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Experiences of Healthcare Personnel Before and After the COVID-19 Pandemic: Emotional Impact and Lifestyle Changes

Becerra Goicochea, Lorena Judith^{1}**Tapia Uriol, Rossy Paola²**Huaccha Tocas, Jorge Orlando³*

¹Regional Teaching Hospital of Cajamarca, Visiting Lecturer at the National University of Cajamarca, Peru.

^{2,3}Regional Teaching Hospital of Cajamarca

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Abstract

Objectives: To explore the experiences of healthcare personnel during the COVID-19 pandemic, focusing on the emotional impact experienced and lifestyle changes before and after the pandemic.

Design: This study is a qualitative inquiry delving into the experiential nature of phenomena through Colaizzi's method. It aimed to describe and understand individuals' subjective experiences, highlighting the richness and complexity of their perceptions and emotions.

Methods: Eighteen healthcare professionals, mostly women aged between 25 and 54, from various specialties such as obstetrics and general medicine were intentionally selected. Semi-structured interviews, recorded and transcribed, were the primary means of data collection, analyzed using Colaizzi's method. Except for one, all participants worked during the pandemic, with work experiences ranging from 1 to over 10 years. They hailed from different localities in Cajamarca and other regions of Peru. Healthcare personnel faced constant emotional pressure, anxiety, and stress due to uncertainty and workload. They also experienced depression and burnout, dealing with a lack of resources and recognition. They used relaxation, self-care, and social support, reevaluated priorities, valued family time, and implemented preventive measures improving patient care.

Conclusions: The study highlights the essential need to support the emotional and mental well-being of healthcare workers.

Keywords: COVID-19, healthcare personnel, emotional impact

1. INTRODUCTION COVID-19, also known as coronavirus, is an infectious disease that has triggered a global pandemic. Characterized as a low-probability, high-impact event, this disease demands an effective response from health systems and relevant institutions. Its control requires not only rigorous measures but also the ability to adapt and improvise by health systems. In this context, resilience becomes crucial to face the challenges posed by the disease [1].

By the end of October, more than 250 million cases of COVID-19 and 5 million deaths had been reported globally. In Spain, although 4.7 million cases were officially reported, estimates suggest the real number could exceed 7 million. This scenario has led to a reduction in life expectancy, significantly impacting groups with comorbidities and the elderly. Additionally, a general deterioration in mental health has been observed. Given this situation, it is crucial to pay attention

to certain groups such as healthcare personnel, predominantly female, and other frontline workers who face a heightened risk of mental health problems in the future. The pandemic and the measures adopted to control it have also generated unintended side effects, such as reduced healthcare services, increased sedentary behavior, and a rise in cases of gender-based violence [2]. The COVID-19 pandemic has had varied impacts globally; in Africa, early governmental measures, along with demographic and sociocultural aspects, managed to contain the virus's spread and maintain low incidence levels, highlighting the importance of adapting public health responses to regional contexts to manage future health crises effectively. Simultaneously, lockdowns have profoundly altered the eating habits of healthcare personnel, emphasizing the urgency of reinforcing nutritional education and planning balanced diets to counteract the growing consumption of ultra-processed foods and mitigate the adverse emotional effects resulting from the pandemic [3,4].

During the COVID-19 pandemic, healthcare personnel in China and worldwide faced unprecedented challenges that deeply impacted their emotional well-being and lifestyles. High rates of anxiety, depression, and stress reflect the intense emotional and physical pressure experienced by professionals directly confronting the health emergency. In particular, studies revealed that doctors and nurses, especially women, reported higher levels of anxiety and post-traumatic stress than their male colleagues. This situation underscores the critical importance of developing and applying effective psychological intervention strategies and emotional support, not only to manage the impact during the crisis but also to adapt daily routines and manage long-term stress. Necessary changes include modifications in diet, physical activity, and time management, highlighting the need for continuous care to ensure the well-being of healthcare personnel and their ability to provide optimal care even after the health emergency [5,6].

The COVID-19 pandemic has underscored the importance of understanding the lived experiences of healthcare personnel before and after its onset, in terms of emotional impact and lifestyle changes. A qualitative study focusing on these experiences provides a deep understanding of how the crisis has affected not only these workers' mental health but also their daily routines, eating habits, and physical activity. This research helps identify the main sources of stress and anxiety, allowing the development of more effective strategies to support the comprehensive well-being of healthcare personnel. Additionally, it reveals how they have adapted their lifestyles in response to the pandemic's demands, providing valuable insights for creating public health policies and intervention programs that promote healthy living practices and stress management, essential for their performance and resilience in the long term.

