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THE COVID-19 PANDEMIC AND ITS RELATIONSHIP WITH MENTAL HEALTH: AN INTEGRATIVE REVIEW

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Abstract: SARS-Cov-2 is the virus responsible for causing COVID-19, it is one of the main RNA viruses belonging to Coronaviridae, and is currently responsible for more than six hundred thousand deaths in Brazil. The clinical manifestations and complications related to COVID-19 have great diversity and are being increasingly studied by professionals not only in the health area but also in several other areas. In this context, we understand that the damage generated by the pandemic is not limited only to physical symptoms and through this article we seek to elucidate and address what possible damages Covid-19 causes to mental health. The study was conducted through an integrative review of 9 studies obtained through the PUBMED platform that were published from 2019 to 2021. Based on the data analyzed, it was concluded that Covid-19 has a negative impact on the mental health of individuals and a probable relationship with the increase in psychiatric disorders such as posttraumatic stress disorder, depressive disorder and anxiety disorders.

Keywords: Covid-19, Mental health, Pandemic, Acute respiratory syndrome.

INTRODUCTION

On March 11, 2020, the World Health (WHO) Organization characterized COVID-19 as a pandemic. SARS-Cov-2 is the virus responsible for causing COVID-19, it is one of the leading RNA viruses belonging to Coronaviridae, a family composed of hundreds of viruses also of which are MERS coronavirus, which causes middle eastern respiratory syndrome, and **SARS-CoV** which is responsible for causing severe acute respiratory syndrome.

The symptomatology of patients infected with SARS-CoV-2 has a wide variation that can range from totally asymptomatic patients, fever, myalgia, headache, cough, among others,

to a severe respiratory condition, which may progress to death. Symptoms usually appear 2 to 14 days after infection with the virus and can affect any gender and any age group. Among the symptoms, there are the so-called alarm signs, defined as symptoms that alert to the need for an immediate search for medical care, they are:

- Dyspnea
- Persistent chest pressure or pain
- Mental confusion
- Inability to stay awake
- Pallor or gray or blue coloring on skin, lips and nails

In addition to pulmonary complications such as acute hypoxemic respiratory failure, other complications related to COVID-19 have also been described and include:

- Sepsis
- Coagulation disorders (such as thromboembolism and pulmonary embolism)
- Acute renal failure
- Liver failure
- Heart failure
- Cardiogenic shock
- Myocarditis
- Cerebrovascular accident
- Acute respiratory distress syndrome
- Encephalopathy
- Anosmia
- Hypogeusia

These complications arise mainly in people with risk factors:

- Elderly
- Smokers

- Systemic Arterial Hypertension
- Obesity
- Diabetes Mellitus
- Cardiovascular diseases
- Chronic lung disease (including asthma and obstructive pulmonary disease)
- Chronic kidney disease
- Chronic liver disease
- Cerebrovascular diseases
- Cancer
- Immunodeficiency

The main form of transmission of SARS-CoV-2 is through respiratory droplets from one infected person to another without infection. Due to this, there are some prevention measures that can be taken, among them it is highlighted: wearing a mask in public, especially indoors or when it is not possible to maintain physical distancing, frequent hygiene of hands with soap and water or gel alcohol and maintain a safe distance from other people (at least 1 meter), even if they don't look sick. In order to comply with one of these prevention measures (social distancing), many countries have chosen to carry out the so-called quarantine.

In this context, the physical alterations of COVID-19 are being increasingly studied and elucidated, as much as it is common for traditional medicine to direct its primary focus to the biological impacts of diseases, something that we cannot leave aside is their psychological impact.

 Although we still have nothing very concrete about the data caused by covid-19 to the central nervous system, something that is no doubt about the negative impact that the pandemic has brought to the mental health of a large part of the population.

- Acute respiratory failure syndrome and mental disorders
- Quarantine and mental disorders

METHODOLOGY

Pubmed indexed databases searched, using the term "COVID-19" and as descriptors, mental health, for research. Scientific productions addressing as a central theme the correlation between the COVID-19 pandemic and mental health, written in English or Portuguese, published from 2019 to 2021, were included. As a guide question of the study, the following question was answered: The COVID-19 pandemic influenced the exacerbation and/or onset of mental healthrelated disorders. 11,760 results were found. of which 10 aligned with the inclusion criteria and served as the result of analysis.

RESULTS AND DISCUSSION

Although we still have nothing very concrete about the data caused by covid-19 to the central nervous system, something that is no doubt about the negative impact that the pandemic has brought to the mental health of a large part of the population.

Articles related to covid and mental health have been produced in large quantity, however the quality has not been so significant.

Studies applying online questionnaires have been done and in these most people report symptoms compatible with depression and anxiety that present temporal correlation to the onset of the pandemic.

