

ORIGINAL ARTICLE

BRAZILIAN NURSING IN THE FIGHT AGAINST THE INFODEMIC DURING THE COVID-19 PANDEMIC

Samira Silva Santos Soares¹, Eloá Carneiro Carvalho², Thereza Christina Mó y Mó Loureiro Varella³, Karla Biancha Silva de Andrade⁴, Thaisa Dantas de Oliveira Souza⁵, Norma Valéria Dantas de Oliveira Souza⁶

ABSTRACT

Objective: to analyze, from publications on the Federal Nursing Council website, the lexicon related to the theme of "Fighting the infodemic during the Covid-19 pandemic".

Method: a qualitative research of the documentary type, whose primary sources were reports and news published on the Federal Nursing Council website during the 2020 Nursing Week. Data was processed in the IRAMUTEQ® software. By means of the Descending Hierarchical Classification, the most frequent lexicon of the class that deals with the investigated theme was identified and it was processed from the word cloud.

Result: the most frequent term identified was "*desinformação*" ("disinformation").

Conclusion: excess of information during the pandemic has caused disinformation, since many of the contents that circulate on social networks are inaccurate or false data, which hinders access to the legitimate information that the population and health professionals need at the current moment of the pandemic.

DESCRIPTORS: Nursing; Pandemics; Covid-19; News; Social Media.

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¹Nurse. PhD student in Nursing. Nursing Professor of the Federal University of Rio de Janeiro. Rio de Janeiro, RJ, Brazil. 

²Nurse and Lawyer. PhD in Nursing. Nursing Professor of the Rio de Janeiro State University. Rio de Janeiro, RJ, Brazil. 

³Nurse. PhD in Collective Health. Nursing Professor of the Rio de Janeiro State University. Rio de Janeiro, RJ, Brazil. 

⁴Nurse. PhD in Nursing. Nursing Professor of the Rio de Janeiro State University. Rio de Janeiro, RJ, Brazil. 

⁵Bachelor in Publicity and Advertising. Post-Graduate degree in Business Management. Administration Manager, AMBEV. Rio de Janeiro, RJ, Brazil. 

⁶Nurse. PhD in Nursing. Nursing Professor of the Rio de Janeiro State University. Rio de Janeiro, RJ, Brazil. 

ENFERMAGEM BRASILEIRA NO COMBATE À INFODEMIA DURANTE A PANDEMIA DA COVID-19

RESUMO

Objetivo: analisar, a partir de publicações do site do Conselho Federal de Enfermagem, os léxicos que mantêm relação com a temática “Combate à infodemia durante a pandemia da Covid-19”.

Método: pesquisa qualitativa do tipo documental, cujas fontes primárias foram reportagens e notícias divulgadas no site do Conselho Federal de Enfermagem durante a Semana de Enfermagem de 2020. Os dados foram processados pelo software IRAMUTEQ®. Por meio da Classificação Hierárquica Descendente, identificou-se o léxico mais frequente da classe que trata a temática investigada e este foi processado a partir da nuvem de palavras.

Resultado: o léxico mais frequente identificado foi “desinformação”.

Conclusão: o excesso de informação durante a pandemia tem causado desinformação, já que muitos dos conteúdos que circulam pelas redes sociais são dados imprecisos ou falsos, que dificultam o acesso às informações legítimas que a população e os profissionais de saúde precisam no atual momento da pandemia.

DESCRITORES: Enfermagem; Pandemias; Covid-19; Notícias; Mídias Sociais.

LA ENFERMERÍA DE BRASIL EN LA LUCHA CONTRA LA INFODEMIA DURANTE LA PANDEMIA DEL COVID-19

RESUMEN:

Objetivo: a partir de publicaciones en el sitio web del Consejo Federal de Enfermería, analizar el léxico relacionado con la temática de la “Lucha contra la infodemia durante la pandemia del Covid-19”.

Método: investigación cualitativa del tipo documental, cuyas fuentes primarias fueron reportajes y noticias divulgadas en el sitio web del Consejo Federal de Enfermería durante la Semana de la Enfermería de 2020. Los datos se procesaron en el software IRAMUTEQ®. Por medio de la Clasificación Jerárquica Descendente, se identificó el léxico más frecuente de la clase que trata la temática investigada, y dicho léxico se procesó a partir de una nube de palabras.

