

# Hierarchies of Need: A Systematic Review of Resilience, Challenge, and Change in the Global Nursing Workforce During the First Two Years of the COVID-19 Pandemic



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#### Abstract

Background: Nursing was critical to global health care delivery during the COVID-19 pandemic. Nurses everywhere experienced an extreme tension between public appreciation and personal distress. These experiences are ubiquitous in nursing research conducted across the world between 2020 and 2022. Despite holding profound value for future clinicians, policy-makers, and wider society, these stories already appear absent in the collective memory. Review Question: To synthesize available qualitative and quantitative research about nurses' experiences of resilience, challenge, and change during the first two years of the COVID-19 pandemic. Type of Review: Mixed-methods systematic review. Methods: The review followed a convergent integrated approach with multiple reviewers involved at each stage. Results: A total of 59 studies were eligible for analysis. Coding of results revealed a similarity to Maslow's expanded hierarchy of needs, which was used as a framing device for findings. The greater portion of recorded experiences expressed needs for safety, belonging, and esteem. Conclusions: The findings contained common and conflicting stories. Taken as a whole, the nursing experience during early COVID represents a powerful, compassionate counter-narrative to contemporary political dystopianism. Implications: Nurses need to leverage their critical importance to health-care delivery for improved work security, sociocultural recognition, and political influence.

#### **Keywords**

COVID-19, delivery of health care, nursing research, systematic review, workforce

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## Implications for Knowledge Translation

- This mixed-methods systematic review is unique in synthesizing both qualitative and quantitative research on nurses' experiences of resilience, challenge, and change during the first two years of COVID-19.
- The findings are framed by Maslow's expanded hierarchy of needs and show that most experiences centered on needs for safety, belonging, and esteem for good or for worse.
- The collective nursing experience during COVID-19 saw repeated stigma and devaluation of nurses but simultaneously represents a compassionate counter-example to the dystopian political narratives of the era.

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By remembering and telling, we not only prevent forgetfulness from killing the victims twice; we also prevent their life stories from becoming banal [...] and the events from appearing as necessary. (Ricoeur, 2006, p. 290)

#### Introduction

Nursing was critical to the delivery of health care during the COVID-19 pandemic. Nurses were lauded in their communities, in the news, and on social media. At the same time, they reported extreme levels of stress and intention to leave the profession (Gray et al., 2021). Nursing during the pandemic was arduous and required immense resilience, defined here as the ability to persevere through adversity, attempt to maintain some state of wellbeing whilst also undergoing personal and professional growth (Phillips & Chao, 2024; Robertson & Cooper, 2013).

The authors of this review were motivated by the belief that nurses' experiences of resilience, challenge, and change throughout the COVID pandemic hold profound value for health systems, policy, governance and wider society. However, they also note the observation that modern societies may have become adept at forgetting experiences, a tendency which is arguably accelerating over time (Halevy, 1948). If future pandemics are a given (WHO, 2024) but social amnesia is increasingly normative, then there is a risk that the potential value contained within the COVID nursing experience will not be realised, or worse, the nursing contribution forgotten entirely.

## **Review Question**

This mixed methods systematic review attempted to answer two research questions:

- What is known about nurses' experiences of resilience, challenge, and change during the COVID-19 pandemic?
- What can be learnt from these experiences and shared with future generations of nurses?

The review had three related objectives:

- To synthesize available qualitative and quantitative research about nurses' experiences of resilience challenge and change during the current pandemic
- To identify gaps in knowledge and make recommendations for further research.
- To articulate implications for nurse education, research, and policy so that future generations of nurses are informed by the COVID nursing experience.

#### Literature Search

The search strategy was informed by the Joanna Briggs Institute (JBI) methodology (Aromatis et al., 2024). The

three stages were: a preliminary Cumulative Index to Nursing and Allied Health Literature (CINAHL) search; analysing keywords in titles, abstracts, or index for relevance; and a comprehensive search using identified keywords in CINAHL and MEDLINE. Two reviewers screened titles and abstracts, with disputes resolved through discussion or a third reviewer. The process is outlined in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flowchart (Figure 1).

#### Inclusion Criteria

All relevant primary qualitative or quantitative research published between January 2020 and March 2022 was included. The populations of interest were registered nurses or students. The context was any health-care setting. See Table 1 in Supplemental Files for Overview of the Included Studies.

## Critical Appraisal

While studies were not excluded based on quality, all included studies were appraised for methodological quality by one reviewer using the JBI critical appraisal checklists for either qualitative or quantitative research (Munn et al., 2020). See Tables 2 and 3 in Supplemental Files for Critical Appraisal Results for Included Studies Using the JBI Critical Appraisal Checklist for Randomized Controlled Trials and RCT Component of Mixed Methods Studies, and Critical Appraisal Results for Included Studies Using the JBI Qualitative Critical Appraisal Checklist and Qualitative Component of Mixed Methods Studies, respectively.

#### Data Analysis and Synthesis

This review followed a convergent integrated approach informed by the JBI methodology for mixed-methods systematic reviews (Stern et al., 2020). Qualitized descriptions of the quantitative data were merged with the qualitative data into categories, which were then developed into themes. Two reviewers generated these categories and themes, which were subsequently agreed upon by the research team.

## **Findings**

As themes were investigated, a pattern emerged that mirrored Maslow's expanded hierarchy of needs (Maslow, 1970). Maslow described the hierarchy as one of relative prepotency, meaning that 'higher' needs emerge only after prior ones are gratified. Beginning from the most fundamental, the needs are described as: Physiological, Safety, Belonging and Love, Esteem, Cognitive, Aesthetic, Self-Actualization, and Transcendence (Maslow, 1970, p. 38).

