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RESEARCH ARTICLE

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Hidden behind a cloak of silence and exclusion: a qualitative study of healthcare professionals and mandated COVID-19 vaccinations

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ABSTRACT

Aotearoa New Zealand (Aotearoa), like many countries, experienced widespread demand for health services, threatening to collapse the health system. In addition to stringent border control, isolation policies for those with COVID-19, and instituting lockdowns, the government imposed a COVID-19 vaccine mandate for groups of essential workers, including healthcare professionals. Some literature argues that the COVID-19 vaccine mandates restrict individuals' freedoms through the loss of employment, income, and status as a healthcare professional. This qualitative research explored how COVID-19 vaccine mandates impacted healthcare professionals. Data from eight in-depth interviews with former healthcare professionals who experienced termination of their employment, and four managers or business owners were thematically analysed. The theme, *Mandate-Induced Traumatic Decision-Making and Loss* and two sub-themes, *A Change in Attitudes* and *Ongoing Impacts on Lives,* were identified. We found the COVID-19 vaccine mandates had detrimental impacts on those healthcare professionals affected by their decision not to have or complete COVID-19 vaccinations. Despite what participants believed were legitimate reasons for not being vaccinated, they experienced ongoing trauma and psychological, unemployment, and financial harm. The findings question the public good benefits of the vaccine mandate when it restricts the freedom, autonomy, and agency of much-needed healthcare professionals, which provide useful insights.

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Introduction

This research aimed to understand the contexts and decision-making associated with the mandates influencing vaccination uptake among health workers subject to these mandates. During the global COVID-19 pandemic, Aotearoa New Zealand (Aotearoa), like many countries, experienced widespread demand for health services that threatened to collapse the health system. To contain the rapid rise in the number of cases of COVID-19 observed internationally, Aotearoa closed its international borders to everyone. Stringent isolation strategies ensured containment of those contracting COVID-19 to minimise its spread. With the introduction of the COVID-19 vaccination, the government took the additional step of introducing COVID-19 vaccine mandates for designated workforce sectors, including health. These changes occurred swiftly, imposed with little time for public consideration or debate, and issued under requests to be kind to one another. The rapid evolution of the COVID-19 pandemic globally, from the World Health Organization first reporting a cluster of pneumonia cases of unknown cause on 6 January 2020 to the first case retrospectively identified in Aotearoa NZ on 21 February 2020 necessitated decision-making with little evidence within a context of scientists racing to develop a suitable vaccine with unprecedented haste (DPMC 2023). Governments around the globe were required to make decisions with little information and make decisions while balancing a number of factors. Schippers and Rus (2021) stated:

> Essentially, policymakers have to react to a threat, of which the extent is unknown, and they are making decisions under time constraints in the midst of immense uncertainty. The stakes are high, the issues involved are complex and require the careful balancing of several interests, including (mental), health, the economy, and human rights (p. 1).

In the following year, while the government in Aotearoa grappled daily to manage the outbreak of COVID-19, the production and testing of vaccinations occurred swiftly, with the gradual publication of evidence about their efficacy in early 2021. Mandated COVID-19 vaccinations became a significant source of controversy and debate, dividing the country, particularly regarding the health workforce. In this article, we report a qualitative study with healthcare professionals to understand the impact of COVID-19 vaccine mandates on them.

Globally, COVID-19 has presented large and small countries like Aotearoa with substantial public health challenges. The development of policy and responses occurred as the pandemic unfolded, and scientists globally worked tirelessly to understand the nature of this coronavirus and how to respond effectively. The rationale communicated to the public has varied with the pandemic, especially as vaccines have become increasingly available. These messages went from protecting those most vulnerable to reaching herd immunity, ending the pandemic, and returning to normal (Bardosh et al. 2022). A constant message in Aotearoa was that the health system would be unable to cope without containment of its spread through the population, and vaccinations were a necessary tool. What followed was the government leveraging vaccinations and the rising stigma against unvaccinated citizens as a tool to convince people of their role in containing the increasing number of people with COVID-19 (Bardosh et al. 2022). Nevertheless, mandating vaccines is controversial in that they are necessary to reduce

the severity of infection and support public health strategies to contain pandemics while at the same time restricting peoples' freedom and choice (Gudooru et al. 2024). Furthermore, it is reported that the efficacy of mandates are influenced by the uptake of vaccines prior to COVID-19, vaccine hesitancy, and timing of announcements (Maquiling et al. 2023).

The COVID-19 Response Minister, Hon. Chris Hipkins, on 11 October 2021, announced the requirement for high-risk workers in the health and disability sector to be fully vaccinated. Healthcare workers included general practitioners, pharmacists, community health nurses, midwives, and 'all' health workers working with vulnerable patients. On 25 October 2021, the COVID-19 Public Health (Vaccinations) Amendment Order (No 3) was enacted. The Minister's rationale for mandating these two workforce groups was that vaccination was the 'strongest and most effective tool' for people's protection against infection and to enable health and education services to continue with minimal disruption (Beehive 2021). The outlined schedule required healthcare workers to have their first vaccinations by midnight on 15 November 2021 and to be fully vaccinated for COVID-19 before midnight on 1 January 2022. Approved by the Ministry of Health for six months, temporary medical exemptions were available for applicants meeting the clinical criteria and supporting evidence provided by the clinical practitioner (Ministry of Health nd). At midnight on 26 September 2022, an amendment to the COVID-19 Public Health Response (Vaccinations) Order 2021 revoked the mandatory requirement for vaccination against COVID-19 for healthcare workers (New Zealand Parliamentary Counsel 2022).

