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AOTEAROA NEW ZEALAND RESEARCH

Birth in the time of COVID-19: Midwives' experiences of providing care during the 2020 COVID-19 pandemic in Aotearoa New Zealand

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ABSTRACT

Introduction: During the COVID-19 pandemic lockdowns in 2020, midwives in Aotearoa New Zealand were classified as essential workers and continued providing maternity services in hospitals, birth centres and the community. Midwives adapted their practice, using virtual care and navigating the restrictions imposed on birthing women/people and their whānau. This paper reports on midwives' experiences of providing care during the pandemic.

Aim: To identify the impacts of the pandemic on midwives providing antenatal, labour and birth, and postnatal care to birthing women/people and their whānau during the 2020 Level 4 and Level 3 restrictions.

Method: In-depth exploratory interviews and Braun and Clarke's (2019) process of reflexive thematic analysis were used to explore impacts on the practice and personal lives of midwives.

Findings: Fifteen midwives described their work-related challenges: significantly increased workloads, inconsistent messaging regarding practice guidance between health authorities and others, and limited access to personal protective equipment. Reflections about wider professional interests included these midwives' immense pride in their profession and their increased agility in the use of new technologies. But these positive elements were juxtaposed against a perceived lack of recognition and financial support for their increased workloads, leaving midwives feeling marginalised and invisible. Midwives' personal lives were significantly challenged by the stress and fear of facing COVID-19 itself, the juggle of managing their work and whānau lives, and their sense of conflict from feeling unable to practise in ways that aligned with their philosophies of inclusion and family-centredness.

Conclusion: Despite challenges, these midwives were committed to whānau in their care and demonstrated resilience, adaptability and resourcefulness in meeting their needs. Health planners should recognise that, as a primary health service, a significant amount of midwifery care is provided in the community setting and future pandemic planning should ensure smooth provision of resources to community-based midwives. Streamlining of information from trusted sources, together with consistency across the country, will assist midwives to respond to health directives confidently.

Keywords: COVID-19, midwifery practice, pandemic, qualitative interview study

INTRODUCTION

The COVID-19 pandemic caused severe disruption globally throughout 2020. While individual countries' responses varied, most focused on minimising social contact, maximising the health service response, identifying cases and contact tracing. In Aotearoa New Zealand (Aotearoa) midwifery care is provided by both Lead Maternity Care (LMC) midwives who are self-employed and community-based, and by core midwives who are employed within primary units, and secondary and tertiary hospital settings. Some midwives are employed by hospitals in "community teams" and are caseloading. During the pandemic, an "Alert" system of Levels numbered 1 to 4 was introduced. Level 4 required households to isolate under "lockdown" (stay at home orders) in an effort to reduce community spread and limit the impact on healthcare services. Essential services and workers could continue to operate. Under Level 3, travel was less restricted than a full lockdown but working from home and non-contact healthcare service consultations were encouraged to continue if possible. An initial four-week national Alert Level 4 lockdown during March/April 2020 was followed by almost three weeks of Alert Level 3 restrictions. Throughout the rest of the year different areas of the country fluctuated between Alert Levels 1 to 4 (Table 1).

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Table 1. Aotearoa New Zealand Alert Level measures

Alert Level	Measures
Alert Level 4: Lockdown Likely the disease is not contained Sustained & intensive community transmission Widespread outbreaks	Staying home in a "bubble" No travel apart from necessities such as food shopping Work & learn from home All public & education facilities close Health consultations by phone or videoconference
Alert Level 3: Restrict Medium risk of community transmission Multiple cases of community transmission & multiple active but managed clusters	Staying home in a "bubble" Travel still restricted – stay local People unable to work from home can return to work Healthcare services continue to use virtual, non-contact consultations where possible
Alert Level 2: Reduce Low risk of community transmission Active clusters in more than one region	Connection & socialisation with friends & whānau allowed, including domestic travel Return to work is permitted but alternative ways of working encouraged Health and disability care services can operate as normally as possible
Alert Level 1: Prepare Disease is contained in Aotearoa. Could be sporadic imported cases and/or isolated local transmission	No restrictions on personal movements or gatherings All businesses, schools & facilities can open Healthcare facilities must have systems & processes in place to ensure visitors keep records of where they have been

In Aotearoa the restrictions introduced during lockdown impacted on pregnant, birthing and postnatal women/people, midwives and midwifery students. This study is part of a larger study which explored the experience of lockdown for these women/people and for midwives and student midwives providing maternity care. At the time this research took place (June-September, 2020) little was known about the impact of a COVID-19 pandemic lockdown on midwives' provision of maternity care in Aotearoa.

