Global Academic Nursing Journal

REVIEW ARTICLE

Analysis of the epidemiological profile of nursing professionals affected by COVID-19: repercussions for care

Análisis del perfil epidemiológico de los profesionales de enfermería afectados por la COVID-19: repercusiones para el cuidado

Análise do perfil epidemiológico dos profissionais da enfermagem acometidos pela COVID-19: repercussões para assistência

Hérica Felix de Oliveira[1]
ORCID: 0000-0003-4915-541X
Aline Silva da Fonte Santa Rosa de Oliveira[1]
ORCID: 0000-0002-4070-7436
Suely Lopes de Azevedo[2]
ORCID: 0000-0003-1107-3427
Cláudio José de Souza[1]
ORCID: 0000-0001-7866-039X
Raquel de Oliveira Laudiosa da Motta[2]
ORCID: 0000-0002-4061-4547
Natália Anisia Costa Marques[1]
ORCID: 0000-0003-4171-7238

[1]Faculdade Bezerra de Araújo. Rio de Janeiro, Brazil.
[2]Universidade Federal Fluminense. Rio de Janeiro, Brazil.

How to cite this article:
Oliveira HF, Oliveira ASFSR, Azevedo SL, Souza CJ, Motta ROL, Marques NAC. Analysis of the epidemiological profile of nursing professionals affected by COVID-19: repercussions for care. Glob Acad Nurs. 2022;3(1):e222. https://dx.doi.org/10.5935/2675-5602.20200222

Corresponding author:
Hérica Felix de Oliveira
E-mail: hericafeliiix@gmail.com

Chief Editor: Caroliny dos Santos Guimarães da Fonseca
Executive Editor: Kátia dos Santos Armada de Oliveira

Submission: 01-03-2022
Approval: 01-20-2022

Abstract

The aim was to describe the epidemiological profile of nursing professionals affected by COVID-19 in Brazil. This is an integrative review with a qualitative approach, using secondary information from public sources available at the Nursing Observatory of the Federal Council of Nursing. Data collection was carried out in August 2021, on the Virtual Health Library Portal, in the databases: LILACS, in the electronic library SciELO, BDENF, MEDLINE. It was identified that, 58,121 reported cases of nursing professionals infected by COVID-19 in Brazil, the total number of deaths corresponds to 858 cases with a case fatality rate of 2.65%. The case and mortality rates of nursing professionals affected by the virus are high and there is a significant difference in the number of cases between the years 2019 and 2021, so protecting the health of professionals working in the area is of paramount importance, since that they have direct contact with the infected person.

Descriptors: Pandemics; COVID-19; Epidemiology; Nursing professionals; Nursing.

Resumén

El objetivo fue describir el perfil epidemiológico de los profesionales de enfermería afectados por COVID-19 en Brasil. Se trata de una revisión integradora con enfoque cualitativo, utilizando información secundaria de fuentes públicas disponibles en el Observatorio de Enfermería del Consejo Federal de Enfermería. La recolección de datos se realizó en agosto de 2021, en el Portal de la Biblioteca Virtual en Salud, en las bases de datos: LILACS, en la biblioteca electrónica SciELO, BDENF, MEDLINE. Se identificó que, 58.121 casos notificados de profesionales de enfermería infectados por COVID-19 en Brasil, el total de óbitos corresponde a 858 casos con una tasa de letalidad de 2,65%. Las tasas de casos y mortalidad de los profesionales de enfermería afectados por el virus son altas y existe una diferencia significativa en el número de casos entre los años 2019 y 2021, por lo que proteger la salud de los profesionales que trabajan en el área es de suma importancia, ya que tener contacto directo con la persona infectada.

Descriptores: Pandémies; COVID-19; Epidemiología; Enfermeras Practicantes; Enfermería.

Resumo

Objetivou-se descrever o perfil epidemiológico dos profissionais de enfermagem acometidos pela COVID-19 no Brasil. Trata-se de uma revisão integrativa de abordagem qualitativa, utilizando informações secundárias presentes em fontes públicas disponíveis no observatório de Enfermagem do Conselho Federal de Enfermagem. A coleta de dados foi realizada no mês de agosto de 2021, no Portal da Biblioteca Virtual em Saúde, nas bases de dados: LILACS, na biblioteca eletrônica SciELO, BDENF, MEDLINE. Identificou-se que, 58.121 casos reportados de profissionais de enfermagem infectados por COVID-19 no Brasil, o total de óbitos corresponde a 858 casos com uma taxa de letalidade de 2,65%. São altas as taxas de casos e mortalidade de profissionais da enfermagem acometidos pelo vírus e há uma diferença significativa do número de casos entre os anos de 2019 e 2021, desta forma proteger a saúde dos profissionais que atuam na área é de suma importância, uma vez que os mesmos têm contato direto com a pessoa contaminada.

Descritores: Pandemias; COVID-19; Epidemiologia; Profissionais da Enfermagem; Enfermagem.

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Introduction

In December 2019, the novel Coronaviridae family virus (originally named 2019-nCoV novel coronavirus, later renamed SARS-CoV-2), appeared in Wuhan, Hubei Province, China and has since spread to more from 27 countries, crossing continents, even arriving in Brazil. The World Health Organization (WHO) clarifies that this virus can cause a respiratory syndrome leading to a serious illness called Severe Acute Respiratory Syndrome[1].

According to the Pan American Health Organization (PAHO) in January 2020, seven identified types of coronavirus (HCoV) were found: HCoV-229E, HCoV-OC43, HCoV-NL63, HCoV-HKU1, SARS-CoV (of which causes severe acute respiratory syndrome), MERS-CoV (in turn causing Middle East respiratory syndrome). The virus found in China was initially named 2019-nCoV, however in February 2020 it was named SARS-CoV-2. Transmission occurs from person to person through respiratory droplets. SARS-CoV-2 proves the pattern of human infection, partially to other coronaviruses, especially severe acute respiratory syndrome (SARS-CoV)[2].

