Original Article

Perceptions and experiences of nurses about their performance in the COVID-19 pandemic

Percepções e vivências de enfermeiros sobre o seu desempenho na pandemia da COVID-19

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ABSTRACT

Objective: to describe the perception and experiences of nurses about their performance during the COVID-19 pandemic. **Methods:** qualitative study with phenomenological approach. Fifteen nurses participated in the study, selected according to an intentional snowball type sample. The data were obtained through semi-structured interviews and the transcribed information was submitted to thematic-category content analysis. **Results:** from the analysis of the participants' discourse, the following categories and subcategories emerged: lived experiences (negative states; work organization; team cohesion; challenges and norms and guidelines); adopted strategies (individual; team support; familiar and informative) and future expectations (return to normality; adaptation; personal and professional growth; nursing uncertainty and valorization). **Conclusion:** from the perceptions and experiences of the nurses of their performance in the COVID-19 pandemic, the negative emotional states, strategies adopted of individual character and future expectations of return to normality are highlighted.
Descriptors: Pandemics; Coronavirus Infections; Nurses, Male; Occupational Health.

RESUMO

Objetivo: descrever a percepção e vivências dos enfermeiros sobre o seu desempenho durante a pandemia da COVID-19. **Métodos:** estudo qualitativo com abordagem fenomenológica. Participaram do estudo 15 enfermeiros, selecionados de acordo com uma amostra intencional do tipo bola de neve. Os dados foram obtidos através de entrevistas semiestruturadas e a informação transcrita foi submetida à análise de conteúdo temático-categorial. **Resultados:** da análise do discurso dos participantes, emergiram as seguintes categorias e subcategorias: experiências vivenciadas (estados negativos; organização do trabalho; coesão da equipe; desafios e normas e orientações); estratégias adotadas (individuais; suporte da equipe; familiar e informativo) e expectativas futuras (regresso à normalidade; adaptação; crescimento pessoal e profissional; incerteza e valorização da enfermagem). **Conclusão:** das percepções e vivências dos enfermeiros do seu desempenho na pandemia COVID-19 salientam-se os estados emocionais negativos, estratégias adotadas de caráter individual e expectativas futuras de regresso à normalidade.
Descritores: Pandemias; Infecções por Coronavirus; Enfermeiros; Saúde do Trabalhador.

Introduction

In the last decades, the evolution in work contexts is associated with new realities resulting from changes in demographic factors and new technologies[1]. However, one of the most recent challenges is related to the appearance of a new strain of coronavirus, the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), responsible for the COVID-19 disease[2]

This new virus, for which there is currently no treatment or vaccine available, was first identified in Wuhan, China, in late 2019. In March 2020, it was declared COVID-19 pandemic[3-4] by the World Health Organization (WHO), representing the most important public health problem of the last hundred years[5].

The recognition of the vital role of nurses in professional exercise[6], for being at the forefront of COVID-19 has also brought about profound and rapid changes for these professionals[7]. These changes are associated with organizational aspects, work-family interaction, telework and increased risks for those working in an emergency context[2,8].

Some of the problems already identified in different national and international researches, resulting from COVID-19 in nurses, are associated with increased levels of anxiety, depression and alcohol use, stress and post-traumatic stress, and the association between physical and mental health problems[2,7]. This new reality has raised increasing concern in the labor context, especially in terms of mental health[2].

However, we believe that the experience lived by nurses in different work contexts will allow a greater knowledge in the scientific field of nursing, specifically about the reality of the impact of this new pandemic, thus contributing to the development of strategies that promote the health of nurses, the quality of care and patient safety.

Given the pertinence of the thematic nowadays, this study emerges from the following guiding question: What is the perception and experiences of nurses about their performance in the COVID-19 pandemic? In this way, the objective defined was to describe the nurses' perception and experiences about their performance during the COVID-19 pandemic.

Methods

The qualitative study, following as a theoretical-methodological reference a phenomenological approach, which enhances the construction of the meaning of experiences experienced by participants, was developed according to the criteria recommended by the Consolidated Criteria for Reporting Qualitative Studies (COREQ) for qualitative research.

