused delays in the start of classes at schools, colleges and universities throughout China, affecting the mental health of university students. Concerns about economic aspects,

academic delays and the influence of the epidemic on daily activities, as well as the scarcity of masks and false information and news can be pointed out as causes of the psychic suffering affecting these students⁽³³⁾.

There are reports that uncertain responses by universities about the creation of probable strategies related to the resumption of activities can cause the feeling of uncertainty and anxiety in students, as the effect on their studies and the reflection that this will imply in their future are unknown^(7,33). Other factors are also associated, such as limited access to virtual resources, a measure often being used to continue academic activities, as well as abrupt changes in routines and fear for the lives of loved ones⁽³²⁾.

Although social restriction measures are not new, their consequences on students' lives can cause psychological pain at different levels. A study describes that about 15.1% of the students considered themselves significantly more concerned during the pandemic period when referring to the normal period, and 38.5% stated "feeling afraid". Other forms of presentation of psychic suffering presented were: feelings of lack of comfort, worry, restlessness, feeling of not knowing what to do, feeling that life had no meaning or feeling almost panicking⁽⁷⁾.

When assessing the emotional impact on Chinese university students, mental health was affected at varying degrees during the outbreak. Of the students interviewed, the survey indicated that 24.9% were suffering from anxiety due to the COVID-19 outbreak; of these, 0.9% suffered from severe anxiety, 2.7% moderate and 21.3% had mild anxiety⁽¹⁵⁾. In only one of the articles studied, the results reported an improvement in the mental health of the students when comparing the pandemic period and the normal period⁽³³⁾.

The consequences of psychic suffering for society as a whole and for the students themselves tend to go through the post-pandemic period, thus reaching society in its various spheres⁽⁹⁾. In view of the evidence that these effects may be prolonged over time, the need to outline strategies for harm prevention or

reduction stands out, in a joint work of several public institutions, through the combination of health and education actions⁽⁸⁾.

Mechanisms for protection and promotion of mental health in the university context

It is emphasized the importance of health systems and government authorities being prepared for widespread transmission of diseases, as well as for all possible consequences, including the psychological impacts to which these individuals are subjected in an epidemic situation⁽¹⁵⁾. In view of the period of public health emergency, there is need to identify measures to prevent and promote mental health of these students⁽⁷⁾.

Authors identified that avoiding the sharing of utensils, hand hygiene and wearing masks were associated with lower levels of psychological impact, depression, anxiety and stress⁽¹⁵⁾. Like the dissemination of accurate and real data on the disease situation, avoiding excessive exposure to television news, the search for veracity of the facts reported or discovered, also reveal reducers of these levels⁽⁹⁾.

The application of specific questionnaires for undergraduate and graduate courses is studied as a mechanism to identify the different forms of suffering, classify them according to their severity and risk, and then be able to draw up a care plan to minimize or cease this suffering in the academic environment. The adaptation of remote activities according to the student's agenda would be a way to minimize delays in the academic calendar, and the creation of virtual meetings for integrative and complementary practices, a means of minimizing this stress, and promoting relaxation⁽³²⁾.

Young people are more receptive to online updates and smartphone networks. This is a facilitating factor to face the challenges of higher education. A possible strategy would be the provision of educational activities and psychological interventions through these means, to reduce the impacts on students' mental health, in addition to the development

of online portals and applications for lectures or teaching activities⁽¹⁵⁾. It is also important to develop psychoeducational care using booklets and informative materials, and means for the development of psychological listening for the relief of emotions, adapting such materials to the conditions of the target audience, through language and the form of dissemination⁽⁹⁾.

Although the return of academic activities is a mechanism for preventing psychic suffering, there is a need not to burden the student during this period. Forms of adaptation to meet the various realities that make up the academic environment are relevant, for example, telephone call service for individuals who do not have Internet access, creation of content that consumes few Gb (Gigabit), questionnaires in order to know the individuality of the student to better use the proposed activities, as well as the development of social support actions⁽³²⁾. Social support reduces psychological pressure during epidemics and becomes effective and necessary during public health emergencies⁽¹⁵⁾.