The key benefits of vaccination are illness and contagion prevention (Giubilini et al. 2023). Deemed essential workers during the COVID-19 pandemic, healthcare workers were at higher risk of exposure to COVID-19, and if they contracted it, more severe illness than the public who were locked down in their homes to reduce contact with others (Bardosh et al. 2022; Giubilini et al. 2023). Vaccinated healthcare workers acquire direct benefits as individuals by reducing severe illness. Therefore, the health system and patients indirectly benefit by reducing the potential staff shortages associated with staff illness or those isolated because they tested positive for COVID-19 (Giubilini et al. 2023). Protection of the vulnerable is a fundamental ethical principle for public health that justifies mandating vaccinations (Lee 2015).

Mandating COVID-19 vaccinations as a public health strategy to control COVID-19, a serious communicable disease, is a controversial and coercive move for governments that some believe is ethically questionable (Bardosh et al. 2022; Giubilini et al. 2023). Two factors underpin deciding whether to mandate vaccines: (a) the magnitude of the threat to public health and (b) the likelihood the mandate will increase positive outcomes for patients (Giubilini et al. 2023). The challenge of vaccine mandates relates to their necessity for the collective public good (reduction of the spread of disease) while infringing on individuals' liberties (Giubilini et al. 2023; Myers et al. 2023). Healthcare professionals' obligations to prevent harm to their patients further confounds the argument associated with mandating vaccines. However, Giubilini et al. (2023) maintained, '[t]he important question is whether the benefit associated with a more restrictive alternative [vaccine mandate] is sufficiently great to justify the greater restriction' (p. 213). However, Myers et al. (2023) contended that vaccine mandates were ethically

just for healthcare workers as the benefits for society outweighed the restrictions on their freedom regarding autonomy and agency.

Vaccines are not without risk, and for COVID-19, this includes younger people (for instance, the Oxford Astra-Zeneca and Johnson and Johnson vaccines carry small risks of clots and mRNA vaccines a risk of myocarditis) (Giubilini et al. 2023). In addition to the restrictions on healthcare workers' liberties associated with vaccine mandates are the risks of potential side effects. Hence, the benefits of the mandate need to outweigh the loss of freedom to choose against the risk of side effects. Paternalistic policies restricting groups of people, like healthcare professionals, may be justifiable if they prevent third parties, like patients, from harm (Manning 2021; Gur-Arie et al. 2023). Manning (2021) and Gur-Arie et al. (2023) both claim the COVID-19 vaccine is less effective in preventing the transmission of COVID-19 compared to other vaccines like measles, mumps, and rubella, and fails to substantiate the rationale for healthcare and other essential workers to bear the burden.

Conversely, Eyre et al. (2023) examined whether vaccinations contained the spread of the alpha and delta variants of COVID-19. This UK retrospective observational cohort study found vaccinations reduced the transmission 14 days post-vaccination for the delta variant, and no difference existed between the alpha and delta variants. Lundstrom (2024) reported the success of the COVID-19 vaccines in reducing the pandemic and the severity of the disease, going further to state, 'Despite numerous efforts of unfounded statements, disinformation, and conspiracy theories indicating major danger and serious consequences of vaccinations, scientific evidence has clearly confirmed that the advantages of COVID-19 vaccines strongly outweigh the risks of SARS-CoV-2 and severe disease' (p. 15). The National Institute for Immunisation Research and Surveillance (2024) examined locally acquired COVID-19 infection and concluded that the greatest effect of the vaccine was serious disease–they also found the vaccine provided protection against infection. Within the context of mandated COVID-19 vaccines in Aotearoa for healthcare workers, we aimed to understand the burden of government-directed mandated vaccinations on healthcare workers.

Methods

We used a Māori-centred qualitative descriptive methodology. The following Māori cultural values underpinned the conduct of the research: *whānaungatanga* (honouring connectedness), *mana motuhake* (valuing integrity), *pūtaketanga* (sharing knowledge and wisdom), and *manaakitanga* (valuing caring, hospitality, and generosity). This methodological approach enabled a qualitative design informed by a te ao Māori (Māori worldview) lens, decolonisation, and intersectionality (Aspinall et al., 2019; Kidd et al., 2021; Wilson et al., 2019) and a critical exploration of contextual factors that positively or negatively influenced health workers decisions about mandated vaccine uptake. This research aimed to:

1. Explain the contexts associated with the COVID-19 mandates that influenced vaccination uptake among health workers subject to these mandates and
2. Describe the decision-making and themes that can inform future vaccination mandate decisions.