This paper focuses on the findings about midwives' experiences of providing antenatal, labour and birth, and postnatal care to whānau during the 2020 Alert Level 4 and Level 3 restrictions in Aotearoa. This article complements the first two articles published in this series (Dixon et al., 2023; Jackson et al., 2023).

Background

To contextualise our study, we canvassed the literature focusing on midwives' experiences of providing care during the early months of the COVID-19 pandemic in both Aotearoa and overseas. We included articles published between 2020 and 2022. During this period the literature largely focused on perinatal care guidelines, changes to midwifery practice, the impact of these changes on relational care, and the wellbeing of perinatal care providers.

Navigating guidelines and information

Early in the pandemic perinatal care services were poorly prepared for the unprecedented situation. Midwives globally had to navigate multiple communications and apply them to their midwifery practice. In Aotearoa, Crowther et al. (2022) undertook a systematic scoping review of 257 sources of national and international COVID-19 guidance provided to midwives between March and June 2020. Guidelines were found to be mainly tailored for hospital-based services, therefore less suited to the Aotearoa context where perinatal care is underpinned by community-based, midwifery-led continuity of care. Midwives navigated an evolving situation around rapidly changing and sometimes inconsistent advice. The provision of a single source of regularly updated and timestamped, evidence-based guidance was the key recommendation arising from this review. Internationally, Australian researchers undertook weekly website searches between March and May 2020 for Australian and international professional bodies' guidelines for COVID-19-related perinatal care, reviewing 81 guidelines (Pavlidis et al., 2020). They and others (Hill et al., 2021; Homer et al., 2021) highlighted the complexity for practitioners in navigating the discrepancies between guidelines. Pavlidis et al. (2020) concluded that collating guidance and keeping up to date were important to help maternity care practitioners provide the most optimal care.

Changes to midwifery practice

As the pandemic unfolded, midwives worldwide made multiple changes to their care provision. Practice changes included time restrictions on face-to-face care in the community, increased use of telehealth, wearing personal protective equipment (PPE) and other measures designed to limit viral transmission and the community burden of disease (Crowther et al., 2022; Green et al., 2021; Homer et al., 2021; Jardine et al., 2020; Murphy, 2020; Potenza et al., 2021; Stulz et al., 2022; van Manen et al., 2021). Many services were restricted, such as the provision of antenatal education classes (Homer et al., 2021) and homebirth options (Jardine et al., 2020), although some areas reported an increase in homebirth enquiries (Cheng et al., 2022; Homer et al., 2021; van Manen et al., 2021; Verhoeven et al., 2022). Screening pathways (e.g., for gestational diabetes) were altered in the United Kingdom (Jardine et al., 2020) and, in Australia, community-based midwives faced changes to their usual access rights when transferring to a hospital or during the postnatal period (Homer et al., 2021).

Impact on midwives of changes to midwifery care provision

Nationally and internationally, midwives reported disruption to the relational care that underpins midwifery practice (Crowther et al., 2021; Lalor et al., 2021; Stulz et al., 2022). The consequences of there being fewer antenatal and postnatal visits were described by midwives as disadvantageous to families (Green et al., 2020; van Manen et al., 2021). Midwives found themselves "policing" the number of support people allowed at labour and births, which undermined their sense of birth being a family experience. Some perceived that telehealth was a barrier to providing woman-centred care. Maintaining social distancing was challenging and midwives struggled to individualise care, which led to a sense of moral distress (Cordey et al., 2022; Stulz et al., 2022). Despite these challenges, Aotearoa midwives championed the uninterrupted continuation of relational care despite personal risk to themselves, keeping women/people and whānau firmly in the centre of their care in this less-than-ideal situation. They demonstrated that, even during a national crisis, quality care that is consistent is facilitated by relational continuity (Crowther et al., 2021). Stulz et al. (2022) similarly reported that midwives "kept it normal" by spending extra time with families in special circumstances. Midwives worked hard to de-escalate women's fears, to be flexible and autonomous, and to meet women's cultural needs (Stulz et al., 2022).

