

PSYCHOLOGICAL STRESS IN HEALTH IN RELATION TO ANXIETY FRAMEWORK IN ACADEMICS DURING THE PANDEMIC

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Abstract: During infectious disease outbreaks, the damage to mental health is often overlooked when compared to biological risks and treatments. However, this psychological impact can be minimized or even avoided through mental health and psychiatric care. Recently, research on the mental health of the general population and college students is at the core. However, this review aims to highlight this process, as it supports the development of public actions and policies aimed at communities and health teams. In this context, the objective of this study was to compile the literature on mental illness and psychological stress of students during the Covid-19 pandemic, to elucidate risk factors and possible interventions. Regarding the estimated prevalence of DAS was 76.1%, 71.5% and 70.1% with at least mild symptoms, 62.9%, 63.6% and 58.6% with at least moderate symptoms and 35, 2%, 40.3% and 37.7% with at least severe symptoms, respectively, 19.7%, 27.5% and 16.5% had at least severe symptoms, respectively. The results showed that all the studies selected from the inclusion and exclusion criteria, the analysis of psychological stress factors in health influence the anxiety in students, mainly in nursing and medicine college students, being significant and having an R of Pearson a very strong positive relationship related to anxiety and depression. This review corroborates that there is a high risk in relationships between mental health problems and factors related to COVID-19. However, women receive more support from family, friends and others, and men are more likely than women to experience symptoms of depression, anxiety and stress.

Keywords: Mental health; Psychological stress; Covid-19.

INTRODUCTION

Covid-19 (Coronavirus Disease-2019) is an acute respiratory infection caused by the SARS-CoV-2 coronavirus, potentially serious, with high transmissibility and global distribution. SARS-CoV-2 is a betacoronavirus identified in bronchoalveolar lavage samples from patients with pneumonia of unknown etiology in Wuhan, Hubei Province, China, in December 2019. It belongs to the Sarbecovirus subgenus of the Coronaviridae family and is the seventh known coronavirus to infect humans. (BRAZIL, 2020).

In Brazil, Covid-19 was one of the main causes of mortality and morbidities. According to the IBGE (Brazilian Institute of Geography and Statistics), approximately 668,000 people died as a result of this disease, so critical measures were taken to contain the spread of the virus. For example, restriction of movement is a major factor in psychosocial stress, with prolonged incarceration, difficulty in accessing daily necessities, possible financial loss, and access to conflicting and insufficient information on the Internet, leading to distress and stress. Pedrozo-Pupo et al. (2020).

During infectious disease outbreaks, the damage to mental health is often overlooked when compared to biological risks and treatments. However, they can affect many more people and persist even after the epidemic is over. However, this psychological impact can be minimized or even avoided through mental health and psychiatric care. The need for this care, demonstrated by previous epidemiological crises, is now intensified in the context of Covid-19. Moreira Carneiro et al. (2020).

Recently, research on the mental health of the general population and college students is at the core. However, this review aims to highlight this process, as it supports the development of public actions and policies

aimed at communities and health teams. In this context, the objective of this study was to compile the literature on mental illness and psychological stress of students during the Covid-19 pandemic, to elucidate risk factors and possible interventions.

METHODOLOGY

This is a literature review study that was designed based on the criteria established in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guide, considering the flow diagram and the PRISMA checklist. Thus, from the guiding question: "Does psychological stress in health influence the anxiety framework in students during the pandemic?" articles were searched.

SEARCH IN LITERATURE

The survey of articles was carried out in the following databases: Medline/BVS and Medline/Pubmed. The following descriptors and their combinations in Portuguese and English were used to search for articles: "Psychological stress AND Students AND Ansiedade AND pandemic // Psychological stress AND Students AND Anxiety AND Pandemic".

INCLUSION AND EXCLUSION CRITERIA

The selection of articles was guided by inclusion and exclusion criteria. The inclusion criteria defined for the selection of articles were: articles published in Portuguese, English; original articles in full and meta-analysis that portray the theme referring to the review and articles published and indexed in these databases in the last 5 years.

The exclusion criteria defined for the selection of articles were non-original articles, dissertations and theses, articles that addressed the topic, but from a different point of view.

After applying the inclusion and exclusion criteria, the articles were identified. The screening of studies was performed by reading and analyzing the titles and abstracts of all articles identified in each database, guided by the inclusion and exclusion criteria adopted. In the eligibility phase, after defining the articles to be included in each database, duplicate articles were excluded.

RESULTS

SELECTION OF STUDIES

A total of 629 studies were identified according to our search strategy. Among them, it presented only 1 duplicate. After applying the adopted inclusion and exclusion criteria, 120 studies in Medline/BVS reading and 501 studies in Medline/Pubmed were excluded, with a total of 619 articles. Afterwards, titles and abstracts were read, 5 of the 9 references were excluded based on the eligibility criteria. Thus, 4 references were selected for full text evaluation. Finally, four articles were eligible for qualitative evaluation. The selection process for identifying eligible studies is included in the review, shown in Figure 1.