The Auckland University of Technology Ethics Committee (AUTEC 23/263) approved this research on 10 March 2023.

Participants

We recruited health workers (regulated health workers and those working within health services) willing to participate in an interview or a focus group to share their experiences and decision-making about the COVID-19 vaccine mandate. We had planned to recruit human resource and health professional staff through DHBs (District Health Boards), but recruitment was difficult. DHBs declined the request to advertise recruitment requests for human resources or health professional staff because they did not want to reignite the trauma associated with the vaccine mandates. We recruited health workers via advertising, snowball sampling, and whanaungatanga (using our connections) to participate in focus groups. When potential participants contacted us about their interest in participating, they were sent an information sheet that was discussed with each person and any questions answered prior to their written consent to participate.

Recruitment of healthcare professionals for interviews was slow because of the trauma and stigma associated with being unable to have the complete vaccine doses and losing their jobs. Initially, inclusion criteria involved two key groups of participants–health workers who engaged in mandated vaccination, those who elected not to have a mandated vaccination, and key informants involved in off-boarding health workers who opted not to have mandated COVID-19 vaccines. Recruitment of health workers proved difficult because they did not want to discuss COVID-19 vaccine mandates, and talking with others was perceived as unsafe. District health boards approached to recruit staff who worked in HR and were involved in the off-boarding or undertaking exit interviews of health workers refused our request because they did not want to relitigate stressful and difficult times within their organisations. Four participants were managers and business owners, although they did not hold HR roles or were involved in off-boarding staff who chose not to fulfil the mandated COVID-19 vaccine schedule.

Data collection and analysis

Semi-structured interviews and a focus group, lasting up to 90 minutes, were digitally recorded and transcribed. We checked the transcriptions against the digital recordings for accuracy and ensured the removal of all identifiable features, an imperative for preserving participants' confidentiality. Therefore, we have only included professionals in the findings. Given the extreme concerns about participants maintaining their privacy, we opted not to identify quotes by discipline or participant number to avoid any possibility of linking quotes to individuals and compromising their identity.

Thematic analysis was used to create themes within the data (Braun & Clarke, 2013). We coded each transcript, creating substantive codes that were then sorted. The qualitative team (JD, TBU, DW) came together to create the themes in a mahi-a-roopū then (group analysis) enabled a consensual approach to data analysis and discussion about the themes (Wilson et al., 2019). Decolonisation and intersectionality informed the interpretation of the findings to explain the findings.

Ethical considerations

We anticipated that participants could be distressed in telling their stories about their decisions regarding COVID-19 vaccinations. In the event that participants needed additional support, our ethical approval included referring them for counselling if necessary. Details were included in the information sheet. Participants reported having the space to tell their stories, while distressing, was beneficial.

Positionality

Three authors (JD, TWB, DW) are experienced healthcare workers and qualitative researchers. They take reporting people's collective stories seriously and accurately, even when the findings provide challenging insights. To ensure accuracy in reporting, we used the process of data analysis, checking that the analysis was an accurate portrayal of what participants shared. All of the authors support the use of vaccinations to contain and prevent the spread of disease and are respectful of people's choices to have or not have vaccinations.

Findings

Twelve healthcare professionals (doctors, chiropractor, registered nurses, clinical nurse specialists, enrolled nurses, and clinical managers)–that is, eight former healthcare professionals who experienced termination of their employment, and four managers or business owners–participated in this research. Six participants were unvaccinated (initial and booster doses), three did not complete the vaccine schedule, and three were fully vaccinated. All of the participants reported supporting vaccination against COVID-19. However, those who were unvaccinated or did not complete the mandated vaccine schedule required for healthcare workers provided a rationale for doing so (Table 1).

The sample included a medical practitioner, manager, allied health professional, eight registered nurses and an enrolled nurse. Their decision not to be vaccinated included religious grounds for one participant being unable to source information about the vaccine ingredients, given the government's significant redaction on papers sourced through the Official Information Act (OIA) or made publicly available. The lack of readily available information plus heightened tensions within workplaces, such as concerns raised for one participant about the treatment of a colleague accused of talking to patients about the COVID-19 vaccine. In one instance, observing severe reactions a colleague or family member experienced after having the vaccine. In one case, the severe reaction resulted in the death of the person within 48 hours of having the vaccination. Four participants had past histories of anaphylaxis or severe reactions to previous vaccines (including significant cardiovascular events like stroke and heart arrhythmias), and one person had a life-threatening medical condition.

Most participants cried throughout their interviews. This research was the first time they had talked about their experiences. Participants reported being relegated to being persona non-gratis and socially marginalised by family members, friends, and work colleagues because of their decisions not to be vaccinated for COVID-19. Those participants who chose to be unvaccinated or did not complete the schedule recounted how the COVID-19 mandates stigmatised them, something that continued to persist despite

Table 1. Participants and COVID-19 Vaccination Status.