Workforce wellbeing – navigating the risk to personal safety

Caring for carers was a strong thread in the early pandemic literature. In Australia, Hill et al. (2021), using an online survey, explored the extent to which midwives and other healthcare practitioners (HCPs) were concerned about catching COVID-19 during the 2020 first wave. Participants reported concerns about catching and spreading COVID-19 at work and to family members at home. Related concerns included inadequate supplies of PPE and being

asked to alter normal PPE use. Also, in Australia, Bradfield et al. (2021) found that midwives' ability to balance the professional aspects of providing midwifery care during an evolving pandemic, with their concerns about their own physical safety and those of their family, required knowledge, adaptability and resilience. Health workers worldwide had also been faced with managing abuse, harassment and violent attacks in their workplaces (Green et al., 2020).

Worldwide, midwives were already working in a context where there was a shortage of midwives. The pandemic exacerbated this staffing shortage. Midwives in Cordey et al.'s (2022) study felt the pandemic had highlighted the current and escalating maternity staffing crisis, affecting their ability to provide safe and individualised care, and contributing to burnout.

METHOD

This was a qualitative study using in-depth exploratory online interviews. The aim was to determine the extent to which the changed methods of service delivery during the COVID-19 pandemic in Aotearoa affected midwives on both a personal and a professional level. An invitation to participate in the study was disseminated via email to the New Zealand College of Midwives | Te Kāreti o ngā Kaiwhakawhānau ki Aotearoa (the College) membership database following approval from the College's Midwifery Research Governance Group.

Inclusion criteria

We invited currently practising midwives in Aotearoa who were working between March and April 2020 to participate in an online interview. They needed to able to converse in English, be over 18 years old, and have access to an internet service and a device on which an interview could be conducted.

Ethics

The project was approved by the Auckland University of Technology Ethics Committee (AUTEC #20/147). Participation was voluntary. Consent to participate was obtained in writing and recorded verbally once any questions that needed clarifying had been answered, prior to the interview commencing. All participant names have been changed to pseudonyms to support the participants' anonymity. Any other potentially identifying details such as workplace names have been removed.

Data collection

All data collection was completed virtually. Interviews were conducted via Zoom (or similar) technology in the period between June and September 2020. Zoom interviews were password protected, recorded, and transcribed by transcribers who had signed a confidentiality agreement. An interview guide was used to support the conversations; the interviewer used further questions to elicit fuller responses as necessary.

Analysis

Data were analysed thematically to contribute to an understanding of the participants' experiences. A reflexive thematic approach to inductively code the data (theme development as directed by the data; Braun & Clarke, 2019) was used as follows. Two researchers (SM and CG) familiarised themselves with the data by reading the transcripts repeatedly. They separately coded half the transcripts each and then compared their codes to ascertain whether there was alignment across the datasets. They found the codes generated were highly resonant across the two groups of transcripts and initial themes were identified from the combined set of transcripts. These initial themes were rechecked against the whole dataset to ensure they were aligned with the research question and study aims, and were shared with the wider research team, who had conducted some of the interviews. The research team discussed the themes identified and reached a consensus that the themes were an accurate reflection of the data.

FINDINGS

The participants

The fifteen midwives interviewed were domiciled across Aotearoa, ranging from major urban cities to remote rural towns. Nine of the midwives were solely providing community-based LMC services, with the remaining six providing a mix of LMC, core and caseloading midwifery care. Their ethnicities included three Māori midwives and twelve tauiwi (non-Māori New Zealanders – including other self-identified ethnicities such as Pākehā, British, Chinese or Other European). Half of the midwives (eight) were within their first five years of clinical practice (two of these were newly graduated) and the remaining seven midwives ranged from having 9 to 25 years in practice.

