A look behind the masks: Resilience and vulnerability among nursing professionals in the pandemic

Um olhar por trás das máscaras: Resiliência e vulnerabilidade entre profissionais de enfermagem na pandemia
Una mirada detrás de las mascarillas: Resiliencia y vulnerabilidad de los profesionales de enfermería en la pandemia

RESUMO
Objetivou-se analisar e discutir os indicadores de resiliência manifestados em profissionais de Enfermagem durante a pandemia. Método: Trata-se de um estudo de natureza descritiva, exploratória e transversal com abordagem quantitativa, desenvolvido com uma amostra intencional de 31 profissionais de Enfermagem em uma única hospitalar localizada no Vale do Paraíba, no interior do estado de São Paulo, Brasil. Resultado: O presente estudo mostrou que a maioria dos entrevistados possuem resiliência elevada equivalente a 80,6%, ou seja, habilidade para enfrentar situações de estresse, evitando, assim, as consequências negativas para a saúde mental. Dos entrevistados, 9,7% possuem resiliência moderada e 9,7% possuem baixa resiliência, o que pode gerar alto índice de estresse, depressão e ansiedade. Conclusão: Evidenciou-se a autoconfiança dos profissionais de Enfermagem em suas próprias capacidades, já que reconhecem suas limitações, todavia são capazes de enfrentá-las, dependendo apenas de si e considerando uma variedade de experiências, aceitações e acontecimentos, mesmo nas dificuldades.

DESCRIPTORES: Enfermagem; Resiliência Psicológica; Profissionais de Enfermagem; Infeção por Coronavírus; Pandemia.

ABSTRACT
The objective of this study was to analyze and discuss the resilience indicators manifested in Nursing professionals during the pandemic. Method: This is a descriptive, exploratory and cross-sectional study with a quantitative approach, developed with 31 Nursing professionals in a hospital located in Vale do Paraíba, in the interior of the state of São Paulo, Brazil. Result: The present study showed that most of the interviewees have high resilience equivalent to 80.6%, that is, the ability to face stressful situations, thus avoiding negative consequences for mental health. Of those interviewed, 9.7% have moderate resilience and 9.7% have low resilience, which can generate high levels of stress, depression and anxiety. Conclusion: The self-confidence of Nursing professionals in their own abilities was evidenced, since they recognize their limitations, however, they are able to face them, depending only on themselves and considering a variety of experiences, acceptances and events, even in difficulties.

DESCRIPTORS: Nursing; Psychological Resilience; Nursing Professionals; Infection from coronavirus; Pandemic.

RESUMEN
El objetivo de este estudio fue analizar y discutir los indicadores de resiliencia manifestados en los profesionales de Enfermería durante la pandemia. Método: Este es un estudio descriptivo, exploratorio y transversal con enfoque cuantitativo, desarrollado con 31 profesionales de Enfermería en un hospital ubicado en Vale do Paraíba, en el interior del estado de São Paulo, Brasil. Resultado: El presente estudio evidenció que la mayoría de los entrevistados posee resiliencia alta equivalente al 80,6%, es decir, capacidad para enfrentar situaciones estresantes, evitando así consecuencias negativas para la salud mental. De los encuestados, el 9,7% tiene resiliencia moderada y el 9,7% tiene resiliencia baja, lo que puede generar altos niveles de estrés, depresión y ansiedad. Conclusión: Se evidenció la autoconfianza de los profesionales de Enfermería en sus propias capacidades, una vez que reconocen sus limitaciones, sin embargo, son capaces de enfrentarlas, dependiendo sólo de sí mismos y considerando una variedad de experiencias, aceptaciones y eventos, incluso en las dificuldades.

DESCRIPTORES: Enfermería; Resiliencia Psicológica; Profesionales de Enfermería; Infección por coronavirus; Pandemia.

