

Fragility versus vulnerability: (re)visiting contemporary aspects of work in the intensive care unit

Fragilidad versus vulnerabilidad: (re) visitando aspectos contemporáneos del trabajo en la unidad de cuidados intensivos

Fragilidade versus vulnerabilidade: (re) visitando aspectos contemporâneos sobre o trabalho na unidade de terapia intensiva

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Submission: 05-28-2021**Approval:** 06-25-2021**Abstract**

The aim was to analyze the understanding of nurses about care practice in intensive care and its related situations. It is qualitative research of descriptive exploratory character carried out in the city of Rio de Janeiro-RJ, which involved the use of a self-administered and semi-structured questionnaire; 13 nurses working in intensive care participated in this survey. Data analysis was performed using the Bardin method, which worked on the category: similarities that threaten the work context. It was detected in this investigation that nurses point to emerging issues of care practice as intervening with the subjective aspects, through which they greatly impact the nursing care provided to critically ill patients. Deficiency on the concept of vulnerability was another fact present, which partially hindered the analysis of the statements and articulation of the concept to the practical context of the work.

Descriptors: Nursing; Intensive Care Unit; Health Vulnerability; Work; Fragility.**Resumén**

El objetivo fue analizar la comprensión de los enfermeros sobre la práctica asistencial en cuidados intensivos y sus situaciones relacionadas. Se trata de una investigación cualitativa de carácter descriptivo exploratorio realizada en la ciudad de Rio de Janeiro-RJ, que implicó el uso de un cuestionario autoadministrado y semiestructurado; En esta encuesta participaron 13 enfermeros que trabajan en cuidados intensivos. El análisis de los datos se realizó mediante el método de Bardin, que trabajó en la categoría: similitudes que amenazan el contexto laboral. En esta investigación se detectó que los enfermeros apuntan a cuestiones emergentes de la práctica asistencial como intervinientes con los aspectos subjetivos, a través de los cuales impactan grandemente los cuidados de enfermería brindados a los pacientes críticos. La deficiencia sobre el concepto de vulnerabilidad fue otro hecho presente, que dificultó parcialmente el análisis de los enunciados y la articulación del concepto al contexto práctico del trabajo.

Descriptores: Enfermería; Unidad de Terapia Intensiva; Vulnerabilidad de la Salud; Trabaja; Fragilidad.**Resumo**

Objetivou-se analisar a compreensão dos enfermeiros acerca da prática assistencial na terapia intensiva e suas conjunturas relacionadas. Trata-se de uma pesquisa qualitativa de caráter exploratória descritiva realizada na cidade do Rio de Janeiro-RJ, que envolveu a utilização de questionário autoaplicável e semiestructurado; participaram deste levantamento 13 enfermeiros atuantes da terapia intensiva. A análise dos dados foi feita através do método de Bardin, o qual trabalhou-se a categoria: similaridades que ameaçam o contexto do trabalho. Detectou-se nesta investigação que os enfermeiros apontam questões emergentes da prática assistencial como sendo intervinientes com os aspectos subjetivos, através dos quais impactam sobremaneira a assistência de enfermagem prestada aos pacientes críticos. A deficiência sobre o conceito de vulnerabilidade foi outro dado presente, o que dificultou parcialmente a análise dos depoimentos e a articulação do conceito ao contexto prático do trabalho.

Descriptores: Enfermagem; Unidade de Terapia Intensiva; Vulnerabilidade em Saúde; Trabalho; Fragilidade.

Introduction

Perceptions about vulnerabilities and their conceptual aspects have always been permanently present in daily nursing, especially in the 21st century, characterized by the era of knowledge, which institutes science, technology, and innovation as a strategic field of action for development in general; It is precisely in this logic that health constitutes an inexhaustible territory for the progress of scientific knowledge, as well as its articulations. In an opportune way, this study is dedicated to research in the scope of labor practices, considering the multiple dimensions contained in this context.

The ICU (Intensive Care Unit) appears as a critical environment because it presents itself as a unit designated for the care of critically ill patients and/or with imminent risk of death¹.