A highly dynamic evolution of crisis

The umbrella concept that our findings identified was that the response to the pandemic was *a highly dynamic evolution of a crisis*. Midwives' experiences clustered around three central themes: directly work-related challenges, issues for the profession more widely, and personal challenges for the midwives themselves. The rapidly evolving situation required immense adaptability and resilience; midwives were "up for", and proved capable of, meeting these challenges despite for many a sense of anxiety about their own and their family's vulnerability to the virus. Midwives identified how the pandemic also exacerbated some wider professional concerns, but these were sometimes framed in positive terms such as feeling an increased sense of pride in their profession.

Work-related challenges

Increased workloads

Midwives experienced many changes in their day-to-day working arrangements, including a noticeable increase in their already stretched workloads. This workload increase was instantaneous upon the announcement of the Level 3 and 4 lockdowns, as observed by Sophie: *…even that first day when Jacinda Ardern* [New Zealand Prime Minister] *made the announcement we were going from Level 3 into Level 4 in 48 hours, she hadn't stopped talking and my phone was ringing…* (Sophie, LMC).

The increased workload was true for both LMC and core midwives. The midwives discussed how their individual workloads had increased dramatically and that this was due to a number of factors. Predominantly though, for the LMC midwives the two-step process of conducting visits at home (where a phone consultation was followed by a brief in-person consultation for clinical observations), coupled with the need to schedule gaps in clinic-based visiting so that clients did not overlap in waiting rooms, meant very long workdays. LMCs have access agreements to undertake acute assessments in hospitals and, during lockdown, hospital services offered to do these assessments to reduce the number of personnel entering the facility. As a result, for core midwives there was a noticeable increase in assessments, that would normally be conducted by LMCs, to factor into their day, as Brooke attests: *…the workload was challenging at times with LMCs not being able to come in for elective caesarean sections, and for antenatal assessments as well, so we did all of that* (Brooke, core midwife).

The withdrawal of many other primary health face-to-face services saw midwives picking up the pieces of client care that would not normally be within their midwifery scope but, if not provided by others (however temporarily), those "pieces" still form part of holistic care provision for midwives. For example, one of Sophie's pregnant clients had recently been diagnosed with bipolar disorder by a mental health clinician – and the onset of the pandemic had had a destabilising effect on her emotional wellbeing. Sophie said:

> *…she messaged me. I was concerned. I couldn't get hold of her over the phone … I drove to her house thinking I was going to find her hanging from the rafters, it was awful. But she couldn't see her GP* [General Practitioner]*… that situation became something it didn't ever need to extend to…* (Sophie, LMC)

Accessibility and availability of personal protective equipment

PPE availability, in particular for community-based midwives, was highly erratic in the initial weeks of the pandemic. Despite daily assurances at the televised 1pm announcements from the Director General of Health that PPE was widely available to health workers, this was simply not the reality for many community-based midwives. Some midwives described personally paying hundreds of dollars out of their own pockets to protect themselves and their clients when the District Health Boards (DHBs) were failing to provide PPE or obstructing easy access to it. "Rationing" of PPE was rife in some areas, with many examples offered by midwives about how difficult it was to access, as Julie described:

> *I felt like we were treated as second grade citizens compared to hospital midwives. To be given a…urine pottle with 5 squeezes of hand sanitiser and one gown and a couple of masks and told 'well, only use it if you have to' was just not acceptable.* (Julie, LMC)

The midwives were pragmatic about resourcing themselves, but found accessing PPE problematic: *Masks, you couldn't buy a bloody mask for love nor money* (Sharon, LMC).

In the early weeks mask wearing was also not necessarily encouraged by some managers, as Georgette described: *In the first lockdown it was optional to wear a mask and actually initially they said, 'don't wear a mask because it's almost scary, it's more scary for the patients'* (Georgette, core midwife).

Jennifer discussed how PPE availability eased up quite quickly in her area, but reported differing access for core and LMC midwives:

> *...those PPE packs certainly became available for the core midwives but for LMCs we had to, for instance, prove that we were going to be using them for a homebirth. We didn't have any provision for any other visits. It was just for homebirths, we had to give the NHI number of the woman and we weren't allowed to get a set for our second midwife.* (Jennifer, LMC)

PPE accessibility became generally less problematic after the first three or four weeks and these midwives appreciated the collegiality shown by their colleagues in securing access across their different work settings. At the same time, the weight of this responsibility for others' safety remained a tension:

