# Social representation of nursing professionals facing the COVID-19 pandemic

Representação social dos profissionais de enfermagem frente à pandemia da COVID-19 Representación social de los profesionales de enfermería frente a la pandemia de la COVID-19

### **RESUMO**

Objetivos: Analisar as representações sociais dos profissionais de enfermagem, frente à pandemia de COVID-19. Método: Estudo exploratório e descritivo, de abordagem qualitativa, delineado pela Teoria das Representações Sociais. A coleta de dados ocorreu por meio de um questionário online, entre outubro de 2020 e janeiro de 2021. A análise de dados foi realizada pelo software OpenEvoc 0.86, para obtenção da frequência média e da ordem média de evocação, estruturando o quadro de quatro casas. Resultados: Os núcleos centrais da representação social, expressaram forte dimensão sobre a condição de letalidade e cuidado, enquanto as periferias, expressaram as emoções e questões do lado emocional dos profissionais. Conclusão: Os dados da pesquisa apontaram para uma concordância do conhecimento entre o senso comum, a comunidade científica e os meios de comunicação. Isto, possivelmente, se deve pela contextualização da informação de maneira contínua e atualizada a respeito da COVID-19.

**DESCRITORES:** Enfermagem; COVID-19; Psicologia Social.

### ABSTRACT

Objectives: To analyze the social representations of nursing professionals facing the COVID-19 pandemic. Method: Exploratory, qualitative study. Outlined by the Theory of Social Representations. Data collection took place through an online questionnaire. The collection took place between October 16, 2020 and January 19, 2021. Data analysis was performed using the OpenEvoc 0.86 software, to obtain the average frequency and the average order of evocation, structuring the four-place table. Results: The central cores of the social representation express a strong dimension about the condition of lethally and care, while the peripheries express the emotions and emotional issues of professionals. Conclusion: They point to an agreement of common sense knowledge with the scientific community and the media. This is due to the continuous and up-to-date contextualization of information about COVID-19.

DESCRIPTORS: Nursing; COVID-19; Social Psychology.

# RESUMEN

Los objetivos: Analizar lãs representaciones sociales de los profesionales de enfermería frente a la pandemia de COVID-19. Método: Estudio exploratorio, cualitativo. Delineado por La Teoría de lãs representaciones Sociales. La colecta de datos ocurrió por cuestionario online. La colecta se realizó entre el 16 de octubre de 2020 y el 19 de enero de 2021. El análisis de los datos fue realizado por el software OpenEvoc 0.86, para obtención de La frecuencia media y Del orden media de evocación, estructurando El cuadro de cuatro casas. Resultados: los núcleos centrales de La representación social expresan fuerte dimensión sobre La condición de letalidad y cuidado, encuanto las periferias expresanlas emociones y cuestiones del emocional de los profesionales. Conclusión: Señala una concordância del conocimiento del senso común com La comunidad científica y medios de comunicación. Esto se debe a La contextualización de información de forma continua y actualizada respecto a la COVID-19.

**DESCRIPTORES:** Enfermería; COVID-19; psicología social.

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### INTRODUCTION

he World Health Organization (WHO), in December 2019, declared the emergence of the new coronavirus, the disease being named as COVID-19 in the city of Wuhan in Hubei province in China, presenting as common symptoms of flu and cold syndrome. This epidemic soon turned into a rapid pandemic, months after it began, affecting more than 200 countries. The lack of knowledge about the clinical manifestations and contamination contributes to the growing number of cases, and with that the impacts for health professionals have become greater and more prone to vulnerability. 1 In this context, it is believed that the unpreparedness of these professionals, lack of structures in health institutions and also, the scarcity of materials for the individual protection of professionals do not collaborate to reduce the impacts of COVID-19 on their physical and psychological well--being, and act as potentiators for the risk of infection and illness.

Social representations are practical knowledge that are developed in common sense relationships, are formed by the set of ideas of everyday life, built in the relationships established between subjects or through group interactions, being also events of intra-individual mental representations of interest to psychology.<sup>2</sup>

We emphasize that, for the construction of the Theory of Social Representations, where Moscovici contributes to the matrix, other important collaborators developed aspects in the field of social representations, namely: Denise Jodelet, main collaborator and continuator of Moscovici Clinical studies
report that 80%
of patients had a
mild form of the
disease, with classic
symptoms of a flulike syndrome,
such as: runny
nose, cough, sore
throat, in addition
to respiratory
manifestations and
fever.