	Occupation	1st Vaccination	2nd Vaccination	Booster	COVID-19 Vaccination Status	Pre–vaccination Health Issues	Post-vaccination Health	Reasons for being vaccinated, unvaccinated or not completing the vaccination schedule
1	Medical practitioner	Yes Pfizer	Yes AstraZeneca	No	Incomplete	Well, age 35	Vax 1 stroke; vax 2 cardiac issues	Health status post-1st and 2nd vaccinations
2	Manager (Registered nurse)	Yes Pfizer	Yes Pfizer	Yes	Vaccinated	Nothing noted	Unchanged	Managed staff
3	Allied health practitioner	Yes Pfizer	Yes Pfizer	Yes	Vaccinated	Anaphylaxis to vaccines	Unchanged	Owned business
4	Registered nurse	No	No	No	Unvaccinated	Guillain Barre Syndrome	Unchanged	Health status
5	Registered nurse	No	No	No	Unvaccinated	Nothing noted	Unchanged	Religious choice (Jewish)
6	Registered nurse	No	No	No	Unvaccinated	Severe reaction to TB vax	Unchanged	Previous vaccine reaction
7	Registered nurse	Yes Pfizer	Yes Pfizer	No	Incomplete	Nothing noted	Palpitations, chest pain and tachycardia post-vaccination–Vax 1 'quickly' | Vax 2 Tachycardia took 2 weeks to resolve	Cardiac arrhythmias
8	Registered nurse	Yes Pfizer	Yes Pfizer	Yes	Vaccinated	Nothing noted	Unchanged	Managed staff
9	Enrolled nurse	Yes Pfizer	Yes Pfizer	No	Incomplete	Nothing noted	Unchanged	Daughter had a severe reaction to her booster
10	Registered nurse	No	No	No	Unvaccinated	History of (a) reaction to treatment for bee sting requiring hospitalisation and (b) hypersensitivity to medications	Unchanged	Disciplined and reported to the regulatory body for allegedly talking to a patient about the vaccine
11	Registered nurse	No	No	No	Unvaccinated	Nothing noted	Unchanged	Observed a colleague's death within 48hrs of vaccination and six deaths (stroke) within 48hrs of vaccination. Told to keep quiet.
12	Registered nurse	No	No	No	Unvaccinated	Nothing noted	Unchanged	Observed treatment of colleague accused of talking to a patient about the vaccine

the vaccine mandates being revoked. Three themes were created from the participants' data. The overall theme, *Mandate-Induced Traumatic Decision-Making and Loss* and two sub-themes: '*A Change in Attitudes*' and '*Ongoing Impacts on Lives*'.

Overall theme: mandate-induced traumatic decision-making and loss

While all participants held positive attitudes towards vaccinations, they recounted experiences of trauma associated with the decision-making surrounding vaccine mandates within health settings. Participants' trauma and loss was grounded in decisions they felt forced to make. The COVID-19 vaccine mandates resulted in significant losses in their lives because they decided not to undertake or complete the scheduled series of vaccinations. The decisions participants made about being vaccinated or not manifested primarily in the termination of their employment, isolation from work colleagues, and, significantly, brought about a loss of and change in their relationships with family and friends. Participants were placed in positions where they had to choose between work and family.

> People were forced to choose between their work over their families. People were put in hard positions, having to choose their work over their family.

> It was a really full-on period. And, personally, the conflict that sat there. A lot of these people are in spaces I'm in, outside of these four walls. And the falling outs of people, relationships, families, and beyond were enormous. People were really passionate about this because of the hurt they were experiencing outside of their employment. People were put in really hard positions of choosing their work over their family.

> I now found out that a lot of people were really angry that we'd been let go, just like the stigma of it. But there are also so many people that I've met since. One place I worked at when the mandates were lifted, a lot of the staff there didn't want it. They all got it [the vaccine] because of mortgages and jobs.

Because of other people's attitudes toward participants and those associated with not having the mandated COVID-19 vaccines, '*a cloak of silence*' shrouded participants and continued to do so. Participants described significant trauma related to the stigma of becoming labelled as someone who was an 'anti-vaxxer,' opposing the vaccine mandates. Yet, all participants were pro-vaccination with reasons for not undertaking or completing the vaccination schedule, such as medical conditions, severe reactions to the COVID-19 vaccine, and religious or spiritual reasons.

> I've actually got postgrad training in vaccinology, amongst other things. So, when COVID hit, I was very excited to be vaccinated. I remember when we got the email saying we could be vaccinated. I called that number straightaway, and it was engaged, so I kept trying until I got through to book my appointment.

> The talk about the vaccine was exciting. The talk about it coming was this, 'Oh, we might get back to normal', because, at that point in time, we were doing so much moving around of staffing and opening, closing, and rules were changing all the time. There was this excitement that the vaccine would lead us into a space where none of that was needed anymore.

> We've never been able to exactly find what is in the vaccine. A lot was redacted. So, we do not know what is in it. So, our question was, do we lose our lifelong jobs? There is no income at all in our family. There needs to be religious accommodations. If we had taken the

vaccine, we would have conflicted with God and our spiritual philosophy and ideology. After losing our jobs and livelihoods, and we have no income, still no income now, it was an easier choice than capitulating to have the vaccine.