> *…just trying to understand the reality of the risks and what was required of me as a practitioner to keep myself safe, and also everyone else that I was caring for safe, just the weight of that responsibility was very heavy.* (Lisette, LMC)

Information sources for midwifery care provision

In the early weeks of the pandemic, information provision to midwives was frequent and sometimes conflicting. Guidelines for the management of pregnancy, labour and birth and postpartum care were often inconsistent. These midwives, both core and LMC, identified that some information sources were more trustworthy than others and cited the College and Ministry of Health advice as more relevant to their needs than what emerged from their DHBs. The latter's advice was often focused on wider hospital-based protocols, which weren't necessarily even relevant to the maternity setting. Jennifer described how: *it was relatively confusing to begin with because we had RANZCOG guidelines and Ministry of Health guidelines and College guidelines differing for a couple of days there, and all changing rapidly* (Jennifer, LMC).

Marie felt that having one source of information, rather than several, would have made a big difference for many midwives. She said:

> *...there were almost too many organisations and you just needed somebody to just kind of, to collect it all, send out one lot of information and to almost just be singing from that same song sheet, so that we all had the same information. We are such a small country with, I don't know how many DHBs it is, a ridiculous number, and so the information was coming from different places and then your regional College was saying one thing and then obviously the national College was saying something different, and then the Ministry of Health was saying...so it's all these different places and actually if it was all just condensed it would have been easier.* (Marie, LMC)

Wider professional issues

Pride in our profession

Another cluster of findings related to wider professional issues. The midwives described a huge sense of pride in the adaptability and professionalism shown by their midwifery colleagues. One midwife used the word "noble" (Polly, employed caseloading midwife) to describe how it felt to go out there day after day at high personal risk and cost to their own families. Collegiality with other midwives and with members of the maternity care team was supportive, and a sense of increased unity and manaakitanga were often noted by these midwives. One midwife said: *…when lots of other health services shut up we still …trudged along and we still kept working…there's a huge amount of credit in that. I think midwives are really awesome* (Marie, LMC). Another noted: *I think overall midwives were amazing to keep going ... yet again I was just blown away by how awesome, what a great bunch of women we are* (Polly, employed caseloading midwife). A further midwife said: *Midwives ... are extremely adaptable. We're used to managing crises, we're used to being lateral thinkers, we're problem solvers* (Sharon, LMC).

Highlighted capability and agility

Midwives also described satisfaction with the agility of their colleagues to adapt to the rapidly unfolding situation. Several mentioned how much their technical capability improved around teleconferencing systems such as Zoom and viewed this as a very useful personal development skill to have come out of practising midwifery under pandemic conditions. The newly graduated midwives in particular recognised their own readiness to fully engage in practice confidently as new practitioners in such a challenging environment with great support from their mentors and peers. Lisette said: *I think that I personally have found that ...in some ways I think it probably sped up my adjustment to being a midwife.* She went on to say: *...now I guess* [I'm] *getting to the point that I'm starting to really feel like I can hold that responsibility and feel reasonably confident in that* (Lisette, LMC).

Feeling marginalised and invisible

However, all of these positive expressions were overshadowed by an enormous sense of invisibility and of being undervalued by the health system and the Government. While there was widespread support for the overall governmental response to the pandemic, when discussing specific responses in terms of their own working lives the midwives felt marginalised and invisible. Alice's comment reflects this predominant feeling:

> *I think ... we're invisible, I really do. I think midwives, to most other health professionals, are just invisible. Or people just see us that we're probably just in the hospital, why would we need stuff like that because aren't midwives just in the hospital? I think community midwifery, LMCs, are very hidden.* (Alice, LMC)

Initially, midwives were not mentioned at all among frontline health workers being publicly praised for their efforts. Other primary health providers such as some Well Child providers, GPs and mental health services sharply reduced or completely stopped providing any face-to-face care. So, when (then) Minister of Health David Clark announced a $30 million dollar package to support GPs and community pharmacies, and later also announced funding for some Well Child services to go virtual, these midwives felt highly aggrieved that they were completely left out of any financial support and were indeed still paying for their own PPE in some cases. Midwifery requests for additional financial support were denied until very late in the piece and then were not remotely commensurate with the level of support offered to other primary service providers, despite midwives being the only service consistently supporting families with in-home, in-person care. Sharon described it like this:

> *I came away with a sense that we've done this, we've got through it, we've helped our families and our women through this and it was heartbreaking when the Government turned down our request for extra funding… you hear that GPs and Plunket are getting millions for going virtual – they're not seeing people, and we're actually the ones at the chalk face. And that's just heartbreaking.* (Sharon, LMC)

Sophie said : *…it's the first time I've really felt seriously disrespected and that really we're… we're not that important"* (Sophie, LMC).

