Revista Habanera de Ciencias Médicas
In the service of science
YEAR 2024
23 JANUARY-FEBRUARY
ISSN 1729-519X
ecimed

SOCIAL SICENCES

ORIGINAL ARTICLE

# Emotional health of sanitary professionals in COVID-19 contexts: a systematic review and qualitative meta-synthesis

# La salud emocional de los profesionales sanitarios en contextos de Covid-19: revisión sistemática y metasíntesis cualitativa

Juan Pablo Vázquez Gutiérrez[1*], Victoria Raquel Rojas-Lozano[2], Laura de la Paz Castillo[3]

[1]Universidad Iberoamericana. Departamento de Ciencias Sociales y Políticas. Mexico City, Mexico.
[2]Universidad Nacional Autónoma de Mexico, Facultad de Estudios Superiores Iztacala. Mexico City, Mexico.
[3]Universidad Iberoamericana, Posgrado en Ciencias Sociales, Mexico City,

***Corresponding Author:** juan.vazquez@ibero.mx

**How to cite this article**
Vázquez Gutiérrez JP, Rojas-Lozano VR, De la Paz Castillo L: Emotional health of sanitary professionals in COVID-19 contexts: a systematic review and qualitative meta-synthesis. Rev haban cienc méd [Internet]. 2024 [cited ]; Available from: http://www.revhabanera.sld.cu/index.php/rhab/article/view/5607

**Received: February 03, 2024**
**Approved: April 30, 2024**

## ABSTRACT

**Introduction:** The pandemic caused by the appearance of the SARS-CoV-2 viral strain, which causes COVID-19, put the health systems of all countries in crisis; especially those with fewer technical and material resources. In this framework, it is relevant to know the impact of the pandemic not only on the infected population, but also on the socio-emotional health conditions of the medical personnel in charge of their care.

**Objective:** To develop a systematic review and a qualitative meta-synthesis of the emotional experience lived by the sanitary staff who looked after COVID-19 patients.

**Material and Methods:** Documentary, descriptive, integrative, and critically focused research. The texts were selected according to the following criteria: a) original papers with qualitative methodology, b) published between 2019 and 2022, c) available in English and Spanish, d) from indexed and specialized journals of health and social sciences, e) about the emotional health of the staff who looked after COVID-19 patients. Search and retrieval were made through PubMed, Google Scholar, BVS and SciELO.

**Results:** This review identified 80 qualitative studies that revealed the significance of emotional life during the COVID-19 pandemic, highlighting fear as an emerging category in most of the studies. The meta-synthesis exhibits four main topics: 1) emotional impacts change depending on gender, profession, and level of attention, 2) tensions between individual and collective emotions, 3) production of moral feelings and ethical dilemmas and 4) challenges to the healthcare system during the pandemic.

**Conclusions:** Identified elements emphasize the need to reevaluate conceptual precision and distinguish among the different reported life levels. It is also important to analyze in more detail the stratification of emotional life in institutional contexts due to the structural problems and shortages of healthcare systems, which were overflown by the pandemic effects.

Keywords:
**Qualitative Research; Health Personal; Emotion; Fear; COVID-19.**

## RESUMEN

**Introducción:** La pandemia originada por la aparición de la cepa viral SARS-CoV-2, causante de la Covid-19, puso en crisis a los sistemas de salud de todos los países; en especial aquellos con menores recursos técnicos y materiales. En ese marco, resulta relevante conocer el impacto de la pandemia, no sólo sobre la población contagiada, sino también sobre las condiciones de salud socio emocional del personal médico encargado de su atención.

**Objetivo**: Realizar una revisión sistemática y una metasíntesis cualitativa de la experiencia emocional vivida por el personal sanitario que atendió pacientes contagiados por Covid-19.

**Material y Métodos:** Investigación documental, descriptiva, integrativa y con enfoque crítico. Los textos fueron seleccionados según los siguientes criterios: a) artículos originales con metodología cualitativa, b) publicados entre 2019 y 2022 c) en idioma inglés y español; d) de revistas arbitradas y especializadas en salud y ciencias sociales; e) referentes a la salud emocional de trabajadores que atendieron pacientes contagiados por Covid-19. Su búsqueda y recuperación se hizo mediante consulta en PubMed, Google Scholar, BVS y SciELO.

**Resultados:** Esta revisión identificó 80 estudios cualitativos que mostraron la enorme relevancia de la vida emocional durante la pandemia por Covid-19, destacándose al miedo como categoría emergente presente en la mayoría de los estudios. La metasíntesis derivó en cuatro temas clave: 1) impactos emocionales diferenciados según género, profesión y nivel de atención; 2) tensiones entre emociones individuales y colectivas; 3) producción de sentimientos morales y dilemas éticos y 4) retos impuestos al sistema de salud frente a la pandemia.

**Conclusiones:** Los elementos identificados destacan la importancia de redimensionar la necesidad de una mayor precisión conceptual y distinción entre los diferentes niveles de vida emocional reportados, así como analizar con mayor detalle la estratificación de la vida emocional presente en el contexto institucional a la luz de carencias y problemáticas estructurales de los sistemas de salud, que se vieron desbordados ante los efectos de la pandemia

**Palabras Claves:**
**Investigación cualitativa; personal de salud; emoción; miedo; Covid-19.**

## INTRODUCTION

The pandemic due to the viral strains of SARS-CoV-2, which caused COVID-19, deepened structural asymmetries worldwide, impoverishing life conditions and increasing social stratification of emotional welfare[1]. Uncertainty accompanied the pandemic, and the need for social isolation led to changes in emotional cultures of societies[2]. Among the strongest emotions associated with the development of the pandemic and its care from the healthcare systems is fear[3]. Various manifestations of fear during the pandemic were observed at both individual and collective levels within healthcare institutions, which indicate the relevancy of the emotional scope in the analysis of health/disease/attention/prevention process in pandemic contexts. Considering that the healthcare staff have been closest to COVID-19 patients, it is important to know how the fear of contagion, the uncertainty produced by working with a serious virus of which nothing was known, the anguish of providing care with strict measures of infection control without necessarily having adequate security measures, the stress of working in unknown environments, and the grief in front of the facing the massive death toll of patients, have all impacted these professionals. This paper critically reviews the qualitative literature in healthcare focusing on emotions expressed by the healthcare staff responsible for caring for COVID-19 patients.

Literature, predominantly quantitative, concerning the impacts on the mental health of healthcare workers worldwide (before and during the COVID-19 pandemic) demonstrate the increasing incidence of emotional exhaustion, burnout syndrome, anxiety, depression, and post-traumatic stress (PTS) in this group of professionals[4,5]. However, despite their importance, these types of studies are still insufficient to fully understand the complexities of the emotional health of healthcare workers, even less so in pandemic contexts.

In this context, qualitative approaches are crucial for understanding the meaning and socioemotional implications arising from care work in high-risk contexts. This study conducts a systematic qualitative meta-synthesis to identify the diverse emotional expressions experienced by healthcare workers during the COVID-19 pandemic through the detailed review and analysis of a bibliographic sample composed of 80 specialized texts, published between 2019 and 2022.

To achieve the aforementioned goal, conceptual clarity is established, delineating the various levels of emotional experiences among healthcare professionals during the pandemic. This involves a detailed description of their lived sensations, emotions, and feelings. Research of this nature is crucial in pandemic contexts such as those recently experienced because sustainability of future sanitary responses will depend on ensuring not only the physical and mental health but also the emotional well-being of healthcare workers. While literature shows the importance and urgency of psychological support as a tool to address gaps that exist and guarantee sustainability[6], this review also underscores the significance of examining social stratification of emotional life among healthcare professionals at the healthcare system. This analysis focuses on factors such as: 1) emotional impacts change depending on gender, profession, and level of attention, 2) production of moral feelings and ethical dilemmas generated in critical moments of care in COVID-19 patients, 3) tensions between individual and collective emotions produced at an institutional level.

The **objective** of this research is to develop a systematic review and a qualitative meta-synthesis of the emotional experience lived by the sanitary staff who looked after COVID-19 patients.

## MATERIALS AND METHODS

**Study design**

This was a documentary, descriptive, integrative, and critically focused research. The presentation of results adheres to meta-analysis international standards recommendation JARS-Qual from the American Psychological Association (APA).