With information circulating about the vaccination causing some to feel unwell, participants' decision-making was relatively extensive. For example, having experienced COVID-19 vaccine complications, some participants' decisions about completing the mandated COVID-19 vaccine schedule were informed by significant research about the COVID-19 vaccine. Some participants contacted Pfizer to become better informed as part of their decision-making and were unwilling to affirm its safety during pregnancy for one participant (JD listened to and verified recordings of this participant's discussion with a Pfizer representative). Yet, despite the risks to their life and wellbeing, some participants felt they had to get vaccinated to work to pay their bills, mortgage or rent, and, importantly, to feed their families.

And they are not acknowledging the people injured by the vaccine. There are stated side effects of the vaccine. They were stated inside Pfizer, but they were not being acknowledged by the government, which now requires this [the vaccine]. And so it was incredibly distressing for our family because it was either close my clinic, which I now have a massive mortgage on and bankrupting my family, or having a vaccine I do not want. In a normal society, this mandate would not be forced on me–it was incredibly distressing.

The key part of my background with vaccinations is that I'm not fully vaccinated. Now, it's not because I don't like them or because I don't believe in them. It literally just was my health and [the] health risks. And that was what the specialist you know recommended for me. So, when the vaccine came out, I was like, that's great. If anyone wants to take advantage of that, that's fantastic. I supported my clients if that's what they wanted to do, but I didn't want to have it.

The following is a participant's account is an example of the searching for information demonstrating the lengths some went to to decide whether to vaccinate.

I was pretty nervous because the CDC [Center for Disease Control and Prevention] at that stage was still suggesting that if anyone had had a profound cardiac response to the m-RNA vaccine, the best practice would be to avoid further vaccinations. I also looked at the vaccine-induced [immune response], which is more common in young women with autoimmune disease in their 30s! And, when you looked at it, like my risk of mortality from COVID versus my mortality from [immune response], they were exactly the same. I looked at that based on different transmission levels because the mortality risk varies depending on different transmission levels. And so, my main motivation for being vaccinated would be to protect others–my family, the community. But even at that stage, I looked at the New England Journal of Medicine [about] transmission information. I saw that there was about a 13% [reduction in transmission], so it wasn't strong even at that stage the data on transmission. It's huge on a public health level, right? When you're like deciding national policy but on an individual level, it didn't feel like it was in my best interests.

Some participants also talked to their local Member of Parliament (MP) in their decision-making process. While understanding the science related to the COVID-19 vaccine, participants also spoke about their increasing concerns about the vaccine's rapid development and testing efficacy. Some participants had observed harmful side effects in their practice. Some experienced these side effects themselves. Participants articulated not

having the opportunity or being prevented from discussing the dissonance they shared about their situation and the mandated COVID-19 vaccine. Participants' initial excitement about the vaccine and life returning to normal diminished with the consequences associated with the vaccination mandate.

> I was a little bit hesitant to start with because of how fast it had come out. But I could appreciate the science behind it and its rationale. I was working daily with COVID-19 patients. As you're probably aware, [the hospital] had quite a large population that had quite a few, especially in birthing and assessment. So, I was probably one of the first to sign up, and I got two doses, so that's where I was at the beginning.

Another participant talked about the one-sided information provided to promote the COVID-19 vaccine mandates.

> But not many people do that research, [the] amount of research. So it's at this stage I think I stopped listening to the media. They only had one line and weren't giving the non-vaxxed side.

Instead of being kind, participants reported that people were nasty and that their identities as healthcare professionals were diminished and demeaned. This situation continues for most participants beyond the COVID-19 vaccine mandate period.

Sub-theme: a change in attitudes

Participants recounted how the introduction of the COVID-19 vaccination mandate for health workers signalled a change in attitudes and created division among health workers, communities, and families. Despite government mantras of being kind throughout the COVID-19 pandemic, participants all reported a significant shift in people's attitudes within their lives and workplaces with the mandate.

> When the mandates came in, the divide was noticeable. Huge, big ethical debates were going on in corridors. Should I be made to do this? The beginnings of that were quite divisive, 'my body, my choice' from a management perspective. We then had to manage around people who had historically been on the same page with things. Once the mandate came out, things intensified. It became–'we don't talk about that', because of how tense those conversations would get, and heated.

There was much discussion about the COVID-19 vaccine mandates in their workplaces and communities related to 'my body, my choice.' The mandates changed the nature of this discussion, which became heated, with people eventually avoiding talking about the COVID-19 vaccine mandates.

> In talking with Māori staff about why this was an issue for them, it wasn't about the vaccine. It wasn't about what I am putting in my body. It was about how it [the vaccine mandates] was done to them. It was about another thing being done to them in a way that didn't work for them.

According to participants, the shift in attitudes away from kindness, a key message during the pandemic-related lockdowns in Aotearoa, resulted in silencing and exiling healthcare professionals negatively affected by the COVID-19 vaccine mandates. These attitudes are evident in the following sub-themes: Being silenced and Being exiled, which explain, in part, the perceived injustices in the treatment of participants.