<sup>3</sup> delving deeper into an anthropological bias, Willem Doise with emphasis on the condition of production and circulation of social representations <sup>4</sup> and Jean-Claude Abric, dealing with the Central Nucleus Theory. <sup>5</sup>

The provision of care is part of a constellation of phenomena and events. The characteristics of most health institutions, the organizational structures, the multiple sources of power, the quantitative values centered on productivity have become, over time, unadapted to the growth and development of the health care organization. In this reality, numerous signs were felt. Insufficient financial resources, unmotivated and dissatisfied staff, increasing absenteeism and mobility rates and the exhaustion of caring staff, have characterized our costly, more dehumanized health services, centered on technique and illness. Thus, it is not possible to privilege the person, the user, the family and the nurse who cares. 6

Currently the world is facing the Coronavirus pandemic, this being the virus that makes up a large family, known in the 60s, and today, due to a new variant of the coronavirus, called 2019-nCoV (COVID-19). 7 Clinical studies report that 80% of patients had a mild form of the disease, with classic symptoms of a flu-like syndrome, such as: runny nose, cough, sore throat, in addition to respiratory manifestations and fever. 7

Approximately 15% of patients may have severe disease, followed by dyspnea, hypoxia, and pneumonia; followed by 5% of patients, who may have the critical clinical form of the disease, with manifestations of respiratory failure, requiring mechanical ventilation and/or septic shock, with an

average lethality between 2.3% and 6%. <sup>8</sup> Symptoms of anosmia and dysgeusia, identified in 19% of COVID-19 cases. <sup>9,10</sup> Signs such as headache, around 8%, nausea or vomiting represented 5% of cases and diarrhea 3.8%, which are less common. <sup>11</sup>

In May 2020, the Federal Council of Nursing (COFEN) launched the nursing observatory, where we can follow the number of nursing professionals infected by COVID-19. <sup>12</sup>

In Brazil, the number of deaths of nursing professionals gives the country the title of 1st country in the world with the most deaths, surpassing the United States, compared to the National Nurses United survey. <sup>13</sup>

For the coordinator of the Crisis Management Committee of the Federal Nursing Council, Walkírio Almeida Segundo, he states that the lack of management protocols and use of PPE worsen the situation, increasing the vulnerability factor to infection, having as a crucial moment for contamination, the time at which the PPE is removed. <sup>13</sup>

It is also worth mentioning the observed report that evidenced the speeches of professionals working on the front line of fighting and fighting COVID\_19, being: five things requested by health professionals to their employers during the COVID-19 pandemic -

"listen to me, protect me, prepare me, support me and take care of me". Such speech demonstrates the insecurity that health professionals externalize, presented in their conscience. These expressions and/or representations are formative, through cultural, social and personal concepts, that significantly influence the performance and safety of health professionals, since these are individuals who have a conscience that can be influenced by the environment in which they live. <sup>14</sup>

In this context, the need for this study is justified, given that nursing professionals are exposed to great risk in the face of COVID-19. This is due to several factors, among which are the inadequacy in the management and use of Personal Protective Equipment (PPE) and the situation

of emotional stress, caused by the high number of infected nurses and technicians who died due to COVID-19. Given this scenario, it is important to verify the set of ideas of the daily life of these professionals, as a way of identifying the social representations expressed by them and using this tool in the elaboration of strategies that help in the best nursing practice, and consequently, attribute a better quality of life to the category.

The objectives of this study are, in general: To analyze the social representations of nursing professionals in the face of the COVID-19 pandemic.

### **METHOD**

This is an exploratory, descriptive study with a qualitative approach, which works with the universe of meanings, motives, beliefs, values and attitudes <sup>15</sup>, outlined through the Theory of Social Representations, in its approach and structure, which is a sociological form of social psychology. <sup>16</sup>

It was submitted to the Research Ethics Committee (CEP) of the Federal University of Rio de Janeiro - Campus Macaé, through Plataforma Brasil on September 9th, 2020. With approval under CAEE: 37928420.6.0000.5699 on October 15, 2021.

