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Enhancing midwives' occupational well-being: Lessons from New Zealand's COVID-19 experience

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Background: The World Health Organization posits that adequate maternity health is possible if midwives are supported, respected, protected, motivated, and equipped to work safely and optimally within interdisciplinary health care teams. Based on qualitative survey data, we argue that the COVID-19 pandemic amplified job demands and resources, professional invisibility, and gender norms to negatively impact midwives' well-being.

Purposes: We aim to develop a refined understanding of the antecedents of well-being in midwifery to equip policymakers, administrators, and professional associations with the knowledge to enhance midwives' well-being postpandemic.

Methodology/Approach: Drawing on the Job Demands–Resources model, we thematically analyzed qualitative survey data (N = 215) from New Zealand midwives to reveal how job demands, resources, and structural factors impacted midwives' well-being.

Results: We identified fear of contracting and spreading COVID-19, financial and legal imperatives (job demands), work-related hypervigilance, sense of professional duty, practical and social support, and appreciation and recognition (job resources) as key antecedents of midwives' well-being. These job demands and resources were influenced by professional invisibility and gender norms.

Conclusion: Policy and practice solutions must address job demands, resources, and structural factors to meaningfully enhance midwives' well-being postpandemic.

Practice Implications: We recommend that policymakers, administrators, and professional associations monitor for signs of overcommitment and perfectionistic strivings and then take appropriate remedial action. We also suggest that midwives receive equitable pay, sick leave, and other related benefits.

Key words: Applied thematic analysis, gender norms, job demands, job resources, midwives, professional identity, well-being

The International Labour Organization recently identified health workers (i.e., midwives, nurses, doctors) as a key occupational group experiencing significant challenges to physical and psychosocial safety (Berg et al., 2023). These challenges were further compounded by the COVID-19 pandemic—an unprecedented global crisis that exposed long-standing structural inadequacies in global health care systems (Avgar et al., 2020). During the pandemic, frontline health care workers experienced immense challenges to service delivery and were forced to contend with previously inconceivable risks to their occupational health and safety (Berg et al., 2023). The COVID-19 pandemic drew global attention to the challenges faced by frontline health care workers, generating recognition and appreciation for the personal risks such workers take to protect public health (Booth et al., 2020).

However, not all frontline health care workers were forced to assume the same level of risk, and not all workers received the same level of public recognition and appreciation (Crowther et al., 2021). For example, workers in highly feminized professions (e.g., midwifery) assumed relatively high levels of personal risk but received little recognition (Hartz et al., 2022). This suggests that the gendered structure of global health care systems still favors some workers over others. As the pandemic abates, exploring the experiences of frontline health care workers in less-recognized professions can provide important lessons about how to enhance occupational well-being across the global health care workforce (Avgar et al., 2020).

In this article, we focus on how the COVID-19 pandemic impacted the well-being of midwives in New Zealand's (NZ's) public health system. NZ midwifery is a potent example of a frontline health care profession where individuals experienced significant and unique well-being challenges during the pandemic. As we show in our results, these challenges stemmed not only from the need to continue providing in-person care despite a high risk of viral contagion but also from structural-level factors, including gendered expectations regarding "why" midwives do their jobs and the perceived invisibility of midwifery as a health care profession.

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We frame our qualitative study within the Job Demands–Resources (JD-R) model (Bakker et al., 2023). The JD-R model is a robust theoretical framework previously used to investigate the antecedents and consequences of worker well-being across diverse contexts. By deploying the JD-R model in our study, we highlight its potential as a unifying framework in health care management research and show how it can be updated and refined to make it more suitable for specific professional health care contexts. Our application and refinement of the JD-R model represents an important theoretical contribution that addresses calls for more contextually specific understandings of worker well-being in management and health care research (Johns, 2017; Mharapara et al., 2023).

Background Literature and Theory

Well-Being in Midwifery

The International Confederation of Midwives describes a midwife as "a responsible and accountable professional who works in partnership with women to give the necessary support, care and advice during pregnancy, labor and the postpartum period, to conduct births on the midwife's own responsibility and to provide care for the new-born and the infant" (International Confederation of Midwives, 2017, p. 1).