SARS-CoV-2 is an RNA virus, so, although enzymes re-read the genetic code, it is possible for mutations to occur rapidly in the midst of replication. Therefore, currently, the variants that have undergone a series of mutations that are of concern are Brazilian, South African and British[3].

In January 2020, the WHO declares the epidemic of the new coronavirus (SARS-CoV-2) as a Public Health Emergency of International Concern (ESPII), thus, it was identified as the organization's greatest alert, being analyzed in the Health Regulations. International. In March 2020, the disease COVID-19 was defined as a pandemic[2,4].

The first case of COVID-19 in South America was found in Brazil, in the state of São Paulo on February 26, 2020, the victim was a male patient, 61 years old, who arrived from Italy, causing alert in the country. In approximately one month (March 20, 2020), viral infection was decreed throughout the national territory[5].

In the year 2020, there were great difficulties in relation to the fight against the disease, the lack of Personal Protective Equipment (PPE), the work overload, the shaken mental health, and the lack of knowledge about the fight against the disease, among other factors, caused that, despite all care, the infection by the virus occurred, which led many professionals to deaths[6].

Many professionals in the country do not have the experience to work in large emergencies, so this fact associated with the fight against COVID-19 is one of the reasons for many infected and dead professionals. Among the groups most affected by COVID-19 are health professionals, with nursing professionals being the most affected, with the highest number of deaths[7].

It is important to highlight that the workforce in the health teams is not homogeneous, presenting distinction of gender, race and social class, reverberating in professional training, as well as in the insertion in the labor market, reflecting in the daily work relationships within the scope of the health services[8].

Thus, it is undeniable that nursing professionals constitute the greatest risk group for COVID-19, as they are in every way directly exposed to infected patients, providing nursing care at all levels of complexity. In this sense, several factors influence, such as work overload, generating stress when caring for patients in complex situations, the fear of an unknown virus with high lethality rates and the working conditions that these professionals are subjected to[7].

In May 2020, 88 nursing professionals died, 215 were hospitalized and 9,778 were in quarantine, with a mortality rate of 2.44%. According to the Nursing Observatory of the Federal Nursing Council (COFEN), in July 2021 the notification of nursing professionals with deaths from the disease reached 838, with a total of reported cases of 57,626 professionals[9].

More than 1.5 million nursing workers dealing daily with new cases and hundreds of deaths caused by COVID-19 have been reported. Nursing teams are facing difficult days, as they perform important services, since the situational framework of these professionals in the midst of the pandemic is critical[7].

According to the COFEN observatory, until August 2021, the total number of nursing professionals affected by COVID-19 was 58,035 reported cases. [10].

There is a lot of research on the SARS-CoV-2 virus, however, the mortality and death rates of professionals from the disease are high, in this way, the pandemic has generated great impacts and challenges in the health area. In view of this scenario, the unique and singular importance of the nursing team's performance in dealing with the COVID-19 pandemic is evident. In this context, there is an interest in carrying out the research to know the epidemiological profile of the nursing team that assists the patient with COVID-19.

Thus, the objective outlined was to describe the epidemiological profile of nursing professionals affected by COVID-19 in Brazil.

The motivation for carrying out this research arose from the perception of the high number of cases of nursing professionals who were affected by COVID-19 in Brazil.

Health professionals are vulnerable groups because they are in direct contact with the sick. Due to the pandemic, there was a need to increase the workload of these professionals, causing physical and psychological overload, affecting their well-being and health.

In addition to these factors, the precariousness of the work process, the lack of infrastructure, supplies and Personal Protective Equipment (PPE), the new hiring of inexperienced professionals, among other recurring problems, contributed to the illness of those who work in the line facing.

It is clear that the morbidity and mortality rates of nursing professionals are high and the precariousness of working conditions significantly influenced the high rate of cases.

Therefore, the reflection that the COVID-19 pandemic generated in the nursing team across the country, demonstrates the importance of tracing the epidemiological profile of professionals who work on the front line, in particular those in nursing, so that there is promotion of

conditions of efficient work and provision of material and human resources by health managers and public authorities.

Methodology

This is a review of the integrative type with a qualitative approach, using secondary information present in public sources available at the COFEN Nursing Observatory.