In addition to the organizational and infrastructure aspects; for proper functioning, uninterrupted care by the multidisciplinary team is necessary, including in this aspect the specialized human resources, as well as specific equipment and technologies designated for diagnosis and various treatments¹.

Thus, in view of this complex contemporary scenario, multifaceted by issues that frequently emerge in nursing care practice, there is an increasing need to mobilize care resources, which adopt perspectives that contribute to the topic addressed.

Revisit the aspects included in high complexity care; becomes provocative, when considering the convenience of analyzing “new/old” dilemmas present in these scenarios.

Such expression, therefore, refers to the re-reading of “new” episodes of situations that essentially consist of “old” and known problems. The incorporation of resources, technologies, and processes, as well as the lifestyles in these environments, characterized by the interaction between man and machine, must be harmoniously present regardless of the situations of vulnerability to which they may eventually be exposed due to adverse conditions².

Admittedly, the perspective of work in the ICU follows significant demands, which include the physical, emotional and cognitive systems; above all, continuous exposure to occupational stressors, as well as the association between the needs characterized by the weariness of these workers, produce repercussions that can be considered abrupt threats for professionals; Take as examples: work overload, in the same way as insufficient human and material resources, which may represent weaknesses with high potential for fatal outcomes³.

In this way, the notion that essentially expresses the concept of vulnerability, briefly considers the connection between the set of individual and collective particularities, also considering the contextual peculiarities that can offer susceptibility to illness, and likewise proportionally the possibility of capitalization of the resources of all orders for their protection and confrontation⁴.

Capturing the established dialectic between understanding this concept and the implications usually established in this daily life, points to the possibility not only of providing recognition by others who eventually share this

same reality; however, pragmatically empowering other nurses to change their perspectives and realities.

Therefore, the objective of this study was: to analyze the understanding of nurses about care practice in intensive care and its related situations.

Methodology

It was used as an approach the exploratory qualitative study, descriptive and analytical, which was based on the use of primary sources. In this sense, the method used was the application of a semi-structured and self-administered questionnaire prepared by the researcher. The instrument was elaborated in three segments: the first containing sociodemographic information of the research participants, and then a script with open questions, allowing the participants to were free to express their understanding of the object of this study.

Thirteen nurses who worked in the intensive care unit, distributed between the day and night shifts in a private hospital, located in the west side of the city of Rio de Janeiro, in 2020, participated in this research. inclusion: nurses who had more than one year of graduation and more than one year of experience in care practice; and that at the time of data collection, they were working in the intensive care unit; and defined as exclusion criteria: nurses who were on sick leave, those who at the time of data collection were on vacation, and those who held leadership positions.

The research was carried out in three distinct stages, initially there was institutional consent, through a document authorizing the study in the scenario, then the individual approach was provided with the nurses to formalize the invitation, promote clarifications related to the research and the Term of Free and Informed Consent (TCLE), it should be noted that before the stage related to data collection, it was necessary to institute an amendment to the initial project with the CEP; due to the COVID-19⁵ pandemic; the aspects concerning the Resolution n.º466/12 of the National Health Council being fully respected⁶.

After collection, the categorical content analysis technique was used for data analysis and treatment⁷; at this stage, data processing followed the following sequence: pre-analysis (organization of the material); exploration of the material (coding, classification, categorization); treatment of the data obtained and interpretation (simple statistical operations, to establish the condensed information provided by the analysis); the use of the method allowed extracting from the speeches the central ideas, the issues repeatedly mentioned, and the complementary aspects between the reports presented, as well as the points of divergence and convergence between the study participants, having adopted the saturation criterion for process completion.

Confidentiality between the participants was guaranteed, following the ethical precepts in research, through codification with the acronyms NURS 01 to NURS 13, it is noteworthy that this article originated from the Master's thesis entitled: Promotion of health in critical care: care technology proposal for critical care nurses presented to the Postgraduate Program in Nursing – Professional Master's Degree in Care Nursing (MPEA) at the Fluminense Federal



University, and it is available in its entirety, as well as all related information to the database on the educapes portal⁸.