Globally, the midwifery workforce is estimated at 1.9 million, with an unbalanced distribution in low- to middle-income countries (World Health Organization, 2021). Researchers have long argued that universal care from midwives who meet international standards and are adequately integrated into health systems will significantly reduce birthing complications and adverse outcomes (Renfrew & Malata, 2021). Because well-educated, compensated, and supported midwives optimize normal physiological processes, they are equipped to provide knowledgeable, safe, respectful, and compassionate care for birthing families (Renfrew & Malata, 2021).

Despite growing recognition of midwives' unique and critical role in health care systems (Renfrew & Malata, 2021; World Health Organization, 2021), research on midwives' well-being remains underdeveloped. Occupational well-being is a broad and complex concept involving individuals, professions, organizations, and society, requiring research sensitive to multiple contexts (Liu et al., 2019). Although the literature is replete with studies on how individual-level factors impact midwives' occupational well-being (e.g., Huo et al., 2020), there is a paucity of research incorporating macro-level structural elements surrounding the individual (Mharapara et al., 2023). For example, researchers have little explicit knowledge of how gender norms embedded in midwives' professional identities impact their well-being, despite midwifery being an extreme example of a feminized profession (Bloxsome et al., 2019; Kemp et al., 2021). Gender norms are unspoken rules concerning how workers of different genders are expected to behave (Acker, 2006). Recent research shows such norms define the types of behavior valued and rewarded in gendered work contexts. In construction, for instance, masculine-coded behaviors such as working long hours and appearing authoritative and confident are highly rewarded, regardless of their impacts on worker well-being (Galea et al., 2022). Because such gender norms are deeply embedded in the macro-level environment, they are less obvious as antecedents of well-being compared to job factors like workload and work hours. However, as research increasingly shows, structural factors like gender norms shape the more obvious antecedents of well-being in critical ways (Galea et al., 2022).

JD-R Model

The fundamental premise of the JD-R model is that worker well-being is shaped by the interplay between job demands and resources. Job demands are physical, psychological, social, or organizational aspects of a job requiring sustained physical, cognitive, and emotional effort. In contrast, job resources are physical, psychological, social, or organizational aspects that are functional in achieving work goals and buffering the depleting impacts of job demands (Bakker et al., 2023). Examples of job resources in midwifery are autonomy, empowerment, and professional recognition (Clemons et al., 2021; Mharapara et al., 2022). Some job demands such as intense workload originate from the external environment (Bakker et al., 2023), whereas others such as perfectionist strivings spring from an internal source (Ocampo et al., 2020). Similarly, resources may be available in the external environment (e.g., social support), or they could have internal origins (e.g., resilience).

Health care management researchers have argued that although the basic premise of the JD-R model holds across diverse work contexts, the model could benefit from further development to understand (a) the unique nature of job demands and resources for specific professional groups and (b) how these job demands and resources shape individual well-being (Parkinson-Zarb et al., 2023). In line with this argument, we contend that researchers must develop a context-specific understanding of how job demands and resources interact with structural factors (e.g., gender norms) to shape worker well-being at the professional level (Mharapara et al., 2023). Thus, in examining how the COVID-19 pandemic impacted midwives' well-being, we integrate the JD-R model with our empirical findings and prior research to identify how structural factors influence midwifery as a gendered profession.

Method

Research Context and Design

Midwifery care in NZ—the geographical location of our study—is part of a fully funded and universally provided national health system. NZ midwives work in three distinct but related settings. First, 39% of NZ midwives are self-employed as community-based midwives. Community-based midwives provide on-call maternity care to most (96%) NZ families through a case-loading continuity of care model (Ministry of Health, 2022). Second, 48% of midwives are employed in various maternity facilities (e.g., hospitals, birthing units), providing maternity care in a fragmented, shift work model (Ministry of Health, 2022). Third, 11% of midwives work in managerial support, educational, regulatory, and specialty roles.

Like other health care professions, NZ midwives were significantly impacted by the COVID-19 outbreak (Crowther et al., 2021). As NZ entered a nationwide lockdown in March 2020, midwives learned through their professional association—

the New Zealand College of Midwives (NZCOM)—that midwifery care was classed as an essential service and, as such, that midwives were expected to continue to providing in-person care to birthing families throughout COVID-19 lockdowns (NZCOM, 2020).