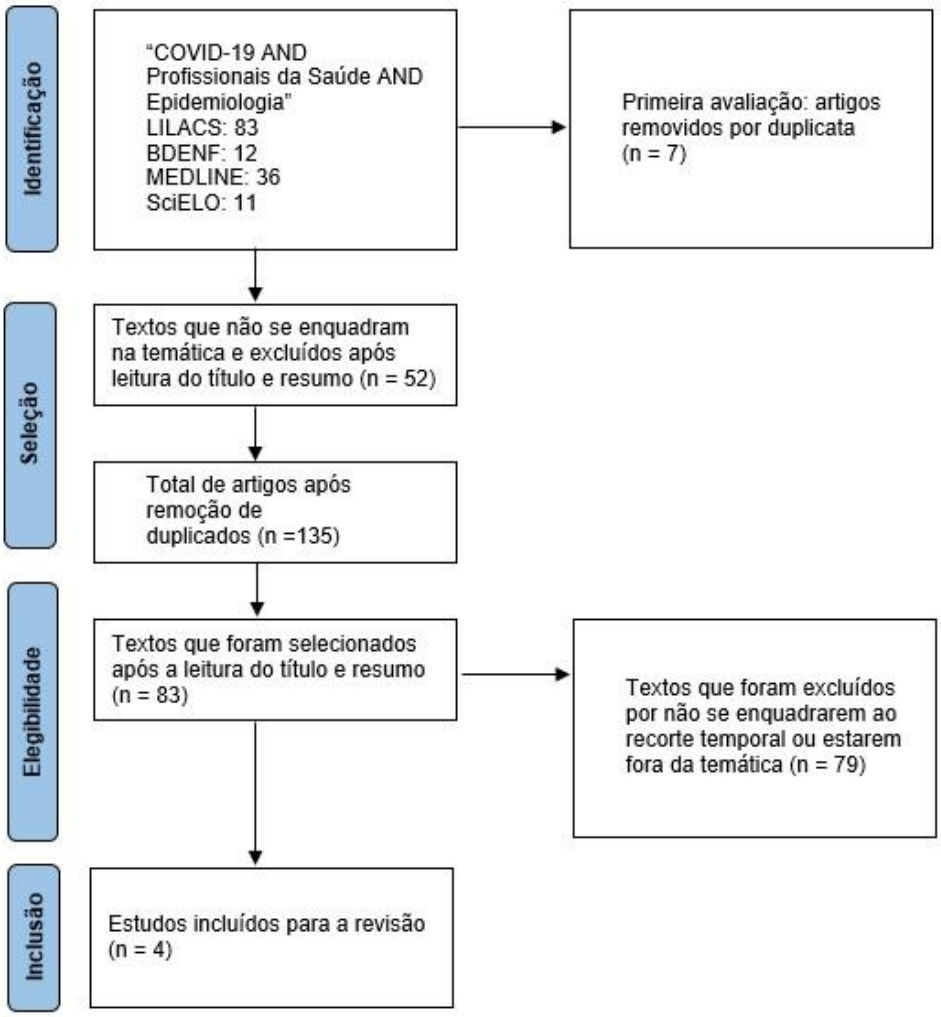
The methodology is understood as a flexible set of guidelines that link theoretical paradigms to research strategies and methods for the collection and analysis of empirical materials. Methodologies are composed of epistemological, metatheoretical, ontological premises that determine the choice of strategies or methods that, in turn, anchor these paradigms in specific empirical terrains or in a specific methodological practice. Thus, methodology refers to more than a simple set of methods or procedures[11].

According to studies, an integrative review is defined as a method that allows the synthesis of knowledge and the incorporation of the results of significant studies in practice. It must be carried out through 6 steps: The first is the choice of the theme and the guiding question; The second is to establish the inclusion and exclusion criteria; The third, to define what contents can be extracted from the articles read; The fourth is the evaluation of selected studies; The fifth interpretation of data; and the sixth the synthesis of acquired knowledge[12].

Research is defined as a way of studying an object. This study is systematic and carried out with the aim of incorporating the results obtained into communicable and proven expressions at the levels of knowledge obtained[13].

The qualitative-quantitative research modality "interprets quantitative information through numerical symbols and qualitative data through observation, participatory interaction and interpretation of the subjects' discourse (semantics)"[14].

Figure 1. Flowchart of the filtering steps of the articles selected in the Systematic Review. Rio de Janeiro, RJ, Brazil, 2021



Data collection was carried out in August 2021, in the Virtual Health Library Portal and in the databases: Latin American and Caribbean Health Sciences Literature (LILACS), in the Scientific Electronic Library Online (SciELO), Nursing Databases (BDENF), Medical Literature Analysis and Retrieval System Online (MEDLINE).

It was used as a guiding question: What are the characteristics of nursing professionals affected by COVID-19 available in the scientific literature?

Articles published in full and in Portuguese, English and Spanish, with the time frame in the last two years (December 2019 and 2021) and that met the objective of the study, were included in the studies. Studies that were not in full in other languages and outside the time frame were excluded.

In the bibliographic research, the descriptors were addressed: Pandemics, COVID-19, Epidemiological profile, Nursing and nursing professionals with the Boolean operator AND.

Data collection was also carried out virtually through the COFEN National Nursing Observatory website.

The data were obtained from digital platforms in the public domain, therefore, there was no need for authorization from the Research Ethics Committee to proceed with obtaining the information. Figure 1 presents the PRISMA flowchart, with the details of how the research was carried out.

It was possible to collect data and identify: the total number of cases reported by UF, state and sex, deaths by UF and lethality; cases of nursing professionals (accumulated data) and deaths of nursing professionals (accumulated data); moving average of cases and deaths of nursing professionals.

Therefore, only publicly available data for scientific studies were presented in the survey.

After data collection, all data were grouped and separated, verified and analyzed. After this organization, a survey was carried out and the results obtained were considered through the Tables.

Data regarding nursing professionals were analyzed using the information contained in secondary sources in the public domain that can be found in the Nursing Observatory that is available virtually by COFEN and the other observations were identified and analyzed through the truthful searches found on the VHL portal and in the SciELO, LILACS, BDENF and MEDLINE databases.

Results and Discussion

The methodological information present in the 04 articles that made up the final selection of this systematic review were collected and compiled in a chart (Chart 1), considering the following topics of interest: Theme, Year of publication, Authors, Journal and Study Results.

Chart 1. Information collected from selected articles from the Systematic Review. Rio de Janeiro, RJ, Brazil, 2021

Theme	Authors	Year	Results
Segurança dos profissionais de saúde no enfrentamento do novo coronavírus no Brasil	Santana, Neuranides et al	2020	Two Brazilian states report cases of COVID-19 among health professionals, totaling 181,886. Among all the capitals of the country, 12 provide information. Some recommended measures are engineering control, security, administrative, safe work practices and personal protective equipment. The repercussions involve mental health, psychological complications, psychological and psychiatric disorders.
Descrição dos casos hospitalizados pela COVID-19 em profissionais de saúde nas primeiras nove semanas da pandemia no Brasil	Duarte, Magda Machado Saraiva et al.	2020	Of the 184 cases, 110 (59.8%) were female, with a median age of 44 years (minimum and maximum: 23-85); 89 (48.4%) were nursing professionals and 50 (27.2%) were physicians. Also, 92 (50.0%) had comorbidity, predominantly heart disease (n=37; 40.2%). Of the 112 professionals with an evolution record, 85 (75.9%) were cured and 27 (24.1%) died, 18 of these were male.
A face feminina na linha de frente contra a pandemia de COVID-19	Santos, Betânia Maria Pereira dos.	2020	Women account for 70% of human resources in Health and 85% of Nursing teams in Brazil, a historically female profession. The pandemic had a negative impact on 95% of health workers, potentiated by the double shift and care for dependents, in the case of women.
Letalidade da COVID-19 entre profissionais de saúde no Pará	Campos, Ana Cristina Viana; Leitão, Luciana Pereira Colares	2021	Among the 15,332 confirmed cases of COVID-19, 70.3% were female and 61.3% were aged between 30 and 49 years (39.2±11.6 years). There were 97 deaths, with a case fatality rate of 0.6%. The probability of death was 52.8 times (20.7-134.5) and 4.0 times (2.5-6.2) higher among young people and men when compared to other notifications.