The participants were selected according to an intentional snowball type sample. Inclusion criteria were defined as: acting in a hospital context or in primary health care, being in active service and having at least one year of professional experience. Nurses were excluded even if they were professionally active and had leave (marriage, parental, illness or vacation).

Because a first contact was made with a participant and in accordance with the assumptions of the snowball technique and compliance with eligibility criteria, 15 Portuguese nurses participated in the study. The number of participants was conditioned by the saturation of information[9] through the verification of repetitive information, i.e., no relevant new data were found, without altering in any way the understanding of the phenomenon under study. No refusal was obtained from all the first contacts made via cell phone for possible participation in the study.

Given the inherent period of the COVID-19 pandemic, the interviews were conducted using the cell phone or video call and according to the availability of the participants, in the month of May 2020 and only in the presence of the researcher (first author) and participant. This research was developed in the scope of the International Project of Occupational Health, of the *Escola Superior de Enfermagem do Porto/Centro de Investigação em Tecnologias e Serviços de Saúde*.

For data collection, a semi-structured interview was used with the following guiding questions: What has been your professional experience in the COVID-19 pandemic? What strategies do you use in

the face of the difficult factors identified and what are your future expectations? The interview script also included questions that allowed the participants' socio-demographic and professional characterization, such as gender, age, marital status, presence of children, academic background, time of professional experience, workplace, bond and type of time exercised.

Two prior interviews were conducted to validate the clarity and objectivity of the guiding questions, without them being integrated into the study.

The average duration for the interview was 30 minutes and it took place only in the presence of the researcher and participant, of which the second authorized previously the recording of the interview. The content of the interviews was validated with the participants when they were held and there was a need to repeat an interview due to problems in sound quality.

The information obtained was transcribed in full to computer text (Microsoft Office Word 2016). The interviews were coded with the attribution of the letter E, followed by a number (according to the order they were conducted). The transcribed information was submitted to thematic-category content analysis, consisting of three chronological poles: pre-analysis, exploration of the material and treatment of results, inference and interpretation[10].

We have opted for a developed codification process, based on the categories established a priori, according to the objectives of the investigation, organized into categories, subcategories, registration units and enumeration units. The qualities in the categorization process were also met: mutual exclusion, homogeneity, relevance, objectivity and fidelity[10].

The present study was approved by the Ethics Committee of the *Escola Superior de Enfermagem do Porto* (703/2020) and the informed consent of the participant was obtained. The safeguarding and confidentiality of the data was ensured, since the interview alone does not allow the anonymity between participant and researcher.

Results

Fifteen nurses participated in the study, 12 of them female, aged between 25 and 60, 10 with a partner, eight with children and 12 with a Post-graduate or master's degree in Nursing. Regarding professional characteristics, the average time of professional experience was 22 years, six worked in a hospital context and nine in Primary Health Care, 13 with a definitive employment relationship and eight in fixed working hours.
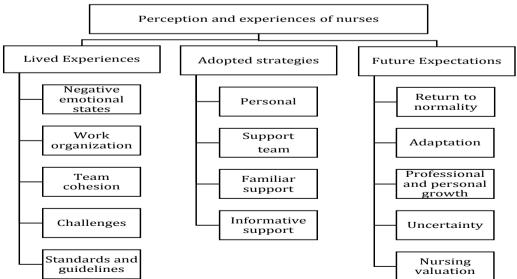

Figure 1 – Categories and subcategories of the perception and experiences of nurses resulting from their performance during the COVID-19 pandemic. Porto, Portugal, 2020

Through the analysis of the participants' discourse, the perception and experiences of the nurses emerged from the categories lived experiences, adopted strategies and future expectations. The subcategories of the COVID-19 pandemic are schematically presented in Figure 1.