The sample consists of nursing service providers at the Nossa Senhora de Nazareth Municipal Hospital, located in the city of Saquarema in the interior of the State of Rio de Janeiro, Brazil. Inclusion criteria were considered: Nurses and Nursing Technicians who are hired under the Consolidation of Labor Laws (CLT - Consolidação das Leis do Trabalho), who are acting in the fight against COVID-19 in the aforementioned Health Unit, and agreed to sign the Free and Informed Consent Term (ICF). The exclusion criteria adopted were: nursing professionals hired under the Autonomous Payment Receipt (RPA -Recibo de Pagamento Autônomo) regime, on leave due to medical certificate and/or sick leave. 103 individuals participated in the research.

For data collection, an online questionnaire was applied, hosted on the Google form platform, with questions of characterization and evocations or techniques of free association of words, classifying in order of priority, five words that came to the mind of the participant. interviewee, faced with the inducing term "New Coronavirus". The collection took place between October 16, 2020 and January 19th, 2021.

Data analysis was performed using the OpenEvoc 0.86 software to obtain the average frequency and average order of evocation. The software calculates and informs the simple frequency of occurrence of each evoked word, the average occurrence of each word by order of evocation, and the average of the weighted average orders of the set of evoked terms (OME).<sup>17</sup>

Os dados foram processados no software OpenEvoc 0.86, que permite processamento e análise, segundo a técnica prototípica. <sup>17</sup> This technique is based on the principle that the sooner a person remembers a word, the greater the representation of that word in a group formed by people with a similar profile. We emphasize that this technique does not represent statistical analysis, being used to standardize and organize information related to the evocation process. <sup>18</sup>

Data is presented as Rangmot's feature provides: the total frequency of each word; the weighted average of the evocation order of each word; total frequency and general average of the evocation orders, in addition to the four-house frame technique, which organizes the elements that make up the central core and the periphery. We used a minimum frequency of 2, order of 3 and a % frequency of <sup>4.17</sup>

The discussion of the results takes place through analysis, according to the emergence of quadrants and dimensions, through the formation of the core and periphery of representations. For the description of the sociodemographic data obtained, a database was created in Excel 2013\* software (Microsoft Inc., Redmond USA) for the association between the study variables.

### **RESULTS**



# Participants profile

Participants are mostly female (83%), as for training (66%) are nursing technicians, with regard to age in the age groups of 18 – 29 (27%), 30 – 39 (44%), 40 – 49 (16%), 50 – 59 (10%), 60 >(3%). As for contact with suspected or confirmed patients for COVID-19 (99%) they confirmed that they had contact, as for the diagnosis for COVID-19 (37.6%) they confirmed, with regard to testing by Swab or Rapid Tests (68%) performed; when asked about symptoms related to COVID-19 (70%) reported having occurred, when using personal protective equipment (98%) reported using it.

### The representations

To the inducer "new coronavirus" we obtained a total of 102 participants, who evoked words. The minimum frequency adopted was 4, with an average evocation order of 3, on a scale from 1 to 5. The calculated frequency was 4. The calculation was performed using the OpenEvoc 0.86 software.

Below is Chart 1, which is the construct of social representations through evocations and its analysis based on the chart of four houses.

In Chart 2, it can be identified that the answers regarding the use of PPE were different in terms of the amount of PPE and its use in conjunction with other PPE. Therefore, we observed that these PPE are not used or are used inappropriately, since the number and percentage mentioned about the use of these devices is significantly lower compared to the number of individuals participating in the study.

## DISCUSSION

The upper left quadrant contains the central evocations: Fear and Isolation, they refer to strong dimensions and representations of knowledge of society, or even the lack of knowledge about the inducing term. Fear is the term that expresses the dimension of ignorance, which imprints on common sense knowledge,

Table 1. Analysis of evocations under the inducer "New Coronavirus".						
++	Frequency >= 4 /Summon order < 3		+-		>= 4 / Summon er >= 3	
9.9%	fear	2.28	8.91%	death	3.4	
4.36%	isolation	2.86	4.16%	care	3.57	
-+	Frequency < 4 / Summon order < 3				Frequency < 4 / Summon order >= 3	
3.76%	sadness	2.74	3.37%	prevention	3.59	
3.76% 2.77%	sadness family	2.74 2.86	3.37% 3.17%	prevention pain	3.59 3	
				'		
2.77%	family	2.86	3.17%	pain	3	