According to studies, in September 2020, there were a total of 181,886 cases of health professionals affected by COVID-19 in 22 Brazilian states. The capital of São Paulo took first place, with 31,085 cases confirmed by capitals with the COVID-19 disease among health professionals. However, in terms of confirmed cases by states, the authors identified that Bahia had the highest number of professionals infected with the virus, with 24,568 cases[15].

Previous studies have identified that the federative units with the highest occurrence of health professionals with COVID-19 were São Paulo with 54.9% cases, Amazonas being 8.2% of cases and Santa Catarina with 7.1% cases. Of these health professionals, 48.4% of the cases are in the nursing area, 27.2% are in medicine and 15.8% are other

professionals, so it is possible to analyze that nursing is in the first place of the most affected by COVID -19 in the survey carried out by the authors[16].

The data contained in the nursing observatory in August 2021 (Figure 3), show a total of 58,121 reported cases of professionals with COVID-19 in Brazil, however, the state of São Paulo is more prominent in relation to other Brazilian states, since it presents 9,837 cases of nursing professionals affected by the disease and 104 deaths. The state of Bahia, takes the second place with 6,768 cases, however, the number of deaths is 19 cases, in this way, it is important to highlight Amazonas, which has 288 cases of nursing professionals affected by COVID-19, and however, the number of deaths is high, with 82 deaths[17].

The Nursing observatory revealed that the Southeast Region is the one with the most health professionals affected by COVID-19 and the highest number of deaths. Based on the data contained in the Brazilian Institute of Geography and Statistics (IBGE), the Federative Unit of São Paulo has an estimated population of 12,396,372 people, making it the most populous in Brazil[18].

This data may explain why the federative unit of São Paulo has the highest rate of health professionals affected by COVID-19 and with high numbers of deaths and the Southeast region has a high percentage of affected by the disease.

Another study analyzed that women are the most affected by COVID-19, because of the 184 cases of hospitalized health professionals, 110 were female, and therefore, 74 cases were male[16]. Authors highlighted that among the confirmed cases of COVID-19, 70.3% were female[19].

The COFEN nursing observatory in August 2021 showed that the percentage of cases of female professionals affected by COVID-19 was 85.35% cases (Figure 8) and the death rate was 63.30% cases (Figure 8), while the male case rate was 14.66% and the mortality rate was 31.13%. The total number of deaths of professionals was 858 cases and the case fatality rate was 2.65%[17].

It is noticeable that the female population is the most affected by COVID-19. Studies have identified that in the field of health professionals, women make up 70% of the health teams and with regard to the nursing workforce, they occupy 85%[27].

According to the studies, it was identified that of the 15,332 cases of health professionals with COVID-19, 61.3% of the cases with the disease were in the age group of 30 to 49 years and female and the case fatality rate was 0.6%. As for the death rate, among women, the rates were low between 18 and 34 years old. In the Nursing observatory, it was shown that the age group with the highest number of affected cases was between the age group 31 to 40 years and the high number of deaths between the age group 41 to 50 years[19].

In the history of work in the area of nursing, care was performed mainly by women, this because they developed the role of caring at home and, in the future, also took care of other people. In this way, it is noted that since the origin of Modern nursing with Florence Nightingale, the female sex has always been the greatest force in nursing, in this case, it is understood the reason for the professionals who are most affected and who die by COVID-19 in Brazil are female[20].

Another factor associated with the issue of gender refers to the fact that women take more care of their health. Women tend to be more concerned about their health; therefore, they attend more health units for health promotion and disease prevention or even in search of treatment, check-ups, among others, thus facilitating the diagnosis of pathologies. On the other hand, most men have the habit of seeking hospital units in cases of emergency or even at the request of their partner. This data demonstrates that, despite the search for emergency units, due to the delay in seeking treatment, health damage occurs, making treatment and early diagnosis difficult[21].

Studies also report that in relation to the safety of health professionals in the midst of the new coronavirus pandemic, the importance of using personal protective equipment (PPE) was identified and discussed the protection of physical and mental health that was extremely impaired by the peculiarities of the pandemic[15].

It is identified that the case and mortality rates of nursing professionals affected by COVID-19 are high. In this way, protecting the health of professionals working in the area is of paramount importance, since they have direct contact with the person contaminated by the virus. Thus, it is important to adopt measures to control infection by contact, by air, and the availability of PPE so that there is adequate protection of professionals. The mental health of professionals also needs to be safe, since many are experiencing physical and emotional exhaustion, which contributes to these professionals being susceptible to the disease, since the more vulnerable the health, the greater the risk of contamination[7].

In line with the aspects described above in the text, it is clear that the consequences of COVID-19 for the health of health professionals, especially professionals in the nursing team, are based on physical and psychological suffering and its sequelae. Many causes identified influenced the large number of deaths and illnesses of these professionals, including overload and exhaustion of workers, lack of professionals to meet the demands, absence or reduction of personal protective equipment, low qualification and insufficient testing, lack of training to act in the different stages of the disease[22].

