

RESEARCH ARTICLE (ORIGINAL) 

Quality of life of the nursing staff during the COVID-19 pandemic: A qualitative study

Calidad de vida del personal de enfermería en tiempos de COVID-19: Un estudio cualitativo

Qualidade de vida da equipe de enfermagem em tempos de COVID-19: Um estudo qualitativo

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Abstract

Background: The COVID-19 pandemic brought changes in healthcare demands that resulted in long working hours for the nursing staff, affecting their quality of life and self-care.

Objective: To explore the perceptions of quality of life among the nursing staff working rotating shifts in an Emergency Department during the COVID-19 pandemic.

Methodology: Qualitative, phenomenological study. The sample consisted of seven nurses and nursing technicians. Data were obtained through semi-structured interviews via Microsoft Teams®. The analysis was conducted from the perspective of the philosopher Martin Heidegger and the theorist Dorothea Orem.

Results: The following categories related to shift work experiences during the COVID-19 pandemic emerged: impact on the physical and mental health, impact on the family and social environment, and self-care deficits related to feeding and rest.

Conclusion: The COVID-19 pandemic had multiple effects and consequences on the nursing staff that negatively affected their quality of life.

Keywords: quality of life; nursing staff; shift work schedule; COVID-19; emergency service, hospital; self-care

Resumen

Marco contextual: La pandemia COVID-19 implicó cambios en las demandas sanitarias, que trajeron consigo extenuantes horas de trabajo en el personal de enfermería. Esto provocó efectos en su calidad de vida y autocuidado.

Objetivo: Comprender la percepción de la calidad de vida del personal de enfermería bajo turnicidad laboral, durante el período de pandemia, en una Unidad de Emergencias.

Metodología: Estudio cualitativo, fenomenológico. La muestra estuvo compuesta por siete profesionales y técnicos de enfermería. La información se obtuvo mediante entrevistas semiestructuradas vía remota por medio de Microsoft Teams®. El análisis se efectuó bajo la mirada del filósofo Martin Heidegger y la teorista Dorothea Orem.

Resultados: Emergieron percepciones vivenciadas en el trabajo por turno en tiempos de COVID-19, las cuales se categorizaron en efectos en la salud física y mental, efectos en el entorno familia y social, y déficit de autocuidado en cuanto a la alimentación y el descanso.

Conclusión: La pandemia COVID-19 trajo consigo múltiples efectos y consecuencias al personal de enfermería, lo cual repercutió negativamente en su calidad de vida.

Palabras clave: calidad de vida; personal de enfermería; trabajo en turnos rotativos; COVID-19; servicio de urgencia en hospital; autocuidado

Resumo

Enquadramento: A pandemia da COVID-19 teve vários efeitos e consequências para os enfermeiros, o que teve um impacto negativo na sua qualidade de vida.

Objetivo: Compreender a percepção da qualidade de vida dos enfermeiros de plantão durante o período de pandemia numa unidade de emergência.

Metodologia: Estudo qualitativo e fenomenológico. A amostra foi composta por sete profissionais e técnicos de enfermagem. As informações foram obtidas por meio de entrevistas semiestructuradas via Microsoft Teams®. A análise foi realizada sob a perspectiva do filósofo Martin Heidegger e da teórica Dorothea Orem.

Resultados: Surgiram percepções do trabalho em turnos em tempos de COVID-19, que foram categorizadas em efeitos sobre a saúde física e mental, efeitos sobre o ambiente familiar e social e déficits de autocuidado em termos de alimentação e descanso.

Conclusão: A pandemia da COVID-19 teve vários efeitos e consequências para os enfermeiros, o que teve um impacto negativo na sua qualidade de vida.