Using Maslow's hierarchy of needs as the framing device offered many benefits. The language and structure are familiar, established, and influential (Haggbloom et al., 2002),

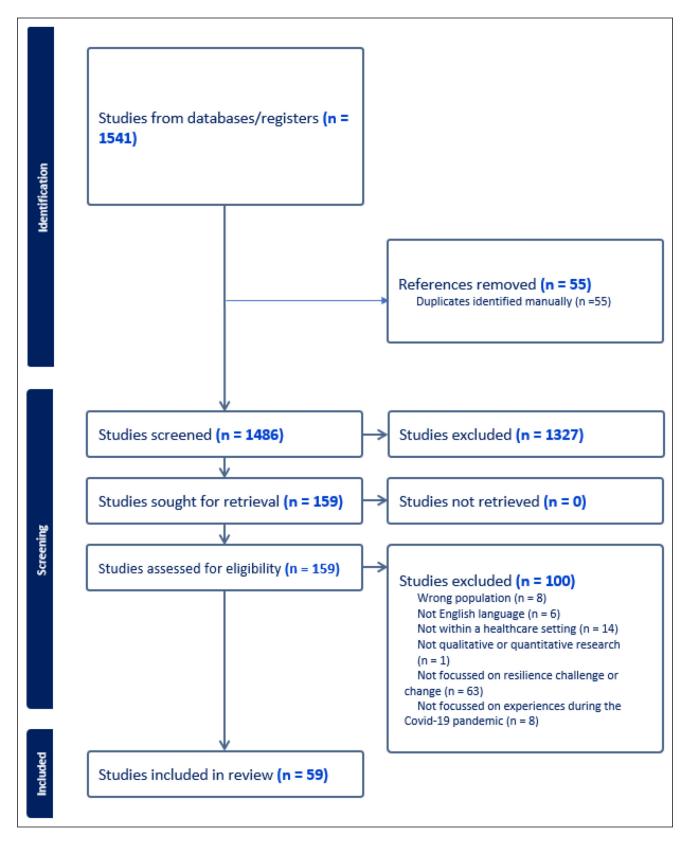


Figure I. PRISMA Flow Diagram.

which makes understanding its application more intuitive. When examining a high volume of literature, this seems advantageous to developing a novel and untested thematic frame. The hierarchy also represents a holistic vision of human needs, one that can be applied across cultures to capture the range of experiences that emerge in challenging circumstances. This felt apt for the experiences under review.

# Needs for Safety, Including Physiological Safety

In two studies, one from Hong Kong (Chau et al., 2021) and one from England (Godbold et al., 2021), physical health and wellness were overtly identified by participants as important elements of their resilience. However, the most obvious manifestation of the physiological needs of nurses working during the early pandemic was Personal Protective Equipment (PPE). The impact of the constant use and frequent absence of PPE was well documented as a common challenge facing health care workers worldwide. "[...]in the beginning, PPE was scarce. We had some, but we were scared about how long it was going to last and if we were going to be able to get more" (Stankiewicz Losty et al., 2021). "As soon as I put on the PPE [...] in about 10 min, I was sweating, finding it hard to breathe, dizzy, and wanting to go outside" (Cui et al., 2020). "[...] our oath didn't say I would have to die for my patient because there wasn't enough PPE" (Jun & Rosemberg, 2022).

Given the direct relationship between material PPE reserves and nurses' physical and psychological security, it felt reasonable to include this amongst the expressed safety needs.

Primary amongst these was a profound fear and uncertainty. An Italian Emergency Department nurse spoke of "the fear of the unknown, the fear of facing something that is not known, not only from a clinical point of view, but also epidemiological" (Arcadi, 2021).

The participants of an online study in North America stated their dissatisfaction and powerlessness within a constantly changing landscape of information, none of which felt reliable. "What is the protocol today? And where, oh where, is the research?" (LoGiudice & Bartos, 2021). "little information on how to treat it [...] you feel almost helpless." (LoGiudice & Bartos, 2021).

A generalized existential fear of becoming terminally infected was common. Some nurses felt like they were being expected to sacrifice themselves for the work. "At the time of the outbreak and while caring for our patients, our greatest concern was the stress of getting infected by the virus" (Chegini et al., 2021).

Sometimes, the fear of passing the virus on to loved ones was even more acute than contracting it oneself. In an Ecuadorian study, 91% of participants reported a fear of caring for patients, and 99% reported a fear of transmitting to relatives as the main source of stress (Franco et al., 2020). Some nurses took measures into their own hands, making changes in their personal life to try and mediate

this risk, including self-isolating from their families and the public (Arcadi, 2021).

The psycho-physical burden associated with constant fear, uncertainty, and proximity to dying patients resulted in severe stress, exhaustion, physical and mental health challenges. "It was more mentally taxing than anything [...] I was having bad dreams" (Stankiewicz Losty et al., 2021). "At the end of my first day being pulled to this unit, I had chest pain, I had a headache" (Stankiewicz Losty et al., 2021)

In their hardest moments, some nurses exhibited suicidal ideation

I don't think I can go on like this. There is so much death and suffering. I am losing so many patients, and I am helpless. I have truly thought about ending it all so that I don't have to see so much suffering and feel so hopeless. (Iheduru-Anderson, 2021)

The challenges inherent in this type of caring were unfortunately exacerbated in many cases by staffing issues. Most of newly qualified students in one study spoke about not being able to take breaks and struggling to eat and hydrate during shifts as a result of staffing shortages, all of which was made more complicated by constant donning and doffing of PPE (Casey et al., 2021). These challenges led to a depletion of morale and confidence in the health organizations within which the nurses worked. In one Iranian study, the nurses interviewed were challenged by a range of organizational issues from planning, staffing, communication, supply of PPE and clinical guidance (Chegini et al., 2021).

That said, this was not the situation in every location. Some Chinese nurses felt their organizations were well-prepared and thus felt safe and secure at work. "This hospital is the epidemic control and public health centre so it has sufficient PPE reserves. The [...] function in each area was clearly expressed in the care protocol [...] I have no worries" (Huang et al., 2021).