It is corroborated that it points to the high rate of cases and deaths from COVID-19 in the national territory, requiring a reorganization of health services due to the deficiency in the physical structure and in the training of human resources to meet the new demands generated by the COVID-19 pandemic[23].

Outlining the profile of nursing professionals affected by COVID-19

With the aggravation of the risk of collapse of health systems, there is concern about professionals in this area who work directly in the fight against the COVID-19 pandemic, given their evident exposure to SARS-CoV-2,

combined with a common scenario of precarious working conditions due to the sanitary situation[24].

Studies indicate that the lack of material supplies, such as gloves, masks, syringes, aprons and other appropriate equipment represent 46.8% of the causes that define the increase in susceptibility in the health field, especially for nursing. In this sense, it is categorical that the pace and pressure of the volume of work activities account for 51.2% of these reasons[20,25].

In the midst of the current pandemic context, it is believed that this scenario can still be aggravated by the work overload, the high transmissibility and mutability of the Coronavirus and, above all, the constant use of specific personal protective equipment[26].

It was possible to identify through the Nursing observatory, made available by the Federal Nursing Council (COFEN) that 58,121 reported cases of nursing professionals infected by COVID-19 in Brazil, the total number of deaths corresponds to 858 cases with a case fatality rate of 2, 65%[17].

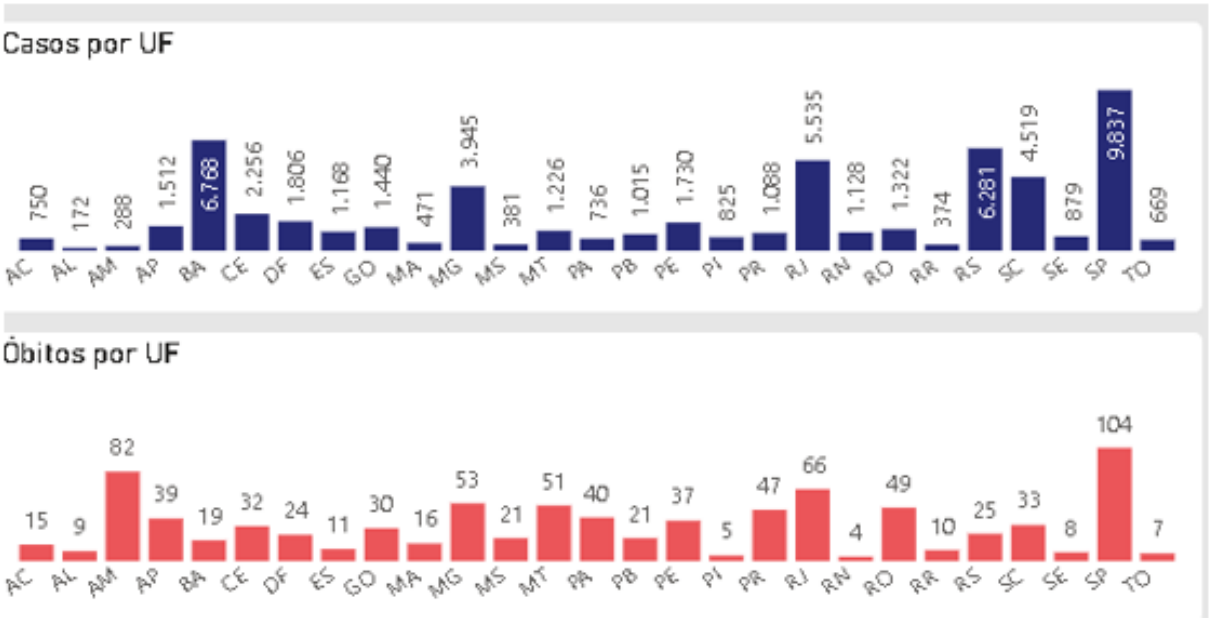
Figure 2. Nursing professionals infected by COVID-19 informed by the COFEN health service. Rio de Janeiro, RJ, Brazil, 2021

Source: COFEN, 2021.

The federative units (FUs) with the highest number of cases of health professionals affected by COVID-19 were: São Paulo with 9,837 cases, followed by Bahia with 6,768 cases, Rio Grande do Sul with 6,281 cases, Rio de Janeiro with 5,535 cases and Minas Gerais with 3,945 cases. The other Brazilian states have a total of 2,256 and the lowest of 172 cases.

In relation to deaths, the Federative Unit stands out São Paulo with 104 deaths, followed by Amazonas with 82 deaths, Rio de Janeiro with 66 deaths, Minas Gerais with 53 deaths and Mato Grosso with 51 cases.

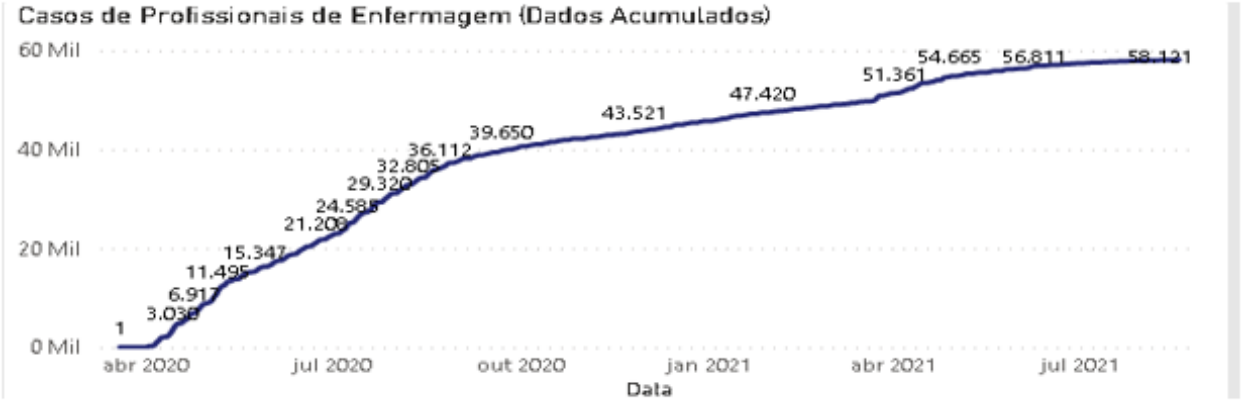
Figure 3. Table of cases of nursing professionals by UF and deaths by UF in the Nursing observatory provided by COFEN. Rio de Janeiro, RJ, Brazil, 2021



Source: COFEN, 2021.