**Search methods and selection criteria**

The works were chosen according to the following criteria: a) original papers with qualitative methodology, b) published between 2019 and 2022, c) available in both English and Spanish, d) from indexed journals specializing in health and social sciences, d) about emotional and psychosocial health of health professionals who looked after patients with COVID-19. The search was done using the following terms gathered from the Health Sciences Descriptor (DECS-MeSh): emotion, affection, feelings, fear, qualitative research, COVID-19/SARS-CoV2/Coronavirus, health staff. Its retrieval was made through PubMed, Google Scholar, Portal Regional de la Biblioteca Virtual de Salud (VBS) and SciELO.

**Search results**

The search took place in December 2022. A total of 1696 texts were retrieved with the search algorithms and 176 references were assessed which then were managed and systematized in the bibliographic manager Zotero. Once the articles were identified and the doubles eliminated, a process of assessment and analysis was done and 80 papers that had the aforementioned criteria were included.

**Quality selection and evaluation**

An initial immersion in data reading and re-reading of all the papers from three reviewers were performed. The integrative revision, classification and synthesis of all selected works was done through the creation of a text analysis matrix which included: a) data relating to the publishing type (institution, publication, knowledge area, language, year of publication, country of origin, author(s)) and b) data relating to the content of the texts (title, research objective, problem, type of research, population, sample, method, used techniques and instruments, software, means of communication, data analysis, analysis categories, theory, theory level and findings, with special attention in identifying reported emotions). The quality of the studies checked was done through the verification list of qualitative research of the Critical Appraisal Skills Program (CASP). (See Table). Two female reviewers did quality of research to describe if the studies accomplished, accomplished partially, or did no accomplish CASP criteria.

**Table: Quality of select studies- number of studies meeting each CASP criteria**

| | Totally Met | Partially met | Not met |
|---|---|---|---|
| 1. Was there a clear statement of the aims of the research? | 72 | 8 | 0 |
| 2. Is a qualitative methodology appropriate? | 80 | 0 | 0 |
| 3. Was the research design appropriate to address the aims of the research? | 54 | 26 | 0 |
| 4. Was the recruitment strategy appropriate to the aims of the research? | 71 | 9 | 0 |
| 5. Were the data collected in a way that addressed the research issue? | 74 | 5 | 1 |
| 6. Has the relationship between researcher and participants been adequately considered? | 14 | 66 | 0 |
| 7. Have ethical issues been taken into consideration? | 71 | 7 | 2 |
| 8. Was the data analysis sufficiently rigorous? | 70 | 9 | 1 |
| 9. Is there a clear statement of findings? | 80 | 0 | 0 |
| 10. How valuable is the research? | 66 | 14 | 0 |

**Source: Critical Appraisal Checklists, CASP Qualitative Studies Checklist**

**Synthesis extraction and data analysis**

For data processing, a quantitative matrix in Excel and a qualitative matrix in Word were developed. Regarding critical and integrative revision, first the database got populated starting from the variables related to the document type and content of the publication, in which units of coding retrieved from each text were specified. The coding process was developed before the data systematization, but for some variables, such as fear, coding was done only after the reading of the texts through frequency analysis. In a second moment, after completing the initial interpretation of the data, an inductive coding system was applied to refine the development of emerging topics through a qualitative matrix which allowed to organize the further problematization and the analysis of identified emotions, as well as to facilitate the generation of missing units of coding. In the specific case of fear, forty subcategories were built to show the way this category was defined and associated. The intercoder agreement was established through an iterative process of recoding, rereading and reanalysis of texts which produced a total of 288 codes.

## RESULTS

**In the search for a structure**

According to the sample of 80 papers reviewed and 288 codes built, results are presented in two moments. In the first one, a synthesis of the state of the published texts is offered. In the second one, the main topics were identified, and their respective findings were classified according to sensations, emotions and feelings expressed by the subjects of research.

**Status of the papers included in the review**

The sample built reveals an international production mostly written in English (90%), in comparison with the one written in Spanish (10%). Publication represents 30 countries, in which China (15), Spain (11), Iran (8) and U.S. (7) were the ones which published the most. The institutions with more presence, according to adscription of the first author, where the Chinese (13) and Spanish (7) ones. The works were published in 53 magazines, 86.7% of the health area and 13.3% of social sciences. For the first case, involved disciplines were: infirmary, health, public and collective health. Regarding social sciences, areas such as anthropology, sociology, social work, and psychology were considered. A perspective analysis on the conditions in which these professionals find themselves during the pandemic was carried out from a clinical, health, individual and behavioral perspective, losing sight of a social, contextual and intersectional analysis.

Most of the studies were carried out in high-income countries, in urban areas and cities and refer to public sector health institutions, leaving a gap regarding what happened in peripheral, rural areas and the private sector. The most analyzed level of care was the tertiary level, and to a lesser extent the primary and secondary levels or other areas that, although not dedicated to the direct care of the virus, had contact with infected patients.

The main research subject studied was the nursing personnel (34 articles, of which 25 exclusively included a sample of women), followed by medicine and other areas that were included to a lesser extent such as psychology personnel, social work, paramedics, physiotherapists, midwives, professionals who care for people with intellectual disabilities and mental health, laboratory technicians and maintenance workers potentially exposed to infectious materials, laboratory staff, pharmacy, radiology technicians, cleaning staff, and administrative staff. The participation covered in the 80 articles included 2020 participants. The type of sampling was non-probabilistic for convenience and varied samples from 1 to 122 professionals were generated.

The quality assessment of most of the studies was moderate. Works included in this synthesis partially accomplished the criteria due to the absence of clarity in data collection, as well as in the use of processing software and the method of analysis of the data.

**Meta-synthesis**

Topics derived from meta-synthesis are subdivided into 1) sensations, 2) perceptions, 3) emotions, 4) feelings, 5) moral feelings, 6) psychosocial health, 7) fear. This cluster of analytic distinctions was an operative decision of the authors which tries to illustrate and distinguish the emotional life complexity of sanitary professionals. Besides, it pretends to be useful to the organization of findings according to the syntactic analysis of emotions that implied the recounting of the words who were more mentioned in the studies and its respective associated factors (See figure 1)

Sensations

Sensations are physiological responses of body and instinctive type from the organism to environmental conditions[7,8]. Starting from the revision made, emotions further mentioned by the healthcare staff were relief, uncertainty, uneasiness, commotion, satisfaction, confusion, exhaustion, dissatisfaction, and nerves. Overall, they were associated with insecurity given by the context itself, such as being in a COVID-19 area or with symptomatic patients. Some examples of the described sensations were:

There is uneasiness and uncertainty because as long as the virus continues targeting the population, the sanitary staff will be the most affected in every way. "It is worrying not knowing what will really happen in a near future in the hospital context"[9].

Ameer (the nurse interviewed in this study) describes the relief sensation that resulted from the renovation of knowledge: "there was relief, a lot of renewal and reading of the material related with the pandemic"[10].

Perceptions

To characterize specific sensations experienced as a direct response to the environment, a section regarding perception is included here. Perception is the way external information is captured and interpreted, the one we receive through our senses in a way that is meaningful to us[7,8]. Perceptions of threat, uncertainty, abandonment, and ungratefulness were identified in the reviewed literature. They were mostly associated to not knowing the virus, its treatment, and the ungratefulness seen in the society connected to their job, expressed in the following lines:

Feelings of uncertainty increased at the beginning of the pandemic because there was a limited orientation about the use of Personal Protection Equipment (PPE), the clinical management of patients and the test for COVID-19 infection[11].

Nurses told that, on the one hand, society has praised them and described them as heroes or angels, making them feel trusted guardians of health; on the other hand, it has considered them infection spots, which has taken them to perceive abandonment and ungratefulness from society[12].

Emotions

Most of the papers contained, as fundamental findings, the experienced emotions and their associated factors. Emotions involve assessment and judgement processes, and they answer specific ways to comprehend the world, which are non-reducible to bodily sensations. Far from being pre-social or precultural, emotions possess a relational character and are configured through determined cultural meanings[8,13].