Against this background, our research was guided by the following question: "How did working through COVID-19 impact midwives' well-being?" To address this question, we implemented a qualitative study informed by an interpretive descriptive methodology. Interpretive description is a suitable methodology for workforce research in health because it provides a rich understanding of the contextually situated, lived experiences of participants (Thompson Burdine et al., 2021; Thorne et al., 2004). Interpretative description is a flexible methodology that allows researchers to combine diverse data collection and analysis methods in a single study (Thorne et al., 2004). In our study, we collected data through a qualitative survey (Braun et al., 2021) and implemented applied thematic analysis (ATA; Guest et al., 2012) to develop a rich understanding of our participants' lived experiences.

Procedure and Participants

We emailed a link to our qualitative survey to all registered members of NZCOM who had previously indicated a willingness to receive research study invitations ($N = 2,236$). We sent reminder emails 2 and 4 weeks after the initial invitation to increase the response rate. A total of 215 participants completed the survey between November 2020 and January 2021, representing a 10% response rate. Although this response rate is low by quantitative study design standards, our sample size, gathered during a global pandemic, is large by qualitative standards. Also, our sample proportionally represented the 20 district health boards that previously administered health care in NZ.

Data Collection

We collected data through an online, fully qualitative survey. Fully qualitative surveys embrace both qualitative values and techniques (Braun et al., 2021). Our survey was self-administered, and questions were presented in a fixed and standard format. Study participants used self-determined language and terminology in response to survey questions. The online delivery of our survey presented several advantages for us as researchers, including lower administration costs, greater potential to capture diverse perspectives and experiences, and increased accessibility to geographically dispersed participants (Braun et al., 2021). For study participants, our survey was empowering. Because participants were not visible to researchers, participants felt safer disclosing sensitive thoughts, feelings, and experiences during the height of the pandemic. Online surveys give participants significant control over when, where, and how they participate (Braun et al., 2021).

The survey asked participants to answer five open-ended questions about how job-related and societal factors impacted their well-being during COVID-19 lockdowns. Example questions were the following:

1. Overall, describe your thoughts and feelings about your safety and well-being as a midwife during the COVID-19 pandemic.
2. Overall, comment on whether you think or feel that New Zealanders in general (not just clients or significant others) appreciate your decision to continue working as a midwife during the COVID-19 pandemic.

Study participants used free text (up to 10,000 characters per question) to respond to questions. Table 1 summarizes basic demographic and work-related information about study participants, including their work context, location, work experience in years, work hours, educational attainment, ethnicity, and relationship status.

Analysis

We used ATA to analyze the data (Guest et al., 2012). In ATA, themes are constructed from data aggregated in a codebook. Key strengths of ATA include its suitability for large data sets and its adaptability for team research. We began the analytical process by familiarizing ourselves with participant responses. Familiarization is "about appreciating the data as data" (Braun et al., 2019, p. 10). At this initial stage, all five authors reflexively immersed themselves in the data to identify noteworthy patterns in the data set, as well as exceptions to those patterns.

Following familiarization, two authors coded the data inductively, developing emergent coding categories based on patterns identified during familiarization. These authors discussed their initial coding with the team and, through written feedback and meetings (virtual and face-to-face), clustered the codes into themes representing the most prevalent antecedents of midwives' well-being. For example, we clustered the codes "lack of recognition," "pride," "underappreciation," "words of encouragement," "undervaluation," "gratitude," and "feeling valued" into the theme labeled "recognition and appreciation."

Once we finished this inductive analysis stage, we integrated our initial findings with existing literature, drawing on ideas and concepts from relevant theory and research to refine our coding categories and themes. First, we drew on the JD-R model (Bakker et al., 2023) to understand which antecedents of midwives' well-being (as represented in our emergent themes and codes) were job demands and which were resources (personal and job). As we undertook this step in the analysis, it became apparent that some antecedents could be categorized as *either* job demands *or* resources, depending on how they interacted with other antecedents. For instance, work-related hypervigilance (WHV) could be a personal resource or a job demand, depending on the practical support midwives received. It also emerged that two key factors impacting midwives' well-being—gender norms and professional invisibility—did not fit within the JD-R model because they impacted midwives at a structural level rather than at the job level. Accordingly, we drew on literature regarding gender value at work (Acker, 2006) and professional identity (Kemp et al., 2021) to conceptualize how these structural factors impacted midwives' experiences of personal and job-related characteristics as demands or resources.