Being silenced

Participants reported not being allowed to discuss their choice not to have further mandated COVID-19 vaccine boosters. Instead, they were deemed conspiracy theorists. This attitude enforced participants' silence, making the justification for their decisions invisible. Such attitudes were incredibly distressing because of vaccine reactions in the past or with the current COVID-19 vaccine. Participants just wanted discussions to help them make an informed decision. According to some participants, General Practitioners' failure to discuss with participants anything about vaccinations and the attitudes and behaviours of others functioned to silence all participants. Participants considered this denial of an opportunity for a conversation mitigated robust health literacy and the safe administration of vaccinations. Because of their medical histories or reactions to vaccines, some participants took, in retrospect, unnecessary risks having the vaccination or a second dose against their doctor's advice, sometimes to their detriment.

> I found that people did not understand, so I kept to myself, I didn't talk about things, and there was also a thing from work saying that we were not allowed to talk about vaccines or COVID with any of our patients or clients.

Despite one participant holding strong pro-vaccination beliefs and never pushing personal views onto others, they were reported to the regulatory body for talking to patients about the vaccine–allegations this participant denied. These experiences existed, even for those who had a medical exemption. Participants reported being treated with disdain, something that was ongoing at the time of the interviews. Medical exemptions quickly became impossible to obtain, according to participants, with applications denied without reason.

Being exiled

According to participants, the intolerance of the community and healthcare professionals toward those who did not get vaccinated served to stigmatise them, effectively exiling them.

> I realised being non-vaxed meant it would affect every area of my life. I couldn't see my kids, I couldn't see my grandkids, I couldn't see my mum. I couldn't join any groups. You know, the biggest thing was I couldn't get my hair cut–I never had long hair.

Bullying manifested in varying ways and was a consequence of being treated with discrimination. Sometimes, this also occurred within their family, whānau, colleagues and friends. Standard employment practices were often circumvented within their workplaces, resulting in unfair and unjust treatment when dismissed from their jobs. For example, some participants were trespassed at their workplaces.

> I had to get a colleague in [clinical area], who lives around this area, to come and collect my uniform and ID. And she brought me my stuff out of my locker, you know. I couldn't even go and collect that stuff because, you know, I was trespassed, and I always attribute trespassing to someone that's done something criminal. And you know I hadn't done anything criminal, yet I was still trespassed.

Being exiled caused participants significant harm and isolation from their usual support system.

Sub-theme: ongoing impacts on lives

Participants described the effects of not having mandated COVID-19 vaccines as having ongoing and destructive impacts on their lives. The pain of losing their employment and being treated negatively was a source of distress and stress for participants. For unvaccinated participants or those not completing the mandated schedule, loss of jobs involved abruptly ceasing work without a farewell. Some participants described losing their jobs as being 'sacked' and, for some, trespassed from their jobs, which detrimentally affected their social, psychological, and spiritual wellbeing.

> People would come in and say things to me, 'Oh, any unvaccinated person deserves to die.' And they would say things to me like, 'Oh, everyone that refuses to get the vaccine, they should just basically, if they catch COVID, they should be put in a tent and denied any healthcare.' And, and I'm sitting here, and I'm like, this kind of narrative is a pretty sick narrative inside of our country.

> They asked me how I was going to finish. I mean, what was the point of asking that? You couldn't have had a party, and who would I have it with anyway? They'd isolated us. I said I'd make a few phone calls. And I thanked [name] for being a good boss and all that sort of stuff, trying to be very positive because I knew she was very stressed. The thing I think I found, too, is that I could never talk about it with anybody.

> When I was terminated [from employment], it destroyed me because that's all I've ever done. You know that's my passion. It took me a long time to be terminated [from employment] to where I am now. To go through counselling with my GP and to realise that, you know, nursing isn't necessarily who I am. And that's sad because that's you know. Now it's a job. And that's sad because I don't know that I could actually let myself care about my job that much again. And that's because of the mandates.

Losing jobs resulted in enduring marginalisation from work colleagues, families, and friends and exclusion from events and society. Participants reported how losing their jobs reflected community intolerance for people who were unvaccinated, forcing them into silence. Loss of income coupled with isolation from whānau caused participants to experience ongoing financial burdens. Participants indicated the potential for alternative pathways for their employment, such as backroom functions like Healthline, which could have been explored, especially in times of shortages in the healthcare workforce.

> We worked with people that had COVID and, you know, I'm good at my job. You know we used to put on PPE [personal protection equipment]. At that stage, my granddaughter, born during the pandemic, lived in this house. And so, before the vaccine, I'd stand outside, take off my clothes, and wash outside before I came in. I was good at my job, and I think there didn't need to be a mandate for me. They didn't need to if people used the correct PPE and other measures. I don't think that they needed to go down that route because the majority of people like myself, you know, went and did it. They followed the guidelines. They could see the rationale for it. They could see the science, and even though it was still an emergency authorisation, they could see that. But I think they could have used so many other measures when they crossed a line.