REcebido em: 22/04/2022 Aprovado em: 16/06/2022

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INTRODUÇÃO

In December 2019, the first cases of Severe Acute Respiratory Syndrome due to Coronavirus (SARS-CoV-2) appeared in Wuhan, China. The new disease was classified as a pandemic by the World Health Organization (WHO) on March 11th, 2020.¹

Faced with these conditions, Brazil declared a Public Health Emergency of National Importance, after confirming the first case of the disease, which caused the authorities to be apprehensive, due to its health impacts and political, social, economic and health consequences.²

In this same scenario, integrating the front line of work with this and other diseases, the Nursing team remained resistant to numerous challenges which unfavorably influence their physical and mental integrity. Among these challenges are: the risk of infection that can cause illness and death; high levels of anxiety; sleep disorders; lack of appetite; the fear of contaminating family members; behavioral and interpersonal conflicts; work overload and violence, among others. At the same time, these professionals still faced a lack of safe conditions to perform their duties, lack of training, lack of hospital supplies and individual and collective protective equipment.³⁴

Since the beginning of the pandemic caused by the new coronavirus, the media has published testimonies of courage and sacrifice exercised by the Nursing team, which faced a tireless struggle to ensure care guided by ethics, in respect and humanization, even in the face of risky conditions to carry out their work. It is believed that performing the role of nursing, in this context, represents a great struggle for all professionals in this class.⁵⁶

It is known that the magnitude of the pandemic and the degree of vulnerability influence the psychosocial impact of Nursing professionals. Although it seems strange, not all psychological and social problems resulting from the pandemic can be classified as diseases, since such reactions are considered natural in the face of an abnormal situation.⁷

If, on the other hand, there are risks to the physical and emotional integrity of these professionals, on the other hand, this context of challenges also allows them to develop new skills and abilities to acquire strength to continue to react. In this sense, many Nursing professionals mentally elaborate problems, tragedies and difficulties more lightly than others and manage to “turn around” in a short time, not letting them get discouraged in the face of the adversities of everyday life. Neuroscientists call this quality resilience.⁸

Currently, the work environment is full of adverse conditions in which these front-line professionals, who are required to perform a precise performance, may not be technically and emotionally qualified. In this way, resilience can be configured as a transformation strategy, as it encourages positive attitudes in the face of stressful factors and circumstances of psychological distress.⁹

In view of the above, this study presents the following question to reality: “Do the levels of resilience of the Nursing team influence situations of vulnerability and exposure in the face of the pandemic?”.¹₀

Thus, this research becomes relevant in order to know the parameters of the emotional state linked to psychological resilience, as well as the challenges of these professionals, so that coping and prevention measures are thought out and adopted.

Recognizing the vulnerability that the Nursing team is currently experiencing, the objective was to analyze and discuss the indicators of resilience manifested in Nursing professionals during the pandemic.

METHOD

This article was extracted from the Course Completion Work entitled “Resilience and Coping among Nursing Professionals during the COVID-19 Pandemic”, presented to the Nursing Undergraduate Department of the Escola Superior de Cruzeiro / ESC, Cruzeiro, São Paulo, Brazil in 2021.

This is a descriptive, exploratory and transversal research, guided by the STROBE tool 1, with a quantitative approach.

The study was developed with an intentional sample among nursing professionals, who worked by shift during the day and night, and who treated patients with suspected or diagnosed COVID-19, in a small unit for hospitalization during the period of the pandemic, consisting of 31 beds, intended for the care of people infected by the coronavirus. It should be noted that the unit is accredited by the Unified Health System (SUS) and is located in a region known as Vale do Paraíba, in the interior of the state of São Paulo, Brazil.

The following inclusion criteria were
adopted: to be a Nursing professional and to be working on the front line in the sector for COVID-19 patient care. Professionals on leave or leave from work during the data collection period were excluded from the research, as well as those who were not interested in voluntarily participating in the study.

Data were obtained between May and June 2021, using two self-applied scales. The first is the Resilience Scale (RS), devised by Wagnild and Young (1993), which was translated and adapted to Portuguese in Brazil by Pesce & cols (92) in 2005.

It is important to highlight that the resilience scale aims to measure levels of positive psychosocial adaptation in the face of significant life events, which define the potential for resilience, encompassing five themes: serenity, perseverance, self-confidence, meaning of life and self-sufficiency. It is a 25-item Likert-type scale, with seven points ranging from strongly disagree (1 point) to strongly agree (7 points). The score varies from 25 to 175 points, considered by factor and in total, and the higher the score, the higher the subject’s resilience.