Lived experiences

From the information obtained from the experiences category, the subcategory negative emotional states associated with anxiety, anguish, fear, stress, worry and insecurity stands out, as can be seen by the following register units*: Anxious with the equipment* (E4)*. At the beginning of the pandemic we were in a situation of greater anguish* (E7)*. When our colleagues started to get sick it was also that anguish that we felt ...I was more afraid of transmitting to someone* (E2)*. A rather worrying experience* (E4)*. With stress...more than I supposed* (E1)*. People get stressed, people panic* (E8)*. I'm feeling...a little insecure...in the background* (E1)*.

They have identified, with regard to work organization, factors such as changes in physical space, working hours, type of care and nature of the work: *I was taken to another place leaving the workplace confined to CO-VID-19* (E1)*. My service was completely restructured* (E2)*. We had to change the structure of the hospital itself to adapt to care* (E10)*. It was the change...I was directed to patients with COVID-19* (E9)*. We started to do 12-hour shifts, ready to say it is a bit tiring* (E8)*. The way we care had to be changed* (E5)*. This changed some types of care in fact... we lost much more time in care... because of the personal protective equipment we use* (E11)*. As there was reorganization of services, I had to have several different functions* (E14)*. We suspended all our activities in the hospital units... we started to communicate by email, by phone* (E13)*. Now I am teleworking full-time* (E15)*.

The participants mentioned in the performance of this period that the cohesion of the team was strengthened*: I also felt at the team level a cohesion, a very big help* (E3)*. There was much more team spirit* (E3)*. In terms of teamwork it has been positive, there has been solidarity between colleagues and other professionals* (E14)*.

It was also a period that brought challenges to the nurses and pointed out as something positive and a greater investment for the acquisition of new knowledge: *Challenge, a lot of new in terms of individual protection, infectology* (E3)*. Always in constant updating* (E5)*. The initial ignorance... a great need to update ourselves* (E7)*. Enriching in the sense of having access to different experiences during this period* (E14)*. It forced me to be constantly studying* (E2)*.

Finally, they referred to the frequency with which standards and guidelines were provided to them: *Guidelines issued by the Directorate General of Health) that were then sent to us* (E5)*. The Directorate General of Health also issued guidelines in this sense, which helped us to guide our performance* (E7)*. The Hospital and the Directorate General of Health itself have automatically issued new standards* (E11)*. Guidelines were changed day after day... thus generating a major change* (E2)*.

Adopted strategies

Of the different types of strategies adopted, aiming at overcoming the difficulties experienced, the individual ones, the support of the team, familiar and informative stand out. Of the individual strategies, those associated with the spiritual dimension, guided imagination, isolation, physical exercise and the characteristics of the work are identified*: My spiritual side* (E14)*. I go through meditations* (E1)*. I have tried hard to work on my mental health* (E3)*. A detachment from thought* (E6)*. Getting home and getting a period off* (E7)*. Having more moments to be alone... more moments to do things that were long ago to be done (E3). To rest when we were off* (E4)*. Being focused on the present moment* (E5)*. Doing some physical exercise going to the outside, to the field to get air, not talking to anyone, but seeing the plants* (E15)*. Working, I get distracted working* (E2)*.

In relation to the support of the team they emphasized the collaboration and the sharing of experiences*: Main strategy is the collaboration between us we have an extraordinary team... professional union* (E1)*. Ask colleagues... share experiences* (E3)*. I have colleagues... we help each other a lot... we support each other when someone... a person is more afraid... it helps us a lot to unite, to talk to each other* (E11)*. It helps to be in a team that gets along well, that's a strategy, I resort to my team whenever I need to when I'm more distressed and have some fear* (E2)*.

The participants considered family support as

a positive influence: *Talking to my family* (E2). *Try at home to experience positive things* (E3). *Having a period dedicated to family* (E7). *Think about those I have at home... not to take anything home* (E8). *I didn't separate and it helps a lot... we come home and have someone... it's always different, it helps to relax* (E11). *For me the family is a support... I find at home a space... to have a positive feedback* (E14).