Midwives' personal challenges

A stressful and scary time

Beyond both the work-related and professional issues for midwives, there were many reflections of a more directly personal nature. The onset of the pandemic in particular was a stressful and scary time and midwives were no different from other members of our community in terms of the fears they held for their own safety and that of their families. Mary said: *…we were being told that all these health workers across the world were dying…midwives were dying, and that's what was scary* (Mary, LMC). Jan recalled being in a room at the hospital and looking out the window with a colleague, when: *…someone said, 'see this carpark here, we're getting a whole lot of freezer containers delivered here, that's going to be for all the people who die'* (Jan, employed caseloading midwife).

So many balls in the air – the juggle of life and work

Several midwives altered their living arrangements in order to keep vulnerable family members safe, and the sheer juggle of managing their households and working lives was stressful and tiring. Polly, a single parent, mentioned:

> *Dad is in his late 70s and my children are young and so I was really worried that I was going to catch it in the community and then bring it back home to them. At one point I thought maybe I should just send my children away.* (Polly, employed caseloading midwife)

All the midwives commented on feeling exhausted.

> *I think just the busyness, that was just exhausting. And we didn't really feel like we could take proper time off. Normally we were taking two days off a week, and two of us would be on and two of us would be off. But it was so busy and it was such a juggle that it became very fragmented and it didn't happen for a while. It was like we were on a treadmill that we couldn't really get off and get into a normal pattern of work. Because we had to space clinics out, so because we were just using one room, normally we'd have run three clinics at a time, a day, in the house. But we couldn't, we could only run one clinic, so it really impacted on the available time. It was just exhausting.* (Alice, LMC)

Midwives' sense of conflict

The midwives described feeling self-sacrificing as they prioritised their midwifery clients and families over their own wellbeing, as Edith summed up nicely: *It's like you have to put your own nightmares to the side to deal with somebody else's nightmares and by the end of it you're exhausted* (Edith, core midwife).

Some midwives struggled with things like enforcing the visitor restrictions – for a time women/people giving birth were only allowed one support person with them, which meant usually their partner but not their other family members. Iris described the experience of separating a young woman in labour from her mother in these terms: *I had to take this mum from her mum, and take her into the birth room. And that was actually one of my toughest moments* (Iris, LMC). Feeling morally conflicted was a prevalent thread in the midwives' stories – they understood the need for taking steps to reduce the transmission of the virus, but Mae (core midwife) described this as feeling: *caught in the middle.* Georgette suggested that she felt powerless: *I didn't make the policy, I'm just here to enforce it* (Georgette, core midwife). Mae further reflected:

> *…the hardest part of it was having to turn family support people away or having to enforce the rule that partners went home after a couple of hours after the birth. I think the LMC had normally scarpered before that happened. And so we were left to do that and that was really difficult. And there were a few times where, there were some reasonably tough conversations that were happening between family and core staff which felt quite uncomfortable at times.* (Mae, core midwife)

This sense of ethical conflict saw some midwives continuing to provide care beyond the usual six-week postnatal period. Julie had:

> *…one family who are really high risk and ethically I could not not keep some ability for them to have some support and some advice. And I know I'm not getting paid for that ... but ethically I couldn't leave a family who were really struggling with parenting.* (Julie, LMC)

Some midwives expressed a sense of disappointment about not being able to provide the level of care they felt was ideal, and worried that the families in their care were being "short-changed" by altered visiting schedules, which meant spending reduced time with them. Midwives spoke of their philosophies of "presence" in the birthspace and felt that physical distancing and mask-wearing at times compromised the relational care they saw as the "heart of midwifery". As Mary put it: *Because then, 100% of who you are as midwife ... you're just giving these women good care, that's the aim of the game. And, you couldn't really do that"* (Mary, LMC).