The importance of the participation of different groups and social actors in the preparation of the survey of psychosocial issues is emphasized⁽¹⁶⁾. Furthermore, health authorities need to identify the psychological needs of these students during the pandemic. Health professionals also have a duty to provide resources for psychological support and interventions, especially during hospitalization⁽³⁴⁾. It is also important to highlight the important role of non-specialized professionals who intend to mitigate emotional distress and reduce possible aggravating factors⁽³²⁾.

Discussion

The psychic suffering among university students in the studies investigated appears as stress, feeling of inability before isolation, discomfort with the situation of constant wakefulness, concern with preventive care, fear of losing relatives and friends, concern about the economic situation of the country, signs of anxiety and depression, in addition to headaches,

irritation, self-isolation, loss of willingness to perform activities, distress and even eating disorders.

Upon identifying the possible causes of mental health changes among students, factors such as the breakdown of the academic routine, the distance from friends and colleagues, the concern with the delay of activities are noticeable, consequently causing delay in the continuation of the course and the date of graduation, the interruption of practical classes and curricular internships, as well as in some universities, the performance of activities remotely, resulting in concerns with internet access and difficulties in adapting to the new learning method.

Despite one of the studies contradicting these perspectives⁽³³⁾, other studies have identified that the COVID-19 pandemic caused changes in the emotional and psychic state of the students, being associated with factors such as social isolation, fear of the possibility of illness and death and the large flow of information. Among the students, in addition to the factors described, the distancing from academic activities has been a crucial factor causing psychic suffering.

It is essential to use measures that aim to minimize psychic suffering and its negative effects on university students. Several strategies with the power to help reduce psychological impacts are identified, ranging from observation and early detection to the creation of mechanisms that facilitate access to online platforms for the development of remote teaching activities and psychosocial support in the pandemic context.

In daily life, certain impediments hinder access to remote activities by most students, such as: the lack of technological knowledge related to the media, the social and economic conditions of students and even the discouragement to participate in the proposed actions. This hinders the creation of strategies, since it does not guarantee uniform and equitable access to all students.

In addition, the findings allow reflecting on the implementation of nursing actions in the care of university students. A viable strategy would be therapeutic listening within the

academic environment, with the development of a holistic look at students, identifying possible psychic sufferings, guiding the importance of social distancing in this pandemic scenario, but also ensuring continuity of contact with their social cycle, even if virtually. There is also need to stimulate self-care and the search for professionals in situations of complications. For the feasibility of these actions, it is important to constantly seek adaptations in the forms of calls, in order to ensure a service based on the student's needs.

In the analyzed materials, only one of the articles used the data collection methodology in two periods, performing a comparison of the pandemic period and the normal period. Most studies performed data collection in a very short period after the beginning of the pandemic (1 or 2 weeks), which may be far from the current reality, in which a long time of circulation of the virus and social isolation has already passed. This assumption suggests that there is a need for studies that assess the long-term impacts caused to the psychic state of these students.

Among the difficulties found for the preparation of this study, there is the fact that this is a recent and emerging situation, in which there is still a short set of articles referring to the association of mental health of university students and the COVID-19 pandemic. Therefore, there is need to conduct studies on this theme, whether longitudinal, descriptive, but mainly with emphasis on qualitative studies, in order to value the study of subjective aspects related to the impacts caused and the forms of presentation of psychic suffering in these individuals.

The information obtained in this study may serve as subsidies for strategies to manage the emotional state of university students. Universities will need to think about ways to minimize the psychological effects caused by the pandemic, through the provision of psychosocial care, as a mechanism to reduce the impacts on the academic calendar and the own routine of the activities, concerning the circulation of people and the virus.

Conclusion

The articles addressed in this study met the proposed objective, as their results allowed identifying the forms of presentation of psychic suffering, as well as the factors resulting from the pandemic associated with them and the possible interventions to minimize or avoid them.