The most characterized emotions from research were fear, anguish, sadness, impotence, irritability, frustration, upsetting, anger, joy, and disgust. Regularly, they were classified as positive and negative; the negative ones were mostly found in texts that studied the first stages of the pandemic; the positive ones were found in the late stages or in the ones aiming to know confrontation strategies. Both kinds of emotions were associated with the risks and challenges faced by professionals working with a virus about which little was known and with limited or nonexistent security felt by the healthcare institutions they were working in. Regarding this last part, some fragments of papers reviewed underline that:

All the nurses agreed on multiple angles to be a nurse and to work in an elderly home. They especially emphasize the ideas of professional pride, and perceived satisfaction for the joy and gratefulness generated by residents and their families[14].

Students particularly emphasized the feelings of sadness towards suffering and death, and they added that during the isolation measures, the presence of a family member was rarely possible, which in turn, lead that the patients with COVID-19 died alone[15].

Feelings

Feelings are encoded and socially configured experiences that entail a moral component and can be the object of teaching, indicating what is socially defined as right or wrong[7]. The main feelings mentioned were anger, tranquility, indignity, trust, worry, distrust, fear, tension, pressure, constriction, strength, overwhelmingness, solitude, panic, motivation, desperation, and illusion.

They were associated with things such as stigmatization of health professionals by families, friends, and communities in general; with feelings of lack of support and acknowledgement of their organizations while trying to face the stressful factors or with the experience of both the self-contagion as well as the death and grief of coworkers, family members, or patients. These are just some examples of the latter:

We worked in better conditions than our previous units. We felt valued and considered to see our processes made easy, which has been motivating. I feel our necessities are completely met[16].

As in many other reports, nurses from this study informed a serious emotional tension related to work overload, suffering and death of patients, and the social stigma derived from their condition of being healthcare workers facing a fearful disease[17].

Moral feelings

Another main finding of the reviewed studies was the identification of what in psychosocial literature is called coping strategies. It was in this section where the majority of the texts named feelings what here are named as morals because of their power of transformation and revindication, thus expressing a conscious balance of the situation and defining moral orientations, that is to say, feelings that have been object of teachings and moral formation and contribute to the creation of parameters towards action[8]. The most named moral feelings were pride, guilt, gratefulness, uselessness, detachment, rejection, dehumanization, hopelessness, helplessness, empathy, demoralization, indignity, incredulity, disappointment, anguish, moral damage, embarrassment (or shame), and patriotic love. Such moral feelings were associated with the ability to manage emotions from the healthcare professionals through the pandemic, like "love to the profession", which included an increased development of professional type of responsibility like "this is my duty, but I feel useless for not being able to do anything more (or else)", or the guilt and shame they felt at the time to "choose" who to help in a healthcare system which had collapsed, or the pride to be "in the front line battle ", using a metaphoric military language and going to abnegation and heroism models.

A distinctive trait (...) was the evidence of moral damage related to the staff sensation that they were defrauding (or disappointing) healthcare users, and that people were profoundly suffering as a result. Participants reported feelings of profound dissatisfaction with the support they could provide the users during the pandemic. One of the main concerns was that people with mental health problems felt isolated and without support or attention[18].

The participants of our study showed disposition to sacrifice in the context of lack of resources, belief in the ability to triumph over adversity, patriotism and faith that involved love for their country. The professional commitment and patriotism were key factors that affected the will to work of the first-line health care workers during the pandemic, which has significant implications to maintain the workforce stability and the quality of care at a time of elevated health needs[19].

Psychosocial health

Even inside the built sample there were specific texts whose problems focused on the mental health of the professionals; terms such as stress, depression, anxiety, obsession, psychological anguish, PTS and burnout syndrome were named in the majority of documents, but in less size than emotions and feelings. They were associated with work exhaustion and uncertainty towards the virus, as well as disease and some other problems caused by confinement and the COVID-19 pandemic such as the loneliness produced by isolation. Regarding PTS or the burnout syndrome, even if they were mentioned in a lesser way, they mostly appear in research from the final pandemic waves. The conjunction of this problematics can be seen in the followings quote:

This study found that nurses felt fear and anxiety, their obsessions increased and showed depressing symptoms (...) These psychological reactions are normal in crisis. However, the quick spread of COVID-19, the lack of clarity of its treatment and infection, and the death of sanitary workers in several countries (...) can unleash these reactions. Besides, in this process, some participants that live with their families (it means, they worry to infect their loved ones), are stigmatized by society or are found in a process of social isolation or quarantine, thus increasing their anxiety and fear[20].

**Figure 1. Perceptions, sensations, emotions, feelings and psychosocial health in COVID-19 pandemic contexts**


**Source: personal elaboration using qualitative matrix**

Fear

Even though fear was not the central object of study in the reviewed texts, its appearance was a central finding, that is why it requires an independent section. The main reason that manifested the health professionals to have fear was contagion[21,22,23]. They had fear of their own contagion[24,25,26,27], of presenting any symptom similar to COVID-19 (coughing, cold, or fever)[28] and in some cases, when the professional had any comorbidity (diabetes or hypertension) [29], this fear increased and was manifested through a particular "obsession" to be constantly monitoring their own symptoms[30,31]. Fear of contagion came with a fear of being admitted to hospital, of entering an Intensive Care Unit (ICU, which is the most critical scenario for a patient), needing a ventilator and not having one[32], fear of re-contagion[33], and fear of going home after being in the ICU[34]. There was also fear of spreading the virus to the family (parents, elders, children)[35,36], not only for the development of the disease, but also for the responsibility to have them caught it. Furthermore, fear manifested by contagion from and to coworkers, although it was less present between sanitary workers who had previous experience with infectious diseases, than first[37,38,39,40] and second level of care[41] or staff that even though they had attended patients with COVID-19, were not in critical spaces of care. Fear of contagion was present in patients, especially in the ones defined as vulnerable or those outside ICU in other services like geriatric[14], psychiatry[42] or gynecology[43,44]. Fear was also manifested in a separate way depending on gender: fear of getting sick and not being able to take care of dependent people or leave children orphan, was a more manifested fear among women; in a convergent way, fear of woman getting was also expressed by men[45].

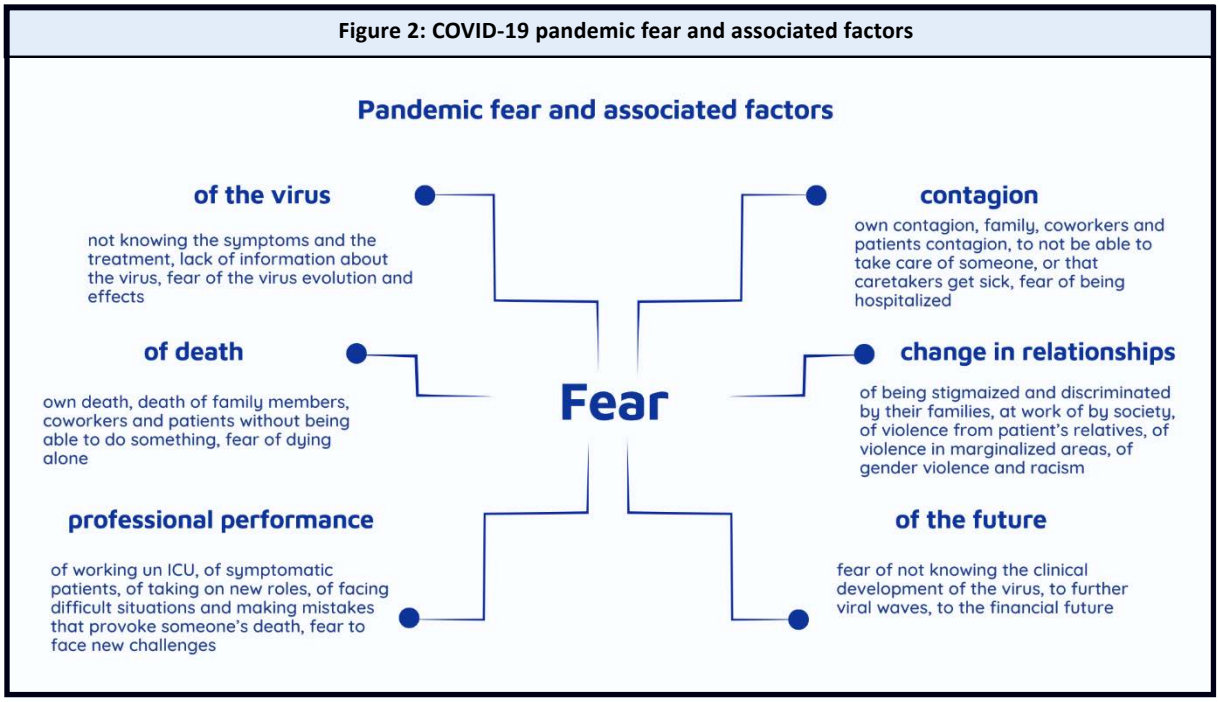
Fear of death was a frequent cause mentioned by healthcare professionals. First, fear of their own death[46,47,48] was pointed out as an associated factor linked to dying alone and far from loved ones (such as the case of the voluntary Chinese staff that went to Wuhan)[49,50,51]. It was also manifested in fear of death of family members or coworkers[52,53]. Finally, it was fear of seeing patients dying, not being able to help them or not supporting the grieving process of relatives[54,55]. Along with fear of contagion and death, given the high rate of lethality and transmission of the virus, fear of disease (to its development and effects)[56,57,58] was also mentioned, a situation associated to the lack of knowledge about symptoms and treatment[20,59], uncertainty to information from virus and lack of information[60,61]. Uncertainty, confusion, disinformation on COVID-19 and its effect brought about another fear: fear associated to the performance[62] or the workspace. This fear was linked to diverse situations: fear of going to work[63,64] or working in isolation rooms (ICU)[65] and having contact with COVID-19 patients[66]. Fear of symptomatic patients[67] or giving care to patients in critical conditions. Fear of inadequate training[68] or facing difficult situations that surpassed their abilities[69], of taking new roles and facing new challenges brought by the coronavirus crisis (especially in the staff that felt outdated or knew nothing about infections)[70,71]; fear of not acting fast[72] and losing control[73], of not to have a backup in decision making[52]; fear of causing someone's death due to ineptitude[44]; fear of not being useful and being a weight for experienced professionals[69].