In addition to our formal application of ATA to the study data, we incorporated "big-tent" criteria for excellence in

TABLE 1: Demographic details of participant midwives (*N* = 215)

Category	Statistic
Work context	
Self-employed community midwives	54% (*n* = 116)
Employed rostered midwives	39% (*n* = 83)
Mixed-roles midwives	7% (*n* = 16)
Work location	
Urban	67% (*n* = 145)
Rural	24% (*n* = 52)
Remote rural	8% (*n* = 18)
Mean years worked	16.6 (*SD* = 11.61)
Hours worked/typical week	37.6 (*SD* = 15.26)
Education	
Bachelor's degree	71% (*n* = 153)
Diploma	12% (*n* = 26)
Hospital-based qualification	17% (*n* = 36)
Mean age (years)	48.8 (*SD* = 11.48)
Ethnicity	
New Zealand Māori	7% (*n* = 14)
New Zealand European	67% (*n* = 144)
Other ethnicity	18% (*n* = 38)
Did not answer	8% (*n* = 19)
Relationship status	
Married, civil union	66% (*n* = 142)
De facto/common law relationship	15% (*n* = 32)
Single	10% (*n* = 21)
Separated/divorced/widowed/ preferred not to say	9% (*n* = 20)

qualitative research (Tracy, 2010). Criteria include topic worthiness, rigor, credibility, resonance, and multivocality. Our analyses were guided by midwifery subject matter experts. The third author previously practiced as a registered NZ midwife. The author shared their reflections on the study data with a select group of midwifery experts practicing in NZ. To increase the credibility and resonance of our findings, the third author shared their reflections and expert feedback with the research team in formal meetings.

Results

How did working through COVID-19 impact midwives' well-being? Our analysis of data from 215 midwife participants revealed six key antecedents of midwives' well-being during the pandemic: *fear of contracting and spreading COVID-19*, *financial and legal imperatives*, *WHV*, *sense of professional duty*, *practical and social support*, and *appreciation and recognition*. Importantly, these antecedents did not impact midwives' well-being linearly, but in complex, nuanced, and dynamic ways. Moreover, the antecedents that directly impacted midwives' individual well-being were influenced by two interrelated macro-level structural factors: *professional invisibility* and *gender norms*.

To summarize and integrate our results with the JD-R model, we developed Figure 1. The central oval represents midwives' well-being, and to its left, we show two key job demands that created additional stress for midwives during the pandemic: *fear of contracting and spreading COVID-19* and *financial–legal imperatives*. To the immediate right of the well-being oval are two personal resources midwives drew on to cope with pandemic-related demands: *WHV* and *sense of professional duty*. Although personal resources buffered the effects of pandemic-related job demands (green arrows), they became a new set of job demands that added to midwives' strain and exhaustion (red arrows). The crux lay in how midwives' personal resources interacted with *job* resources at their disposal, namely, *practical and social support* and *appreciation and recognition*. The question marks next to the job resources indicate that they were either available or absent for midwives. WHV helped midwives feel safe and protected when practical and social support was available. Similarly, when midwives perceived *appreciation and recognition*, a sense of professional duty boosted their morale to work through challenging circumstances. More commonly, however, midwives reported an absence of *practical and social support* as well as *appreciation and recognition*. Under these circumstances, midwives experienced WHV and a sense of professional duty as additional job demands, further undermining their well-being.

The outer perimeter of Figure 1 represents the structural-level factors surrounding midwives' work context during the pandemic. Two interrelated factors—*professional invisibility* and *gender norms*—influenced midwives' perceived availability or absence of job resources. Specifically, midwives' perceived professional invisibility limited their access to practical support (e.g., personal protective equipment [PPE]), whereas gendered norms about "why" midwives do their jobs created a social climate in which midwives felt underappreciated and underrecognized. In the following subsections, we explain and illustrate our findings about how job demands, resources, and structural factors interacted to impact midwives' well-being during the pandemic. Additional data supporting extracted themes are shown in Tables 2–4.