Therefore, it is possible to affirm that the pandemic itself and its aspects that interfere in the academic life and physical health of students and their families cause negative effects on the mental health of university students and society in general. Thus, there is need to adopt reduction measures, prevention strategies and management of psychic suffering, both by health authorities and universities and education professionals, to minimize the current psychic suffering that occurred during the pandemic, as well as the future effects resulting from it.

An in-depth study of these impacts and forms of presentation in these students is still relevant. Studies such as this reflect the reality experienced and serve as a support for actions to promote mental health and reduce the negative effects caused by this period of global emergency, but it is important that more studies on this theme be developed, especially in a longitudinal and qualitative approach, in addition to the need for careful evaluation of the damages that may occur in the long term.

Collaborations:

1 – conception, design, analysis and interpretation of data: Vivian Andrade Gundim, Jhonatta Pereira da Encarnação, Flávia Costa Santos and Rozemere Cardoso de Souza;

2 – writing of the article and relevant critical review of the intellectual content: Vivian Andrade Gundim, Jhonatta Pereira da Encarnação, Flávia Costa Santos, Josenaide Engracia dos Santos, Erika Antunes Vasconcellos and Rozemere Cardoso de Souza;

3 – final approval of the version to be published: Rozemere Cardoso de Souza.

References

1. Phelan AL, Katz R, Gostin LO. The Novel Coronavirus Originating in Wuhan, China: Challenges for Global Health Governance. *Jama*. 2020;323(8):709-10. DOI: 10.1001/jama.2020.1097
2. Meng L, Hua F, Bian Z. Coronavirus Disease 2019 (COVID-19): Emerging and Future Challenges for Dental and Oral Medicine. *J Dent Res*. 2020;99(5):481-7. DOI: 10.1177/0022034520914246
3. Organização Mundial de Saúde. Doença de coronavírus 2019 (COVID-19): relatório de situação-36 [Internet]. Genebra (CHE); 2020 [cited 2020 May 29]. Available from: <https://www.paho.org/pt/covid19>
4. Lana RM, Coelho FC, Gomes MFDC, Cruz OG, Bastos LS, Villela DAM, et al. Emergência do novo coronavírus (SARS-CoV-2) e o papel de uma vigilância nacional em saúde oportuna e efetiva. *Cad Saúde Pública*. 2020;36(3):e00019620. DOI: <http://dx.doi.org/10.1590/0102-311x00019620>
5. Ferreira MG, Barbosa EI. Antagonismo do isolamento: o distanciamento que protege e vulnerabiliza frente ao contexto de pandemia [Internet]. *Health Residencies Journal*. 2020 [cited 2020 May 16];1(3):1-5. Available from: <https://escsresidencias.emnuvens.com.br/hrj/article/view/36>.
6. Freitas F. Coronavírus, saúde mental e o que levar em conta no isolamento [Internet]. Rio de Janeiro (RJ): Fundação Oswaldo Cruz; 2020 [cited 2020 Jun 7]. Available from: <https://cee.fiocruz.br/?q=Coronavirus-saude-mental-e-o-que-levar-em-conta-no-isolamento>
7. Araújo FJO, Lima LSA, Cidade PIM, Nobre CB, Rolim Neto ML. Impact of Sars-Cov-2 And Its Reverberation in Global Higher Education and Mental Health. *Psychiatry Res*. 2020; 288:112977. DOI: 10.1016/j.psychres.2020.112977
8. Maia BR, Dias PC. Ansiedade, depressão e estresse em estudantes universitários: o impacto da COVID-19. *Estud psicol (Campinas)*. 2020;37:e200067. DOI: <http://dx.doi.org/10.1590/1982-0275202037e200067>
9. Schmidt B, Crepald MA, Bolze DAS, Neiva-Silva L, Demenech LM. Saúde mental e intervenções psicológicas diante da pandemia do novo coronavírus (COVID-19). *Estud psicol (Campinas)*. 2020;37:e200063. DOI: <https://dx.doi.org/10.1590/1982-0275202037e200063>