CHARACTERISTICS OF THE INCLUDED STUDIES AND ANALYSIS OF PSYCHOLOGICAL STRESS

The main characteristics of the included studies are presented in Table 1. In the study by Md. Saiful Islam 2020, sample of N = 3122 Bangladeshi university students, mean and standard deviation for sex and age group respectively: 59.5% male and 40.5% female, mean age of 21.4 years (SD = 2) ranging from 18 to 29 years. Regarding the estimated prevalence of DAS was 76.1%, 71.5% and 70.1% with at least mild symptoms, 62.9%, 63.6% and 58.6% with at least moderate symptoms and 35, 2%, 40.3% and 37.7% with at least severe symptoms, respectively, 19.7%,

27.5% and 16.5% had at least severe symptoms, respectively. This relates to being female, living in an urban area, not exercising, getting poor sleep, surfing the internet for hours (5-6, 6 or more) a day, restrictions during COVID-19, and smoking.

Regarding Kun Gou's 2021 article, the sample of N = 1,278 undergraduate students from universities located in Shaanxi Province, the mean and standard deviation of sex and age group respectively: 452 men (35.4%) and 826 women (64.6%), with a mean age of 21.46 (± 1.68 years). Depending on the prevalence, 280 (21.9%) university students had depressive symptoms; 270 (21.1%) with symptoms of anxiety; 138 (10.8%) with symptoms of stress; 12 (0.9%) respondents had a low level of social support; 461 (31.6%) support score; 805 (63%) had a high social support score. The analysis of mental health symptoms between genders reveals significance. In this study, men had higher levels of mental health symptoms of depression ($t=5.624$, $p<0.001$), anxiety ($t=6.332$, $p<0.001$) and stress ($t=5.58$, $p<0.001$) than men. than women.

In reference to Khaled Seetan from 2021, the sample of N = 553 medical students from Jordan. The mean age was 20.7 years (SD = 1.9), men (40.1%) and women (59.9%). Tange the prevalence, students raised concerns about academic impact, as more than half (58.4%) were unable to acquire more clinical skills and go to laboratories, while 41.8% were afraid to self-isolate for a period of time. In addition, more than one in five students perceived restrictions on access to classes and course exams, possibly due to difficulties in using technology or travel restrictions. Nearly a third of respondents were concerned about getting the right residency program (35.4%), while 23.1% expressed concern about being able to graduate first and 17.9% expressed concern about being dropped out of medical school.

As for Alsolais, Abdullelah from 2021, the sample N = 1057 nursing students. Mean age was 21.77 years (SD +/- 2.47), male (44.3%) female (55.7%). Regarding the prevalence of D.A.S, the mean score for depression, anxiety and stress was 11.01 (SD ¼ 11.11), 8.02 (SD ¼ 10.22) and 10.72 (SD 1/4 11.06), respectively. In the case of depression, 56.7% responses were classified as the normal, 8.3% severe and 11.0% very severe. About 62.8% of students are classified as having no anxiety, while 4.5% and 16.1% are classified as severe and very severe anxiety, respectively. Most

people did not express stress (69.1%), while 9.3% and 4.9% indicated severe and very severe stress, respectively.

The results showed that all the studies selected based on the inclusion and exclusion criteria, the analysis of psychological stress factors in health influence the condition of anxiety in students, mainly in nursing and medicine university students, being significant and having an R of Pearson an very strong positive relationship, related to anxiety and depression.