## Needs for Belonging and Love

A common antidote to the painful challenges outlined above was the comfort, company and contributions of colleagues. Teamworking and togetherness were hugely prevalent themes across the studies. "There was a real sense of communion, of togetherness. It didn't matter what job title or experience you had, everybody helped out in whatever way they could" (Martin-Delgado, 2021). "We were all in it together, and there was no other way to survive" (Craw et al., 2023).

This feeling was not strictly limited to other nurses. The participants in a Canadian study stated that the existence of positive interdisciplinary relationships was a highlight of their experience and had a protective impact on their levels of resilience (Mohammed & Lelièvre, 2022).

Sources of support were not limited to workspaces but also given by social and familial networks (Chegini et al., 2021). The participants of a Turkish study highlighted the

importance of the personalised support they received from family and friends. These individuals knew what the nurses liked to eat, how they liked to spend their time, and their general attitude towards life, all of which enabled tailored support outside of work (Aydin & Bulut, 2021).

A morally distressing experience was how nurses managed the absence of family members for the affected and dying patients. Due to the restrictions around visitation and contact, patients were often alone during their time of greatest need, except for the presence of health-care professionals. "It hurt to have the family calls explaining [that] their loved ones were failing and not allowing them to visit, even at death. Trying to let the patient feel they weren't alone in those final moments" (LoGiudice & Bartos, 2021).

Nurses worldwide saw bridging this gap between patient and family – physically, emotionally and communicatively - as part of their role during the pandemic. "Seeing these people die in total solitude struck me very much as they had absolutely no way to communicate with relatives or with the people important to them. There was only us" (Arcadi, 2021). This was a bifurcated role, with nurses supporting both the sick patient and their family members.

## Needs for Esteem

Elsewhere, the data contains evidence to the contrary; that in many instances nurses felt dispensable to their colleagues. This situation created additional challenges. Traditional hierarchies and status could determine exposure to the virus and workload distribution, as was experienced by this South Korean nurse:

Doctors and clinical pathologists do not go into the isolation unit often, and they come right back out once their work is done. Nurses, on the other hand, perform not only their nursing work but also have to assist those people when they come in and tidy up after they leave. So, nurses spend much more time in the isolation unit and have more work to do. (Lee & Lee, 2020)

Nurses observed their tasks, both clinical and non-clinical, increasing exponentially because of undertaking the professional roles of other groups who appeared to possess exemptions not granted to nurses. "In one situation, a nurse repaired a toilet in a patient's room with the plumber outside of the room explaining to her what needed to be done "(Robinson & Kellam Stinson, 2021).

Everything falls to the nurses. We are cleaning the room, bringing things, and we're doing everything [...] And we've had to kind of step up, which we always do [...] But it's frustrating that we're expected to do more and more and more because we're there at the bedside. (Jun & Rosemberg, 2022)

Perhaps due to this prolonged and intimate proximity to the virus, nurses in various locations also begin to experience stigma and social exclusion from their communities. "[W] e've become people that the public wants to avoid rather them feeling appreciation for us and thinking of us like we are working hard and trying our best" (Jang et al., 2022). "I cannot tell others about working at this hospital because when I asked the taxi driver to take me to the hospital, he asked me if I worked there, and then he told me to get out" (Lee & Lee, 2020).

Various studies identified a correlation between the nature of public perception and the resilience of the nursing workforce. When nurses felt appreciated by their communities, they felt better equipped to manage their work. For example, 59.1% of participants in one American study said community encouragement effectively reduces stress (Gray et al., 2021).

Validation from the administrative and management class within health-care organisations was also important for resilience. An Ecuadorean study found that nurses rated only their professional duty (91%) as a stronger feeling than institutional recognition (89%) (Franco et al., 2020). High-quality clinical leadership was also identified as a modifier of resilience. Senior nurses working in an accessible way in the same spaces as their team could be experienced as a profoundly protective factor, containing the adverse challenges of constant change (Cadge, 2021).

Unsurprisingly, a particularly powerful source of esteem was the gratitude of recovered patients. "Patients bowed to us when they were discharged. Their actions of appreciation touched me, which energized me and made me have a great sense of achievement" (Cui et al., 2020).

This sense of achievement often manifested as in the classification of nurses as heroes. Heroism was indeed a ubiquitous theme in testimonies from dramatically different societies, such as Iran ["Nurses have never been seen to this extent. We are now the heroes/heroines of the people. We should appear strong before their eyes" (Monjazebi et al., 2021)]; China ["I am proud to be able to come forward when our country and people are in distress [...] In this particular moment, I feel like a hero" (Xu et al., 2021); and the US ["I told my brother-in-law who is a fireman that people were calling us heroes, and I do not feel like a hero. He told me that people need heroes right now and to be proud to be one" (Stankiewicz Losty et al., 2021)].

The experience of receiving such praise was sometimes problematic. Nurses in multiple studies expressed frustrations with the dissonance between public adulation and working conditions. In Sri Lanka, nurses in private hospitals pointed out the difference between being called a key worker whilst being denied overtime and holiday pay (Rathnayake et al., 2021).

## Cognitive Needs

The language with which nurses frame their experiences can be a key indicator of their cognition. Warfare metaphors were

commonly used to signify the nature and severity of the experience and the mentality required to survive it. A good example is an Israeli study where the nurses used such rubric *en masse*. The nurses conceptualized the virus as a "nearly invisible enemy" and a "mute killer attacking the population" (Marey-Sarwan et al., 2021).

Given the extreme psychological burdens experienced by nurses during the pandemic, the language of trauma is unsurprisingly potent within multiple testimonies. "We didn't realize in the moment how traumatizing it was. When we reflected and looked at it, we were traumatized. We are being traumatized, but we try to bury it in the moment" (Kelley, 2021).