Participants all talked about the psychological and emotional effects and unresolved grief associated with losing their careers and identities. Participants felt their clinical histories were dismissed as part of their decision not to vaccinate, and their commitment to the health services they worked in was ignored. This lack of acknowledgment of their

contributions to the health system was made worse because they could not find employment as a health professional despite the subsequent lifting of COVID-19 vaccine mandates. Living with the stigma of losing their job and not being re-employed left all of these participants feeling like their employers labelled them as 'anti-vax' despite all the participants reporting what they believed were genuine reasons for not being vaccinated. Participants believed the government could have handled the vaccine mandate process better.

> If you wrap people with aroha (empathy and compassion) and treat them with dignity and respect and have a coordinated pathway between ACC (Accident Compensation Corporation), GPs (General Practitioners), and the Ministry [of Health], you could manage that situation completely differently. So much of this was preventable just by some simple systems and a little compassion.

Participants claimed the process they were forced to endure had negatively impacted their mental health. Consequently, most continued to be traumatised and grieved by the loss of an essential part of their identity.

Discussion

Without a doubt, the health and government responses to the pandemic were unfolding as it progressed, with vaccine mandates instigated during the pandemic response and amongst growing societal stigma toward the unvaccinated. This research provides key insights into the experiences of healthcare workers who felt silenced, isolated, and stigmatised and who experienced ongoing social, employment, and financial harm when they decided to be unvaccinated or not complete the vaccination schedule. The imposition of COVID-19 mandates for some healthcare workers and their families occurred within a context of crisis decision-making at a national level in response to an unfolding pandemic scenario, and at an individual level, participants' search for evidence and information that did little to help their informed decision-making. The New Zealand Royal Commission COVID-19 Lessons Learnt (2024) found that vaccines were 'cruel and caused mental health issues and financial hardship' (p 56). Similar to participants in this research, they found vaccine mandates were divisive, isolating, and stigmatising for those opting not to have the COVID-19 vaccination or continue with vaccination schedules. The 12 healthcare workers' stories outlined apparent injustices for those who chose, for what they perceived were legitimate reasons, not to have mandated COVID-19 vaccinations.

Bardosh et al. (2022) claimed the stigma associated with the status of those who are unvaccinated is normalised in societal discourse, evident at various societal levels, including the media and politicians. Other research found that when the mandates in Aotearoa were enacted, almost 90% of the health workforce was vaccinated with at least two doses (Meehan et al. 2024). Notably, contrary to widespread perceptions, we found that participants were not 'anti-vaxxers,' as some were labelled. Instead, participants strongly questioned being mandated to do something that removed their rights, autonomy, and agency, such as choosing to be vaccinated or not.

Community resistance is a response to mandated vaccines. There exists a dissonance between those who are pro-vaccination and those who are anti-vaccination or anti-mandates (the latter obscured and difficult to decipher). Public benefits, such as greater

freedom, were afforded to those fully vaccinated toward the end of the pandemic. At the same time, for those opting to be unvaccinated, sanctions applied whereby their liberty remained restricted (Bardosh et al. 2022). Yet, the strong anti-vax and anti-mandate stances (often conflated into an anti-vax stance) that emerged during the COVID-19 pandemic in Aotearoa reinforced the notion that the loudest voices were the ones publicly heard.

We found participants in this study were committed to working within healthcare services. Each participant undertook significant research of the evidence to inform decisions about being vaccinated, reaching a seemingly sound rationale not to have a vaccination or proceed further with their vaccination schedule. Against this backdrop and the government's policy to mandate COVID-19 vaccines for health workers, their realities and the perceived harms they experienced became invisible, and their voices silenced. Attwell et al. (2022) found that while healthcare workers invariably supported vaccine mandates, they found that participants advocated for a more compassionate approach than the restrictive policies around mandates that negatively impacted their employment. Bardosh et al. (2022) critiqued the use of vaccine mandates. The ethical notion of 'do no harm' was not upheld when implementing the government-directed policy during the pandemic response, which is evident in participants' stories. Participants consistently relayed stories of social, psychological, and spiritual harm causing personal distress and expulsion from a profession to which they were committed. Some offered solutions to avoid the harm they reported, such as looking at backroom activities like working on helplines and respectful pathways for moving healthcare workers out of frontline employment.

They lost their employment as healthcare professionals and the income their families relied on and faced ongoing stigma from colleagues, friends, and family, something other research discusses (Bardosh et al. 2022). Some participants also reported the process of being 'sacked' was extensive, taking up to a year. Participants articulated an inability to secure employment despite a strong desire to return, something Gur-Arie et al. (2023) also refer to. A study analysing vaccination records, employment and earnings in large administrative datasets confirmed our findings, reporting a negative consequence for those opting not to be vaccinated was a 15% reduction in employment and a 19% reduction in earnings compared to those vaccinated (Meehan et al. 2024).

Bardosh et al. (2022) highlighted the unintended consequences involving widespread harm, social disharmony, stigma, and distrust of government and political decisions that erode the credibility of public health decisions. Moreover, mandates potentially damage future widescale public health approaches to managing pandemics. Mandate-related damage manifests in embedded distrust of the government, which motivates people to protect their freedoms (Bardosh et al. 2022). Charania et al. (2024) also noted a marked decrease in childhood immunisation over the COVID-19 pandemic (June to March 2020–June to March 2023), with immunisation rates of tamariki Māori (Indigenous children) dropping 18% (87% to 69%) coverage and Pacific children down 14% (95% to 81%). The impact of the pandemic on families, the quality of information sources, and the anti-vax campaign all influenced vaccine hesitancy, evident in Māori and Pacific family decisions about childhood immunisation.