The study was approved by the Research Ethics Committee under opinion No. 3.912.499, of the proposing institution, in this case the Universidade Federal Fluminense; as well as through the consent of the co-participating institution in the study scenario, which was a tertiary health

care hospital, located in the west zone of the city of Rio de Janeiro, Brazil; and respecting all ethical and legal aspects⁶.

Results

The table below addresses the first stage of the applied questionnaire, which referred to the characterization of nurses working in the intensive care unit, participating in the study.

Table 1. Sociodemographic distribution of nurses working in the Intensive Care Unit of a private hospital in the west side of the city of Rio de Janeiro. Niterói, RJ, Brazil, 2020

Age (years)	N	F (%)
30-39	10	79
20-29	01	07
40-49	01	07
50-59	01	07
Total	13	100
Sex	N	F (%)
Masculine	02	15,39
Feminine	11	84,61
Estado Civil	N	F (%)
Married	10	76,09
Single	02	15,38
Widower	01	8,53

Regarding the age group (Table 1), 79% are between 30 (thirty) and 39 (thirty-nine) years old, while the other participants add up to 7% each individually, being represented in the age groups between 20 (twenty) and 29 (twenty-nine) years; 40 (forty) and 49 (forty-nine) years and 50 (fifty) and 59 (fifty-nine) years.

When compared to the 15.39% represented by the male sex, we observed that 84.61% of the picture is

composed of the female sex, which shows that the research participants are predominantly female.

Regarding marital status, 8.53% of the sample population declared themselves widowed, while singles totaled 15.38%, and predominantly the informants who declared to be married, totaling 76.09%.

Table 2. Professional qualification, work shift, length of employment and about having another job. Niterói, RJ, Brazil, 2020

Professional Qualification	N	F (%)
Lato sensu post-graduation	10	76,09
Graduation only	03	23,91
Stricto Sensu Post-Graduation	0	0
Work shift	N	F (%)
Day shift workers	04	30,76
High duty	05	38,48
24-hour stopover	04	30,76
Length of employment relationship	N	F (%)
01 to 02 years worked	03	23,07
02 to 03 years worked	03	23,07
Over 03 years worked	07	53,86
About having another job	N	F (%)
Have another job	06	46,17
Does not have another job	07	53,83

In the sequence (Table 2), some results from the application of the questionnaire are also presented;

regarding the profile of the professional qualification of the participants, the information collected gives us the following



characteristics: 76.09% had at least one lato sensu postgraduate course; 23.91% had an undergraduate degree, that is, only a university degree; however, none of the interviewees had a stricto sensu postgraduate degree.

The information shown in Table 2 also identifies 30.76% as day shift workers, and 38.48% as night shift workers, while 30.76% working in 24-hour shifts, it is therefore worth emphasizing; that there is no scale of 24 (twenty-four) hours in the study setting, possibly only when the employee needs to complement the workload.