Participants in this study felt they were consciously adopting a strategy of depersonalizing patients to deal with the psychological impact of their suffering. "It was very easy to just treat their vital signs and treat their numbers, and almost detach from the situation, which emotionally I think made it easier to deal with" (Kelley, 2021).

Some studies focus on the nurses' positive responses to this trauma, and how the pandemic demanded self-development and evaluation. In one Spanish study, nurses saw the pandemic occasioning significant self-improvement, not just in terms of their resilience, but also in other important domains: "During this time I've grown as a person, I've grown as a professional. [...] I've become strong, and more sensitive, I think I'm better now than before the pandemic" (Martin-Delgado, 2021).

Nurses also developed deeper knowledge and understanding of their role. The strengthening of technical skills, especially in respiratory care, airway management and infection control, was mentioned by nurses across the world (Huang et al., 2021). In addition to resilience, other non-technical skills critical to the nursing workplace, such as adaptability, were greatly enhanced. The challenges of adjusting to volatile and risky conditions was described by one American nurse as "like building a plane and flying it at the same time" (Robinson & Kellam Stinson, 2021).

Outside of work, an array of coping strategies – clear manifestations of nurses' conscious attempts to deal with their experiences - are outlined including sharing jokes and humour as a means to reduce stress (78.4%) (Gray et al., 2021), exercise, religious practice, gardening and spending time outdoors (Stankiewicz Losty et al., 2021).

#### Aesthetic Needs

Mentions of beauty were largely absent from the data. On the one hand, this is hardly surprising given the nature of the nursing experiences under review. On the other hand, patient suffering, organizational tumult, and negative behaviours from the public could all arguably be parsed as varieties of ugliness. Coping in such circumstances can be described in aesthetic terms – as something amazing or inspirational. This is how a Turkish nurse described their experience: "It brings

a very beautiful, spiritual satisfaction to be in the pandemic. I realized that we have a very sacred profession as a nurse" (Deliktas Demirci et al., 2021).

The closeness of spiritualism and beauty, a relationship described here as sacred, suggests a religious outlook. Indeed, the only other manifestations of aesthetic concepts were found in studies from Iran (Monjazebi et al., 2021; Rajabipoor Meybodi & Mohammadi, 2021) in which the participants' experiences of resilience, challenge, and change contained explicitly religious signifiers. Although Maslow's concept of hierarchy of needs is thoroughly secular, these are more appropriately discussed under transcendence needs, given their cosmic nature.

## Need for Self-Actualization

"I never thought that I could be so strong" (Yip et al., 2021). This statement by a nurse from Hong Kong demonstrates how the challenges and changes brought by the pandemic occasioned self-transformation and realization. A primary example of this was a reclarified sense of professional identity and commitment, something evidenced in two Chinese studies (Cui et al., 2020; Zhang et al., 2021) and in a Turkish study, where the researchers noted how some nurses experienced a surge of belief in the power of their profession (Cengiz et al., 2021). Nurses who found that their resilience was tested but remained intact developed a renewed sense of hope and optimism. "I really learnt to be more resilient, you just push through it then everything will become better in the end" (Goh et al., 2021).

The relationship between surpassing expectations and greater resilience, and how this could be experienced as a positive feedback loop, moving between colleagues, was articulated by nurses in Israel and Spain, respectively: "The optimism, help, and support for each other helped my mental resilience and that of others" (Marey-Sarwan et al., 2021). "Being able to work in a good work environment has helped me a lot to cope better" (Vázquez-Calatayud et al., 2021).

Achieving self-actualization was also possible for novice nurses. In a UK study of student nurses who opted into clinical work during the early waves of COVID-19, significant challenges were contextualized alongside the benefits to those students' careers and the patients they will meet in future. "The experience was horrendous [...] However, the experience has been incredibly valuable and I feel it will make me a better nurse in the future ... I don't regret my choice" (Kane et al., 2022).

#### Need for Transcendence

The religious content of some nurses' testimony best fits this type of need. A core aspect of transcendence - being part of something bigger than oneself - is commensurate with manifestations of faith. "My colleagues and I pray a lot together.

God is in control, and we are His hands and feet right now" (Stankiewicz Losty et al., 2021). "Nursing is a kind of worship, worship means serving God's people" (Rajabipoor Meybodi & Mohammadi, 2021).

Believing in a deity was not the only way to achieve the transcendence of primal survival instincts. Drawing only from commitment to the profession, another Iranian study saw nurses explain how they believed their purpose was to "sacrifice our lives for the patients in tough days like these" (Deldar et al., 2021). In a Singaporean study, nurses' duty to others was a sufficient ethical motivator for overcoming fear and anxiety, resulting in a transcendent connection. "I think it's just like an honor [sic] to do something for the nation. You feel like you are part of something bigger than yourself' (Goh et al., 2021)

Nurses demonstrated awareness of the peculiarity of the moment. Despite the challenges, some expressed gratitude for the opportunity to contribute at a unique time in history. "It's nice to be involved with something like this [...] We, as nurses, are directly involved. Proud of it. Glad to be able to do something as a nurse that not everyone can do" (Rathnayake et al., 2021).

## **Discussion**

As expected with a review of global experiences, the breadth of findings includes conflicting and common experiences. The discussion will now examine a number of these differences and similarities, both negative and positive.

#### **Differences**

Attitudes Regarding Authority and Hierarchy. One significant difference observed by all researchers was a general contrast in attitudes between nurses from different parts of the world towards sources of authority, whether this was individuals of 'higher' status within the same organisation or bodies invested with broader decision-making power, such as local hospital management, regional or central government. For the most part, this difference appeared to manifest in simple geocultural terms, with nurses working within Occidental (or culturally adjacent) countries such as the US, UK, Canada, Australia, and Western Europe more commonly offering a negative appraisal of the logic and preparedness of their systems than their peers operating in the Orient.

