

## REFLECTIONS ABOUT COVID-19 "INFODEMIC"

### REFLEXÕES ACERCA DA "INFODEMIA" RELACIONADA À COVID-19

### REFLEXIONES SOBRE LA "INFODEMIA" RELACIONADA CON COVID-19

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**Funding:** No funding.

**Submitted on:** 2020/07/07

**Approved on:** 2021/02/05

#### Responsible Editors:

 Janaina Soares  
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#### ABSTRACT

This study aims to reflect on the negative impacts that the unbridled dissemination of news about COVID-19 can bring to health and to society. Thus, there is a need for actions and interventions that prevent or minimize these impacts and that sensitize the population about the correct handling of information, in order to reduce the harmful repercussions of the infodemic regarding this new disease. It is a reflective analysis of the consequences that "infodemic" can cause to health and society, due to the unbridled dissemination of news related to COVID-19. In this context, it is emphasized that it was possible to perceive that the "infodemic", that is, the excess of information, whether accurate or not, about COVID-19 brings innumerable harmful impacts on the mental health of the population and health professionals, as well as for health services and society. This fact demonstrates the need to conduct research and educational actions that provide a reduction in the harmful effects caused by this phenomenon.

**Keywords:** Coronavirus Infections; Information Dissemination; Health Personnel; Mental Health; Health Services; Public Health Nursing.

#### RESUMO

*Este estudo tem o objetivo de refletir sobre os impactos negativos que a disseminação desenfreada de notícias sobre a COVID-19 pode trazer para a saúde e para a sociedade. Desse modo, destaca-se a necessidade de ações e intervenções que previnam ou minimizem esses impactos e que sensibilizem a população quanto ao correto manejo das informações, de forma a diminuir as repercussões prejudiciais da infodemia acerca dessa nova afecção. Trata-se de uma análise reflexiva sobre as consequências que a "infodemia" pode causar à saúde e à sociedade, devido à divulgação desenfreada de notícias relacionadas à COVID-19. Nesse contexto, ressalta-se que foi possível perceber que a "infodemia", ou seja, o excesso de informações, precisas ou não, sobre a COVID-19 traz inúmeros impactos maléficos para a saúde mental da população e dos profissionais de saúde, bem como para os serviços de saúde e para a sociedade. Esse fato demonstra a necessidade de realização de pesquisas e de ações educativas que proporcionem a diminuição dos efeitos nocivos ocasionados por esse fenômeno.*

**Palavras-chave:** Infecções por Coronavírus; Disseminação de Informação; Pessoal de Saúde; Saúde Mental; Serviços de Saúde; Enfermagem em Saúde Pública.

#### RESUMEN

*Este estudio tiene como objetivo reflexionar sobre los impactos negativos que la difusión desenfrenada de noticias sobre el COVID-19 puede traer a la salud y a la sociedad. Por tanto, se necesitan acciones e intervenciones que prevengan o minimicen estos impactos y que sensibilicen a la población sobre el correcto manejo de la información, a fin de reducir las repercusiones nocivas de la infodemia sobre esta nueva afección. Se trata de un análisis reflexivo de las consecuencias que la "infodemia" puede ocasionar en la salud y la sociedad, debido a la difusión desenfrenada de noticias relacionadas con el COVID-19. En este contexto, se destaca que se pudo percibir que la "infodemia", es decir, el exceso de información, veraz o no, sobre el COVID-19 trae numerosos impactos nocivos en la salud mental de la población y los profesionales de la salud, así como para los servicios de salud y para la sociedad. Este hecho demuestra la necesidad de llevar a cabo acciones de investigación y educación que permitan reducir los efectos nocivos que genera este fenómeno.*

**Palabras clave:** Infecciones por Coronavirus; Difusión de la Información; Personal de Salud; Salud Mental; Servicios de Salud; Enfermería en Salud Pública.