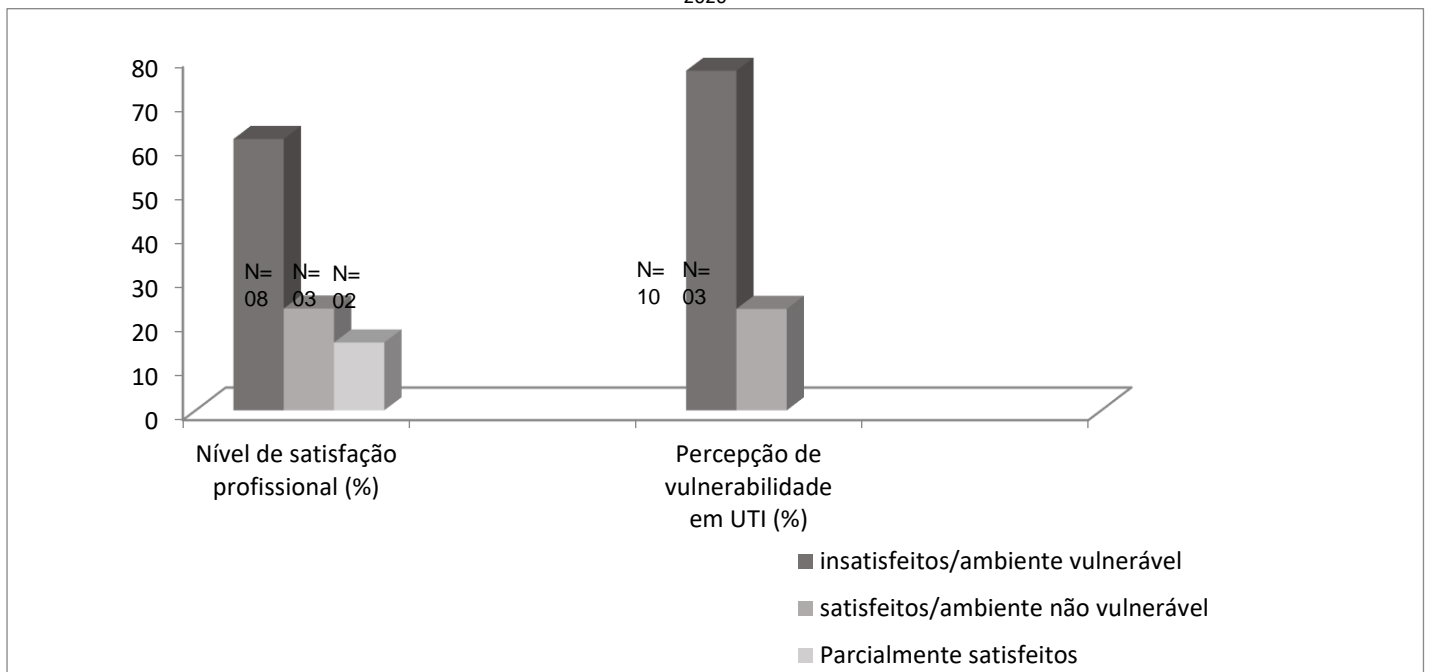
Even though it is not clear in the statements, it is inferred that the informants who reported working 24 hours were based on the accumulation with another employment

relationship, thus totaling this workload, or even referring to shift changes.

The length of employment with the company is in the following proportion of the sample, 23.07% had between 1 (one) to 2 (two) years of work, 23.07% had 2 (two) to 3 (three) years of work in the company and 53.86% reported having more than 3 years of service. When answering the data collection instrument about having another job, 46.17% said they had one, while 53.83% said they did not, which revealed a relative balance in this circumstance.

Regarding the second part of the applied instrument, it was possible to generate; from the information collected, the table with the two graphs below:

Graph 1. Representation of the level of satisfaction as a Nurse and the perception of the Intensive Care Unit as a vulnerable environment. Niterói, RJ, Brazil, 2020



In the first graph, what stands out is precisely the high number of respondents who reported dissatisfaction in the field of professional practice, these statements were limited to yes/not only; it is not possible to capture the relationship established in this context. However, in the second graph, we expressively observe the perception of a vulnerable environment when the studied scenario was

considered, but in a usual way, the deponents related risk as being the same thing as vulnerability.

Along with the thematic contents, the simple categorical analysis allowed us to debug the connectedness of the data through survey, distribution, approximation, recognition and consequently enabled the grouping of results in the following axes described in Chart 2, which guided the discussion of the findings of this study.