The Role of Faith, and Types of Faith. Another stark difference was the centrality of religious faith to the motivation and resilience of certain groups of nurses, and the total absence of this inspiration for many others. Interestingly, the data indicate that the former group of nurses was in two distinct locations where different religions are ascendant - the US (Protestant Christianity) and Iran (Shi'a Islam). Faith appeared to serve various positive functions for these nurses, such as providing a rationale for action and sacrifice.

Moreover, although religious content was missing from swathes of testimony elsewhere, none of the nurses who expressed religious sentiment did so in a negative way. No nurse of faith depicted the pandemic as a moment in which they - or humankind more broadly - were being punished by a higher power.

Elsewhere, secular notions of duty and inspiration were strongly expressed, whether comradery (deriving strength from colleagues) or commitment to patients (deriving purpose from providing care). Both experiences could be described as representing a type of humanistic faith.

A unique situation can be observed in the People's Republic of China. Many health-care professionals are members of the Chinese Communist Party. These participants did not (or perhaps culturally could not) distinguish between their clinical and their patriotic duty. This represents a particular case of nurses identifying, arguably in a religious way, with the apparatus of the state. For these nurses, the language of war and soldiering is arguably non-metaphorical, as members of the military volunteered to work clinically from the same nationalistic fervour (Liu et al., 2020). These nurses could be described as articulating a type of secular faith in the state that is no less spiritual than its theistic contemporaries.

# **Negative Similarities**

Nursing Labour is Undervalued. A Lancet editorial published early in the pandemic declared that "without nurses and midwives, there would be no healthcare" (Lancet, 2020). The same piece, which estimates that around 90% of the global nursing and midwifery workforce are female, observes that these professions remain chronically undervalued and concludes that this stems from entrenched structural prejudice towards work performed by women.

Unfortunately, some findings of this review appear to support this perspective. Despite the requirement for new ways of working, the COVID pandemic saw a continuation of gender bias. The crisis context did not disrupt but rather reproduce the relations of depreciation that have characterised the nursing experience within the history of healthcare.

This manifests in the following paradox. Observing the location of nurses within systems of work and power, the following propositions seem true: On the one hand, nurses are the health professionals most proximal to patients. As a group, they spend more time in direct contact with patients than medics, allied HCPs and non-health occupations such as catering, cleaning, and clerical services. On the other hand, nurses lack the institutional power and authority to make, mediate, and challenge many decisions that affect them in the workplace. As a result, nurses operate at both the centre and the periphery of health systems: they represent both positionalities; they are simultaneously indispensable and expendable.

There are significant risks that result from such a double bind. Despite possessing autonomy in their clinical decision-

making, by lacking sovereignty over themselves, in the sense of a legitimate power to say 'no', nurses remain constantly close to harm. In the pandemic, this meant the risk of physical and psychological damage, including illness, suicidality, and death. It seems difficult to argue that, when the well-being of nurses is revealed *in practice* to be less protected than that of other groups, there is a systematic devaluation of their knowledge and skill, if not the profession as a whole. This is a discomforting thought at the quarter stage of the twenty-first century.

Nursing Labour is 'Dirty' Work. It is not just within health institutions that nurses felt distanced from others. The findings contain numerous accounts of public aversion to nurses during the pandemic. Whilst creating distance from others as a potential source of infection became a normative safety behaviour during the pandemic, the consequence of directing such behaviours towards nurses is to arguably treat them as simulacra for the virus. This represents a new form of an old stigma, namely that nurses perform 'dirty' work.

The notion of nursing labour as 'dirty' is established within literature from nursing fields as disparate as gynaecology (Bolton, 2005) and mental health (Thomas, 2014). Lawler (1991) noted thirty years ago that this association is likely rooted in the fact that nursing operates behind the curtain of privacy within the domains of bodily fluids and physical and mental dysfunction. Being avoided and treated as 'dirty' and contagious due to pandemic working appears as a further indignity compounding the devaluation already experienced due to gendered depreciation. That said, Bolton (2005) observes that nursing labour, as female work and thus counterposed to the presumed 'nobility' of male labour, has always been considered 'dirty' whether or not a contagion - real or imagined - is involved.

#### **Positive Similarities**

In the Absence of Evidence, There is a Presence. Despite the negative similarities in the experiences of nurses globally, the findings also permit alternative perspectives that reveal the immense worth of nurses to the world. For example, all the testimonies reviewed here are necessarily contingent upon acts of commitment; every nurse's individual dedication to being there for others. As such, embodying the value of dedication in this way, nurses had a material impact in the absence of an agreed-upon evidence base for clinical practice, at least in the early stages of the pandemic. The presence of nurses serves a recognizable treatment function, mediating some of the virus's damaging effects. In the rubric of influential nursing theorist Jean Watson (2007), this powerful omnipresence epitomises the 'carative' essence of the profession. The phenomenon also evokes fundamental principles within seminal mental health nursing theory. In the work of Peplau (1991) healing takes place

within the arena constituted by the therapeutic relationship between nurse and patient, meaning the catalysts for positive change are the nurses themselves.

The Nursing Experience as Universal Antidote to Fracture and Forgetting. Maurice Halbwachs, the philosopher widely accepted as having first conceptualized collective memory, observed how the phenomenon is tensile and impressionistic (Halbwachs, 2020). In other words the content of historical memory is influenced and determined by the norms, needs, and ideologies of those recalling it (Hutton, 2000). Therefore, if collective memory is not value-neutral, its form and function must be critically questioned.