Fear of Contracting and Spreading COVID-19

Midwives' fear of contracting COVID-19 was significant, especially at the beginning of the pandemic when very little was known about the virus, and therapeutics were unavailable. Midwives expressed their fear in statements such as:

> *At the time I was pregnant and was terrified. I had suffered several miscarriages in the past and was finally holding my pregnancy only to have COVID come along. I felt that I was putting myself in danger and felt*

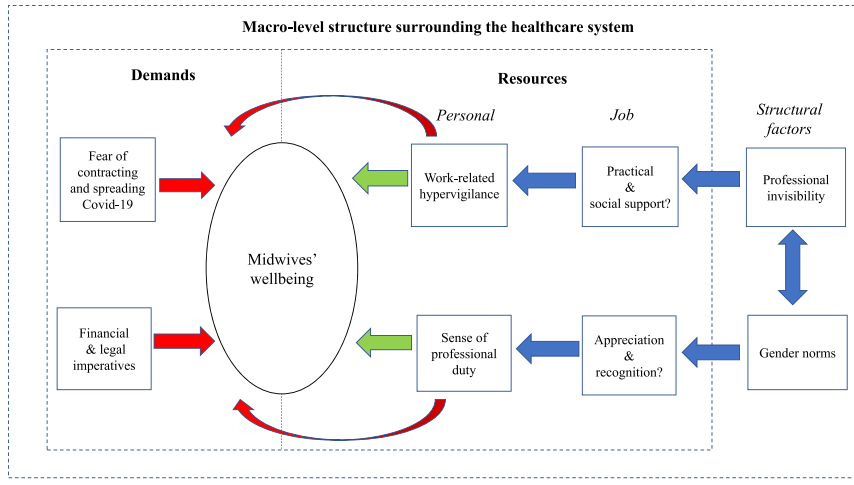

Figure 1. Macro-level structure surrounding the health care system.

forced to do so to provide care to other pregnant women (P5)

The data show midwives' fear of contracting the virus was only outweighed by their fear of spreading it to others:

My greatest stress was concern for my whanau [family] and the stress that I could be a vector of transmission to my loved ones at home, and also to the many women, pepe [babies] and whanau [families] that I work with. (P71)

Participants expressed their distress and guilt about the risk of contracting the virus and becoming superspreaders with emotive words including "vulnerable," "anxious," "scared," "worried," "nervous," "terrified," and "conflicted."

Financial and Legal Imperatives

Most community-based midwives in NZ are self-employed and do not have funded leave. As NZ public health service contractors, community-based midwives are paid according to predetermined milestones (modules) in the birthing process. As conveyed by one midwife, they felt financially compelled to continue providing care through the pandemic:

I don't feel I had a choice to continue working. If I could have chosen to stop over that time, I probably would have. We are self-employed, [so] no work equals no pay, and women needed to be seen and cared for. Midwives just had to keep going. (P202)

Community-based midwives also felt contractually obligated to care for birthing families without consideration for their own well-being. The following statement categorically illustrates the legal imperative felt by midwives:

We HAD NO CHOICE [sic] but to continue working as we are healthcare professionals with legal obligations to fulfill regarding our visits. (P56)

Work-Related Hypervigilance

In attempting to preserve personal and client well-being, midwives developed WHV. WHV develops as a response to

TABLE 2: Job demands: themes and supporting data

Theme	Definition of theme	Representative quotes
Fear of contracting and spreading COVID-19	Carrying the burden of possibly contracting COVID-19 and infecting others	"I was so frightened that I would be the carrier in the community and being in contact with so many families what that would look like." (P15) "I was scared when going to other homes as I had no way of knowing if people were abiding by the lockdown rules and reducing their risk of contracting COVID-19. I felt guilty that I would be a perfect vector for the virus going in and out of vulnerable people's bubbles potentially spreading the virus. I was also extremely tired and struggled during the initial lockdown period with the many extra phone calls and expectations from women with little accurate information to provide them." (P205)
Financial and legal imperatives	Needing to earn income and to uphold contractual obligations	"I am the sole earner in my household. I had no choice." (P42) "I don't feel it was a decision to continue working, I had only gotten this job 1 month before lockdown so I felt I didn't have a voice yet to say I can't work during this time. I felt I had to continue working even if it meant putting my family at risk." (P141)