Palavras-chave: qualidade de vida; recursos humanos de enfermagem; jornada de trabalho em turnos; COVID-19; serviço hospitalar de emergência; autocuidado

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Introduction

As a result of the COVID-19 pandemic, there have been several changes in health care requirements, with new demands and work patterns that have led to changes in the working hours of healthcare professionals in various health care facilities, both nationally and internationally. Even before the COVID-19 pandemic, the International Labour Organization (2017) reported that shift work and long daily working hours were common in the health sector worldwide, and that there was widespread evidence of the negative impact of excessive working hours on the health of health workers, both on their family life, quality of care, and workplace safety.

In this context, stressors such as shift work can have a direct impact on the quality of life and the working environment, as well as on the biological functioning of the personnel, thus jeopardizing competent professional performance (Del Valle, 2021; Rodríguez-Novo et al., 2022).

Considering the context of the COVID-19 pandemic, Loyola Silva et al. (2021) point out that the nursing discipline is one of the most affected professions, since nurses have a close relationship with patient care and are therefore more prone to experience high levels of stress and emotional exhaustion, which affects their quality of life. In addition to the psychological impact, this problem also contributes to a lower quality of care and a higher risk of errors.

For this reason, self-care among the nursing staff is essential to managing the levels of stress and burnout experienced during the COVID-19 pandemic. Dorothea Orem's theory of self-care identifies self-care as an essential practice. It is the duty of all health professionals to help patients, but also themselves, to become empowered to care for themselves. This model is a general theory that comprises four interrelated theories: the theory of self-care deficit, the theory of dependent-care, the theory of nursing systems, and the theory of self-care. The latter will be used in this study with the universal self-care requisites: "The maintenance of a sufficient intake of food, the maintenance of a balance between activity and rest, the maintenance of a balance between solitude and social interaction" (Raile, 2022, p. 202).

Thus, this study aimed to understand the perception of quality of life of the nursing staff working rotating shifts during the COVID-19 pandemic in an emergency department.

Background

According to the Chilean Ministry of Health (2020), COVID-19 is the worst pandemic in the last 100 years and has overwhelmed health professionals who have worked non-stop, without visiting their families for fear of infecting them, with shifts of 24 hours or more and with injuries to their faces. For this reason, special attention must be paid to health workers in order to prevent

mental and physical illnesses.

For Rivera et al. (2017), health-related quality of life is a multidimensional, subjective, and dynamic concept that is influenced by the experiences to which the health worker is exposed (p. 61). They also state that the work performed has a negative or positive impact on each worker, which would be closely related to the environment, the unit, and their duties. Thus, the lifestyles of nursing staff working rotating shifts may be affected, and they may develop psychosomatic illnesses, as evidenced by altered sleep and rest patterns, changes in diet and appetite, fatigue, emotional changes, and stress (Marrero, 2024). Several studies have reported low level of quality of life among health professionals during the COVID-19 pandemic (Canova-Barrios & Oviedo-Santamaría, 2021; Leon-Reyna et al., 2021; Llerena & López, 2022; Suryavanshi et al., 2020). Therefore, there is a need for further mixed or qualitative studies to provide more in-depth knowledge. While qualitative studies indicate that organizational factors are barriers to self-care for health professionals and influence their quality of life, one of the factors that affects professionals is healthcare management, with working hours and schedules, and where most interventions are possible (Orgaz et al., 2022).

Research question

What is the perceived quality of life of the nursing staff working in rotating shifts in an emergency department of a hospital in the Maule region, Chile, during the COVID-19 pandemic?

Methodology

This qualitative study followed the methodology of interpretive phenomenology proposed by Martin Heidegger, which seeks to understand the other, not only through language and conversation, but also through the meaning of phenomena (Fuster, 2019).

The sample consisted of seven nurses and nursing technicians working in the emergency department of a hospital in the Maule region, Chile. The selection was interrupted when data saturation was reached. The inclusion criteria were: (1) Nursing personnel working rotating shifts in the emergency department, who had an employment contract with the institution and (2) who had worked at least one month during the COVID-19 pandemic. The exclusion criteria were: (1) Nursing staff who were on sick leave or holidays during the COVID-19 pandemic. Data were collected through a semi-structured interview via Microsoft Teams® lasting approximately 30 to 45 minutes. The interview script included the following questions related to each specific objective, which were reviewed and approved by the academic committee of the School of Nursing of the Catholic University of the Maule and by a qualitative research consultant (Table 1).