Table 2. Quantitative analysis of which PPE are used.					
PPE	Number of times Mentioned	% compared to the total N of participants			
Mask	73	70,8			
Cloak	62	60,1			
Bonnet/Cap	52	50,4			
Glove	52	50,4			
Glasses	29	28,1			
n95 Mask	22	21,3			
Pro foot	11	10,6			
Face shield	9	8,7			
None	6	5,8			
Coat	3	2,9			
Overall	1	0,97			
The one that the institution provides	1	0,97			
Source: Research data. *NOTE: The total number of study participants was 103 subjects. Therefore, the percentage compared was over this mentioned total.					

built throughout history. Isolation is the term that represents the word, possibly the most socialized, whether by social networks, television stations and the scientific community, which during the course of the COVID-19 pandemic became the main measure to face the disease.

The central nucleus has three functions: generating, organizing and stabilizing, de-

termining, respectively, the meaning, the internal organization and the stability of the representation. The generating function gives the meaning of the other elements of the representations <sup>19</sup>

The upper right quadrant contains the evocations with high frequency, however, they were not promptly evoked, namely: death and care. Death represents a strong

expression regarding the inducer, because the lethality for the infection of the COVID-19 pandemic is the main bridge of intervention for the resolution of the pandemic, having as the main point for the scientific community the "flattening of the curve" of recurrent deaths from CO-VID-19. The term care, on the other hand, is inserted in an ambiguous way, and can be interpreted as nursing care, since this is an analogy from the perspective of nursing performance/function, in addition to representing the dimension of care in its general concept, in which there must be caution and prudence, possibly to warn of acts that lead to infection.

The monitoring panel of the City of Saquarema on May 2, 2021 had: 3,041 confirmed cases; 2,214 cases recovered; 167 deaths and 50 suspected cases of CO-VID-19, such data contribute to an expressive lethality of 5.49%. This lethality rate directly implies psychosocial aspects that influence the common sense of nursing professionals, working in times of the CO-VID-19 pandemic.

Through these social representations, identified in the study, the peripheries strengthen the central core from the perspective of the discourse of elucidating emotions and protective measures against COVID-19.

The periphery is the lower right quadrant, composed of mediation evocations, which contain the following terms: sadness, family, despair and concern, are evocations that portray the emotional of these workers in times of pandemic, that show their weaknesses in terms of mental health. The second periphery is the lower right quadrant, which also points to mediation, containing the terms: prevention and hygiene, which are in line with the aforementioned terms, which refer to the idea of non-infection and acts that may inhibit it. Pain and cure are, in turn, terms that refer to those infected by COVID-19, directly related to symptoms.

The COVID-19 pandemic generated repercussions regarding discussions that offer well-being and better working conditions to workers in the nursing category.

Fear is the term that expresses the dimension of ignorance, which imprints on common sense knowledge, built throughout history. Isolation is the term that represents the word, possibly the most socialized [...], which during the course of the COVID-19 pandemic became the main measure to face the disease.

Based on this assumption, support for the qualification of professionals through emotional support and continuing education are necessary investments to minimize the negative impacts of the pandemic. <sup>20</sup>

From the knowledge of the social representations of nursing workers in a time of pandemic, it is possible to rethink the process of Permanent Education in Health, that envision workshops for the collective and participatory construction of the participants and facilitation of understanding and awareness for workers about the importance of using PPE properly.

### CONCLUSION

The central cores of social representation expressed a strong dimension about the condition of lethality and care about the mentioned inducer (Novo Coronavirus) and the theme of the study, while the peripheries, these expressed the emotions and emotional issues of the professionals. The data point to an agreement of common sense knowledge, which is disseminated by the scientific community and the media. This is due to the contextualization of the dissemination of information, in a continuous and updated way, regarding the COVID-19 pandemic.

It is believed that the objective of this study was achieved, but the limitation found was regarding the awareness of professionals to participate in the research, through the questionnaire applied. As a potentiality, the study can support a further deepening of the imagery of nursing professionals working in the time of the COVID-19 pandemic, as well as the knowledge of common sense on the subject, in view of the infodemic.

It is left as a recommendation, the need for a process of implementation of permanent education in health on the subject of the use of personal protective equipment,

dressing and undressing, considering that the proper use of these devices is the protective factor for the assistance and protection of the health of professionals, allowing the reduction of contamination and infection of these professionals.

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