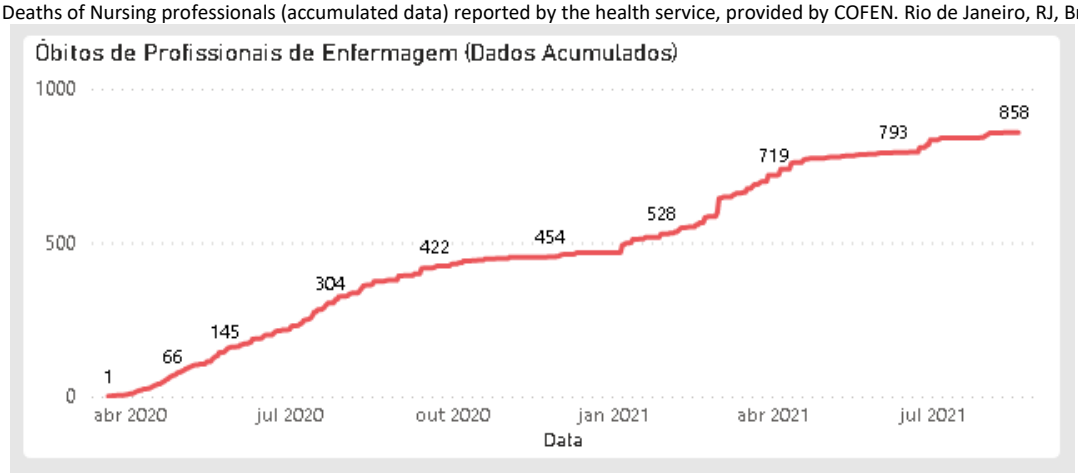
There was a significant increase from April 2020 to August 2021. Since in April 2020 there were 1000 cases of nursing professionals affected by the disease, while in August 2021 58,131 cases were found. Likewise, it occurred with the number of deaths, which increased from 2020 to 2021, as shown in Figures 3 and 4.

Figure 4. Cases of nursing professionals (accumulated data) reported by the health service. Rio de Janeiro, RJ, Brazil, 2021



Source: COFEN, 2021.

Figure 5. Deaths of Nursing professionals (accumulated data) reported by the health service, provided by COFEN. Rio de Janeiro, RJ, Brazil, 2021

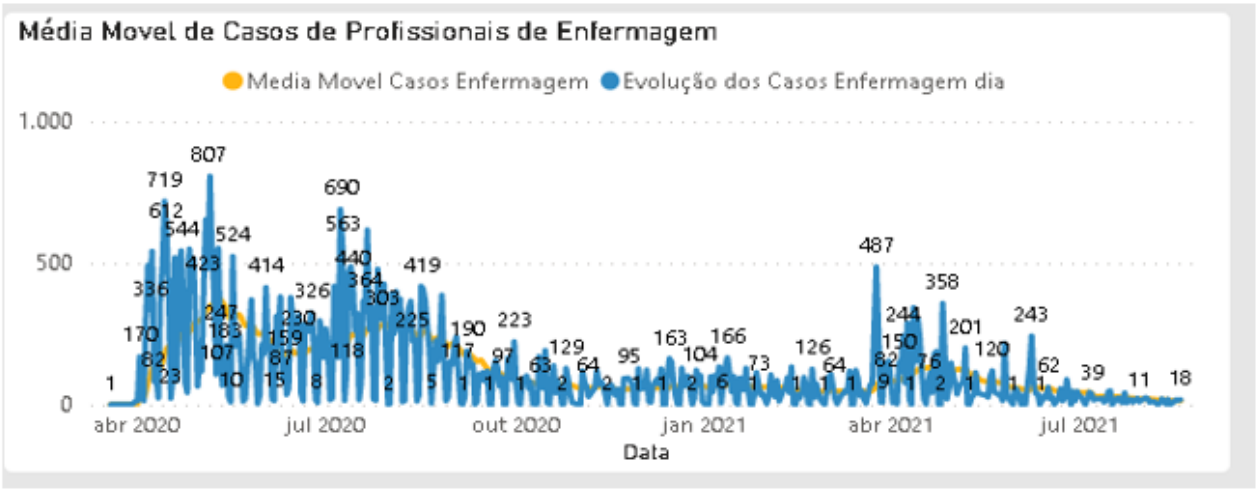


Source: COFEN, 2021.

It is possible to identify that there is a drop in the moving average of cases from 2020 to 2021, since from April 2020 to July 2020, the evolution of cases presented a total of 807, in 2021, the highest number corresponds to April with 487 cases.