Table 1*Semi-structured interview questions*

Interview questions
1. Can you describe your physical health while working shifts during the COVID-19 pandemic?
2. Can you describe how you felt mentally while working shifts during the COVID-19 pandemic?
3. How do you think the system has affected your family relationships during the COVID-19 pandemic?
4. What is your perception of the amount of time you and your family spent or shared together while working shifts during the COVID-19 pandemic?
5. How do you think the shift system has affected your social interaction during the COVID-19 pandemic?
6. What were your eating habits while working shifts during the COVID-19 pandemic?
7. What were your sleep habits while working shifts during the COVID-19 pandemic?
8. How were you able to balance the burden of shift work with your rest time during the COVID-19 pandemic?

Source: Author.

Subsequently, a content analysis was carried out. The interviews were transcribed using Microsoft Word. The information was organized into paragraphs and lines that were numbered (L1, L2, L3, L4, etc.). The identity of each participant was coded in numbers from 1 to 7 (Participant No. 1, Participant No. 2, etc.) to preserve their anonymity. For the thematic analysis of the information, categories and subcategories were identified to capture the essence of the discourse.

This article is a product of an undergraduate thesis and has been approved by the Scientific Ethics Committee of the Catholic University of the Maule (No. 105/2022). Each research participant signed an informed consent form. Approval was also obtained from the head nurse of the emergency department and the directors of the hospital.

To ensure the scientific accuracy of this study, the criteria of methodological rigor proposed by Rojas and Osorio (2017) and Creswell and Miller (2000) were respected: Multiple data sources, Triangulation and Transferability.

Results

The sample consisted of five women and two men aged 29 to 41 years, in a total of two nurses and five nursing technicians. Only one had a child. Regarding their length of experience, all of them had more than nine years of experience.

Three categories were obtained for each objective, with their respective subcategories (Table 2).

Table 2*Categories and subcategories of the study*

Categories	Subcategories
Impact of shift work on health conditions	Physical health Mental health
Impact of shift work on the environment	Family environment Social environment
Self-care behaviors	Eating habits Sleep and rest habits

Source: Author.

Category 1: Impact of shift work on health conditions

Two subcategories were identified for this category: Physical health subcategory - Within the Health condition category, participants identified physical health as one of the areas most affected by shift work during the COVID-19 pandemic, mainly due to the level of patient dependency and reduced mobility, which led to greater physical exhaustion among the nursing staff. In this regard, the participants reported:

It was a lot of physical effort, because the patients were unable to move, they needed a lot of assistance . . . I was so tired that my shoulders hurt, my back hurt, my legs, my arms, and suddenly, my head ached. (Participant No. 3, L4-9).

"I was very tired, physically, yes, it was very exhausting . . . I worked in the inpatient unit of the Hospital of Talca, where I cared for many stroke patients, so I had to put in a lot of effort". (Participant No. 4, L1-9); Mental health

subcategory - In this subcategory, participants reported that fear and stress were the most frequent feelings during the COVID-19 pandemic. These feelings were present in the general population, but were significantly stronger among the health care workers, given the work environment and the proximity to a disease about which there was no greater knowledge, with high mortality rates in population groups, and without vaccination. One of the participants reported:

The beginning of the pandemic was a bit stressful because it was a new disease, we didn't know it, we were afraid, maybe because of our family or because of what was going to happen because it was very likely that we could infect our family. (Participant No. 6, L6-9).

The nursing staff needed psychological support to cope with the daily work of caring for patients who could not recover and had no opportunity for individualized treatment due to the collapse of the health care systems worldwide:

"It was like a process, uh, a bit of a shock, it was a bad process and, yeah, it took mostly psychological help". (Participant No. 3, L46-47).

"I felt very weak and cried a lot, I missed hugging my family and having more physical contact with them". (Participant No. 1, L16-18).