The items are grouped into three factors, namely: Factor I (Resolutions of Actions and Values), containing items that indicate resolutions of actions (taking plans through to the end; dealing with problems in some way; accepting the facts without much concern; being disciplined, doing things one day at a time, being a person you can count on in an emergency; generally face a situation in different ways; usually find a way out when in a difficult situation; having enough energy to do what needs to be done) and values (feeling proud of having accomplished goals in your life; being friends with yourself; I often find reasons to laugh; perceive meaning in their life and consider the support of the values that give meaning to life, such as friendship, personal fulfillment, satisfaction and the meaning of life);

Factor II (Independence and Determination), which includes items that convey maintenance of interest in things, being able to be on their own, feeling good even if there are people who don’t like them and being determined; and Factor III (Self-confidence and ability to adapt to situations), contemplating items that convey capabilities such as being able to depend on yourself more than anyone else, feeling that you can handle several situations at the same time, you can face difficult times because you have experienced difficulties before, believing in yourself to the point of feeling able to go through difficult times, not insisting on situations you can’t do anything about. 11

If, on the one hand, there are risks to the physical and emotional integrity of these professionals, on the other hand, this context of challenges also allows them to develop new skills and abilities to acquire strength to continue to react. In this sense, data of interest to the study, designed to collect information about the social, demographic and economic conditions of the participants. Its items refer to age, sex, education about the environment in which one is inserted, time since graduation, marital status, family income, number of children and area of work.

Before the questionnaires, each participant received the Free and Informed Consent Term (FICT), in which the implications and peculiarities of the study were presented and anonymity was guaranteed to all, being assigned to the letters 'Tec' which corresponds to "nursing technician" and Nur representing "Nurse", followed by cardinal numbers (example: Tec 1, Nur 1, Tec 2, Nur 2, Tec 3, Nur 3 and so on).

Therefore, the data were grouped in an Excel table and the variables were analyzed individually using descriptive statistics, with measures of central tendency and dispersion, absolute and relative frequency. The research followed all ethical precepts according to the recommendations established by resolution 510/16 of the National Health Council (CNS - Conselho Nacional de Saúde) for research carried out with human beings, and after approval of the project by the host institution, it was submitted to the Ethics and Research Committee (CEP - Comitê de Ética e Pesquisa), through the Brazil Platform, destined for the Teresa D’Ávila University Center (UNIFATEA), having received opinion 4,472,922 and Certificate of Ethical Appreciation Presentation (CAAE - Certificado de Apresentação de Apreciação Ética) number 40780820.4.0000.5431 of December 17th, 2020.

RESULTS

Thirty-one nursing professionals participated in the research, 23 (74%) of whom were nursing technicians and 8 (26%) were nurses. All of them worked at the headquarter institution and on the front line of the fight against COVID-19.

Below, some information collected
and cataloged will be presented in order to elucidate the interpretation of the sociodemographic profile of the participants.

It was found that 26 (84%) of the participants were female and 5 (16%) were male. These were in the age group between 22 and 55 years, mean age, 19 (48.4%) were married or cohabiting, 13 (42%) were single, 2 (6.4%) were widowed and 1 (3.2%) was divorced.

As for the number of children, 9 (29.03%) had no children, 11 (35.49%) had only one, 8 (25.80%) had two and 3 (9.68%) had 3 children.

When questioned in relation to the training time, it was observed that 4 (12.90%) were 1 year, 5 (16.13%) 2 years old, 2 (6.45%) 3 years old and 20 participants (64.52%) over 5 years old. Regarding family income, 1 (3.22%) earns

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Table 1 - Sociodemographic Characterization of Participants, countryside of São Paulo, Brazil, 2021