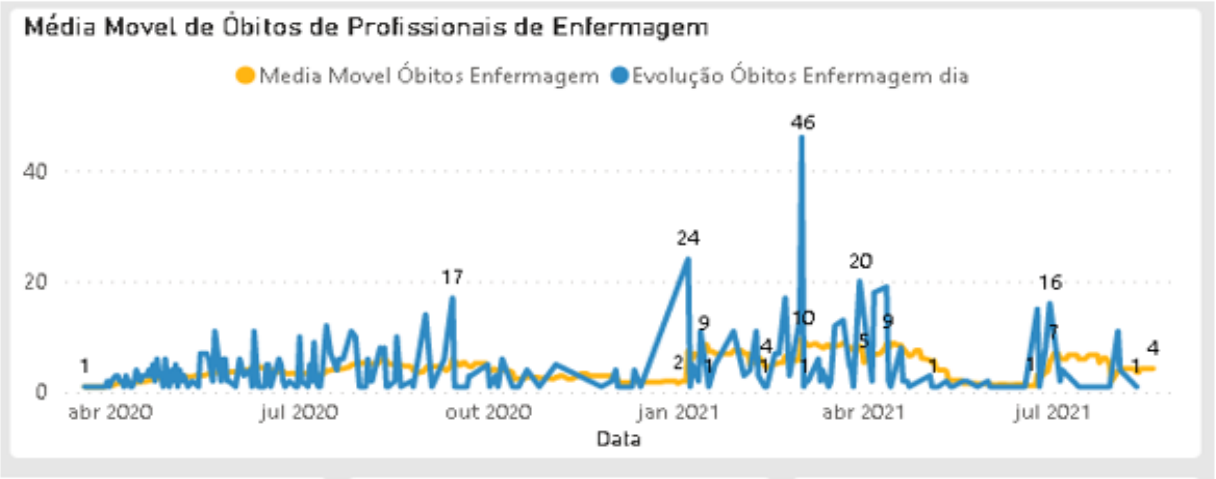
However, in relation to the moving average of deaths of nursing professionals, in the first quarter of 2021, there was the greatest evolution of deaths, reaching 46 cases.

Figure 6. Moving average of nursing professionals informed by the health service. Rio de Janeiro, RJ, Brazil, 2021



Source: COFEN, 2021.

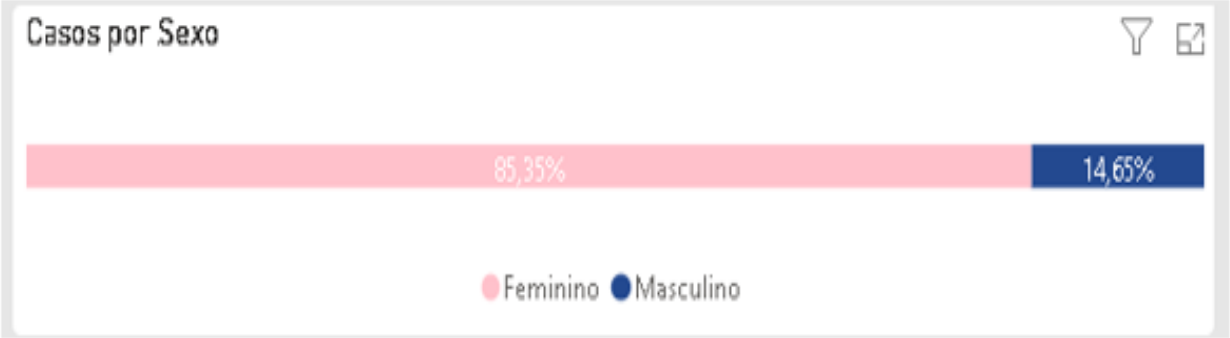
Figure 7. Moving average of deaths of Nursing professionals informed by the health service. Rio de Janeiro, RJ, Brazil, 2021



Source: COFEN, 2021.

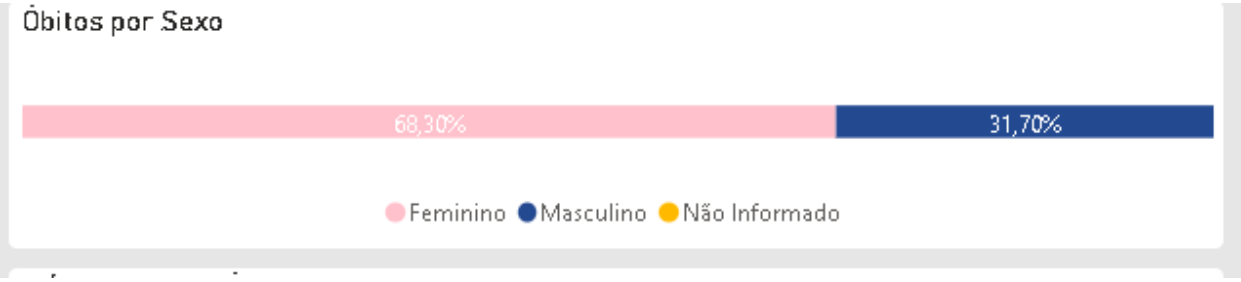
It was also analyzed that females were more affected by the disease. Because based on 100%, 85%, 35% of the cases are female and the other 14.65% are male. Regarding the number of deaths, the female gender also stands out, since 68.30% were female and 31.70% were male.

Figure 8. Cases by sex of nursing professionals informed by the health service. Rio de Janeiro, RJ, Brazil, 2021



Source: COFEN, 2021.

Figure 9. Deaths by sex of nursing professionals informed by the health service. Rio de Janeiro, RJ, Brazil, 2021