TABLE 3: Job resources: themes and supporting data		
Theme	**Definition of theme**	**Representative quotes**
Work-related hypervigilance	Having to be constantly alert and on guard against infection	"I'd come home in tears knowing my husband, who is in the high risk bracket, would look at me with an expression of fear. We had a routine in place for when I got home. This meant I walked around the outside of the house naked, into the bedroom and to our bathroom and showered before having any contact with him." (P125) "As I work a distance away from home I could not stay at my usual accommodation—risk of infecting friends, so stayed in a hotel & a spare flat someone offered me." (P85)
Sense of professional duty	Assume responsibility for birthing families regardless of circumstance	"I know my neighbors/distant contacts were flabbergasted at my commitment. [They showed] no understanding that babies keep being born no matter what—that someone has to be there to help. When I got in my car to go to work during lock down, a neighbor asked me: 'Do you have to go to work?' Duh!" (P102) "Overall, I felt my work was important, and women needed to have a reliable maternity carer—so I kept going." (P129)
Practical and social support?	Receiving material assistance (e.g., PPE), guidance, and encouragement from others, or not	"At the initial outbreak I felt that the community of women that we work with gave us more support and safety gear to use so we could carry on with providing care for women of the community." (P145) "Midwives were unsupported/forgotten health care providers as it took so long for the PPE gear to be provided and guidelines of care." (P19)
Appreciation and recognition?	Feeling that one's work is seen and valued by others, or not	"Clients definitely appreciated the ongoing seamless care." (P30) "I never once had a woman say to me, 'thank goodness you are still here' or 'thank you for continuing to provide care for us.' Not once." (P18)

Note. PPE = personal protective equipment.

specific job demands that require a worker to be alert and on guard (Fritz et al., 2018). Midwives in our study developed WHV in response to the highly infectious and transmissible nature of COVID-19:

> *Overall, I did find it a very anxious time, washing and re-washing hands, clothes, hair and cars. Being over vigilant at clinic and home to prevent contagion or spreading possible viruses. (P116)*

WHV could be either a resource or a demand for midwives. When midwives felt they received adequate *practical support* from the health care system, WHV functioned more like a personal resource and had a generally positive impact on their well-being:

TABLE 4: Structural factors: themes and supporting data		
Theme	**Definition of theme**	**Representative quotes**
Professional invisibility	Perceptions of midwifery as underrecognized and disrespected as a profession	"I think we were absorbed into 'nursing/frontline worker' very effectively and felt angry at mainstream media's ability to ghost us into an 'unseen' role." (P71) "The media and public were full of gratitude for doctors, nurses, frontline workers at supermarkets, but midwives were not mentioned. It was hurtful and yet I understand that we weren't the only ones left unmentioned." (P10)
Gender norms	Unspoken rules about how workers of different genders are expected to behave, which influence how their work is valued and rewarded within and beyond their organizations or professions	"I think most people take our role for granted at the best of times and do not understand the impact that the demands of this role play on our physical and mental well being…as always I think there is an unreal expectation that we should put everyone else's well being ahead of our own." (P9) "I believe they do [appreciate our decision to keep working], however I feel it was expected. A sad reality to acknowledge and we humbly oblige. We are seen publicly in my perception not as an amazing profession continuing in a pandemic, [but as] the profession who should continue." (P14)

I felt confident in supporting women and caring for myself during the pandemic. After the first few weeks, guidelines from MOH [Ministry of Health] and recommendations from NZCOM became clearer and following them was time consuming but appropriate. The DHB [local healthcare body] I work for had amassed enough PPE gear to see us care for women safely. (P50)

However, WHV could also become a demand for midwives due to the increased workload brought on by constant alertness (Fritz et al., 2018). One participant captured this sentiment in describing the onerous procedure she implemented when visiting clients at home:

I had to alter my clinical practice significantly…. If visiting a woman postnatally at home, [the] expectation was that only the woman and pepe would be in the room with [me]. [I] wore mask, apron, and overshoes, and carried own hand sanitizer. Prior phone call. No sitting down in house. Social distancing. Mother to handle baby unless I was doing full physical assessment requiring hands on. At L3–4 [lockdown levels three and four] I would be also wearing disposable gloves for any touch. All gear removed at car and bagged. My tools—stethoscope, scales, etc.—transported in plastic bag, wiped down in house then re-bagged. Took all waste with me and disposed at clinic. (P29)

Importantly, WHV became even more onerous for midwives in the absence of practical support from external bodies:

We were unsupported by (DHB/MoH) [District Health Board/Ministry of Health] in terms of PPE…. My psychological health suffered and continues to do so. I have flashbacks to the time period—I felt responsible for the safety of many and helpless with the lack of PPE available. (P78)

Sense of Professional Duty

Midwives have always positioned themselves as partners and advocates for birthing women and families. This internalized *sense of professional duty* became an energizing personal resource for some midwives working through the pandemic:

I think women needed to know that we, as health practitioners, would always be there for them, as we have a duty of care as a midwife! Otherwise, you're in the wrong job. (P16)

At the same time, midwives often wished their dedication to professional duties was better acknowledged by others:

I believe I have a duty of care to women and my colleagues to continue on in my role unless I myself am incapacitated. It was good that the international appreciation of healthcare workers got media coverage here in NZ, as I think it raised the profile of health professionals here. For midwives, I believe there is never enough positive media praise of our profession. There should always be more. (P215)

When midwives felt invisible to news media and health care leaders, or underrecognized and underappreciated by clients, their sense of professional duty became more of a job demand than a resource.