<table>
<thead>
<tr>
<th>Nurses</th>
<th>Age</th>
<th>Sex</th>
<th>Marital status</th>
<th>Family income</th>
<th>No. of children</th>
<th>Training time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nur. 1</td>
<td>44</td>
<td>M</td>
<td>Single</td>
<td>Up to 2,000.00</td>
<td>0</td>
<td>5 years or +</td>
</tr>
<tr>
<td>Nur. 2</td>
<td>47</td>
<td>F</td>
<td>Married</td>
<td>+ than 2,000.00</td>
<td>2</td>
<td>4 years</td>
</tr>
<tr>
<td>Nur. 3</td>
<td>37</td>
<td>F</td>
<td>Married</td>
<td>+ than 2,000.00</td>
<td>0</td>
<td>5 years or +</td>
</tr>
<tr>
<td>Nur. 4</td>
<td>37</td>
<td>F</td>
<td>Married</td>
<td>+ than 2,000.00</td>
<td>0</td>
<td>5 years or +</td>
</tr>
<tr>
<td>Nur. 5</td>
<td>38</td>
<td>F</td>
<td>Married</td>
<td>Up to 1,000.00</td>
<td>2</td>
<td>5 years or +</td>
</tr>
<tr>
<td>Nur. 6</td>
<td>30</td>
<td>F</td>
<td>Single</td>
<td>Up to 2,000.00</td>
<td>1</td>
<td>5 years or +</td>
</tr>
<tr>
<td>Nur. 7</td>
<td>23</td>
<td>M</td>
<td>Married</td>
<td>+ than 2,000.00</td>
<td>1</td>
<td>1 year</td>
</tr>
<tr>
<td>Nur. 8</td>
<td>23</td>
<td>M</td>
<td>Single</td>
<td>+ than 2,000.00</td>
<td>1</td>
<td>1 year</td>
</tr>
</tbody>
</table>

Nursing Technicians:

| Tec. 1       | 55  | F   | Married        | + than 2,000.00| 2               | 5 years or +  |
| Tec. 2       | 57  | F   | Married        | + than 2,000.00| 1               | 2 years       |
| Tec. 3       | 30  | F   | Married        | + than 2,000.00| 1               | 2 years       |
| Tec. 4       | 35  | F   | Married        | + than 2,000.00| 1               | 1 year        |
| Tec. 5       | 36  | F   | Married        | + than 2,000.00| 1               | 1 year        |
| Tec. 6       | 41  | F   | Married        | + than 2,000.00| 1               | 1 year        |
| Tec. 7       | 57  | F   | Divorced       | + than 2,000.00| 1               | 5 years or +  |
| Tec. 8       | 29  | F   | Divorced       | + than 2,000.00| 1               | 5 years or +  |
| Tec. 9       | 51  | M   | Single         | + than 2,000.00| 1               | 5 years or +  |
| Tec. 10      | 54  | F   | Widow          | Up to 1,500.00  | 0               | 1 year        |
| Tec. 11      | 23  | F   | Single         | + than 2,000.00| 0               | 1 year        |
| Tec. 12      | 22  | F   | Single         | + than 2,000.00| 0               | 1 year        |
| Tec. 13      | 54  | F   | Widow          | + than 2,000.00| 0               | 1 year        |
| Tec. 14      | 23  | F   | Single         | + than 2,000.00| 0               | 1 year        |
| Tec. 15      | 46  | F   | Widow          | + than 2,000.00| 0               | 1 year        |
| Tec. 16      | 26  | M   | Single         | + than 2,000.00| 0               | 1 year        |
| Tec. 17      | 46  | F   | Widow          | + than 2,000.00| 0               | 1 year        |
| Tec. 18      | 56  | F   | Widow          | + than 2,000.00| 0               | 1 year        |
| Tec. 19      | 33  | F   | Single         | + than 2,000.00| 0               | 1 year        |
| Tec. 20      | 43  | F   | Married        | + than 2,000.00| 1               | 1 year        |
| Tec. 21      | 26  | M   | Single         | + than 2,000.00| 1               | 1 year        |
| Tec. 22      | 26  | M   | Single         | + than 2,000.00| 1               | 1 year        |

Source: Authors’ database, 2022.

Table 2 – Resilience of frontline nursing professionals of the COVID-19 pandemic, countryside of São Paulo, Brazil, 2021 (n=31).

<table>
<thead>
<tr>
<th>Resilience</th>
<th>34 Professionals</th>
<th>Punctuation</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>3</td>
<td>25 to 75</td>
<td>9.7%</td>
</tr>
<tr>
<td>Moderate</td>
<td>3</td>
<td>76 to 125</td>
<td>9.7%</td>
</tr>
<tr>
<td>High</td>
<td>25</td>
<td>126 to 175</td>
<td>80.6%</td>
</tr>
</tbody>
</table>

Source: Authors’ database, 2022.
up to BRL 1,000.00 per family member, 5 (16.13%) earns up to BRL 1,500.00; 8 (25.81%) up to BRL 2,000.00; 17 (54.84%) more than BRL 2,000.00.

The present study showed that the majority of respondents have a high resilience of 80.6% (Table 2), that is, skills to face stressful situations, thus avoiding negative consequences for mental health.