Fear caused by disorganization in the healthcare system; fear associated to the personal protection equipment (PPE)[74] due to its insufficiency to prevent infection, low quality, theft or scarcity[75]. Fear of losing the job, salary cuts (mainly in private establishments), and fear of lawsuits in case something went wrong with the patients (especially, with the ones not in a critical situation)[44]. Fear of not accomplishing the professional duty of caring[76,77], and fear of being judged by colleagues, of quitting or refusing to help COVID-19 patients[45]. Finally, fear of losing a potential treatment or not having more information about it[78].

Healthcare professionals not only lived fear in an individual level regarding the disease, death, or work performance; their fears were also associated to the change that contagion and confinement caused in social relations. One of the main problems was stigma and discrimination in which they were victims at a family, work, and community level[79]. In that way, fear of the reaction from the family to know they were infected(80) or fear of the demand of the family to quit the job, which was only present in women. Fear of change in the relationship with others[81,82], which was lived in the workspace when they were afraid of patient violence or family members in work contexts (beating or emotional extortion)[53]. There was also fear linked to extra domestic space, which was lived differentiated in rural or urban areas, between men and women and among racialized people. In that regard, for example, there was fear of violence in marginalized neighborhoods or the attitudes from people who did not receive attention and mainly belonged to peripheral areas[78]; fear of the possible experience of gender violence in empty streets for the isolation measures[45] and fear of having a higher exposure because they were part of an ethnic minority[83].

Finally, health professionals also manifested feeling of fear of the future[16,84]; fear of not knowing what would happen with the virus development (if there would be more strands, comorbidities, more challenges to the healthcare or more virus waves)[85,86]; fear that the quarantine continued; fear of work and financial future[87] and the inability to provide for the family[88,89]. (Figure 2)

**Figure 2: COVID-19 pandemic fear and associated factors**




**Source: personal elaboration using qualitative matrix**

## DISCUSSION

The results stemmed from the 80 reviewed papers are organized in 4 main topics: 1) emotional impacts change depending on gender, profession, and level of attention, 2) tensions between individual and collective emotions, 3) production of moral feelings and ethical dilemmas and 4) challenges to healthcare system during the pandemic.

*Emotional impacts change depending on gender, profession and level of attention.*

Linked to emotional impacts, only one study included gender perspective in its analysis[45], another one race[83], and only some had approaches to the primary and secondary level of care[38,42,44,46,60]. Scarce consideration of these issues is relevant from a transversal and intersectional perspective because data showed that the pandemic did not influence consistently the same way across all health professionals. Variables such as gender, profession, and level of care in the medical center played a core role in different types of experienced emotion.

With these considerations, different kinds of affectation are noted depending on professions and occupations inside the medical complex. In that sense, Dragioti *et al.*[90], mention that physicians and nurses were affected differently; being nurses more prone to insomnia, anxiety and depressing symptoms while physicians experienced more stress and PTS.

As to the intersection between gender and attention level, this study did not find significant differences in qualitative key, points that differ from the data traced on our end. In that respect, Bartra *et al.*[91], sustain that anxiety and depression were more frequent in women, female nurses and female front line workers, who according to Balai *et al.*[92], displayed 1.5 higher risks of experiencing anxiety, stress and low quality of sleep.

*Tensions between individual and collective emotions*

Individually, health professionals exhibited a wide range of emotions and feelings as a consequence of their experiences, perceptions and interpretations, which set the enormous complexity of an affective process emanating during medical attention performed in pandemic contexts. At the same time, even when the emotional record was generally done considering the individual level, the review identified collective expressions of these affections, which include tensions between individual and moral feelings. These tensions are derived from gender and professional imperatives inside the healthcare system established in the activity of care and attention(93).

The response of the healthcare systems to situations created by the pandemic increased the perception of insecurity and uncertainty in their professionals. Thus, emotions as fear were partially associated to insecurity (of position, rights and living means), uncertainty (of continuity and future stability), and vulnerability (of the body, possessions, security in the neighborhood and community). These institutional scopes emphasized individual scopes connected with fear and frustration, and with pride and satisfaction to care, regardless of acknowledging low support levels and recognition from their institutions.

*Production of moral feelings and ethical dilemmas*

In most of the reviewed studies, registered emotion not only assumed a collective character, but also a moral one. The recurring appearance of different kinds of fear speaks of it together with its high intensity in contrast to feelings such as guilt, consciously assumed or veiled (for adopting responsibility, due to neglect or omission, from patients' death, own contagion, family, or friends, etc.). Professional duty is relevant since it was expressed in feelings such as respect and pride when accomplishing as a professional destined to the "front line" care, using a military metaphor that assimilates combat vs. COVID-19. Their labor was assumed to be heroic, altruistic, and mainly professional. The expression of these kinds of feelings was experienced and suffered through very intense tensions, conflicts, and dilemmas of moral order by the interviewed staff[93,94].

*Challenges to the healthcare system during the pandemic*

Compiled material in this meta-synthesis offers an account of healthcare systems collapse during the COVID-19 crisis, experience that entailed challenges to such institutional settings not only in management and resource usage, but in the integral care of healthcare workers and possible coping strategies for vulnerabilities and inequalities present on these spaces[93].

In the labor context, this review revealed how urgent is to standardize communication and development of action plans that deal with equipment and supplies, infrastructure, and human resources. Also, how urgent is to design adequate policies to limit COVID-19 workload in health professionals at the three levels of care to mitigate gender and ethnic salary gaps, among other measures. Furthermore, in line with what Bartra *et al.*[91] pointed out from the registered experiences during the pandemic, it is critical to develop support systems and listening sessions between administrations and health professionals, as well as video orientation and mental health counseling[95].

**Relevance and limitations**

This paper offers a systematic review of bibliography that highlights the emotional topic, which has been less retrieved as compared to the mental and the psychological ones with the purpose of giving account of a sanitary human resources crisis by the new epidemiological imperatives that disrupt these workers after the COVID-19 pandemic and that in certain regions such as America, is exacerbated by the historical deficit and the retirement process which will be passed through by their healthcare systems in the next years.

Study **limitations** are inherent to paper assessment, which were of moderate quality, so we recommend caution when considering transferring our findings. Besides, the search strategy could have caused bias in the analyzed information linked to the limited number of consulted databases and the language of the texts chosen (Spanish and English).

## CONCLUSIONS

An analytical distinction among different affective expressions reported by sanitary workers (sensations, perceptions, emotions, feelings, and moral feelings) was only rendered exceptionally in the audited research. In that regard, affective life registered in the 80 studies reviewed was undifferentiated and lacked conceptual systemic work, which set off theory and methodology interrogations for further inquiry.