Chart 2. Grouping of prevalent themes, from the reports presented; in the instrument developed by the researcher. Niterói, RJ, Brazil, 2020

Guiding axes for the discussion	Groupings
The nurse in the current health context	Standardization of institutional routines, work overload, lack of material resources, poor remuneration, noise from alarms, adverse events, limitation of personal protective equipment (PPE), exhaustive workload, shortage of nursing professionals, distancing from family and social life, bad eating habits.
	Deficiency of health resources, lack of leadership, emotional and physical strain, lack of social



Perceptions about vulnerability (values and feelings)	recognition, anxiety, stress, personal or environmental weaknesses in dealing with everyday situations, exposure to factors with health risks.
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Discussion

Clarity and understanding of vulnerability become a necessary discussion as we refer to nursing care practice in the context of intensive care; this, due to the multiplicity of work processes that involve this scenario. Looking into the perception and likely articulation between working conditions and individuals, it proposes an accentuated analysis that incorporates in the most exhaustive way possible the mutual interferences, as well as the conjunctures of the various factors involved and their relational causes⁹.

The term fragility comfortably accommodated the legal sciences, and this expression is recognizedly used to refer to people who had their ability to act and defend themselves weakened, whether for biological or social reasons and, therefore, needing differentiated protection to guarantee their rights, later, the concept of vulnerability became compatible with the conception of fragility, assuming an interdisciplinary character and being applied to different thematic fields⁴.

Initial studies on vulnerability in Brazil refer to issues of decomposition of civil rights, strongly linked to socioeconomic content, thus addressing situations such as violence, the absence of citizenship with a precarious guarantee of civil and labor rights and even environmental injustice; speeches vigorously marked by the country's historical and political underdevelopment⁴⁻⁹.

However, the concept of vulnerability reappeared in the panorama of the emergence of AIDS (acquired immunodeficiency syndrome) in the 1990s, in an epidemiological circumstance linked to collective health; the approach initially considered in this perspective, which still remains, involves three components: the individual component (related to the information that the individual has about the problem and the capacity to transform it into protective practices); the social component (which refers to the possibility of metabolizing and incorporating changes taking into account their cognition, material resources, culture, existence or not of violent coercion and defense capacity) and the pragmatic component (this refers to the national, regional or local efforts, are the social resources made available for the empowerment of individuals)⁹.

Roughly, but distinctly, the ways of constructing the concepts and their practices differ when considering risk and vulnerability, although the use of the concept of risk is more strongly engaged in the hospital context, probably due to the theme related to patient safety¹⁰.

It is noteworthy, however, that while risk predominantly has a probabilistic, analytical, objective nature, capable of expressing the mathematical chances of "any individual becoming ill"; In contrast, the emerging concept of vulnerability is still under construction, which addresses the abstract elements associated with and associated with the disease processes for individual

theoretical plans, whose knowledge allows intervention on the situation of susceptibility of this individual, that is, is able to display the potentials of illness/non-illness related to the set of conditions⁹.

The nurse in the current health context

We opened this discussion topic, paying attention to the answers about feeling satisfied as nurses (Chart 1), 08 participants said no, while only 03 said yes and 02 said they were partially satisfied.

These data represent signs of attention, and at the same concern for the need to carry out studies that refer to aspects of work; because as observed, both the testimony that declares positive, and the one that declares negative, sequentially, their answers address questions addressed to the professional context, these findings become relevant, as they express the reflection and the need to discuss this issue, among those who consider themselves satisfied, two have another job and only one does not; for the partially satisfied, the two answered that they do not have another job, for the eight that are not satisfied, half that is, four have another professional relationship and four do not have one; on the general average, more than half of the interviewees have no other professional relationship, remaining active only in the study setting; the fact is that working with something that does not bring us satisfaction makes us sick and naturally takes us out of balance.

The formatting of the questions developed was initially intended to identify the nurses' understanding of vulnerabilities in their care practice and the understanding of this concept. Thus, the notions expressed in the reports remained partially aligned, considering the susceptibility of individuals and their work contexts, this is because some have shown limitations in differentiating with the concept of risk. In this survey, it was found, for example, the excessive charge to comply with institutional routines, the scarcity of human and material resources, the work overload, the use of technologies, the exhaustive workload, the social distance, among other elements, components present in the daily lives of nurses, with the ability to impact on care practice.

"[...] I understand that the frail person is always vulnerable to something [...], frailty for me means weakness, vulnerability and being susceptible to something" (NURS 12).