2. MATERIALS AND METHODS

Participants: This study focused on understanding the experiences of healthcare personnel before and after the COVID-19 pandemic, involving eighteen valuable healthcare workers, mostly women, whose ages range from young to experienced, all at different stages of their careers. They come from various corners of Peru, with most from Cajamarca. This group includes obstetricians, nurses, and general practitioners, providing a comprehensive view of healthcare professionals.

To collect their stories, semi-structured conversations full of depth and personal details were used to understand what it meant to live and work during pandemic times. Almost all participants were at the forefront of the battle against the virus, sharing their knowledge ranging from their first year in medicine to those with decades of service.

Participants were selected to reflect the reality of different work environments and types of employment, from hospitals to basic care centers, and from permanent employees to independent workers. Respect and care were ensured, with each participant agreeing and feeling comfortable

participating, respecting their languages and cultures without third-party intervention, maintaining a space of trust and privacy.

Our approach allowed us to better understand how healthcare personnel have reinvented themselves and adjusted to crisis times, balancing the demands of their work with their personal and family well-being. Their stories reveal impressive strength and adaptability, inspiring dedication and unparalleled commitment to those who care for our health in critical moments.

Ethical Aspects of the Study: The study was conducted in strict alignment with the ethical principles established in the Declaration of Helsinki, as well as specific ethical guidelines in Peru. Ethical approval for this project was granted by the Ethics Committee of the Regional Teaching Hospital of Cajamarca in 2023. A detailed informed consent process was ensured, where the nature, purpose, and procedures of the study were shared with participants both orally and in writing.

MethodsStudy Design: This study adopted a phenomenological approach guided by Colaizzi's method, allowing us to delve into the essence of the experience investigated. Initially, detailed narratives of the phenomenon were collected, followed by an in-depth and reflective analysis of the obtained information. This process included meticulous review of each transcript and extraction of fundamental meanings through dynamic coding, based on descriptive terms directly derived from the narrated experience. These meanings were then organized into thematic categories revealing patterns and connections within the shared life stories. Finally, a detailed representation of individual experiences was developed, and the accuracy of these interpretations was verified with participants to ensure their authenticity and fidelity to the phenomenon studied.

Interviews: Two researchers (LJBG, JOHT) constructed the semi-structured interview guide based on literature analysis from Scielo, PubMed, Scopus [7, 8, 9, 10, 11], useful for collecting responses from participants in different geographical areas of Peru (see Figure 1). The guide was then reviewed and evaluated by expert researchers (EUB, AMA), consisting of an eight-question questionnaire that allowed the extraction of relevant data after the preliminary interview. After the first two interviews, the guide was adjusted to clarify responses regarding research objectives. These pilot interviews were analyzed, and their data integrated into the results. Audio recordings were transcribed, and recordings were subsequently deleted. Participants' names were coded with pseudonyms to maintain anonymity. Field notes were also taken to capture expressions accompanying the discourse. Data collection concluded upon reaching data saturation, i.e., when interview analysis revealed no new or relevant information.

These rigor criteria contributed to the study's robustness and credibility, providing a deep and nuanced understanding of healthcare personnel's experiences during the pandemic.

Interview Guide:
<p>How would you describe your emotional well-being during the COVID-19 pandemic in your role as healthcare personnel?</p> <p>What emotions have you experienced most frequently during the pandemic, and how have they evolved over time?</p> <p>What specific situations have caused you the most stress, anxiety, or concern in your work due to the pandemic?</p> <p>What strategies have you used to cope with and manage difficult emotions during this period?</p> <p>What aspects of your personal and professional life as healthcare personnel did you consider most important before the COVID-19 pandemic?</p> <p>What major adjustments have you had to make in your daily routine and work approach since the pandemic began?</p> <p>What activities or habits have you modified or incorporated into your daily life as a result of the pandemic and why?</p> <p>How do you think lifestyle changes have affected your overall well-being and your ability to perform in your role as healthcare personnel during the pandemic?</p>

Figure 1. Interview guide

Results and Discussion: The qualitative research on healthcare personnel's experiences during the COVID-19 pandemic was conducted through interviews with 18 professionals, mostly women, including obstetricians, general practitioners, and nurses. Participants ranged in age from under 25 to over 55, with work experience from 1 to over 10 years. These professionals worked in various settings, such as hospitals and primary care centers, located in different regions of Cajamarca and other parts of Peru (see Table 1).