#### How to cite this article:

Alencastro ASA, Melo ESJ. Reflections about COVID-19 "infodemic". REME - Rev Min Enferm. 2021[cited \_\_\_\_\_];25:e-1360. Available from: \_\_\_\_\_ DOI: 10.5935/1415.2762.20210008

## INTRODUCTION

Human coronaviruses have been known to science since 1937. Young children are the easiest to contract the most common types of coronavirus and a large part of the population is infected with at least one common type of this virus at some point in their lives. Alpha coronavirus 229E and NL63 and beta-coronavirus OC43 and HKU1 are the coronaviruses that most commonly infect humans. COVID-19, a disease caused by the SARS-CoV-2 virus, was discovered in 2019, leading to respiratory infections, which may appear to be a cold or the flu in milder cases and, in more severe cases, causing pulmonary repercussions, still having infected people who are asymptomatic. The most common symptoms are: fever, cough, dyspnea, fatigue, runny nose and sore throat. The disease is transmitted by close contact with an infected individual, through droplets of saliva, sneezing, coughing and contaminated surfaces.<sup>1,2</sup>

To date, there is no specific treatment proven effective for infection with the new coronavirus, only the use of symptomatic drugs. Therefore, preventive behavioral measures are the main resource to prevent the spread of the virus, and it is necessary to wash your hands frequently with water and soap or liquid soap or even 70% alcoholic preparation, and bleach can also be used to sanitize surfaces and objects. In addition, it is recommended not to take your hands to the mucous membranes and conjunctivae, such as nose, mouth and eyes; maintain a minimum distance of 1 meter between people in the social environment or in public environments; avoid agglomerations and poorly ventilated environments, in addition to social distance. The risk groups are people over 60 years old or who have chronic diseases such as diabetes, hypertension and asthma.<sup>1,2</sup> It is noteworthy that this scenario may change according to the virus mutation and new scientific discoveries.

Therefore, it is laborious to provide updated statistics, as the data related to COVID-19 changes daily. However, it is known that this viral disease started in China, in December 2019, and spread to several countries in a few months, exponentially. Until, on March 11, 2020, COVID-19 was declared by the World Health Organization (WHO) as a pandemic.<sup>3</sup> That said, in mid-February of the following year there were already more than 108 million confirmed cases and more than 2.3 million deaths from infection worldwide, with Brazil having almost 10 million of these cases and 237,489 of those deaths to date February 14, 2021, exceeding the number of deaths in China since the end of April 2020.<sup>4</sup> WHO

sought to disseminate correct information about COVID-19, especially related to prevention, management and possible treatments for the disease, with a view to avoid further harm to public health.<sup>5</sup>

In the same measure that attempts to contain the pandemic of the new coronavirus (SARS-CoV-2), it also seeks to minimize the unbridled spread of news about the virus. Since COVID-19 is a type of recent viral disease, it brought with it a great deal of information about the disease, a fact that makes it difficult for people to discern the truth of these news. Thus, according to the WHO, the “infodemic” is the overabundance of information, accurate or not, that makes it difficult for people to access reliable sources of guidance when they need it.<sup>5</sup>

Thus, this study aims to reflect on the negative impacts that the unbridled news dissemination about COVID-19 can bring to health and to society. We highlight the need for actions and interventions that prevent or minimize these impacts and that sensitize the population about the correct handling of information, in order to reduce the harmful repercussions of the infodemic regarding this new condition.

### Impacts of infodemic on mental health

In the face of globalization, it can be seen that a news story reaches the world in a few minutes. The current social media landscape has brought ease and speed when it comes to news dissemination. Information is inherent to the period of development and maintenance of human societies. However, the media expanded the production of these contents and, due to the period of social detachment, people are more exposed to the media, especially digital, so that much of the news becomes accessible. However, there is a difficulty in verifying the veracity of this information.<sup>5</sup>

Since December 2019, news about the new coronavirus (SARS-CoV-2) has flooded the pages of newspapers, magazines, blogs, social media, websites, and televisions. However, the amount of information related to COVID-19 increased considerably from March 2020, when it started to be considered as a pandemic by WHO, as well as before the beginning of the quarantine period, distancing, or social isolation in almost all the countries of the world.<sup>3</sup>

Thus, quarantine has caused excessive consumption of information from the media, as well as an increase in the elaboration and dissemination of false news, given the idleness of some people in the period of social detachment. As the virus is recent and its effects are be-

ing studied, much information is still dissonant, leading some people to engage in producing false content in order to generate panic in the population, becoming a danger to public health, especially with regard to mental health.