If the collective memory of the COVID-19 pandemic is contestable, the value derived from centering the experience of the nurses is an open question. The findings of this review reveal the nursing experience during the pandemic to represent a near-universal, non-ideological narrative of devotion to others. The literature examined here represents an extraordinary collection of proofs that the principles of care and compassion were materially manifest in a world in crisis. At the same time, the consequences of such commitment are profound - that virtue and vulnerability are never far apart.

The appeal of such a narrative lies in its ability to challenge the dystopian political visions that have dominated the developing twenty-first century. The nursing experience of COVID-19 rejects the inference that there are no common interests between people. As such, it can serve to redress the alleged absence of humankind's capacity for care, commitment and connection.

#### Limitations of Study

Recent literature has identified and defined a range of recurrent weaknesses with systematic reviews (Uttley et al., 2023). A limitation of this review is the number of databases searched, which was limited to CINAHL and MEDLINE. A further limitation is that certain inclusion criteria undermine claims to universal applicability. For example, global representation and relevance are necessarily circumscribed by the exclusion of non-English language papers.

#### **Conclusion**

Nursing was critical to the delivery of healthcare during COVID-19. Whilst the profession was celebrated publicly, its members experienced extreme distress and insecurity. The reality of this tension is revealed in the personal stories of nurses and nursing students from around the world. As the acuity of the pandemic has abated these stories are becoming absent from collective memory.

To our knowledge, this mixed methods systematic review is the only attempt to synthesise the research carried out by nurses' during the pandemic focused on their experiences

of resilience, challenge and change. A number of differences and similarities were explored, including attitudes towards authority, the role of religious faith, nursing labour as 'dirty' work and the power of values-based practice. Such was the power of commitment displayed by nurses during the pandemic; the nursing experience can be held up as a powerful counter-narrative to the political dystopia that has dominated the twenty-first century.

# Implications of Study

Education. Pre-registration and graduate learners would benefit from learning about the impact pandemics have both on society broadly and nurses specifically. There would be immense value to entire health and care systems from future registrants learning about the qualities and practices associated with high-performing and low-performing multidisciplinary teams and organizations working in crisis, being encouraged to engage with change-processes that enable or sustain resilience.

Research. Noting the urgency with which practice nurses required best-available evidence during the pandemic, there must be a continued push to identify gaps in knowledge, pursue research that closes these gaps, and develop more robust ways of communicating across the practice-theory gap. To do this effectively, there must be greater international collaboration between nurse researchers to establish wider communities of knowledge and practice.

Policy. Nurses have an opportunity to leverage their value for improved recognition and professional influence. Nursing can exert greater influence over the clinical and non-clinical systems upon which global health security is contingent. This would allow the largest group of health-care professionals to inform said security but also ensure their own safety at work.

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#### Supplemental Material

Supplemental material for this article is available online.

#### References

- Arcadi, P. (2021). Nursing during the COVID-19 outbreak: A phenomenological study. *Journal of Nursing Management*, 29(5), 1111–1119. https://doi.org/10.1111/jonm.13249
- Aromataris, E., Lockwood, C., Porritt, K., Pilla, B., & Jordan, Z. (Eds.). (2024). *JBI Manual for Evidence Synthesis*. JBI. https://doi.org/10.46658/JBIMES-24-01
- Aydin, R., & Bulut, E. (2021). Experiences of nurses diagnosed with COVID-19 in Turkey: A qualitative study. *International Nursing Review*, 69(3), 294–304. https://doi.org/10.1111/inr.12735
- Bolton, S. C. (2005). Women's work, dirty work: The gynaecology nurse as 'other'. *Gender, Work & Organization*, *12*(2), 169–186. https://doi.org/10.1111/j.1468-0432.2005.00268.x
- Cadge, W. (2021). Intensive care unit nurses living through COVID-19: A qualitative study. *Journal of Nursing Management*, 29(7), 1965–1973. https://doi.org/10.1111/jonm.13353
- Casey, K., Oja, K. J., & Makic, M. B. F. (2021). The lived experiences of graduate nurses transitioning to professional practice during a pandemic. *Nursing Outlook*, 69(6), 1072–1080. https://doi.org/10.1016/j.outlook.2021.06.006
- Cengiz, Z., Isik, K., Gurdap, Z., & Yayan, E. H. (2021). Behaviours and experiences of nurses during the COVID-19 pandemic in Turkey: A mixed methods study. *Journal of Nursing Management (John Wiley & Sons, Inc, 29*(7), 2002–2013. https://doi.org/10.1111/jonm.13449
- Chau, J. P. C., Lo, S. H. S., Saran, R., Leung, C. H. Y., Lam, S. K. Y., & Thompson, D. R. (2021). Nurses' experiences of caring for people with COVID-19 in Hong Kong: A qualitative enquiry. *BMJ Open*, 11(8), e052683–e052683. https://doi.org/ 10.1136/bmjopen-2021-052683
- Chegini, Z., Arab-Zozani, M., Rajabi, M. R., & Kakemam, E. (2021). Experiences of critical care nurses fighting against COVID-19: A qualitative phenomenological study. *Nursing Forum*, 56(3), 571–578. https://doi.org/10.1111/nuf.12583
- Craw, E. S., Buckley, T. M., & Miller-Day, M. (2023). "This isn't just busy, this is scary": Stress, social support, and coping experiences of frontline nurses during the COVID-19 pandemic. *Health Communication*, 38(10), 2047–2057. https://doi.org/10.1080/104 10236.2022.2051270
- Cui, S., Zhang, L., Yan, H., Shi, Q., Jiang, Y., Wang, Q., & Chu, J. (2020). Experiences and psychological adjustments of nurses who voluntarily supported COVID-19 patients in Hubei province, China. *Psychology Research and Behavior Management*, 13, 1135–1145. https://doi.org/10.2147/PRBM.S283876
- Deldar, K., Froutan, R., & Ebadi, A. (2021). Nurse managers' perceptions and experiences during the COVID-19 crisis: A qualitative study. *Iranian Journal of Nursing and Midwifery Research*, 26(3), 238–244. https://doi.org/10.4103/ijnmr. IJNMR\_285\_20
- Deliktas Demirci, A., Oruc, M., & Kabukcuoglu, K. (2021). 'It was difficult, but our struggle to touch lives gave us strength': The experience of nurses working on COVID-19 wards. *Journal of Clinical Nursing*, 30(5/6), 732–741. https://doi.org/10.1111/jocn.15602
- Franco, J. A., Leví, PDLÁ, Coffré, J. A. F., & Ángeles Leví Aguirre, P. (2020). Feelings, stress, and adaptation strategies of nurses against COVID-19 in Guayaquil. *Investigacion & Educacion en Enfermeria [Nursing Education & Research*, 38(3), 1–14. https://doi.org/10.17533/udea.iee.v38n3e07