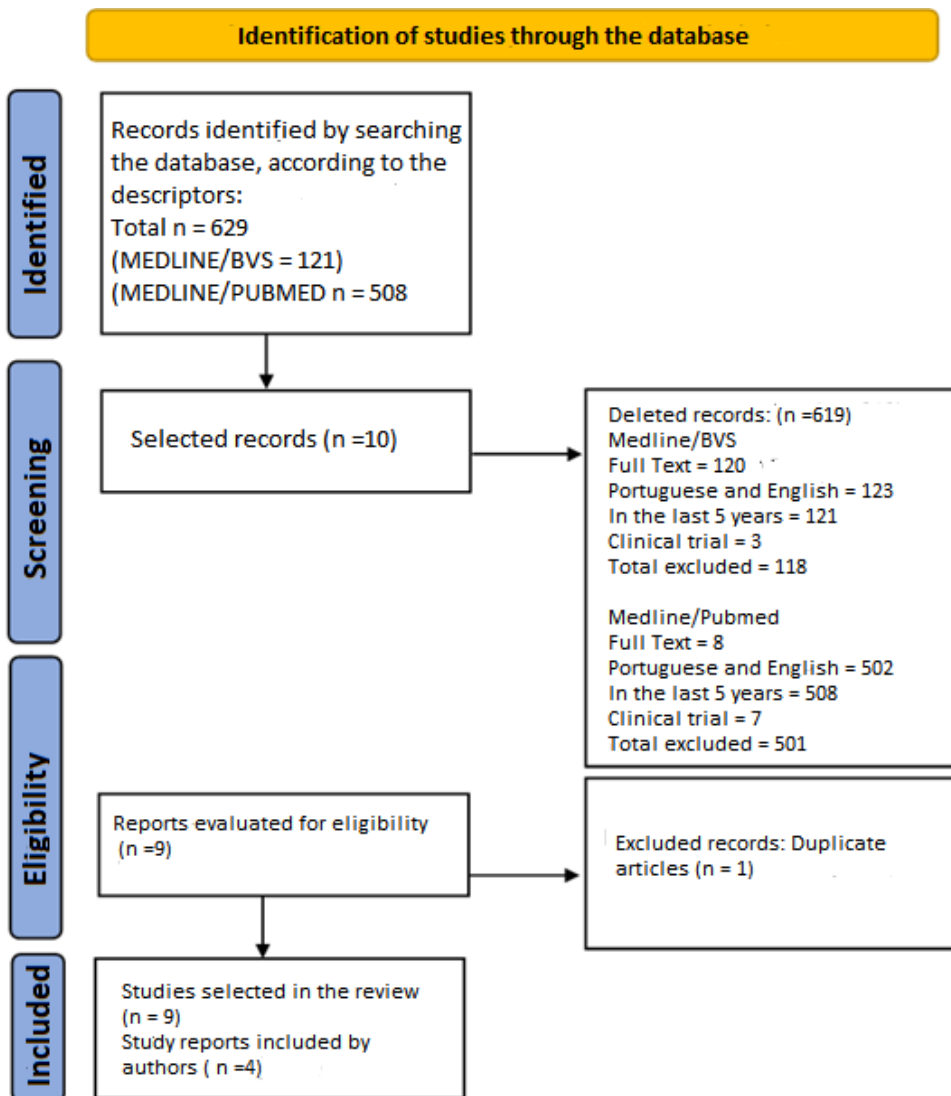


Figure 1: Flowchart for selection, identification, screening, eligibility and included process.

Title/Author	Year of publication	Study design	Objectives	Methodology	Main results
Psychological responses during the COVID 19 outbreak among university students in Bangladesh/ Md Saiful Islam.	2020	Clinical trial/ Cross-sectional study	To assess the prevalence of depression, anxiety and stress (DAS) with the DASS-21, as well as associated factors, among university students in Bangladesh at the beginning of the COVID-19 outbreak.	A web-based survey was carried out during the month of April 2020, involving 3,122 Bangladeshi university students aged between 18 and 29 years (59.5% male; mean age 21.4 ± 2 years)	Estimates of the prevalence of depression, anxiety and stress were, respectively, 76.1%, 71.5% and 70.1% for at least mild symptoms, 62.9%, 63.6% and 58.6% for symptoms at least less moderate, 35.2%, 40.3% and 37.7% for at least severe symptoms and 19.7%, 27.5% and 16.5% for at least very severe symptoms
Assessing the impact of social support on depression, anxiety and stress among undergraduate students in Shaanxi Province during the COVID-19 pandemic in China/Kun Guo.	2021	Clinical Trial / Cross-sectional study	This study aims to find factors associated with mental health symptoms of depression, anxiety and stress among undergraduate students in Shaanxi province during the COVID-19 pandemic in China.	A cross-sectional study was carried out from February 23 to March 7, 2020. A total of 1278 undergraduate students from universities located in Shaanxi province participated in this study.	This research shows that females receive more social support than males ($t = -5.046$, $P < 0.001$); men have symptoms of higher level depression ($t = 5.624$, $P < 0.001$); men have higher level stress symptoms ($t = 5.58$, $P < 0.001$.)
Impact of COVID-19 on the mental well-being of medical students in Jordan/khaled Seetan	2021	Clinical Trial / Cross-sectional study	This prospective cross-sectional study is exploring the effect of the pandemic on the mental health of medical students.	The assessment of mental well-being was performed using the Kessler Psychological Stress Scale (k10); the impact of COVID-19 on life activities and strategies followed to manage the situation were also examined. A total of 553 medical students were recruited for the study.	A total of 553 medical students were recruited for the study. Men constituted 40.1% and women, 59.9%. Students reported that COVID-19 affected most aspects of physical fitness (73.1%), study (68.4%) and social relationships (65.6%)
Perceptions of risk, fear, depression, anxiety, stress and coping among Saudi nursing students during the COVID-19/ Alsolais Abdullelah	2021	Clinical Trial / Cross-sectional study	This study assessed perceptions of risk, fear, mental health status and coping strategies among Saudi nursing students amid the COVID-19 pandemic.	Through an online survey, students' mental health was assessed using the short version of the Depression, Anxiety and Stress Scale, while coping was assessed using the Brief-Coping Orientation of Problem Experienced scale.	Students had modest risk perception and fear of contracting COVID-19. "Religion" was reported as the most used coping strategy. Approximately 43.3%, 37.2% and 30.9% of respondents expressed some degree of depression, anxiety and stress, respectively.

Table 1: Description of selected articles with the variables: Title of study/Author, year of publication, objectives, methodology and main results.

CONCLUSION

This review corroborates that there is a high risk in relationships between mental health problems and factors related to COVID-19. However, women receive more support from family, friends and others, and men are more likely than women to experience symptoms of depression, anxiety and stress. Therefore, it is necessary to investigate more closely the risk factors associated with social isolation due to the pandemic in order to obtain a possible effective intervention.

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