In Brazil, there is still no specific legislation for false news or fake news that threatens public health. Despite this, art. 41. of the Criminal Misdemeanor Law says that “provoking alarm, announcing disaster or a non-existent danger, or performing any act capable of producing panic or turmoil” is liable to a simple prison sentence, from 15 days to six months or a fine.<sup>6</sup> At that, depending on the false news released, some legal penalty may be applied against the people who generated it, in order to avoid further damage to the mental health of the population.

In addition, social isolation can cause psychological pressure mainly on children, young people, and adults, considering that the distance between friends and some family members makes the individual feel lonely and sad, which can lead to episodes of major depressive disorder. Furthermore, depressive symptoms can stimulate a suicide crisis when related to socio-environmental and health vulnerabilities. In this same scenario, isolation also brings psychological risks to the elderly population, as this is a determining factor in triggering serious illnesses, mental disorders, family conflicts and depression. Thus, the levels of stress, agitation and anxiety of the elderly person rise, culminating in the increase of psychosomatic problems in this age group.<sup>7</sup>

Moreover, the population is not yet prepared to deal with social detachment, as this new moment generates doubts about, for example, what to do during the day, how to organize household chores, the home office, and the routine with the family. Associated with this, for some, idle time coupled with the concern about not contracting the new virus and the fear that a family member will develop the disease, as well as the anxieties related to economic issues, can be conditioning factors to trigger some psychological suffering. in individuals.<sup>8</sup>

As a result, if the excessive amount of information, often dissonant, can psychologically affect the members of a family - who are in their homes during social isolation -, the most vulnerable are the health professionals who work on the front lines of the fight against disease. For many of these professionals, the high workload, uncertainties about the availability or depletion of PPE, family distance and the lack of consonant information can be crucial for the development of negative emotional indicators, such as depression and distress.<sup>8</sup>

Then, Brazil needs to fight COVID-19 and, at the same time, plan health policies to care for people with post-pandemic mental suffering. In a review on the subject, including studies related to outbreaks or epidemics published between 2004 and 2019, negative psychological effects were identified, including symptoms of post-traumatic stress, confusion and anger. Stressors included longer quarantine duration, fears of infection, frustration, boredom, inadequate supplies, information, financial loss and stigma, and the effects of this period of social isolation can be long-lasting.<sup>9</sup>

For these reasons, WHO published a guide on mental health care during the pandemic, which guides the reduction of information consumption and the optimization of quarantined time by performing other types of activities at home.<sup>10</sup> Likewise, professionals of Nursing, especially those who are not at the forefront of combating the new coronavirus, can develop forms of health education with a view to sensitizing the population regarding the appropriate use of the means of information, in order to reduce the negative effects of the disease. The health agencies' concern with COVID-19 and the psychological consequences it brings, such as stress and anxiety, which can be intensified by infodemic, is evident.

### Impacts of infodemic on health services and Nursing professionals

In addition to the harmful impacts on the mental health of the population, the infodemic also causes damage to health services and the professionals who work in them, such as those in the area of Nursing. The unbridled dissemination of news can interfere directly or indirectly in the hospital dynamics, causing a lack of personal protective equipment (PPE) and specific medications, overcrowding of health services and a decrease in the team of health professionals.

A study carried out with 1,257 health professionals revealed that female nurses had more intense levels of anxiety, depression, anguish, and insomnia than other professionals, being at the forefront of care for patients infected with SARS-CoV-2. These psychological impacts on health professionals can interfere in the provision of care to patients due to several factors, such as: change in the way the professional treats the patient due to high levels of stress; uncertainties regarding care caused by anxiety; fear of contracting the disease and fear of the contagion and infection of family members and friends.<sup>8</sup> Thus, in addition to the increase in the number of sick

leave of professionals infected by SARS-CoV-2, absences are initiated due to their intense psychological suffering.