In countries such as England, for example, it was reported that mental stress was higher than expected for the same period of the year (according to previous studies), especially in individuals aged between eighteen and thirty-four years, female and living with children in the same house.

For now, suicide rates have not yet increased, but researchers warn of the psychological damage caused not only by the pandemic itself but also by the excessive circulation of information of low scientific value that end up generating fear and concern.

Historically, the first documented quarantine was held in Venice, a city in Italy, in the year 1,127 due to the spread of leprosy. It is defined by the separation and restriction of the transit of people who may have been exposed to a contagious disease, in order to reduce the risk of infecting others.

The benefits generated by a quarantine, when it is actually indicated, are enormous from the point of view of disease control and reduction of morbidity and mortality, but there are also the harms that are caused by temporary removal between family and friends, loss of freedom, change in routine, among others. All these points, whether short or long term, can result in anguish and fear related to uncertainty about the disease, generating a negative impact related to the mental health of the population, within a pandemic scenario.

In order to analyze the impact of the pandemic on a group of health professionals, a study was conducted that put staffs in contact with patients infected with SARS and found that after the quarantine period (which lasted 9 days) they were more likely to present symptoms such as exhaustion, insomnia, irritability, anxiety when dealing with febrile patients, problems of concentration and reluctance when making decisions.

Another study showed that, during quarantine, in a given population of 1,656 individuals, 7% had anxiety symptoms during quarantine and 17% symptoms of rabies, percentages that reduced to 3% and 6% respectively after a period of 6 months after the end of quarantine.

In order to have a greater understanding of the intensity of the consequences caused by quarantine in different groups, studies were conducted in order to analyze the factors already associated with the patient before quarantine and the possible influence they would have on the outcome related to mental health. It was measured that the main aspects related to a worse outcome were: low levels of education, age between 16 and 24 years, female gender and having a child, however these data are still little confirmed, since other studies have already shown that sociodemographic factors would have little influence on the context in general.

In quarantine, as in any event, there are stressful factors and reparatory factors. The first group encompasses uncertainty regarding its duration of the problem, lack of knowledge about the disease, fear of becoming infected and infecting someone (especially in pregnant women and those with children), frustration due to the change of routine, stress and concern related to the financial part and the limitations that are occurring in funeral ceremonies, preventing all loved ones of the deceased from having a moment of farewell. The second group, which aims to reduce the impact of this challenging scenario on mental health, search for reliable sources of information and tries to filter the news, seeks other methods of interacting and distracting, plans how the relationship with supplies and medications should be.

During this whole period there are many doubts, and it will certainly take many years before we understand what the true impact of the pandemic was on mental health.

Another important issue that should be addressed is the relationship of acute respiratory syndrome with unfavorable mental health outcomes. This pathology is responsible for causing a series of emotions in users, since this can be fatal, has an uncertain prognosis, is linked to the discomfort caused by the procedures, isolation and the whole experience of going through a hospital stay. Such factors may contribute to a disorder in patients who have had SARS.

Studies have shown that 10-35% of patients had symptoms of anxiety, depression, or both, during the initial post-recovery phase of the disease, and others reported post-traumatic stress disorder present in 7.3% of patients in the following 6 months after recovery.

In a cohort study in Hong Kong, which analyzed 90 patients in a 30-month window, starting in June 2003, an incidence of 58.9% was found when considering any diagnosis of those listed in the DSM-IV that includes: anxiety disorder, agoraphobia, panic attacks, social phobia, post traumatic stress disorder, generalized anxiety disorder, major depressive disorder, among others.

In addition to the points addressed above, it is essential not to address the mental health issue of health professionals, since they suddenly ended up being required more than expected.

In this situation of pandemic, these professionals were submitted to numerous responsibilities and challenges, without notice. In addition to the pressure on their own, but also from the patient and his/her family members, there is the long working hours, the lack of beds and personal protective equipment, the distance these workers had to have from their family to prevent the virus from being spread, since they were in constant contact with infected patients, among other factors that contribute to significant stress in the lives of these specialists.

It has been reported that there are some hospitals that offer psychological and psychiatric support to frontline physicians, however, unfortunately, this is a distant reality that ends up being little implemented.

FINAL CONSIDERATIONS

Thus, the pandemic scenario brings copious changes in physical health, but also mental changes of both patients and health professionals, and greater support of nuclei that offer ways to mitigate the consequences generated by covid-19 is necessary.

Mental health, although it has always been important, has never been approached as intensely and as frequently as in the last two years. Psychiatric disorders have grown significantly, and a foundation for mental health is needed to contain the problems already present and avoid future problems, because even though the impact that the pandemic has had on individuals is already notorious, it is still very uncertain the transient or definitive sequelae that will come to affect the population.

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