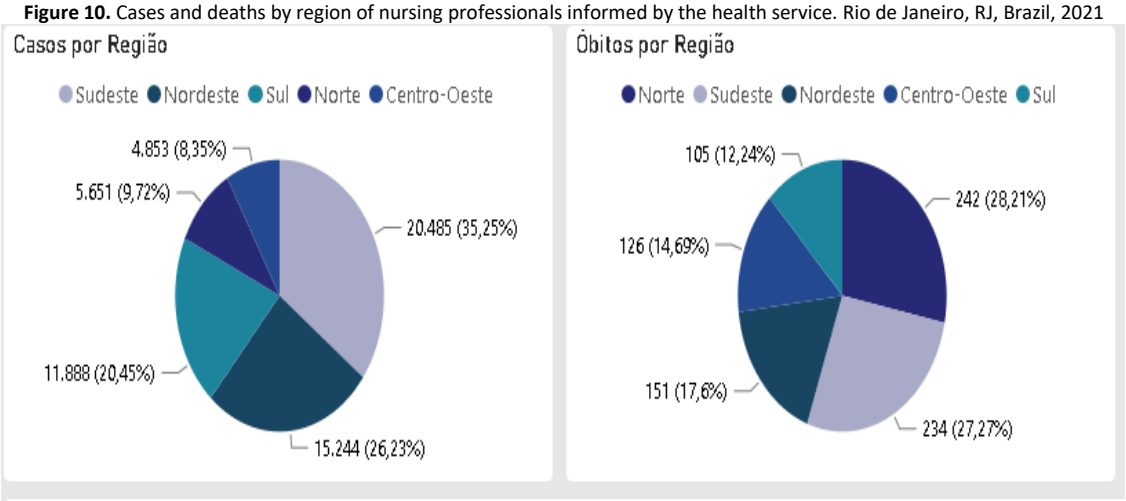


Source: COFEN, 2021.

The region of Brazil with the highest number of cases is the Southeast, with a total of 20,485 cases and a percentage of 35.24%, followed by the Northeast Region, which has a total of 15,244 cases and a percentage of 26.23%, the South Region presents 11,888 cases, 20.45%, the North with 5,641 cases, and 9.72% of cases and, finally, the Midwest with 4,853 cases and 8.35%.

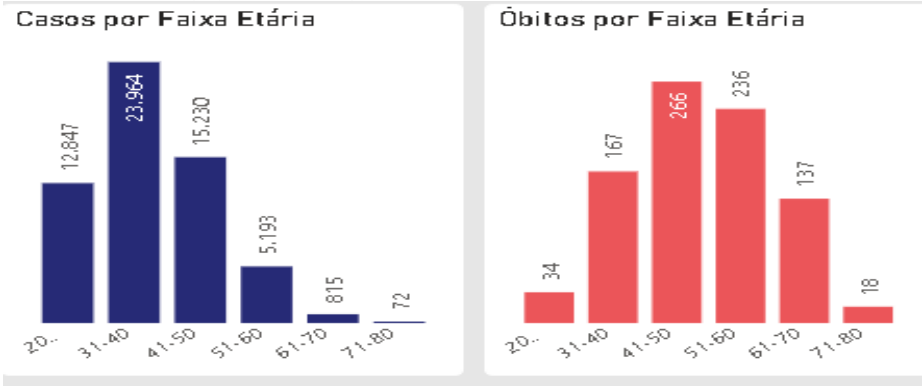
In relation to deaths, there is a big difference, since the northern region is the one with few cases identified in relation to the Southeast, Northeast and South, however, it is the one that stands out in the percentage of deaths, as it has 242 deaths, which corresponds to at 28.21%, the Southeast Region is in second place, with 234 deaths, corresponding to 27.27%, the North Region, 151 deaths, which expresses 17.6%, the Center-West 126 deaths, corresponding to 14, 69% and the South Region, is in the last place with 105 deaths and the percentage of 12.24%.

Figure 10. Cases and deaths by region of nursing professionals informed by the health service. Rio de Janeiro, RJ, Brazil, 2021



Source: COFEN, 2021.

Figure 11. Cases and deaths by age group of nursing professionals informed by the health service. Rio de Janeiro, RJ, Brazil, 2021



Source: COFEN, 2021.

The age group of nursing professionals with the highest number of cases is between 31 and 40 years old, with a total of 23,964 cases, there are 15,230 cases in the age group of 41 to 50 years, 12,847 cases in the age group of 20 years or older, 5,193 cases from 51 to 60 years old, 815 cases from 61 to 70 years old and 72 cases from 71 to 80 years old. With regard to the number of deaths, 266 deaths correspond to the age group from 41 to 50 years old, 236 deaths from 51 to 60 years old, 167 deaths from 31 to 40 years old, 137 deaths from 61 to 70 years old, 34 deaths from 20 years old or more and 18 deaths from 71 to 80 years old.

Final Considerations

The realization of this work arose from the moment we realized the alarming number of nursing professionals contaminated by COVID-19, since many were infected and died. We know that nursing is directly associated with care, so professionals are in direct contact with patients considered to be symptomatic or asymptomatic with COVID-19, who are at high risk of contamination by the disease.

When tracing the epidemiological profile of professionals working in nursing between the years 2019 and 2021, it can be noted that the most affected by the disease were women, with nursing being a historically female profession. The Southeast region stands out in terms of number of cases and deaths and the most affected age group is between 30 and 50 years old.

The importance of nursing teams in fighting the disease, which has taken the lives of many people, is perceptible, therefore, the data demonstrate the importance of knowledge regarding the epidemiological profile of nursing professionals affected by COVID-19 in Brazil, taking into account consideration of national and regional aspects, since hospitalization and mortality rates from the disease are high.

The disease caused by the SARS-COV-2 virus still affects a high number of people, so it is necessary to invest in training and professional training so that they are prepared to face not only COVID-19 but also future diseases that may arise and seriously affect public health.

Some limitations were found in the course of the study, since the COVID-19 pandemic is recent and is still being experienced, so the data are constantly updated in addition to the fact that many are not computed, resulting in underreporting, which makes it difficult the search for completely accurate data. It is also noted the difficulties in finding articles related to the proposed topic, as publications are not quick and the discovery of COVID-19 is approximately two years old, therefore, there are few published articles.

In general, it was possible to describe the epidemiological profile of nursing professionals affected by COVID-19 in Brazil, as the data made available by the nursing observatory, the Federal Nursing Council and literature that are in accordance with the theme were presented.

In view of everything we portrayed in the study, we can say that the health class, in particular, the nursing team composed of nurses, technicians and nursing assistants will never be the same, the impacts caused will never be forgotten. Therefore, the COVID-19 pandemic, its repercussions and its consequences will still extend for a long period of our history.

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