Resultado: el término que se identificó con más frecuencia fue “desinformação” (“desinformación”).

Conclusión: el exceso de información durante la pandemia ha causado desinformación, puesto que muchos de los contenidos que circulan en las redes sociales son datos imprecisos o falsos, que dificultan el acceso a las informaciones legítimas que precisan tanto la población como los profesionales de la salud en el momento actual de la pandemia.

DESCRIPTORES: Enfermería; Pandemias; Covid-19; Noticias; Medios Sociales.

INTRODUCTION

The year 2020 will certainly go down in history as the year in which the greatest pandemic of the 21st century occurred – that of Covid-19, a respiratory disease that emerged in late 2019 in China and which quickly spread across the world, reaching several countries on all continents. Caused by a new coronavirus (SARS-CoV-2), the disease quickly changed the routine of society: it caused schools to close, classes to be suspended, and cities to declare a state of emergency and public calamity⁽¹⁾. Especially the health services and the work process in these places were affected, frighteningly impacting on the routine of health professionals. In this way, such a pandemic is characterized as a watershed, which gives rise to a new social paradigm, transforming habits, customs and beliefs, shaping behaviors and practices.

On the other hand, it also makes it possible to expand science and knowledge. In this sense, many studies are being developed in order to better elucidate the action mechanisms of the virus, the incubation period of the disease, and other routes of viral transmission besides the respiratory, among other aspects. But, undoubtedly, the great desire is for research studies to quickly find an effective vaccine and/or drug, capable of combating the new coronavirus, allowing society to return to “normality”.

This desire to cure and deliver the world from a disease that has frightened the population encourages the search for alternative strategies for the prevention of contagion and treatment, and increases the search for information and news that can bring hope or optimism. Conversely, it encourages the exploration of content that can cause disinformation, fear, and tension in the population⁽²⁾.

The importance of conveying clear and suitable information is emphasized in order to prevent a context of panic or inappropriate behaviors, which ends up spreading the disease even more. Reliable information and news are extremely important to guide health professionals and the population on the signs and symptoms, the forms of contagion, and the preventive measures, in addition to possible treatments, contributing to coping with the disease. For this reason, numerous investments are made to promote health education and to socialize content that can provide a healthy life, fight diseases such as Covid-19 and, at the same time, convey safety and tranquility in relation to issues of disease and health⁽²⁾.

One of the forms of socialization of information occurs through the media, both by traditional means (newspapers, television programs, magazines, and radio), and by the new means of communication (social networks, websites, and conversation sharing applications).

The media is a powerful tool for socializing information, as it has spread capacity, that is, it reaches different audiences, varying according to age, gender, lifestyle, academic background, profession, etc. In addition, it has several types of approach, according to the individuals that make up its target audience and, for this reason, it constitutes an important element for health education⁽³⁾, since it manages to address several topics. Thus, it is with the contribution of the media that ways of preventing the disease are socialized: percentage of cured individuals, number of deaths, innovative means of treatment, and most recent research studies, among other subjects.

However, it should be noted that the excess of information fostered by technological growth, mainly linked to digital media, also has a negative side: the rise of fake news. Fake news means wrong information conveyed, whether on purpose or not, which can generate panic or insecurity in people⁽⁴⁾.

In this context, the excess of information and news circulating about the new disease is an object of concern and debate. This situation was called infodemic by the World Health Organization (WHO) and defined as “excess of information, some accurate and some not, which hinders finding suitable sources and reliable guidance when needed”^(5:2).

The situation presented makes it difficult for health professionals to distinguish reliable information from that which is not. To aggravate this context, the population is also subjected to fake news, which spreads exponentially through social networks and media and can harm the real knowledge about the pandemic, as they contribute to generate confusion on the topic⁽⁵⁾. In addition, the infodemic and fakes news have provoked acts of violence against health workers, being the subject of several complaints transmitted by the Regional Nursing Council of São Paulo (*Conselho Regional de Enfermagem de São Paulo*, Coren-SP), based on reports of professionals attacked in public transportation, where, for fear of being contaminated, people attacked them physically and/or verbally⁽⁶⁾.

The infodemic and fake news are responsible for the accelerated increase in low quality information and contribute to the population's disinformation. In this circumstance, the importance of health professionals, especially nurses, is attentive to identify and prevent such information from being disseminated⁽⁵⁾.