Most of the research was exploratory or descriptive, however, there are missing studies that fill the void found in this review, considering the predominance of high-income countries and big city centers. There is an urgency for research with gender and intercultural focus, given that ethnic origin and economic precariousness were traits with differentiated impacts, which exacerbated social and emotional preexistent inequalities. In that sense, it is relevant to review the medical space as an environment that produces and reproduces social stratification of emotional well-being that, even if in some cases provided support and stability, it was overloaded and constituted a factor of high uncertainty in others, propelling feelings of anguish and fear.

**Expression of Gratitude**

We thank Universidad Iberoamericana for the granted finance.

## REFERENCES


1. Bericat Alastuey E. *Excluidos de La Felicidad: La Estratificación Emocional Del Bienestar Social En España*. CIS-Centro de Investigaciones Sociológicas. 2018;310.

2. Medina-Mora ME, Cordero M, Rafful C. *Determinantes sociales de la salud mental en la pandemia.* In: Fajardo-Chica D, Hansberg O, eds. *La vida emocional en la pandemia*. Mexico: Universidad Nacional Autónoma de México, Secretaría de Desarrollo Institucional; 2021.

3. Luo F, Ghanei Gheshlagh R, Dalvand S, Saedmoucheshi S, Li Q. Systematic Review and Meta-Analysis of Fear of COVID-19. Frontiers in Psychology [Internet]. 2021 [Cited 21/04/2023];12. Available from: https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2021.661078/full

4. Braquehais MD, Vargas-Cáceres S, Gómez-Durán E. The impact of the COVID-19 pandemic on the mental health of healthcare professionals. QJM: An International Journal of Medicine [Internet]. 2020 [Cited 24/11/2022]; 113(9):613-7. Available from: https://doi.org/10.1093/qjmed/hcaa207

5. Sexton JB, Adair KC, Proulx J. Emotional Exhaustion Among US Health Care Workers Before and During the COVID-19 Pandemic, 2019-2021. JAMA Network Open [Internet]. 2022 [Cited 24/11/2023]; 5(9):e2232748. Available from: https://doi.org/10.1001/jamanetworkopen.2022.32748

6. Muller AE, Hafstad EV, Himmels JPW. The mental health impact of the covid-19 pandemic on healthcare workers, and interventions to help them: A rapid systematic review. Psychiatry Research [Internet]. 2020 [Cited 24/11/2023]; 293:113441. Available from: https://pubmed.ncbi.nlm.nih.gov/32898840/

7. Jasper JM. Las emociones y los movimientos sociales: veinte años de teoría e investigación. Revista latinoamericana de estudios sobre cuerpos, emociones y sociedad [Internet]. 2012 [Cited 21/04/2023]; 4(10):46-66. Available from: https://www.annualreviews.org/doi/10.1146/annurev-soc-081309-150015

8. Ariza M, ed. Las emociones en la vida social: miradas sociológicas. México: Universidad Nacional Autónoma de México, Instituto de Investigaciones Sociales; 2020.

9. Rojas JG, Lopera-Betancur MA, Forero-Pulido C, García-Aguilar LC. Cuidar al paciente con COVID-19: entre la incertidumbre y el deseo de salir adelante. Rev colomb enferm [Internet]. 2021 [Cited 21/04/2023];20(2):e035. Available from: https://doi.org/10.18270/rce.v20i2.3291

10. Marey-Sarwan I, Hamama-Raz Y, Asadi A, Nakad B, Hamama L. "It's like we're at war": Nurses' resilience and coping strategies during the COVID-19 pandemic. Nurs Inq [Internet]. 2022 [Cited 21/04/2023];29(3):e12472. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8646746/

11. Austin EJ, Blacker A, Kalia I. "Watching the tsunami come": A case study of female healthcare provider experiences during the COVID-19 pandemic. Appl Psychol Health Well Being [Internet]. 2021 [Cited 21/04/2023];13(4):781-97. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8239839/

12. Piredda M, Fiorini J, Marchetti A. The wounded healer: a phenomenological study on hospital nurses who contracted COVID19. Front Public Health [Internet]. 2022 [Cited 24/11/2022]; 10:867826. Available from: https://pubmed.ncbi.nlm.nih.gov/35875015/

13. Ahmed S. La política cultural de las emociones. 2 ed [Internet]. México: Universidad Nacional Autónoma de México; 2015 [Cited 21/04/2023]. Available from: https://archive.org/details/la-politica-cultural-de-las-emociones.

14. Sarabia-Cobo C, Pérez V, Lorena P de. Experiences of geriatric nurses in nursing home settings across four countries in the face of the COVID-19 pandemic. J Adv Nurs [Internet]. 2021 [Cited 21/04/2023]; 77(2):869-78. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/jan.14626

15. Roca J, Canet-Vélez O, Cemeli T, Lavedán A, Masot O, Botigué T. Experiences, emotional responses, and coping skills of nursing students as auxiliary health workers during the peak COVID-19 pandemic: A qualitative study. Int J Ment Health Nurs [Internet]. 2021 [Cited 21/04/2023]; 30(5):1080-92. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/inm.12858

16. Deliktas Demirci A, Oruc M, Kabukcuoglu K. 'It was difficult, but our struggle to touch lives gave us strength': The experience of nurses working on COVID-19 wards. J Clin Nurs [Internet]. 2021 [Cited 21/04/2023]; 30(5-6):732-41. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/jocn.15602

17. Melnikov S, Kagan I, Felizardo H. Practices and experiences of European frontline nurses under the shadow of COVID-19. Nurs Health Sci [Internet]. 2022 [Cited 21/04/2023]; 24(2):405-13. Available from: https://onlinelibrary.wiley.com/doi/10.1111/nhs.12936

18. Liberati E, Richards N, Willars J. A qualitative study of experiences of NHS mental healthcare workers during the Covid-19 pandemic. BMC Psychiatry [Internet]. 2021 [Cited 21/04/2023]; 21:250. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8113793/

19. Li H, Cui Y, Efstathiou N, Li B, Guo P. Experiences of redeployed healthcare workers in the fight against COVID-19 in China: A qualitative study. PLoS ONE [Internet]. 2022 [Cited 21/04/2023]; 17(8):e0273429. Available from: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0273429

20. Kackin O, Ciydem E, Aci OS, Kutlu FY. Experiences and psychosocial problems of nurses caring for patients diagnosed with COVID-19 in Turkey: A qualitative study. Int J Soc Psychiatry [Internet]. 2021 [Cited 21/04/2023]; 67(2):158-67. Available from: https://doi.org/10.1177/0020764020942788

21. Kwaghe AV, Kwaghe VG, Habib ZG. Stigmatization and psychological impact of COVID-19 pandemic on frontline healthcare Workers in Nigeria: a qualitative study. BMC Psychiatry [Internet]. 2021 [Cited 21/04/2023]; 21:518. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8528377/

22. Nyashanu M, Pfende F, Ekpenyong M. Exploring the challenges faced by frontline workers in health and social care amid the COVID-19 pandemic: experiences of frontline workers in the English Midlands region, UK. J Interprof Care [Internet]. 2020 [Cited 24/11/2022]; 34(5):655-61. Available from: https://doi.org/10.1080/13561820.2020.1792425

23. Lee JY, Lee J yeon, Lee SH. The Experiences of Health Care Workers during the COVID-19 Pandemic in Korea: a Qualitative Study. J Korean Med Sci [Internet]. 2021 [Cited 21/04/2023]; 36(23):e170. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8203853/

24. Ness MM, Saylor J, Di Fusco LA, Evans K. Healthcare providers' challenges during the coronavirus disease (COVID-19) pandemic: A qualitative approach. Nurs Health Sci [Internet]. 2021 [Cited 21/04/2023]; 23(2):389-97. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/nhs.12820

25. Chen H, Wang Y, Liu Z. The experiences of frontline nurses in Wuhan: A qualitative analysis of nurse online diaries during the COVID-19 pandemic. J Clin Nurs [Internet]. 2021 [Cited 21/04/2023];30. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8662013/

26. Rosa D, Bonetti L, Villa G. Moral Distress of Intensive Care Nurses: A Phenomenological Qualitative Study Two Years after the First Wave of the COVID-19 Pandemic. Int J Environ Res Public Health [Internet]. 2022 [Cited 24/11/2022]; 19(22):15057. Available from: https://www.mdpi.com/1660-4601/19/22/15057