Of those interviewed, 9.7% have moderate resilience and 9.7% have low resilience, which can generate high levels of stress, depression and anxiety, influencing the behavior and training of these professionals. The data revealed psychosocial adaptation focused on resolutions of actions and values, using strategies linked to this factor to achieve resilience.

Distribution of frequency and percentage of the overall score separated by groups according to their tendency towards resilience.

Among the participants, it was noticed that the single and married, the highest average was among the married with 137 points, among the divorced and widowed the widows had the highest average with 145. Among the female sex, the average was 137 points.

Nurses and nursing technicians had a similar score of around 137 score points.

Among the age group of the study participants, there was a variation between age from 22 to 55 years. As for the number of children, the average of 3 children dominated.

It was observed that the high levels of resilience were more present among the married, the widowed, female among family income up to 1500.00, age group from 41 to 55 years, and those with the highest number of children, nurses and nursing technicians had an equal mean of resilience.

Among the factors of the scale, the one with the lowest value was 1 (3.2%) nursing technician with totally disagree with 34 points and the highest value was 1 (3.2%) nursing technician with totally agree with 170 points, no participant presented the maximum value of the instrument of 175, the maximum score reached was 170 points and one participant presented the minimum value of the instrument with a score of 34 points.

This type of psychosocial adaptation reveals actions based on behaviors such as: carrying plans through to the end; to be less concerned with facts; find ways to live with discipline; see yourself as a person you can count on in an emergency; see a situation in different ways and, when you are in a difficult situation, find a way out, with energy.

**DISCUSSION**

In moments of great difficulties, it is possible to notice that most people acquire strength and ability to deal with challenges. 15

It is worth noting that the existing literature points to the importance of caring for one’s own mental health in the face of the misfortunes experienced in the face of unexpected and serious public health emergencies, such as the case of COVID-19. It is noticed that this can be a step towards the expansion of resilience in this group of researched, since studies 14-15 claim that resilient people have a low rate of depression and good learning conditions. They also add that resilience can generate a better perception of quality of life. 16-17

In this way, it is dazzled that resilience enhances the awakening of positive feelings such as empathy, gratitude and affection, which allow nursing professionals to re-signify life and personal values and, thus, develop skills to face the adversities that emerge in care practice. 18-19

Among the aspects associated with resilience is the ability to deal with the challenging environment, difficult news and go through difficulties for the rehabilitation of affected patients that generate potential risk factors for the development of negative emotions, such as stress, anxiety and anguish. We emphasize the importance of resilience as a protective factor against stressful conditions, which contributes to the reduction of anxiety and depression levels, in addition to helping as a moderator in facing concerns related to COVID-19. 20

In addition to technical-scientific knowledge, the preparation of the nursing team for care, responsibility and ethics in care, as well as elements that represent faith, resilience, empathy and solidarity. It should be noted that having a trained and well-informed team about the virus, knowing its transmission, techniques and infection control processes, will be information with a positive impact on the relief of anxiety and fear of these professionals. Thus, psychological and life characteristics, such as not thinking about the stress experienced, seeking support among team members and sharing experiences in unfavorable moments to stimulate life, can prevent exposure to risk factors associated with mental health. 21

The sociodemographic and work characteristics, it should be considered that such aspects can influence the moral sensitivity of nursing professionals in the face of problems that are presented to them in practice. 22-23

In this sense, resilience plays a preventive role by reducing the negative effects of stress, improving the mental health of the worker. However, in the complexity of human beings and their work, in facing the adversities present in the work context, people and environmental resources must be continually promoted, as resilience is a “being” and not a “resilient being”. 24

**CONCLUSION**

In this study, the self-confidence of Nursing professionals in their own abilities was evidenced, recognizing the limitations, but being able to face them, depending on themselves and considering a variety of experiences, acceptances and events, even in the face of difficulties.

The present study showed that most Nursing professionals have high resilience, which can help reduce vulnerability, as it is related to less stress.

This research becomes relevant to
the challenges of these professionals, so that coping and prevention measures are adopted for the well-being of the team. Skills to win and learn from adversity are characterized by personal and professional strengthening and growth.

It was evident that, in everyday life, the capacity for resilience is essential for emotional health, comprising positive perceptions in the face of adverse situations.

**REFERÊNCIAS**