Considering that Nursing, in addition to acting on the front line of fighting the pandemic, is strategic for facing the infodemic and fake news, it was considered relevant to outline the following objective for this study: to analyze, based on publications on the Federal Nursing Council (*Conselho Federal de Enfermagem*, Cofen), the lexicon that is related to the theme of "Fighting the infodemic during the Covid-19 pandemic". Such lexicon will be presented through a word cloud, in order to characterize and clarify their inter-relations and importance in the context of facing the pandemic, fake news, and the infodemic.

It is understood that contextualizing fakes news and the infodemic is a relevant strategy for coping with Covid-19. In particular, it is considered that Nursing, in addition to providing direct assistance to people infected with the new coronavirus, should also assume, in a more alert manner, its educational role and its commitment to the truth of the facts, particularly at this unusual and pandemic complex.

METHOD

A qualitative study of the documentary type, whose primary sources included the reports and news published on the Cofen website, in the "Notícias" ("News") page of the "Imprensa" ("Press") menu.

Data collection consisted of cataloging news and reports published during the 2020 Nursing Week. Therefore, the time frame considered May 12th as the initial milestone and the May 20th as the final milestone, those dates being the International Nurses Day and the National Nursing Assistants and Technicians Day, respectively.

With the aid of the *Interface de R pour les Multidimensionnelles de Textes et de Questionnaires* (IRAMUTEQ®) software, the lexical analysis of the words was performed. Lexicon means the understanding/interpretation of a word in a given context. For the data to be submitted to IRAMUTEQ®, the corpus was prepared (grouping all the material to be analyzed in a single document), reading the material to have a general notion of the themes of the publications, and processing the data itself using the aforementioned software.

For the purposes of this study, it was decided to use analysis using the Descending Hierarchical Classification (DHC) and the word cloud. DHC separates the corpus into classes and each class is composed of a vocabulary similar to each other and, at the same time, different from the other classes, so that, at the interpretive level, the meaning of the classes depends on the theoretical framework of each research study⁽⁷⁾. The word cloud, on the other hand, is a simple lexical analysis, but graphically interesting, since from it, words are grouped and organized according to their frequency in the textual corpus.

In the present study, the class analyzed aims to answer the objective of this article; and the word cloud, to support the lexical analysis of the class by displaying the most frequent words identified in the publications available on the Cofen website.

It is worth considering that the word cloud was processed from the identification of the most frequent lexicon in the studied class and that the words with a frequency equal to or greater than 10 in the corpus were selected. Thus, after the processing stage, the analysis and interpretation of the meaning of the words was used in the context of the selected publications, making it possible to establish the interpretation of the data, comparing the findings with the literature.

In the presentation of the results, at the end of the text segments (main units of textual analysis of this type of software) there is the identification of the publication, by means of the "P" coding, followed by an Arabic number that indicates the chronological sequence of publication and capture fulfilled.

As it does not directly involve human beings, and since the data was collected on a public (free) website, there was no need for submission and evaluation of the material by a Research Ethics Committee.

It is also worth considering that, at the end of each material published on the Cofen website that was originally from other sources, the proper identification of authorship was inserted, thus observing the copyright of the respective publications.

RESULTS

A total of 30 publications were identified, which constituted the general corpus of the analysis. The processing of data by IRAMUTEQ® resulted in the identification of 529 text segments, of which 399 were used, representing a total of 75.43% of the researched material.

By the DHC method, the corpus was divided into five classes. One of them deals with the theme that this article intends to discuss and was entitled "The Covid-19 pandemic and the fight against fake news". This class represents 17.54% of the material submitted for analysis and retains 70 text segments. The most frequent term in this class was "*desinformação*" ("disinformation"), evoked 23 times in this context. The processing of this lexicon by the word cloud method highlighted other words that help in understanding the theme.

Figure 1, which presents the word cloud displayed by IRAMUTEQ®, positions words randomly, so that the most frequent ones appear larger than the others, in order to highlight their prominence in the class.

to recognize the value of science and that it is necessary to join efforts to combat fake news and disinformation within the scope of the Covid-19 pandemic.