27. Perraud F, Ecarnot F, Loiseau M. A qualitative study of reinforcement workers' perceptions and experiences of working in intensive care during the COVID-19 pandemic: A PsyCOVID-ICU substudy. PLoS ONE [Internet]. 2022 [Cited 21/04/2023]; 17(3):e0264287. Available from: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0264287

28. Sun N, Wei L, Shi S. A qualitative study on the psychological experience of caregivers of COVID-19 patients. Am J Infect Control [Internet]. 2020 [Cited 21/04/2023]; 48(6):592-8. Available from: https://www.sciencedirect.com/science/article/pii/S0196655320302017

29. García Lara GA, Hernández Solís I, Hernández Solís S, Cruz Pérez O, Ocaña Zúñiga J. Paramédicos en tiempos de pandemia. Historias de angustia, miedo y esperanza. RICSH [Internet]. 2021 [Cited 24/11/2022]; 10(19):85-113. Available from: https://ricsh.org.mx/index.php/RICSH/article/view/231

30. Fawaz M, Samaha A. The psychosocial effects of being quarantined following exposure to COVID-19: A qualitative study of Lebanese health care workers. Int J Soc Psychiatry [Internet]. 2020 [Cited 21/04/2023];66(6):560-5. Available from: https://doi.org/10.1177/0020764020932202

31. Galehdar N, Kamran A, Toulabi T, Heydari H. Exploring nurses' experiences of psychological distress during care of patients with COVID-19: a qualitative study. BMC Psychiatry [Internet]. 2020 [Cited 21/04/2023]; 20(1):489. Available from: https://doi.org/10.1186/s12888-020-02898-1

32. Palacios-Ceña D, Fernández-de-las-Peñas C, Florencio LL, de-la-Llave-Rincón AI, Palacios-Ceña M. Emotional Experience and Feelings during First COVID-19 Outbreak Perceived by Physical Therapists: A Qualitative Study in Madrid, Spain. Int J Environ Res Public Health [Internet]. 2021 [Cited 21/04/2023]; 18(1):127. Available from: https://www.mdpi.com/1660-4601/18/1/127

33. Ozcan S, Kirca N. Feelings, Thoughts and Experiences of healthcare professionals who recovered after being diagnosed with COVID-19, a phenomenological study. Psychiatr Danub [Internet]. 2021 [Cited 21/04/2023]; 33(3):402-10. Available from: http://www.psychiatria-danubina.com/UserDocsImages/pdf/dnb_vol33_no3/dnb_vol33_no3_402.pdf

34. Yin X, Zeng L. A study on the psychological needs of nurses caring for patients with coronavirus disease 2019 from the perspective of the existence, relatedness, and growth theory. Int J Nurs Sci [Internet]. 2020 [Cited 21/04/2023]; 7(2):157-60. Available from: https://www.sciencedirect.com/science/article/pii/S2352013220300508

35. Chakma T, Thomas BE, Kohli S. Psychosocial impact of COVID-19 pandemic on healthcare workers in India & their perceptions on the way forward - A qualitative study. Indian J Med Res [Internet]. 2021 [Cited 21/04/2023]; 153(5-6):637-48. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8555609/

36. Villar RC, Nashwan AJ, Mathew RG. The lived experiences of frontline nurses during the coronavirus disease 2019 (COVID-19) pandemic in Qatar: A qualitative study. Nurs Open [Internet]. 2021 [Cited 21/04/2023]; 8(6):3516-26. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1002/nop2.901

37. Sims H, Alvarez C, Grant K, Walczak J, Cooper LA, Ibe CA. Frontline healthcare workers experiences and challenges with in-person and remote work during the COVID-19 pandemic: A qualitative study. Front Public Health [Internet]. 2022 [Cited 21/04/2023]; 10:983414. Available from: https://www.frontiersin.org/articles/10.3389/fpubh.2022.983414 38. Abalo Miller K, Bang C. Dimensión subjetiva de los procesos de trabajo en profesionales de salud en contexto de pandemia: un estudio exploratorio a partir del análisis de dispositivos de Apoyo a los Equipos de Salud en un municipio del Área Metropolitana de Buenos Aires (AMBA). Psicología, Conocimiento y Sociedad [Internet]. 2022 [Cited 24/11/2022]; 12(1):5-34. Available from: http://www.scielo.edu.uy/scielo.php?script=sci_abstract&pid=S1688-70262022000100005&lng=es&nrm=iso&tlng=es

39. Okediran JO, Ilesanmi OS, Fetuga AA. The experiences of healthcare workers during the COVID-19 crisis in Lagos, Nigeria: A qualitative study. Germs [Internet]. 2020 [Cited 21/04/2023]; 10(4):356-366. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7811855/

40. Vindrola-Padros C, Andrews L, Dowrick A. Perceptions and experiences of healthcare workers during the COVID-19 pandemic in the UK. BMJ Open [Internet]. 2020 [Cited 21/04/2023]; 10(11):e040503. Available from: https://bmjopen.bmj.com/content/10/11/e040503

41. Orgaz P, Rodríguez Vega B, Bayón C, Palao Á, Lorenzini N, González Torres MÁ. Experiencia del personal sanitario durante la primera ola de Covid-19 en España: un estudio cualitativo con grupos focales. Rev Asoc Esp Espec Med Trab [Internet]. 2022 [Cited 21/04/2023]; 31(2):155-66.Available from: https://scielo.isciii.es/scielo.php?script=sci_abstract&pid=S1132-62552022000200004&lng=es&nrm=iso&tlng=es

42. Palinkas LA, Engstrom A, Whiteside L, Moloney K, Zatzick D. A Rapid Ethnographic Assessment of the Impact of the COVID-19 Pandemic on Mental Health Services Delivery in an Acute Care Medical Emergency Department and Trauma Center. Adm Policy Ment Health [Internet]. 2022 [Cited 21/04/2023]; 49(2):157-167. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8317683/

43. González-Timoneda A, Hernández Hernández V, Pardo Moya S, Alfaro Blazquez R. Experiences and attitudes of midwives during the birth of a pregnant woman with COVID-19 infection: A qualitative study. Women Birth [Internet]. 2021 [Cited 21/04/2023]; 34(5):465-72. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7724562/

44. Kayiga H, Genevive DA, Amuge PM, Ssemata AS, Nanzira RS, Nakimuli A. Lived experiences of frontline healthcare providers offering maternal and newborn services amidst the novel corona virus disease 19 pandemic in Uganda: A qualitative study. PLoS ONE [Internet]. 2021 [Cited 21/04/2023]; 16(12):e0259835. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8664167/

45. Lenta MM, Longo RG, Zaldúa G, Veloso V. La salud de las trabajadoras de la salud en el contexto de pandemia. Anuario de Investigaciones [Internet]. 2020 [Cited 24/11/2022]; 27:147-54. Available from: https://www.redalyc.org/journal/3691/369166429016/369166429016.pdf

46. Bermejo Cayamcela DM, Álvarez Ochoa R, Lliguisupa Peláez VDR, Pesántez Beltrán DJ, Zhindón Arévalo CE. Impacto social y psicológico del COVID-19 en el personal sanitario. Caso Ecuador. Revista Ciencias Pedagógicas e Innovación [Internet]. 2021 [Cited 24/11/2022]; 9(2):153-9. Available from: https://incyt.upse.edu.ec/pedagogia/revistas/index.php/rcpi/article/view/412

47. Zhou H, Wang X, Du R. The Work Experience of Newly Recruited Male Nurses during COVID-19: A Qualitative Study. Asian Nurs Res [Internet]. 2021 [Cited 21/04/2023]; 15(3):203-209. Available from: https://www.sciencedirect.com/science/article/pii/S1976131721000396

48. Reina Leal LM, García Murcia JS, Higuera Ramos DM, Morales Ávila M, Venegas Barrera AF. Cuidar en tiempos de pandemia: experiencia de una auxiliar de enfermería en Bogotá. Index Enferm [Internet]. 2021 [Cited 21/04/2023]; 30(4):338-41. Available from: https://scielo.isciii.es/scielo.php?script=sci_abstract&pid=S1132-12962021000300013&lng=es&nrm=iso&tlng=es