DISCUSSION

The reflections conveyed by these Aotearoa midwives concerning the impact of the pandemic demonstrated that they were certainly not alone, in that their experience of navigating the rapidly evolving situation was highly resonant with that of midwives globally. Access to resources, the exacerbation of already existing maternity system challenges, and midwives' personal responses to the threat of COVID-19 itself have been highlighted across a range of similar studies.

Evolving challenges: The dynamic nature of the pandemic response

Midwives around the world faced an unprecedented disruption to their usual patterns and methods of care provision. Community-based providers, in particular, were forced to rapidly pivot to conducting virtual consultations and restricting the time they spent face-to-face with families, including by conducting so-called "window visits" where the parent and baby would be observed through the window with support and advice being offered over the phone (Crowther et al., 2021; Homer et al., 2021; van Manen et al., 2021). Within the hospital setting, the frequent donning and doffing of PPE added minutes to every clinical encounter. This was identified as compromising safety in emergency situations in some studies (Semaan et al., 2020; van Manen et al., 2021). Increased workloads were confirmed by midwives globally – with reports of unsafe practices due to hospital-based staff being under intense pressure within hospitals, and families avoiding coming to the hospital due to fear of contagion, further impacting the workload of community-based midwives (Cordey et al., 2022; Crowther et al., 2021; Stulz et al., 2022; van Manen et al., 2021). Several scholars positioned this as being "a magnification of existing problems" (Cordey et al., 2022, p. 2) within their various maternity contexts, which were already struggling with workforce shortages, low morale and increased stress among maternity workers (Crowther et al., 2021; Magner et al., 2021; Semaan et al., 2020; van den Berg et al., 2021).

The supply of PPE was an issue globally. Early in the pandemic (March 2020) the World Health Organization (WHO) acknowledged that the significant worldwide shortage of PPE supply was compromising health worker safety and urgently recommended a 40% increase in manufacture and the establishment of more effective supply chains to improve distribution (WHO, 2020). In Australia, 93% of privately practising midwives reported having to purchase PPE themselves and being denied assistance with sourcing PPE by their local hospitals (Homer et al., 2021). Also in Australia, Hill and colleagues reported that 50% of the 580 healthcare providers who responded to their survey said PPE supplies were inadequate, and two-thirds claimed that their managers had suggested variations to officially recommended PPE use – including not using PPE at all (Hill et al., 2021). Both the LMC and core midwives in our study had similar experiences in this regard – and this was also congruent with the findings of other studies (Crowther et al., 2021; Ness et al., 2021).

In terms of practice guidance, sources of information for midwives and other HCPs proved a frustration during the early weeks of the pandemic. Exposure to multiple recommendations, which were often conflicting, left midwives feeling uncertain; while communicating current requirements to birthing families, when these changed on an almost daily basis, was challenging. Information sources were not equally "trustworthy" in these midwives' minds – with professional body and national health ministry edicts being more relied upon than guidance emerging from direct employers. This too was noted internationally, with one third of the respondents in Hill et al.'s (2021) study expressing disappointment with the communication of COVID-19-related information from their employers. Studies which synthesised information about COVID-19 practice recommendations worldwide for maternity care concluded that the discrepant information available provided an ongoing challenge for healthcare providers and calls for streamlining information were plentiful (Crowther et al., 2022; Pavlidis et al., 2020; Szabo et al., 2021; Vu Hoang et al., 2020).

Rising to the challenge

Despite the myriad personal and professional disruptions associated with navigating the pandemic during the early months, the midwives in Aotearoa we spoke with described great pride in their profession's response. Midwives stood together, looked out for one another, and showed resilience that carried them through. These positive elements of bolstered camaraderie and determination to continue providing responsive care also featured strongly in international accounts of midwives' pandemic experiences, at least initially. Strategies to support midwives in their day-to-day work included establishing "wobble rooms" where midwives, who were beginning to feel overwhelmed with the emotional and physical labour of their work, could go for some time out to regroup (van den Berg et al., 2021). The concept of "psychological PPE" was born – this refers to "mechanisms deployed to prepare staff cognitively, emotionally and practically, to enhance coping skills and to promote healthcare workforce mental health and well-being" (Magner et al., 2021, p. e54). Several studies described innovations in the practice arena that were designed to support the wellbeing of maternity staff and mitigate the increased stress midwives were reporting (e.g., van den Berg et al., 2021). However, as the pandemic wore on, the compounding of existing workforce shortages, the moral distress of being unable to provide the level of relational care midwives aspire to and the ongoing debilitating effects of providing "maximum levels of effort … with minimal resources" saw many midwives questioning their future within the profession, citing burnout and exhaustion as "their tipping point for collapse" (Cordey et al., 2022, p. 4). It is possible that had we interviewed our cohort of midwives many months further into the pandemic a similar arc of being initially rallied and buoyed by the novelty of the situation but moving to an eventual sense of "fighting a losing battle" (Cordey et al., 2022, p. 4) may have been similarly borne out.