The Cofen adheres to the letter from the health professionals against fake news. The campaign calls on social networks to change algorithms and notify users exposed to fake news about Covid-19. (P7)

Fake news channels have more reach than official data... and rarely mention official sources or recommendations from health authorities. (P30)

Against lies, health professionals demand action from the technology giants. Tired of facing the coronavirus pandemic and still having to deal with fake news on social networks, doctors, researchers and nurses demand a new policy from Facebook, Twitter, Google and Youtube. (P8)

DISCUSSION

In 1918, due to the Spanish flu, printed newspapers and magazines of the time published photographs and narrated the impacts of the disease. In 2009, influenza A (H1N1) had great repercussions in the media, but it only caused occasional changes in social habits. In 2020, the greatest health crisis of the 21st century is being experienced, the Covid-19 pandemic and, in the midst of this event, there is a high volume of information and true and false news, disseminated mainly through non-formal channels, such as messaging applications, media, and social networks⁽⁸⁾.

It is evident that the fact that more than three billion people around the world need to adhere to social isolation or quarantine has helped the media, using information technology, to keep the global population connected and in close relationship with governments, research institutes, and the WHO, among others⁽⁸⁾. Information technology (IT) is understood as the combination of activities, solutions, and recommendations provided by computer resources that are intended for the elaboration, storage, transmission, access, safety, and use of information. It is highlighted that the media can use resources linked to IT, such as smartphones, computers, and tablets, to convey information and news⁽⁹⁾.

If, on the one hand, access to information technology contributes to the continuity of work and school classes, it helps to reduce social distancing and is useful to share news and manage and divide knowledge, on the other hand its use implies the development of skills to use resources appropriately. In this perspective, attention should be paid to issues of cybersecurity or information security to guarantee that the rights to privacy, ethical use, and confidentiality of personal data, and management of false expectations are protected, among other aspects⁽⁸⁾.

During the Covid-19 pandemic, in addition to facing isolation, quarantine, lockdown, and social distancing, among other health control recommendations, the WHO also declared that a huge infodemic is being experienced⁽¹⁰⁾.

Access to false or inaccurate news generates disinformation and can affect people's mental health, make them more anxious, depressed, and emotionally exhausted, leading to behavioral changes and further increasing risks during the pandemic. In addition, it hinders access to reliable guidance, which can affect decision-making processes, especially when there is not enough time to carefully analyze the evidence, sources, and quality of what has been published⁽⁸⁾. Thus, it is essential that society, governments, health authorities, and health professionals and academics unite in the fight against the infodemic and the transmission of fake news^(8,11).

It is worth highlighting that fake news is not a recent problem, which arose through

technology. False news can happen through simple conversations between people, but with the development and growth of technological means, they have gained more strength and impact on society⁽¹¹⁾.

There are strategies to combat deceptive information and news, among which the importance of confirming the source of receipt of the message, checking if there is scientific evidence about what is being conveyed and, when in doubt about the veracity of the content, not sharing it, limiting dissemination. The WHO and the Brazilian Ministry of Health have availed on their websites a space to combat fake news, clarifying divergent and false news circulating through chat apps, networks, and social media. In addition, they provided a telephone number to answer questions about the Coronavirus and the Covid-19 pandemic through the WhatsApp® application^(4,8).

It is asserted that the population's desire to cure the disease causes the multiplication of news of home recipes and recommendations from opportunistic health professionals, who, in order to obtain personal promotions in the media, disseminate methods and procedures that theoretically would have potential for prevention and treatment of Covid-19 without, however, offering any proof of efficacy, therefore expressing opinions and not knowledge^(12,13). In the same way, unscrupulous religious leaders exploit the faith of their followers by promising cures with fanciful interpretations of the divine word to inculcate the use of medications or conducts without scientific support⁽¹⁴⁾. Such news is disseminated through social media, confusing and offering a false sense of security to the population.

In an open letter, physicians, nurses, and health professionals from all over the world denounced the repercussions of this fallacious news and made a call, through an international campaign against fake news about the new Coronavirus, for the social media platforms to position themselves more energetically to solve the chaos resulting from this type of news associated with Covid-19⁽¹⁵⁾. The letter, signed on May 13th, 2020 by the Cofen during Nursing Week, indicates as an important measure to be taken by these platforms the correction of false information to users who have interacted with disinformation content about health. They also emphasize the need to change the algorithm that describes the access contents, in order to reduce and remove incorrect information, instead of expanding it⁽¹⁵⁾.