49. Zhu P, Liu X, Wu Q, Loke J, Lim D, Xu H. China's Successful Recruitment of Healthcare Professionals to the Worst-Hit City: A Lesson Learned. Int J Environ Res Public Health [Internet]. 2021 [Cited 21/04/2023]; 18(16):8737. Available from: https://www.mdpi.com/1660-4601/18/16/8737

50. Khanjarian F, Sadat-Hoseini AS. Lived experiences of nurses providing altruistic care to patients with COVID-19. Nurs Outlook [Internet]. 2021 [Cited 21/04/2023]; 69(5):767-79. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8103141/

51. Casafont C, Fabrellas N, Rivera P. Experiences of nursing students as healthcare aid during the COVID-19 pandemic in Spain: A phemonenological research study. Nurse Educ Today [Internet]. 2021 [Cited 21/04/2023]; 97:104711. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7744273/

52. Stoichitoiu LE, Baicus C. COVID-19 pandemic preparedness period through healthcare workers' eyes: A qualitative study from a Romanian healthcare facility. PLoS ONE [Internet]. 2021 [Cited 21/04/2023]; 16(10):e0257381. Available from: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0257381

53. Shahbaz S, Ashraf MZ, Zakar R, Fischer F. Psychosocial, emotional and professional challenges faced by female healthcare professionals during the COVID-19 outbreak in Lahore, Pakistan: a qualitative study. BMC Women's Health [Internet]. 2021 [Cited 21/04/2023]; 21(1):197. Available from: https://doi.org/10.1186/s12905-021-01344-y

54. Mehedi N, Ismail Hossain M. Experiences of the Frontline Healthcare Professionals Amid the COVID-19 Health Hazard: A Phenomenological Investigation. Inquiry: a journal of medical care organization, provision and financing [Internet]. 2022 [Cited 21/04/2023]; 59:469580221111925. Available from: https://pubmed.ncbi.nlm.nih.gov/35819056/

55. Hernández-Fernández C, Meneses-Falcón C. "The worst thing that has happened to me": Healthcare and social services professionals confronting death during the COVID-19 crisis. Front Public Health [Internet]. 2022 [Cited 21/04/2023]; 10:957173. Available from: https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2022.957173/full

56. Jorge Diogo PM, Lemos e Sousa MOC, Rodrigues JRG da V, Silva TA de AM de A e, Ferreira Santos ML. Emotional labor of nurses in the front line against the COVID-19 pandemic. Rev Bras Enferm [Internet]. 2021 [Cited 21/04/2023]; 74. Available from: http://www.scielo.br/j/reben/a/gGvSvWDpB8Hb7rqhJFLmqHn/?lang=en&format=html

. 57. Zhang MM, Niu N, Zhi XX. Nurses' psychological changes and coping strategies during home isolation for the 2019 novel coronavirus in China: A qualitative study. J Adv Nurs [Internet]. 2021 [Cited 21/04/2023]; 77(1):308-17. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/jan.14572

58. Smeltzer SC, Copel LC, Bradley PK. Vulnerability, loss, and coping experiences of health care workers and first responders during the covid-19 pandemic: a qualitative study. Int J Qual Stud Health Well-being [Internet]. 2022 [Cited 24/11/2022]; 17(1):2066254. Available from: https://www.tandfonline.com/doi/full/10.1080/17482631.2022.2066254

59. Tan R, Yu T, Luo K. Experiences of clinical first-line nurses treating patients with COVID-19: A qualitative study. J Nurs Manag [Internet]. 2020 [Cited 21/04/2023]; 28(6):1381-90. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/jonm.13095

60. Fernández-Castillo RJ, González-Caro MD, Fernández-García E, Porcel-Gálvez AM, Garnacho-Montero J. Intensive care nurses' experiences during the COVID-19 pandemic: A qualitative study. Nurs Crit Care [Internet]. 2021 [Cited 21/04/2023]; 26(5):397-406. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/nicc.12589

61. Catania G, Zanini M, Hayter M. Lessons from Italian front-line nurses' experiences during the COVID-19 pandemic: A qualitative descriptive study. J Nurs Manag [Internet]. 2021 [Cited 21/04/2023]; 29(3):404-11. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/jonm.13194

62. Huang F, Lin M, Sun W, Zhang L, Lu H, Chen WT. Resilience of frontline nurses during the COVID pandemic in China: A qualitative study. Nurs Health Sci [Internet]. 2021 [Cited 21/04/2023]; 23(3):639-45. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/nhs.12859

63. Alizadeh A, Khankeh HR, Barati M, Ahmadi Y, Hadian A, Azizi M. Psychological distress among Iranian health-care providers exposed to coronavirus disease 2019 (COVID-19): a qualitative study. BMC Psychiatry [Internet]. 2020 [Cited 21/04/2023]; 20(1):494. Available from: https://doi.org/10.1186/s12888-020-02889-2

64. He Q, Li T, Su Y, Luan Y. Instructive Messages and Lessons From Chinese Countermarching Nurses of Caring for COVID-19 Patients: A Qualitative Study. J Transcult Nurs [Internet]. 2021 [Cited 21/04/2023]; 32(2):96-102. Available from: https://doi.org/10.1177/1043659620950447

65. Moradi Y, Baghaei R, Hosseingholipour K, Mollazadeh F. Challenges experienced by ICU nurses throughout the provision of care for COVID-19 patients: A qualitative study. J Nurs Manag [Internet]. 2021 [Cited 21/04/2023]; 29(5):1159-68. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/jonm.13254

66. Liu Q, Luo D, Haase JE. The experiences of health-care providers during the COVID-19 crisis in China: a qualitative study. Lancet Glob Health [Internet]. 2020 [Cited 21/04/2023]; 8(6):e790-e798. Available from: https://www.sciencedirect.com/science/article/pii/S2214109X20302047

67. Hantoushzadeh S, Bagheri M, Amjadi MA, Farahani MF, Haghollahi F. Experiences of health care providers on pregnancy and childbirth care during the COVID-19 pandemic in Iran: a phenomenological study. BMC Pregnancy Childbirth [Internet]. 2021 [Cited 21/04/2023]; 21(1):670. Available from: https://doi.org/10.1186/s12884-021-04148-y

68. Yin Z, Zhang W, Jia X. Psychological distress of frontline healthcare workers in the intensive care unit during the early stage of the COVID-19 pandemic: a qualitative study from China. BMJ Open [Internet]. 2022 [Cited 21/04/2023]; 12(2):e049627. Available from: https://bmjopen.bmj.com/content/12/2/e049627

69. Collado-Boira EJ, Ruiz-Palomino E, Salas-Media P, Folch-Ayora A, Muriach M, Baliño P. "The COVID-19 outbreak"—An empirical phenomenological study on perceptions and psychosocial considerations surrounding the immediate incorporation of final-year Spanish nursing and medical students into the health system. Nurse Educ Today [Internet]. 2020 [Cited 21/04/2023]; 92:104504. Available from: https://www.sciencedirect.com/science/article/pii/S0260691720308406

70. García-Martín M, Roman P, Rodriguez-Arrastia M, Diaz-Cortes M del M, Soriano-Martin PJ, Ropero-Padilla C. Novice nurse's transitioning to emergency nurse during COVID-19 pandemic: A qualitative study. J Nurs Manag [Internet]. 2021 [Cited 21/04/2023]; 29(2):258-67. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/jonm.13148

71. Rücker F, Hårdstedt M, Rücker SCM. From chaos to control - experiences of healthcare workers during the early phase of the COVID-19 pandemic: a focus group study. BMC Health Serv Res [Internet]. 2021 [Cited 21/04/2023]; 21(1):1219. Available from: https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-021-07248-9

72. Gao X, Jiang L, Hu Y, Li L, Hou L. Nurses' experiences regarding shift patterns in isolation wards during the COVID-19 pandemic in China: A qualitative study. J Clin Nurs [Internet]. 2020 [Cited 21/04/2023]; 29(21-22):4270-4280. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/jocn.15464

73. Eftekhar Ardebili M, Naserbakht M, Bernstein C, Alazmani-Noodeh F, Hakimi H, Ranjbar H. Healthcare providers experience of working during the COVID-19 pandemic: A qualitative study. Am J Infect Control [Internet]. 2021 [Cited 21/04/2023]; 49(5):547-54. Available from: https://www.sciencedirect.com/science/article/pii/S0196655320308968