As for the information support, it emerged from the need for preparation by the degree of knowledge, which was referenced by the search for updated information: *Try to be aware of all the information that was being given to us* (E3). *We always put clear signs according to the General Direction of Health, always straight so as not to miss any step* (E4). *Open three sites Direção Geral de Saúde (General Directorate of Health), Centers for Disease Control and World Health Organization and see what came out on the day ...get information and transmit information to colleagues* (E7). *Be up to date with the standards of the Direção Geral de Saúde* (E9).

Future Expectations

From the nurses' perception about the future, the expectations are a return to normality, adaptation, uncertainty, personal and professional growth and nursing valuation.

From the highlight of the subcategory return to normality, it goes through a rapid overcoming of the situation, a process of awareness of the need for time so that human values that emerged in this period can be maintained: *May all this be resolved as soon as possible* (E1). *May we return to normality* (E5). *To normalize our behaviors* (E4). *Hopefully this will pass and that everyone will be able to overcome this situation* (E8). *That this will end... quickly... that they will find a vaccine... because we can't stand this wear and tear* (E10). *It will take time, but we will be fine* (E9). *We will get through this... our National Health Service has been proving a great ability... people have also contributed to this* (E11). *I would like this reflection to be done by all people and from that something good will emerge, values that should probably be more evident in society... the union between people, the capacity of self-help* (E14).

But equally expectations for an adaptation: *We will all have to be much more vigilant all much more cautious... start*

to put the practice into perspective in a way... different and more adapted to the circumstances (E5). *In our daily lives we adapt to these circumstances... create specific routines and strategies... reinvent ourselves... I think nothing will be more equal to what it was* (E15). *Society will have to reorganize itself not only for the economy, but also for the routines of daily life* (E2).

Beyond the return to normality and adaptation, the feeling of uncertainty is expressed in the statement: *I think we are still going to... the worst... the uncertainty of tomorrow* (E6). *Not forgetting that at any moment we can become infected... it can bring problems* (E11). *But to give each other a little more time too... I wish these values could remain for longer, but very honestly, I don't know if this will happen* (E14).

The expectation of nursing valuation was also mentioned by the nurses: *In terms of population I think the work will be more valued* (E11). *The nursing I think will never be the same, the infection control will have another karma in our practice* (E16).

Discussion

As limitations of the study, the method of selection of participants is considered, which does not allow the extrapolation of the respective results. As well, the fact that the context of the COVID-19 pandemic is a new situation for participants.

We consider that this study can contribute to the awareness of nurses, managers and organizations for the importance of health promotion in the workplace. And, above all, mental health in such a challenging global phase, associated with the opportunity for new work challenges, with interdependent and flexible strategies, from the restructuring of physical spaces, the reorganization of work, the promotion of a culture of social support and healthy behaviors such as eating habits, physical exercise and leisure activities. Future post-pandemic investigations with populations from other work contexts (nursing homes, schools or correctional facilities) and other study designs may enhance the advancement of knowledge arising from the results of this study.

Nurses are essential professionals who ensure

the care at the front line of COVID-19, in work contexts already characterized by excessive workload, high work rhythms and lack of human and material resources[11]. In this period, the lack of knowledge of a new disease, the concern to contract it and transmit it to the family[2,7,12] emerge. Warning signs such as anxiety, anguish and fear described by the participants are frequent in situations of potential danger, originating potential disturbance in the well-being of the nurse, but allowing for dealing with the new situations[13-17]. Stress, a reality of professional exercise, also assumed greater intensity in this period. Although the average time of professional experience of the participants is 22 years, it was verified that the negative emotional state assumes relevance in face of the new reality. This fact is also corroborated using personal protective equipment in which compromised communication, discomfort, fatigue and skin lesions are identified in research as adverse consequences[18].