Godbold, R., Whiting, L., Adams, C., Naidu, Y., & Pattison, N. (2021). The experiences of student nurses in a pandemic: A qualitative study. *Nurse Education in Practice*, 56, 103186. https://doi.org/10.1016/j.nepr.2021.103186

- Goh, Y. S., Ow Yong, Q. Y. J., Chen, T. H. M., Ho, S. H. C., Chee, Y. I. C., & Chee, T. T. (2021). The impact of COVID-19 on nurses working in a university health system in Singapore: A qualitative descriptive study. *International Journal of Mental Health Nursing*, 30(3), 643–652. https://doi.org/10.1111/inm.12826
- Gray, K., Dorney, P., Hoffman, L., & Crawford, A. (2021). Nurses' pandemic lives: A mixed-methods study of experiences during COVID-19. *Applied Nursing Research*, 60, 151437. https://doi.org/10.1016/j.apnr.2021.151437
- Haggbloom, S. J., Warnick, R., Warnick, J. E., Jones, V. K., Yarbrough, G. L., Russell, T. M., Borecky, C. M., McGahhey, R., Powell, J. L., Beavers, J., & Monte, E. (2002). The 100 most eminent psychologists of the 20th century. *Review of General Psychology*, 6(2), 139–152. https://doi.org/10.1037/1089-2680.6.2.139
- Halbwachs, M. (2020). On collective memory. University of Chicago Press.
- Halevy, D. (1948). Essai sur l'accélération de l'histoire [Essay on the acceleration of history]. Self-published.
- Huang, F., Lin, M., Sun, W., Zhang, L., Lu, H., & Chen, W. T. (2021). Resilience of frontline nurses during the COVID pandemic in China: A qualitative study. *Nursing & Health Sciences*, 23(3), 639–645. https://doi.org/10.1111/nhs.12859
- Hutton, P. (2000). Recent scholarship on memory and history. *The History Teacher*, 33(4), 533–548. https://doi.org/10.2307/494950
- Iheduru-Anderson, K. (2021). Reflections on the lived experience of working with limited personal protective equipment during the COVID-19 crisis. *Nursing Inquiry*, 28(1), 12382–12382. https://doi.org/10.1111/nin.12382
- Jang, H.-Y., Yang, J.-E., & Shin, Y.-S. (2022). A phenomenological study of nurses' experience in caring for COVID-19 patients. *International Journal of Environmental Research and Public Health*, 19(5), 2924. https://doi.org/10.3390/ijerph19052924
- Jun, J., & Rosemberg, M.-A. S. (2022). I am a nurse, not a martyr: Qualitative investigation of nurses' experiences during onset of the coronavirus pandemic. *Policy, Politics & Nursing Practice*, 23(1), 48–55. https://doi.org/10.1177/15271544211054435
- Kane, C., Wareing, M., & Rintakorpi, E. (2022). The psychological effects of working in the NHS during a pandemic on final-year students: Part 2. *British Journal of Nursing*, *31*(2), 96–100. https://doi.org/10.12968/bjon.2022.31.2.96
- Kelley, M. M. (2021). United States Nurses' experiences during the COVID-19 pandemic: A grounded theory. *Journal of Clinical Nursing*, 31(15-16), 2167–2180. https://doi.org/10.1111/jocn. 16032
- Lancet, T. (2020). The status of nursing and midwifery in the world. *The Lancet*, 395(10231), 1167. https://doi.org/10.1016/S0140-6736(20)30821-7
- Lawler, J. (1991). Behind the screens: Nursing, somology and the problem of the body. Churchill Livingstone.
- Lee, N., & Lee, H.-J. (2020). South Korean nurses' experiences with patient care at a COVID-19-designated hospital: Growth after the frontline battle against an infectious disease pandemic. *International Journal of Environmental Research and Public Health*, 17(23), 9015. https://doi.org/10.3390/ijerph17239015