According to the global ranking of fake news disputes, from the beginning of the pandemic until June 8th, 2020, Brazil holds the world record for fallacious news about the number of cases and deaths due to Covid-19, with 34 checks of disinformation news items, raising uncertainties about these data. The country is followed by the United States, with 24 false checks⁽¹⁶⁾. Interestingly, these are precisely the countries that occupy the second and first place in the world, respectively, in the list of case monitoring carried out by the Johns Hopkins University⁽¹⁶⁾.

Corroborating the problem, on June 5th, 2020, the Brazilian government decided to modify the methodology for disclosing data related to Covid-19 deaths and cases, since the Ministry of Health failed to report the accumulated data from the beginning of the pandemic, communicating only the numbers obtained in the last 24 hours⁽¹⁷⁾. This measure was widely criticized by experts from the country and from the world. Based on this episode, the National Council of Health Secretaries (*Conselho Nacional dos Secretários de Saúde*, CONASS) created a panel with all the data from Brazilian states and partnered with the media to disseminate them⁽¹⁷⁾. On June 9th, 2020, the Federal Supreme Court (*Supremo Tribunal Federal*, STF) determined that the government should again release the data in full⁽¹⁷⁾.

It can be seen in Brazil that most of the fake news circulating during the pandemic has a strong political influence. However, the consequences of these narratives are not limited to political aspects since, faced with divergent and fallacious messages, the population does not know who or what content they can trust^(8,17) and, unfortunately, assimilates false news easily and quickly, certainly in virtue of its multiple faces, contents, and contours.

This study has a time limitation, considering that data collection occurred only in the

period from May 12th to May 20th, 2020. In addition, not all the news items circulating in the country during that period were assessed. However, it is understood that it is possible that other studies may follow the same methodological design, but with greater extension of the time frame and diversification of the data collection source.

The option for the online documentary research was made in order to overcome the difficulty related to conducting a survey in the midst of the Covid-19 pandemic, in which social distancing has been requested.

The main contribution of the study is that, when using the IRAMUTEQ® software, it was possible to employ statistical calculations on qualitative data (the publications) that pointed out the word “disinformation” as the most frequent. In addition, the concern of nursing professionals with such disinformation, which can threaten lives and be used politically and without scientific evidence, was clear.

It is suggested to deepen and expand studies on the fight against the infodemic and fake news, as well as the elaboration of other documentary research studies that may contribute to the historical context of the greatest pandemic of the 21st century.

FINAL CONSIDERATIONS

The study made it possible to discover, through the Descending Hierarchical Classification, the most frequent vocabulary in the context of the discussion about the Covid-19 pandemic and the fight against fake news.

The word “disinformation” was the most frequent and was highlighted in the word cloud. Thus, the nurses’ concern with fallacious information and excessive news without evidence from a reliable source was evidenced, which is characterized as another means of weakening the confrontation of Covid-19.

The software also allowed for a careful look at the publications and revealed that the excess of information that has been reported during the pandemic has caused disinformation, since most of the content that circulates on social networks is inaccurate or false.

However, it is considered that, during the period of the Covid-19 pandemic, the WHO, government bodies, and research bodies have as main ally the means of mass dissemination. Thus, it is recommended that there be a partnership with the mainstream media so that the correct information that needs to more easily reach the population is disseminated, hindering the spread of fake news.

In addition, there must be an individual commitment to check if the news received is true, not sharing it in case of doubt. Furthermore, it is worth highlighting that there are already technological tools on social networks (Instagram®, Twitter®, and Facebook®) that determine whether the news is fallacious or not, and, in case it is not true, they automatically inform the reader about this condition. It is necessary that more and more people use these tools to prevent fake news. It is recommended that the media, in partnership with governments, systematically carry out awareness raising campaigns about the risks of false news, how to detect them, and how not to spread them.

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Corresponding author:

Samira Silva Santos Soares

Universidade Federal do Rio de Janeiro

R. Afonso Cavalcanti, 275 - 20211-110 - Rio de Janeiro, RJ, Brasil

E-mail: samira_opg@hotmail.com

Role of Authors:

Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work - SSSS, ECC, TCMMLV, KBSA, TDOS, NVDOS

Drafting the work or revising it critically for important intellectual content - SSSS, ECC, TCMMLV, KBSA, TDOS, NVDOS

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