Infodemic can also cause overcrowding of health services, since the various symptoms that the condition presents, constantly disseminated by the media, make the population worry even with the slightest sign of cold and have doubts whether or not they have the disease. Furthermore, among the symptoms of anxiety and stress is shortness of breath, so some people confuse this sign with dyspnea, a common symptom of COVID-19, which leads them to seek health services, contributing to their overcrowding. With this, the great demand and the growing number of people being hospitalized with suspicion of having contracted SARS-CoV-2, the number of beds is quickly occupied, lacking for those who are really in need of hospital care.<sup>11</sup>

In addition, the infodemic of the beginning of the pandemic led to the unconscious and unrestrained consumption of masks and other PPE to prevent COVID-19, so that the lack of this equipment is already a common scenario in health services.<sup>12</sup> This fact exposes health professionals to the virus, which may culminate in their refusal to continue the care, primarily those who are closest to the patient, such as nurses. It is known that the reduction in the teams of professionals is inversely proportional to the increase in new confirmed cases, a fact that can also interfere with the quality of care provided to patients with the disease.

It is clear that there must be awareness of the careful handling of news, in view of the dangers that the unbridled dissemination of information can bring to the health system and how it can negatively affect the growing number of individuals with COVID-19 who need emergency care and intensive care.

### Impacts of infodemic on society

Along with the range of new information, many of which are inaccurate, are the fake news that is constant when it comes to the new coronavirus. These have brought alarming impacts to society, such as the indiscriminate use of medicines and a decrease in adherence to the recommendations of social distance.

It is known that studies in search of a specific treatment for COVID-19 have been constantly carried out by science and new articles are being published on the subject, however, so far, nothing has been proven to be really effective. There are rumors that the drugs chloroquine and hydroxychloroquine should be used as a treatment for the disease. However, the scientific evidence on the use of these drugs

for the treatment of COVID-19 is insufficient and there is no evidence available on their benefits, being recommended, by the Pan American Health Organization (PAHO), that they be used only in ethically studies acceptable.<sup>13</sup>

These drugs are commonly used by the population to treat autoimmune diseases and malaria. Therefore, with the dissemination of false news related to them, people started to buy them for indiscriminate use and without indication, ignoring the adverse effects that this can generate, so that these medications were missing for those who really had a medical indication, causing serious problems for public health.<sup>14</sup>

The excess of information has even generated distrust in relation to what has been done to prevent COVID-19. As an example, some news has been published mentioning that the disease is not so contagious, that it does not cause so many ills and that the number of deaths is wrong. This news has had a negative impact on society, as many people do not believe in the potential for morbidity and mortality of COVID-19, not adhering to the recommendations for quarantine, isolation, and social detachment, thus increasing the number of confirmed cases of people who contracted the community-borne disease.<sup>15</sup>

Additionally, the aforementioned impacts of the infodemic on mental health and health services may have a negative impact on society, which may reflect in the increase in the number of individuals who need and will need psychotherapeutic assistance and in the possible progression of the number of deaths from the disease due to insufficient adherence. social isolation, as well as the lack of hospital resources.

## FINAL CONSIDERATIONS

From this perspective, it is possible to perceive the various harmful effects caused by the large number of information conveyed in the media, especially during the period of social isolation. This makes infodemic one of the greatest challenges to be overcome or mitigated by Nursing during the COVID-19 pandemic.

Psychological and social damage and the collapse of health services may be just some of the harmful consequences of a series of other complications that the infodemic can cause. Thus, it is important to highlight the need to carry out research that identifies how infodemic affects people's lives, with a view to supporting intervention strategies that seek to reduce the harmful impacts of the unbridled dissemination of health-related information, especially with regard to health, such as COVID-19.

This can also be achieved through the development and dissemination of educational technologies that aim to prevent the psychological repercussions generated by the infodemic, as well as to sensitize the population about the correct handling of information, in order to reduce the harmful consequences of infodemic, since this phenomenon can surely damage to public health.

Thus, from these reflections, it is understood that national and international mobilization to mitigate the negative impacts of the infodemic is crucial to maintain the mental health of the population and health professionals, for the good functioning of health services and for the good coexistence in society, especially during this critical, unexpected, and unprecedented period of social isolation experienced during this pandemic.

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