- Liu, Y.-E., Zhai, Z.-C., Han, Y.-H., Liu, Y.-L., Liu, F.-P., & Hu, D.-Y. (2020). Experiences of front-line nurses combating coronavirus disease-2019 in China: A qualitative analysis. *Public Health Nursing*, 37(5), 757–763. https://doi.org/10.1111/phn. 12768
- LoGiudice, J. A., & Bartos, S. (2021). Experiences of nurses during the COVID-19 pandemic: A mixed-methods study. *AACN Advanced Critical Care*, 32(1), 14–26. https://doi.org/10.4037/aacnacc2021816
- Marey-Sarwan, I., Hamama-Raz, Y., Asadi, A., Nakad, B., & Hamama, L. (2021). It's like we're at war": Nurses' resilience and coping strategies during the COVID-19 pandemic. Nursing Inquiry, 29(3), 12472–12472. https://doi.org/10.1111/nin.12472
- Martin-Delgado, L. (2021). Nursing students on the frontline: Impact and personal and professional gains of joining the health care workforce during the COVID-19 pandemic in Spain. *Journal of Professional Nursing*, *37*(3), 588–597. https://doi.org/10.1016/j.profnurs.2021.02.008
- Maslow, A. H. (1970). Motivation and personality. Harper & Row. Mohammed, N., & Lelièvre, H. (2022). Lived experience of medicine nurses caring for COVID-19 patients: A quality improvement perspective. Journal of Nursing Care Quality, 37(1), 35–41. https://doi.org/10.1097/NCQ.0000000000000090
- Monjazebi, F., Dolabi, S. E., Tabarestani, N. D., Moradian, G., Jamaati, H., & Peimani, M. (2021). Journey of nursing in COVID-19 crisis: A qualitative study. *Journal of Patient Experience*, 8, Online only. https://doi.org/10.1177/2374373521989917
- Munn, Z., Barker, T. H., Moola, S., Tufanaru, C., Stern, C., McArthur, A., Stephenson, M., & Aromataris, E. (2020). Methodological quality of case series studies: An introduction to the JBI critical appraisal tool. *JBI Evidence Synthesis*, 18(10), 2127–2133. https://doi.org/10.11124/JBISRIR-D-19-00099
- Peplau, H. E. (1991). Interpersonal relations in nursing: A conceptual frame of reference for psychodynamic nursing. Springer Publishing Company.
- Phillips, F., & Chao, A. (2024). Rethinking resilience: Definition, context, and measure. *IEEE Transactions on Engineering Management*, 71, 12289–12296. https://doi.org/10.1109/TEM. 2021.3139051
- Rajabipoor Meybodi, A., & Mohammadi, M. (2021). Identifying the components of spirituality affecting the resilience of nurses. *Journal of Nursing Management (John Wiley & Sons, Inc*, 29(5), 982–988. https://doi.org/10.1111/jonm.13235
- Rathnayake, S., Dasanayake, D., Maithreepala, S. D., Ekanayake, R., & Basnayake, P. L. (2021). Nurses' perspectives of taking care of patients with coronavirus disease 2019: A phenomenological study. *PLOS ONE*, 16(9), 0257064–0257064. https:// doi.org/10.1371/journal.pone.0257064
- Ricoeur, P. (2006). Memory, history, forgetting (K. Blamey & D. Pellauer, Trans.; Illustrated edition). University of Chicago Press.
- Robertson, I., & Cooper, C. L. (2013). Resilience. Stress and Health: Journal of the International Society for the Investigation of Stress, 29(3), 175–176. https://doi.org/10.1002/smi.2512
- Robinson, R., & Kellam Stinson, C. (2021). The lived experiences of nurses working during the COVID-19 pandemic.

Dimensions of Critical Care Nursing, 40(3), 156–163. https://doi.org/10.1097/dcc.000000000000481

- Stankiewicz Losty, L., Bailey, K. D., & Losty, L. S. (2021). Leading through chaos: Perspectives from nurse executives. *Nursing Administration Quarterly*, 45(2), 118–125. https://doi.org/10.1097/NAQ.000000000000000456
- Stern, C., Lizarondo, L., Carrier, J., Godfrey, C., Rieger, K., Salmond, S., Apóstolo, J., Kirkpatrick, P., & Loveday, H. (2020). Methodological guidance for the conduct of mixed methods systematic reviews. *JBI Evidence Synthesis*, 18(10), 2108–2118. https://doi.org/10.11124/JBISRIR-D-19-00169
- Thomas, S. P. (2014). Emotional dirty work: A concept relevant to psychiatric-mental health nursing? *Issues in Mental Health Nursing*, 35(12), 905–905. https://doi.org/10.3109/01612840. 2014.981462
- Uttley, L., Quintana, D. S., Montgomery, P., Carroll, C., Page, M. J., Falzon, L., Sutton, A., & Moher, D. (2023). The problems with systematic reviews: A living systematic review. *Journal of Clinical Epidemiology*, 156, 30–41. https://doi.org/10.1016/j. jclinepi.2023.01.011
- Vázquez-Calatayud, M., Rumeu-Casares, C., Olano-Lizarraga, M., & Regaira Martínez, E. (2021). Nursing students' experience of providing frontline COVID-19 support: A qualitative study. *Nursing & Health Sciences*, 24(1), 123–131. https:// doi.org/10.1111/nhs.12902
- Watson, J. (2007). Watson's theory of human caring and subjective living experiences: Carative factors/caritas processes as a disciplinary guide to the professional nursing practice. *Texto & Contexto Enfermagem [Text & Context Nursing]*, 16(1), 129–135. https://doi.org/10.1590/s0104-07072007000100016
- WHO. (2024). Call for urgent agreement on international deal to prepare for and prevent future pandemics. https://www.who.int/ news/item/20-03-2024-call-for-urgent-agreement-on-internationaldeal-to-prepare-for-and-prevent-future-pandemics
- Xu, F., Tang, J. P., Lu, S., Fang, H. W., Dong, L., & Zhou, Y. X. (2021). Coping and growing in dilemma: Clinical work experience of front-line nurses in Wuhan during the early stage of COVID-19 epidemic. *Japan Journal of Nursing Science*, 18(4), 1–9. https://doi.org/10.1111/jins.12428

- Yip, Y.-C., Yip, K.-H., & Tsui, W.-K. (2021). The transformational experience of junior nurses resulting from providing care to COVID-19 patients: From facing hurdles to achieving psychological growth. *International Journal of Environmental Research and Public Health*, 18(14), 7383. https://doi.org/10. 3390/ijerph18147383
- Zhang, X. T., Shi, S. S., Qin Ren, Y., & Wang, L. (2021). The traumatic experience of clinical nurses during the COVID-19 pandemic: Which factors are related to post-traumatic growth? *Risk Management and Healthcare Policy*, 2021(14), 2145–2151. https://doi.org/10.2147/RMHP.S307294

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