74. Norful AA, Rosenfeld A, Schroeder K, Travers JL, Aliyu S. Primary drivers and psychological manifestations of stress in frontline healthcare workforce during the initial COVID-19 outbreak in the United States. Gen Hosp Psychiatry [Internet]. 2021 [Cited 21/04/2023]; 69:20-6. Available from: https://www.sciencedirect.com/science/article/pii/S0163834321000013?via%3Dihub

75. Embregts PJCM, Tournier T, Frielink N. Experiences and needs of direct support staff working with people with intellectual disabilities during the COVID-19 pandemic: A thematic analysis. J Appl Res Intellect Disabil [Internet]. 2021 [Cited 21/04/2023]; 34(2):480-90. Available from: https://onlinelibrary.wiley.com/doi/10.1111/jar.12812

76. Dowrick A, Mitchinson L, Hoernke K. Re-ordering connections: UK healthcare workers' experiences of emotion management during the COVID-19 pandemic. Sociol Health Illn [Internet]. 2021 [Cited 21/04/2023]; 43(9):2156-2177. Available from: https://onlinelibrary.wiley.com/doi/10.1111/1467-9566.13390

77. Nelson H, Hubbard Murdoch N, Norman K. The Role of Uncertainty in the Experiences of Nurses During the Covid-19 Pandemic: A Phenomenological Study. Can J Nurs Res [Internet]. 2021 [Cited 21/04/2023]; 53(2):124-33. Available from: http://journals.sagepub.com/doi/10.1177/0844562121992202

78. Konduru L, Das N, Kothari-Speakman G, Behura AK. Experiencing the COVID-19 pandemic as a healthcare provider in rural Dhanbad, India: An interpretative phenomenological analysis. PLoS ONE [Internet]. 2022 [Cited 24/11/2022]; 17(8):e0273573. Available from: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0273573

79. Ali I, Sadique S, Ali S. Doctors Dealing With COVID-19 in Pakistan: Experiences, Perceptions, Fear, and Responsibility. Front Public Health [Internet]. 2021 [Cited 21/04/2023]; 9:647543. Available from: https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2021.647543/full

80. He J, Liu L, Chen X. The experiences of nurses infected with COVID-19 in Wuhan, China: A qualitative study. J Nurs Manag [Internet]. 2021 [Cited 21/04/2023]; 29(5):1180-8. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/jonm.13256

81. Martínez Garduño MD, Cruz Bello P, Esquivel Campuzano U, Martínez Garduño MD, Cruz Bello P, Esquivel Campuzano U. Acciones y percepciones en aislamiento por COVID-19 en los alumnos de la Facultad de Enfermería y Obstetricia de la UAEMéx. Dilemas contemporáneos: educación, política y valores [Internet]. 2021 [Cited 21/04/2023]; 9(SPE1). Available from: http://www.scielo.org.mx/scielo.php?script=sci_abstract&pid=S2007-78902021000800049&lng=es&nrm=iso&tlng=es

82. Karimi Z, Fereidouni Z, Behnammoghadam M. The Lived Experience of Nurses Caring for Patients with COVID-19 in Iran: A Phenomenological Study. Risk Manag Healthc Policy [Internet]. 2020 [Cited 21/04/2023]; 13:1271-8. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7450521/

83. Qureshi I, Gogoi M, Al-Oraibi A. Factors influencing the mental health of an ethnically diverse healthcare workforce during COVID-19: a qualitative study in the United Kingdom. Eur J Psychotraumatol [Internet]. 2022 [Cited 24/11/2022]; 13(2):2105577. Available from: https://pubmed.ncbi.nlm.nih.gov/35967893/

84. Mohammadi F, Tehranineshat B, Bijani M, Oshvandi K, Badiyepeymaiejahromi Z. Exploring the experiences of operating room health care professionals' from the challenges of the COVID-19 pandemic. BMC Surg [Internet]. 2021 [Cited 21/04/2023]; 21:434. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8709905/

85. Zhang Y, He M, Li C, Xu R. Experience of Frontline Clinicians Fighting against COVID-19: a Qualitative Study. Chinese General Practice [Internet]. 2020 [Cited 21/04/2023]; 23(9):1078-82. Available from: https://doi.org/10.12114/j.issn.1007-9572.2020.00.261

86. Carman Copel L, Lengetti E, McKeever A, Pariseault CA, Smeltzer SC. An uncertain time: Clinical nurses' first impressions during the COVID-19 pandemic. Res Nurs Health [Internet]. 2022 [Cited 21/04/2023]; 45(5):537-48. Available from: https://onlinelibrary.wiley.com/doi/10.1002/nur.22265

87. Shaukat N, Ali DM, Barolia R. Documenting response to COVID-individual and systems successes and challenges: a longitudinal qualitative study. BMC Health Serv Res [Internet]. 2022 [Cited 21/04/2023]; 22(1):656. Available from: https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-022-08053-8

88. Goberna-Tricas J, Biurrun-Garrido A, Perelló-Iñiguez C, Rodríguez-Garrido P. The COVID-19 Pandemic in Spain: Experiences of Midwives on the Healthcare Frontline. Int J Environ Res Public Health [Internet]. 2021 [Cited 24/11/2022]; 18(12):6516. Available from: https://www.mdpi.com/1660-4601/18/12/6516

89. McGlinchey E, Hitch C, Butter S, McCaughey L, Berry E, Armour C. Understanding the lived experiences of healthcare professionals during the COVID-19 pandemic: an interpretative phenomenological analysis. Eur J Psychotraumatol [Internet]. 2021 [Cited 21/04/2023]; 12(1):1904700. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8820784/

90. Dragioti E, Tsartsalis D, Mentis M, Mantzoukas S, Gouva M. Impact of the COVID-19 pandemic on the mental health of hospital staff: An umbrella review of 44 meta-analyses. Int J Nurs Stud [Internet]. 2022 [Cited 21/04/2023]; 131:104272. Available from: https://www.sciencedirect.com/science/article/pii/S0020748922001018?via%3Dihub

91. Batra K, Singh TP, Sharma M, Batra R, Schvaneveldt N. Investigating the Psychological Impact of COVID-19 among Healthcare Workers: A Meta-Analysis. Int J Environ Res Public Health [Internet]. 2020 [Cited 21/04/2023]; 17(23):9096. Available from: https://www.mdpi.com/1660-4601/17/23/9096

92. Balai MK, Avasthi RD, Va R, Jonwal A. Psychological Impacts among Health Care Personnel during COVID-19 Pandemic: A Systematic Review. J Caring Sci [Internet]. 2022 [Cited 21/04/2023]; 11(2):118-125. Available from: https://jcs.tbzmed.ac.ir/Article/jcs-30496

93. Billings J, Ching BCF, Gkofa V, Greene T, Bloomfield M. Experiences of frontline healthcare workers and their views about support during COVID-19 and previous pandemics: a systematic review and qualitative meta-synthesis. BMC Health Serv Res [Internet]. 2021 [Cited 21/04/2023]; 21:923. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8419805/

94. Joo JY, Liu MF. Nurses' barriers to caring for patients with COVID-19: a qualitative systematic review. International Nursing Review [Internet]. 2021 [Cited 21/04/2023]; 68(2):202-13. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/inr.12648

95. Tao X, Yu CC, Low JA. Exploring loss and grief during the COVID-19 pandemic: A scoping review of qualitative studies. Ann Acad Med Singap [Internet]. 2022 [Cited 21/04/2023]; 51(10):619-28. Available from: https://pubmed.ncbi.nlm.nih.gov/36317572/

**Conflict of interests**

Authors declare not having any conflict of interest.

**Funding declaration**

Authors declare to have funding to translate the text.

**Authors´ contributions**

Juan Pablo Vázquez Gutiérrez: Conceptualization and design; visualization; supervision; manuscript writing and preparation of the initial draft; writing, review and editing.

Victoria Raquel Rojas-Lozano: Conceptualization and design; methodology; data collection and software; analysis and data interpretation; manuscript writing and preparation of the initial draft; writing, review and editing.

Laura de la Paz Castillo: Data collection and software; analysis and data interpretation; manuscript writing and preparation of the initial draft.

All authors participated in the discussion of the results and have read, reviewed and approved the final version of the article.