As a result, both the physical and psychological effects led to changes in the quality of life, where the participants were in the same context but perceived the phenomenon differently through their own experiences.

Category 2: Impact of shift work on the environment

Another area strongly affected was the nursing environment, where the following subcategories emerged.

Family environment subcategory - This subcategory is closely related to the relationship with the family before the COVID-19 pandemic and is influenced by the presence of children and external and professional support networks. Most participants mentioned the distancing from their family environment due to fear of contagion, long working hours, and lockdown:

In family relationships, more than anything else, you get away from everyone, so you don't see your family because you can't see practically anyone and since we work in risky places, I also got away from friends, from my family, I didn't see my parents much, I just went there to drop off my daughter. (Participant No. 4, L38-41).

"At the beginning it had a strong impact because, although you work with patients and try to help, you also want to protect your family". (Participant No. 5, L36-39).

However, some interviewees reported that they did not experience a major impact on their family environment because they were able to maintain contact, which was influenced by the family relationship before the pandemic: "No, we have always had a good relationship with my family, so I don't live with them but we always communicate..., although during the pandemic it was less, we always talked and visited each other". (Participant No. 2, L48-50).

Social environment subcategory - Regarding the social environment, the participants mentioned that the relationships they had before the pandemic did not change much, as they continued to communicate through social networks. However, they were affected to some extent due to the lockdown and the fear of being infected:

"I still keep my friends, but of course I stopped seeing them, I stopped talking to some people who still don't understand that you are working". (Participant No. 4, L49-51).

The social issue was very well considered because at that time I was on the front line because I worked in the health sector and, I don't know, they came to ask about everything . . . When I got infected, no, it was like nobody wanted to have anything to do with me (laughs), but after that everything was fine. (Participant No. 3, L69-73).

Participants also mentioned that there were times when they felt discriminated against because they were health workers and because of the collective fear among the general population:

Like uncomfortable, bad. In fact, I arrived at the supermarket and told her: "I need something like that". "Oh no! I'll give it to you, wait for me outside" (laughs). But I think it was because it was an unknown subject, it was like when children play and say: "Oh, he has the plague! Something like that. It was a bit boring, but it went by (laughs), it was part of the process. (Participant No. 3, L87-91).

Category 3: Self-care behaviors

Two subcategories related to Dorothea Orem's self-care theory emerged from the participants' interviews. These subcategories are oriented toward two universal self-care requisites: The maintenance of sufficient food intake and The maintenance of a balance between activity and rest. These subcategories are presented below.

Eating habits subcategory - The nursing staff reported self-care deficits that affected several areas of their lives, including their eating habits. Participants reported self-care deficits related to the maintenance of sufficient food intake. The eating habits of these nursing professionals were affected during the COVID-19 pandemic. The interviews revealed that imbalances were created in the participants' lives in terms of the type and timing of meals in order to adapt and perform the tasks required by the strenuous workday:

"I had a bad diet and bad habits that, in the end, ended up making me fat. There were episodes during the pandemic when we started to eat unbalanced, and it caused me to gain too much weight, which affected my work performance". (Participant No. 5, L56-59).

As home delivery became more popular, I ate more fast food. I started eating poorly and, on top of that, I lost my habits... This was mainly due to time and convenience issues. (Participant No. 5, L65-67).

"You eat poorly, you eat, I don't know, because of anxiety or stress, and the food I did eat was of poor quality". (Participant No. 7, L29).

Sleep and rest habits subcategory - The impact on the sleep habits of health personnel was one of the most recurring themes among the participants, and it was evident that most of them suffered from some imbalance in this regard. Sleep disorders led to daily fatigue, which they attributed to the change in schedules and work shifts. However, the high work demands during the COVID-19 pandemic made it impossible to meet the universal requisite of maintaining a balance between activity and rest:

“There was a time when we would work 24 hours and then have 3 days off, but we would still work on those 3 days off because our colleagues were on sick leave”. (Participant No. 4, L103-104)

In addition, they did not achieve quality rest due to the self-care deficit in sleep and rest, resulting in the need for medication to satisfy and balance this need, which some participants still take today:

I used to take sleeping pills to be able to fall asleep when I came in the morning and at night. I sleep about 7 hours, but I think I'm only resting for about 3 or 4 hours, the rest of the time I'm awake.