10. Xavier AAO, Barata G, Tercis LS, Hafiz M. Covid-19 aproxima cientistas da mídia de maneira inédita [Internet]. Campinas: Unicamp; 2020 [cited 2020 Jun 10]. Available from: <https://www.unicamp.br/unicamp/coronavirus/covid-19-aproxima-cientistas-da-midia-de-maneira-inedita>
11. Li H, Liu SM, Yu XH, Tang SL, Tang CK. Coronavirus disease 2019 (COVID-19): current status and future perspectives. *Int J Antimicrob Agents*. 2020;55(5). DOI: <https://doi.org/10.1016/j.ijantimicag.2020.105951>
12. Arshad Ali S, Baloch M, Ahmed N, Arshad Ali A, Iqbal A. The outbreak of Coronavirus Disease 2019 (COVID-19) – An emerging global health threat. *J Infect Public Health*. 2020 Apr;13(4):644-6. DOI: <https://doi.org/10.1016/j.jiph.2020.02.033>
13. Freitas ARR, Napimoga M, Donalisio MR. Análise da gravidade da pandemia de Covid-19. *Epidemiol Serv Saúde*. 2020;29(2):e2020119. DOI: <https://doi.org/10.5123/s1679-49742020000200008>
14. Estrela FM, Cruz MA, Gomes NP, Oliveira MAS, Santos RS, Magalhães JRF, et al. Covid-19 e doenças crônicas: impactos e desdobramentos frente à pandemia. *Rev baiana enferm*. 2020;34:e36559. DOI: 10.18471/rbe.v34.36559
15. Wang C, Pan R, Wan X, Tan Y, Xu L, Ho CS, et al. Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *Int J Environ Res Public Health*. 2020;17(5):1729. DOI: 10.3390/ijerph17051729
16. Organização Pan-Americana da Saúde. Considerações psicossociais e de saúde mental durante o surto de COVID-19, 18 de março de 2020. Washington, D. C. (EUA); 2020 [cited 2020 Mar 28]. Available from: <https://iris.paho.org/handle/10665.2/51996>
17. Miyazaki MCOS, Soares MRZ. Estresse em profissionais da saúde que atendem pacientes com COVID-19. Ribeirão Preto: Sociedade Brasileira de Psicologia; 2020 [cited 2020 Jun 11]. Available from: <https://www.sbp-online.org.br/2020/03/grupo-de-trabalho-gt-de-enfrentamento-da-pandemia-sbp-covid-19>
18. Enumo SRF, Weide JN, Vicentinni ECC, Araújo MF, Machado WL. Enfrentando o estresse em tempos de pandemia: proposição de uma Cartilha. *Estud psicol (Campinas)*. 2020;37:e200065. DOI: <https://doi.org/10.1590/1982-0275202037e200065>
19. Crispim D, Silva MJPS, Cedotti W, Câmara M, Ananda GS. Visitas virtuais durante a pandemia do Covid-19 [Internet]. Belo Horizonte: Associação Médica de Minas Gerais; 2020 [cited 2020 Apr 20]. Available from: <https://ammg.org.br/wp-content/uploads/Visitas-virtuais-COVID-19.pdf>
20. Cruz N, Souza E, Sampaio C, Santos A, Chaves S, Hora R, et al. Apoio psicossocial em tempos de COVID-19: experiências de novas estratégias de gestão e ajuda mútua no sul da Bahia, Brasil. *APS em Revista*. 2020;2(2):97-105. DOI: <https://doi.org/10.14295/aps.v2i2.94>
21. Wang C, Cheng Z, Yue XG, McAleer M. Risk Management of COVID-19 by Universities in China. *J Risk Financial Manag*. 2020;13(2):36. DOI:10.3390/jrfm13020036
22. Senhoras EM. Coronavírus e educação: análise dos impactos assimétricos. *Boletim de Conjuntura (BOCA)*. 2020;2(5):128-36. DOI: <http://dx.doi.org/10.5281/zenodo.3828085>
23. Arino DO, Bardagi MP. Relação entre Fatores Acadêmicos e a Saúde Mental de Estudantes Universitários. *Psicol pesq*. 2018;12(3):44-52. DOI: <http://dx.doi.org/10.24879/2018001200300544>
24. Santos RR, Greco PBT, Prestes FC, Kirchhof RS, Magnago TSBS, Oliveira MA. Sintomas de Transtornos Psíquicos Menores em estudantes de enfermagem. *Rev baiana enferm*. 2016;30(3):1-14. DOI: 10.18471/rbe.v30i3.16060
25. Pereira A, Cardoso F. Ideação suicida na população universitária: Uma revisão da literatura. *Rev E-Psi [Internet]*. 2015 [cited 2020 May 10];5(2):16-34. Available from: <https://revistaepsi.com/artigo/2015-ano5-volume2-artigo2/>
26. Padovani RC, Neufeld CB, Maltoni J, Barbosa LNF, Souza WF, Cavalcanti HAF, et al. Vulnerabilidade e bem-estar psicológicos do estudante universitário. *Rev bras ter cogn*. 2014;10(1):2-10. DOI: <http://dx.doi.org/10.5935/1808-5687.20140002>
27. Souza MT, Silva MD, Carvalho R. Revisão integrativa: o que é e como fazer. *Einstein (São Paulo)*. 2010;8(1):102-6. DOI: <https://doi.org/10.1590/s1679-45082010rw1134>
28. Sousa LMM, Marques-Vieira CMA, Severino SSP, Antunes AV. Metodologia de revisão integrativa da literatura em enfermagem. *Rev Inv Enfer [Internet]* 2017 [cited 2020 May 10];Ser II(21):7-26. Available from: <https://repositorio-cientifico.essatla.pt/bitstream/20.500.12253/1311/1/>