"The emotional pressure that we experience, in our work practice, in relation to the workload, which is very exhausting and few employees to handle a very large work demand" (NURS 11).

Based on the results found, it was possible to group (Chart 1) the themes considered problematic in the reports presented, which in turn reveal the situations of professional exposure and their likely consequences; these findings denote influence in the affectation of humanistic and



psychosocial care processes, with the potential to cause harm to both the caregiver and those who depend on the care.

"Firstly, the noise of the alarms, and secondly, working with the reduced staff, which ends up overloading the employee and can directly impact patient care" (NURS 12).

The perception of these aspects, understood as vulnerable, became even more relevant, when we add the COVID-19 pandemic⁵; situations previously characterized as simple and usual within an ICU, for example: the aspiration of the upper airways, among other more complex procedures, moves to a more hermetic level, requiring special attention, caution, and care from the nursing staff.

This appreciation strengthens the need to focus on the quality of life of those who are at the forefront, that is, those who are on the front lines of fighting the virus.

"[...] vulnerability due to the current pandemic situation, due to the workplace, trying to save PPE (personal protective equipment) and forgetting that we health professionals are likewise exposed [...] many hours equipped without being able to drink water and go to the bathroom, Physical and mental wear and tear" (NURS 07).

Perceptions about vulnerability (values and feelings)

The aspects that represent the perceptions of vulnerabilities highlighted by the participants of this study permeate emotional situations, as shown in some narratives, the dilemmas experienced by professionals about their working conditions highlight dilemmas that have already been highlighted, however, now with a new characterization, even without mastering the concept addressed, they manage to establish an initial relationship based on the individual component, that is, the first component to be considered from the perspective of vulnerability⁹.

The following excerpts demonstrate the relationship established by the study participants:

"Yes. Sometimes we hide feelings, emotions and at some point, it hurts/hurts us" (NURS 09).

"[...] because we work under tension and stress, emotional health is the balance for the professional not to get sick [...]" (NURS 07).

It is observed, however, that there must be consonance between the physical-structural aspects, between the actions aimed at assistential care, and between assistive technologies; these elements need to be guided by a reflective critique that can allow us to individually consider individuals and the contexts of situations that clearly

represent the vulnerabilities present in the work environment⁹.

Nursing is permanently exposed to situations of risk and vulnerabilities, especially in the current moment of pandemic situations that can compromise the emotional and physical state of workers in their daily lives. On the other hand, individual efforts in relation to self-care must be preserved as a capacity for resilience and overcoming.

The nurses' statements objectively display values and feelings, attributed by them, directly relating to their activities as indicated (Chart 1), the precariousness highlighted in health resources, as well as the absence of leadership, the lack of social recognition, anxiety, stress, emotional and physical wear, and tear, in addition to exposure to health risk factors in this work environment; urgently claims the need for investigations in these scenarios.

Knowing how to care as a logic of health production emerges from a challenging complex that encompasses issues related not only to the professional, but also to issues that relate to the objective and social reality and that will naturally be reflected in the way of acting and in their actions. Thus, the intensive care unit nurse must be aligned with the physical, emotional, and technical skills for the development of the care process in its entirety¹¹.

Final Considerations

It was apprehended that the nurses participating in this study, although demonstrating to recognize the weaknesses, seen as vulnerabilities; in its care to critically ill patients, despite all the difficulties addressed and mentioned above, the main concern pointed out was the alignment of work processes with the subjective aspects of professionals, recognizing them in an integral perspective.

It is also highlighted, as a limiting factor in this study, the contact using social media, due to the need for social distancing; health recommendation due to the COVID-195 pandemic and the deficiency between knowledge of the concept used and articulation with the practical context of the work.

However, these dynamics that characterize the work processes remain under continuous construction, requiring studies that mention and characterize other realities experienced in other contexts; above all, it is noteworthy that the use of the concept employed is not predominantly limited to theoretically analyzing these phenomena, however directing towards effective strategies, with resolving potentials, from the creation of technologies that operate in all social relations.

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