It still happens to me. (Participant No. 4, L82-85).
“I'm dealing with a sleep disorder that makes it impossible for me to sleep, and I've got to rely on sleep medication to help me sleep”. (Participant No. 5, L70-72).

This was because of the pandemic, I was able to get a full eight hours of sleep each night with no gaps. But now I have to take sleep medication to get a good night's rest and be well. (Participant No. 5, L75-77).

Discussion

Concerning the first category (Impact of shift work on health conditions), participants reported multiple effects on health conditions due to the high workload and the global context experienced during the COVID-19 pandemic, with physical and mental health being the most affected. With regard to the first subcategory (Physical health), these findings contrast with those of Cargnin et al. (2019) and Zhan et al. (2020), who mentioned that the likelihood of health professionals presenting physical health problems is closely related to the effort exerted during the workday and is directly proportional to job demands, especially when the worker is continuously exposed to work that involves physical effort, as was the case with patients who tested positive for COVID-19.

Participants also reported that physical health was related to the second subcategory (Mental health), which was accentuated by the physical burden and unknown process of a pandemic. Similarly, several studies (Blanco-Daza et al., 2022; Urzúa et al., 2020) also found a high levels of stress and emotional lability associated with the increase in the demands and consequences of the pandemic, resulting in high psychological demands.

The second category - Impact of shift work on the environment - was a strongly affected aspect among the nursing staff, namely the Impact on the family environment and

Impact on the social environment subcategories. Both of these subcategories are affected by the presence of children, and the participants with children were the most affected in the family environment subcategory. These findings are consistent with previous studies by Rivera et al. (2021) and Ljevak et al. (2020), which showed how the family environment of health personnel was affected by shift work, long working hours, lockdown, and emotions such as anxiety, stress, and sleep disorders, which led to a decrease in social activities and a reduction in the time spent with the family.

The third category refers to self-care behaviors according to Dorotea Orem, which were analyzed based on the interviews of each participant and the theorist's self-care requisites. Two subcategories were found: Eating habits and Sleep and rest habits. The pandemic, shift work, the psychological effects, and the social and family environment led to a deficit in those self-care requisites. These results are similar to those found in several studies, mostly those with a quantitative methodology (García et al., 2020; Uribe-Tohá y León-Pino, 2022; Villaseñor et al., 2021). These studies showed that the population felt that their diet had been affected, with an increase in the consumption of unhealthy food and sleep disorders, such as insomnia, and a reduction in the quantity and quality of sleep, which are associated with an increase in the number of working hours due to professional demands.

Conclusion

During the COVID-19 pandemic, nurses working in a shift system perceived a decrease in their quality of life. This period had negative effects and consequences on their lives and affected their physical and mental health and their social and family environment, leading to a deficit in self-care. These situations led people to reorganize their daily lives and adapt their self-care and patient care. It is important to note that the phenomenon experienced was the same, but not everyone experienced these situations in the same way. It depended on the context in which they found themselves before the pandemic, such as the presence of children, family, and friends.

Although the nursing staff has the necessary knowledge of care and self-care, there was an imbalance in the maintenance of health, development, and well-being during the COVID-19 pandemic, which led to changes in the quality of life of these workers and the self-care requisites proposed by Dorothea Orem. It is essential to generate evidence that can provide new knowledge on the subject and help develop self-care strategies to help health workers in future similar contexts and avoid damaging their quality of life.

Further studies should be conducted face-to-face with the necessary safety protocols in place to protect both participants and researchers. In this way, intimacy with participants can be developed, nonverbal language can be better captured during the interviews, and greater depth can be achieved regarding the phenomenon.

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