Practical and Social Support?

Practical and social support from organizational and professional bodies were job resources available to some midwives. For example:

I was anxious at first but ADHB [local healthcare body] provided all the necessary training, guidelines, PPE and excellent employee psychological support. (P194)

More commonly, midwives reported a stark lack of support from health care organizations:

I felt like a lamb put out to slaughter in level 4 [the highest level of lockdown]. Pushed out to work with minimal guidance and no protection. In fact, the few guidelines we got actively discouraged use of PPE. It was horrific. (P218)

Although there was a global shortage of PPE at the start of the pandemic (van Barneveld et al., 2020), midwives felt they received less practical support than other health care professionals:

It was very frustrating at first getting any PPE from the DHB [District Health Board]. I felt the DHB was slow to respond to our needs considering we were in daily contact with the public. MoH [Ministry of Health] Practice Guidance was to wear a mask but we were unable to source them. I felt our workforce was just expected to carry on as normal even though other practitioners pulled back. It felt like our midwives were not as valued. (P129)

As this quote suggests, most participants attributed the lack of support during the pandemic to midwifery's *professional invisibility* in the broader health care system, which we discuss later.

Appreciation and Recognition?

Appreciation and recognition from clients were critical job resources for midwives who felt an internalized sense of professional duty. Midwives view their role as essential to society (Bloxsome et al., 2019)—and want to be recognized as such by the families and communities they serve. During the COVID-19 pandemic, some midwives felt a sense of appreciation and recognition from birthing families with whom they had direct, in-person contact:

I had so many families thankful for my care and that I still did drive-up clinics to see them when they heard friends and family had no visits. (P15)

However, more commonly, midwives felt underrecognized and underappreciated by those around them:

> *I don't think they quite understood or understand the cost it has taken on some midwives. Because, in most cases, they received great care but they haven't really stopped to think how it might have been for us. (P26)*

When midwives felt they were underrecognized and underappreciated by clients, their sense of professional duty stopped being an energizing resource and became an onerous job demand. Instead of doing their jobs to make a positive impact, they did so out of obligation.

Professional Invisibility

Midwives often attributed the lack of practical and social support they received from organizational bodies to their profession's relative invisibility to health care system leaders and in the media:

> *We were invisible. A lot of professions were thanked publicly, a lot of emphasis on nurses, yet most nurses didn't work in COVID areas—but we did as midwives! (P127)*

At the professional level, midwives felt not only underrecognized for the risks they were assuming but also disrespected by the media, public health service, and allied professions:

> *There were often comments made in [the] media about health workers, although often midwives WERE forgotten in these [comments], and it seemed we were lumped in with the nurses. Especially for LMC midwives, this is a kick in the guts when we were actually at greater risk than a lot of others given the number of women we see. (P41)*

Midwives viewed such treatment as another reminder of their less privileged status as health care professionals, which has historically been related to the gendered structure of the midwifery profession (Kemp et al., 2021).

Gender Norms

Gender norms have created widespread expectations about "why" midwives do their jobs, with the historical narrative being that because most midwives are women, they are natural carers whose work is a calling or vocation—something they do for the love of it—rather than a career that should be equitably compensated (Kemp et al., 2021). Although many midwives did feel an internalized duty of care during COVID-19—which energized them as a personal resource when they felt adequately recognized and appreciated for their work—gendered expectations rooted in midwives' professional identity made it harder for them to feel like they were indeed recognized and appreciated. As the following quote illustrates, this led to the overall impression that midwives were undervalued before, during, and after the pandemic:

> *Unfortunately, I think there is such a huge expectation that women have of us that is not realistic. [They think it's] just a complete given that "the midwife will do it…". I do not think this is confined to expectations regarding Covid-19 but to women and midwifery in general, which is really sad. (P89)*

Discussion

Our research reveals the complex and dynamic ways in which job demands, resources, and structural factors interacted to influence midwives' well-being during COVID-19. We revealed the job demands for midwives (*fear of contracting and spreading COVID-19* and *financial–legal imperatives*) and the personal resources midwives drew on to buffer themselves against those demands (*WHV* and *sense of professional duty*). We also showed how the lack of job resources—*practical and social support* and *recognition and appreciation*—could turn midwives' personal resources into job demands, adding to existing strain and exhaustion. Finally, and perhaps most importantly, we identified two interrelated structural factors—*professional invisibility* and *gender norms*—that shaped the availability of key job resources for midwives and, in turn, influenced how they coped with the demands of the pandemic.