Work environment and organization are fundamental for the quality of life at work and patient safety, and the processes of change determine the promotion of individual and organizational resources for an adaptive process[17]. Rapid organizational changes, the mobility of nurses to COVID-19 services, changes in work shifts and the unavailability of breaks due to the use of personal protective equipment already described in the literature were also identified in the participants' speech. It is worth highlighting the experience of teleworking. The continuity of professional telework exercise, with the inherent physical separation of the team and dependence on the effectiveness of technological resources may present advantages such as reduced time spent on displacements, but associated with lonelier work, ergonomic risks, technostress and difficulty in family reconciliation [16]. It was found that most of the participants are female, with partner and children. Given the role assumed by women, the use of telework is a potential source of conflict between work and family[2,12].

Nurses are relevant professionals of multidisciplinary and interdisciplinary teams, the promotion of supportive relationships, interaction and interdependence reinforces the sharing of emotions, allowing the overcoming of difficult situations and greater team cohesion[2,6,16]. These results corroborate the findings of our research. The importance of interpersonal relationships in a profession directed to care for the patient is also highlighted, and at times, in order to minimize the consequences of the scarcity of human resources and not to overload the team, the nurse goes to work even when ill [11]. In this context, we emphasize the support role of supervisors as essential, both in the emotional and instrumental domains, providing the necessary resources[2].

Being a new situation, the pandemic has brought to these nurses, challenges associated with work and the search for knowledge. Also referenced in different researches in which the investment, searching for information and new scientific evidence, was identified as a challenging period[5,17]. The positive involvement of nurses was thus highlighted, intensifying flexibility and adaptability to new demands, an interesting fact, given the age range of participants and their definitive bond, thus revealing true professional commitment.

The strategies identified by the nurses focused essentially on the individual level and the cognitive-behavioral domain. Strategies that may have been enhanced by the acquisition of skills acquired in the academic training of participants, through graduate or master's degrees. The importance of mindfulness, relaxation techniques, guided imagination, and resilience in promoting mental health have evidenced positive results in different researches[17,19]. Also, physical activity has proved to be fundamental in health promotion actions in the workplace[1,20].

As far as support is concerned, as a resource of help and sensitivity to the other, provided by the team and relatives, the importance of sharing experiences with colleagues and supervisors was stressed. The professional experience of older nurses may be a contribution of excellence in the area of skills and abilities that promote less impact in innovative situations, particularly in the area of emotion management, use of personal protective equipment, or even in reference

models of clinical practice, as corroborated by different authors[12,16].

Similarly, research has recognized the support of nursing managers in new forms of management, in the field of work-family interaction, and in the quality of care provided and liaison with the occupational health team, which is essential for the identification of factors that may compromise the health of nurses, as well as understanding, guidance and supervision, both instrumental and emotional[4,7,12,15].

Finally, sensitized to the need for knowledge acquisition, as much remains unknown, the nurses searched for credible sources of information, meeting the importance of continuous learning, thus enhancing lifelong learning, as has been sustaining the literature[6-17].

As for future expectations, they are conditioned by the lack of knowledge of COVID-19 and relate to the desire for a return to normality, but also an adaptive process, where the emerging opportunities associated with these experiences can contribute to personal growth, professional and nursing appreciation. Also, the literature corroborates the importance of a culture of learning, with the identification of areas for improvement and valorization of significant work as a resource to deal with the demands[12,16]. And, even if the return to normality is expressed by the participants, recovering from the pandemic will not be a simple process. However, considering the work context as a privileged place for health promotion, the importance of adopting preventive measures is fundamental, at a time when there is still no prospect of treatment for COVID-19. Literature points out the importance of psychological support, focusing on individual and organizational characteristics, as well as support beyond the workplace[16-17].

Conclusion

The study described the perception and experiences of a sample of nurses about their performance in the context of the COVID-19 pandemic, highlighting, from this experience the negative emotional states.

The strategies adopted were, essentially, individual, highlighting the support of the team and family. The return to normality is one of the main expectations of the future, in which the personal and professional growth and the valuation of nursing are equally integrated.

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Collaborations

Borges EMN, Queirós CML, Vieira MRFSP and Teixeira AAR contributed in the conception and design or analysis and interpretation of the data, writing of the article, relevant critical review of the intellectual content and final approval of the version to be published.

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