Table 1. Participant Characteristics

Gender	Profession	Work Experience	Work Sector	Residence	Contract Type
Female	Obstetrician	More than 10 years	Other	Pasco	Other
Female	Other	More than 10 years	Hospital	Cajamarca	Permanent
Female	Obstetrician	More than 10 years	Hospital	Iuancavelica	Permanent
Female	Other	1 to 5 years	Hospital	Cajamarca	Contracted
Male	Doctor	1 to 5 years	Hospital	Cajamarca	Contracted
Female	Obstetrician	More than 10 years	Other	Cajamarca	Permanent

Female	Obstetrician	More than 10 years	Other	Cajamarca	Permanent
Female	Obstetrician	1 to 5 years	Primary Care	Cajamarca	Contracted
Male	Doctor	More than 10 years	Hospital	Cusco	Permanent
Female	Other	6 to 10 years	Primary Care	Cajamarca	Contracted
Female	Nurse	More than 10 years	Hospital	Lima	Permanent
Male	Doctor	More than 10 years	Hospital	Lima	Other
Male	Doctor	More than 10 years	Hospital	Cajamarca	Contracted
Male	Doctor	More than 10 years	Primary Care	Lima	Other
Female	Doctor	More than 10 years	Hospital	Cajamarca	Permanent
Female	Doctor	More than 10 years	Primary Care	Lima	Permanent
Female	Nurse	6 to 10 years	Hospital	Cajamarca	Contracted
Male	Other	More than 10 years	Primary Care	Lima	Other

The qualitative analysis of the interviews allowed the identification of a variety of experiences and feelings among healthcare personnel during the COVID-19 pandemic. Multiple main themes were recognized, ranging from emotional well-being to specific professional challenges, coping strategies, and adjustments in both personal and professional daily routines. Table 2 below summarizes the main categories and subcategories derived from the interviews, providing a detailed view of how these professionals faced and adapted to the conditions imposed by the pandemic. This thematic structure offers a comprehensive understanding of the various dimensions of the pandemic's impact on their lives and work practices.

Table 2. Categories and Subcategories of Healthcare Personnel's Experiences Before and After the COVID-19 Pandemic

Category	Subcategory
Emotional well-being during the pandemic	Constant emotional pressure
	Impact on mental health
Specific professional challenges	Evolution of emotions
	Insufficient resources
	Recognition and support
Coping strategies	Relaxation and self-care
	Social support

Category	Subcategory
Valuing family time	Reevaluation of priorities
Adjustments in personal and professional routines	Preventive measures
	Changes in patient care
Impact of changes on professional performance	Improved care capacity

During the pandemic, healthcare personnel faced constant emotional pressure. Issues such as anxiety, fear, and stress arose due to social isolation, economic concerns, and health uncertainty. This situation was exacerbated by inadequate resources and support. Understanding these effects is crucial for developing strategies to support mental and emotional health in future similar crises. The study interviews revealed that healthcare personnel experienced constant emotional pressure during the pandemic. This pressure and the continuous stress environment highlight the urgent need to design and implement effective strategies for the emotional well-being of frontline healthcare workers. Most interviews confirmed that the pandemic had a significant impact on the mental health of healthcare personnel, with common issues of anxiety and stress. Additionally, all interviews noted increases in anxiety, sadness, and fear levels among healthcare personnel during the pandemic.

In the study, healthcare personnel reported using two main strategies to cope with the COVID-19 pandemic: relaxation and self-care, and social support. Relaxation and self-care included activities that promoted mental and physical health, such as relaxation exercises, maintaining healthy sleep habits, and a balanced diet. These practices helped healthcare workers better manage stress and maintain their well-being during periods of high demand and emotional pressure.

Maintaining frequent communication with friends and family offered an emotional support network, allowing for shared experiences and reducing feelings of isolation. These strategies align with those identified in other studies, highlighting the importance of self-care, compliance with health measures, and social interaction in facing crisis situations. Implementing these strategies systematically can provide a solid model to improve resilience and mental health of healthcare personnel in future similar health emergencies.

Several important outcomes were observed regarding how individuals coped with and adjusted their lives during the COVID-19 pandemic. Valuing family time led many to reconsider their priorities, placing more emphasis on personal relationships and family well-being. Significant adjustments were also made in personal and professional routines, such as following preventive measures and changing patient care approaches. These changes not only helped adapt to new conditions but also improved healthcare workers' ability to provide better care.

Conclusion: This study underscores the crucial need to understand and support the emotional and mental well-being of healthcare workers. The coping strategies identified have not only proven effective in mitigating stress but can also serve as a valuable model for future interventions. These strategies, when implemented systematically, offer solid and continuous support for frontline healthcare workers, helping them maintain their mental health and resilience in times of crisis.

Ethics Statement: All participants provided informed consent to participate in the study. No author declares any conflict of interest. There was no financial support for this study.

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