Our findings highlight the importance of understanding how job demands and resources interact with latent structural factors to shape well-being outcomes. As expressed by midwives in our study, the COVID-19 pandemic did not create midwives' professional invisibility or the gender norms that inform how their work was valued compared to other health professionals. Instead, the pandemic brought these preexisting structural factors into sharper relief, putting midwifery and other health professions under increased strain. Thus, in line with other researchers (Avgar et al., 2020), we posit that examining the well-being impacts of the pandemic—even retrospectively—can expose deeper and more long-standing structural problems and inadequacies in global health care systems.

Our research also has implications that could improve how health care management scholars apply the JD-R model to their work. The JD-R model explains how personal and situational factors *within* organizational contexts influence worker well-being (Bakker et al., 2023). However, our empirical findings suggest the model omits the influence of external structural factors in shaping midwives' well-being outcomes. Health care organizations do not exist in a vacuum but within broader social, economic, political, and cultural structures. Our research gives insight into how these structures influence job resources and demands. We conducted our study in midwifery—an underresearched health care profession. The broader conclusion of our research—that job demands and resources must be understood within the macro-level environment—applies to various health care professions.

Another theoretical contribution of our study is demonstrating how personal resources can become job demands without adequate appreciation and support. A sense of professional duty helped midwives maintain work engagement through the challenging circumstances of the pandemic—although only to the extent that others recognized the value

of their work. WHV helped midwives minimize the perceived risk of becoming superspreaders—but without adequate practical support and guidance, WHV became an additional source of strain. These findings illustrate the unstable, shifting nature of job demands and resources and emphasize the importance of providing adequate job support to ensure personal resources do not morph into demands.

Practice Implications

Given our finding that a personal resource (e.g., WHV) can mutate into an additional job demand if a worker is not adequately supported, policymakers and administrators should actively monitor the causes and consequences of employee strain. For instance, without appropriate support and supervision, a worker high in perfectionistic striving and diligence—positively valenced strengths—may experience strain from the need to accomplish everything to a high standard. A meticulous midwife with a highly internalized sense of professional duty will likely experience burnout. We posit that it falls within the policymaker and administrator's purview to be watchful for signs of perfectionist striving and overcommitment and take appropriate action.

Our findings also imply that policymakers and administrators should be keenly aware of macro-level structural factors to moderate job demands and provide effective job resources. We acknowledge that it is largely beyond the ability of policymakers and administrators to control or modify deeply embedded, structural factors existing in long-standing cultures. However, by becoming more attuned to the pervasive influence of macro-level factors, they could take action that ameliorates their impact. For example, policymakers and administrators could ensure that midwives are compensated in a manner befitting their status as essential workers. This includes adequate pay, sick leave, and other related benefits (Berg et al., 2023).

Limitations

We suggest certain limitations to consider when assessing the conclusions of our study. First, to identify the structural factors that influenced midwives' well-being—*professional invisibility* and *gender norms*—we relied predominantly on midwives' subjective perceptions. Although this is a standard approach in qualitative research, we acknowledge that other health professionals may have perceived the structural factors we identified differently. Second, we cannot be sure that the midwives who responded to our survey represented the wider midwifery workforce. For example, midwives who were motivated to complete the survey may have been motivated by particularly negative experiences, and midwives who had already left NZCOM due to COVID-19 did not have an opportunity to participate. Third, although the NZ midwifery model is comparable to Australia, the Netherlands, and the United Kingdom (Mharapara et al., 2022), midwifery work is integrated differently in many countries. Consequently, this limits the global generalizability of our findings. Although this constitutes a research limitation from one perspective, we believe it also underscores the importance of our broader argument that the JD-R model should be adjusted to specific professional and work contexts to factor in how broader, structural-level antecedents impact individual well-being.

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