Feeling the pinch

The majority of our findings concur with the experiences of midwives and other health workers internationally. For example, fears for one's own personal and family safety from occupational exposure to COVID-19 were described ubiquitously, regardless of professional role (Bradfield et al., 2021; Crowther et al., 2021; Hill et al., 2021; Pallangyo et al., 2020; Semaan et al., 2020). One finding, however, does seem unique to our context in Aotearoa, which was the midwives' descriptions of feeling undervalued by, and invisible to, the Government who they hoped would provide practical and financial support for their increased workloads and ongoing engagement in care provision. While in the United Kingdom gratitude for the work of essential National Health Service (NHS) workers played out daily across neighbourhoods in the Clap for Our Carers Campaign (BBC News, 2020) and the United Nations praised midwifery efforts globally (UN News, 2020), here in Aotearoa midwives' pleas for recognition and compensation fell on deaf ears within the Government, at least initially. This finding was echoed in another study conducted in Aotearoa (Crowther et al., 2021) and likely reflects a more deeply embedded, historical

under-recognition of the work of midwives, as evidenced in the protracted remuneration contract negotiations that have dogged both community-based and hospital-based midwives' professional lives for many years (Chittock, 2022, Crowther et al., 2021).

STRENGTHS AND LIMITATIONS

The study has several strengths, including the timeliness of the data collection in relation to the experiences being explored. These interviews were conducted within four to six months from the onset of the first lockdown response to the pandemic, so midwives' recollections were fresh, the pandemic was ongoing, and midwifery care continued to be impacted by ongoing restrictions. Our study sample was broadly reflective of the midwifery workforce in terms of including newly graduated to very experienced midwives, rural/urban and geographical spread of practice and work settings (although we had a greater proportion of LMC midwives than the workforce distribution) and one fifth of participants were Māori. It is unclear how Māori midwives' experiences differed from tauiwi midwives' experiences, which would be an avenue for further research in this area. A larger sample might have elicited a wider range of experiences, but this limitation is mitigated by the high degree of resonance between the experiences of our participants and midwife experiences reported internationally, and the congruence of our findings with those of other similar studies.

CONCLUSION

Our findings confirm that, within our sample, both core and LMC midwives were capable, flexible, adaptable and highly professional but felt undervalued by the health system and the Government when providing care during the initial months of the pandemic. Midwives *went out there courageously* (Polly, employed caseloading midwife) at a time when Well Child providers and GPs withdrew face-to-face services. Midwives provided essential care for whānau and critical psychological and clinical support for new parents caught in the grip of a nationwide crisis. Our findings also remind us that the predominant focus for the COVID-19 maternity response centred on hospital-based services. The study highlights the integral role of primary care provided by midwives within the perinatal and wider health service and the need for recognition of this at the highest levels of pandemic response planning.

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GLOSSARY OF KUPU MĀORI

(Moorfield, 2011)

manaakitanga	Hospitality, kindness
Pākehā	New Zealander of European descent
tauiwi	Foreign people, non-Māori
whānau	In this context refers to an extended family, family group… in the modern context the term is sometimes used to include friends who may not have kinship ties to other members

KEY POINTS

- In pandemic and emergency situations, health planners should recognise and support the contribution of community-based midwives.
- The midwives studied felt proud of their profession's response to COVID-19, despite experiencing challenges and a sense of marginalisation by health authorities.
- These midwives appear to have adapted well with flexible and innovative care, providing critical psychological and clinical support for new parents.

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