- Metodologia%20de%20Revis%c3%a3o%20Integrativa_RIE21_17-26.pdf
29. Oliveira MAFD, Cestari TY, Pereira MO, Pinho PH, Gonçalves RMDDA, Claro HG. Processos de avaliação de serviços de saúde mental: uma revisão integrativa. *Saúde debate*. 2014;38(101):368-78. DOI: <https://doi.org/10.5935/0103-1104.20140034>
 30. Santos CMC, Pimenta CAM, Nobre MRC. The PICO strategy for the research question construction and evidence search. *Rev Latino-Am Enfermagem* [Internet]. 2007 [cited 2020 Jun 10];15(3):508-11. Available from: <http://www.scielo.br/pdf/rlae/v15n3/v15n3a23.pdf>
 31. Stetler CB, Morsi D, Rucki S, Broughton S, Corrigan B, Fitzgerald J, et al. Utilization-focused integrative reviews in a nursing service. *Appl Nurs Res*. 2006;11(4):195-206. DOI: 10.1016/s0897-1897(98)80329-7
 32. Texeira MR, Dahl CM. Recriando cotidianos possíveis: construção de estratégias de apoio entre docentes e estudantes de graduação em Terapia Ocupacional em tempos de pandemia. *Rev Interinst Bras Ter Ocup*. 2020;4(3):509-18.
 33. Yuan S, Liao Z, Huang H, Jiang B, Zhang X, Wang Y, et al. Comparison of the Indicators of Psychological Stress in the Population of Hubei Province and Non-Endemic Provinces in China During Two Weeks During the Coronavirus Disease 2019 (COVID-19) Outbreak in February 2020. *Med Sci Monit*. 2020;26:e923767-1. DOI: 10.12659/MSM.923767
 34. Cao W, Fang Z, Hou G, Han M, Xu X, Dong J, et al. The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Res*. 2020 May;287:112934. DOI: 10.1016/j.psychres.2020.112934

Received: June 14, 2020

Approved: August 31, 2020

Published: November 25, 2020



The *Revista Baiana de Enfermagem* use the Creative Commons license – Attribution -NonComercial 4.0 International. <https://creativecommons.org/licenses/by-nc/4.0/>

This article is an Open Access distributed under the terms of the Creative Commons (CC BY-NC). This license lets others remix, adapt and create upon your work to non-commercial use, and although new works must give its due credit and can not be for comercial purposes, the users do not have to license such derivative works under the same terms.