The New Zealand Royal Commission COVID-19 Lessons Learnt (2024) found vaccine hesitancy related to people's existing health issues or previous vaccine reactions, similar

reasons participants offered about their hesitancy not to get vaccinated or complete the vaccine schedule. Huang et al. (2022) surveyed healthcare workers to understand their hesitancy in being vaccinated against COVID-19. Most respondents were concerned about the vaccine's side effects and inadequate testing. Similar to our research, most respondents reported being pro-vaccines. Huang et al. stressed that most healthcare workers (96%) had vaccines, like Meehan et al. (2024), who found that 90% of healthcare workers in Aotearoa. Healthcare workers held complex roles during the pandemic, with expectations to promote vaccinations while at high risk themselves (Wilpstra et al. 2024). The scoping review undertaken by Wilpstra et al. (2024) highlighted the negative consequences of vaccine hesitancy at multiple levels–providers, patients, and the health system. Further research is needed to understand the intersection between vaccine hesitancy and the consequences on healthcare workers' mental health.

Gur-Arie et al. (2023) questioned the ethics of governments mandating COVID-19 vaccines for health workers tied to their employment conditions, primarily where those sanctions resulted in termination of employment and social, societal, and financial costs. At the same time, health workers are essential in over-burdened health systems during and following the height of the COVID-19 pandemic. In Aotearoa, mandates were introduced within an enigma of converging but disparate public health values, professional obligations, and institutional failures to care for employees amid the crisis. Something talked about by Gur-Arie et al. (2023). However, the New Zealand Royal Commission COVID-19 Lessons Learnt (2024) found, 'Vaccine mandates were necessary and beneficial, and increased vaccination rates' (p. 56). They also reported that in addition to protecting those who were vulnerable, people felt safer.

Nevertheless, while the COVID-19 vaccine prevents the severity of illness and death if a person contracts the virus, it does not prevent its community transmission–the public good of such mandates (Gur-Arie et al. 2023). However, this stance is countered by other literature such as Eyre et al. (2023), Lundstrom (2024), and the National Institute for Immunisation Research and Surveillance (2024) all reported protection against COVID-19 in addition to reducing the severity of infection. According to Gur-Arie et al. (2023), the defence of public good associated with government-mandated COVID-19 vaccines is somewhat limited for health workers. Disregarding health workers' liberty, autonomy, and agency created an unnecessary burden of harm for those electing not to have the COVID-19 vaccine, as participants discussed in this study. Indeed, J. S. Mills (cited in Manning 2021) stated, ' … interference with an individual's liberty can only be justified to prevent the harm of others' (p. 8). Thus, given that the COVID-19 vaccine does not prevent community transmission, the only apparent reason for mandating the vaccine would be to minimise the severity of illness and the death of needed health workers.

Being a health worker carries higher risks for and exposure to contracting communicable diseases, especially during a global pandemic when carrying out their duty to care for and protect their patients (Gur-Arie et al. 2023). We found that despite their increased level of risk, health workers had a strong sense of duty to care for patients, evident in their due consideration and the research they undertook to decide whether to be vaccinated. For some participants, this meant having the vaccines against medical advice they were given–an actual harm, given the serious side effects experienced (see Table 1). Moreover, the mandated COVID-19 vaccination of health workers occurred when the

health system was under immense pressure and struggling to meet the health needs of people (Meehan et al. 2024).

Health worker shortages have featured frequently in national media in Aotearoa during and after the pandemic. Yet, those in this study reported the difficulty of re-entering the health workforce, even since the removal of the vaccine mandates. We observed that participants were willing but unable to regain employment in the health system. They felt their inability to regain employment was fuelled by the ongoing social stigma toward unvaccinated healthcare professionals despite being willing to undertake activities not involving direct patient contact, such as being on helplines. We would also contend that the health system endured the harm and burden of losing health workers exiting it and not returning because they did not have their vaccinations when healthcare demand increased (Meehan et al. 2024). The pathway out of and back into employment for healthcare workers needs to be transparent, timely and enabling.

Notably, the nature of their employers' communication was stigmatising, with most participants describing it as cold, hard and lacking compassion or understanding–for some, it made them feel like criminals for something they had done wrong. Harm similar to the participants was something Attwell et al. (2022) and Bardosh et al. (2022)reported. Participants endured demeaning processes associated with off-boarding, instructed to stay away from their place of employment, actions like being escorted offsite by security staff, and previously highly regarded health workers placed into the categories of 'other' and 'anti-vaxxers'. Heyerdahl et al. (2023) reported healthcare workers had difficulty discussing vaccinations, and vaccination stances engendered a loss of trust, disrupted relationships, and created 'strategic silences'. They found unvaccinated healthcare workers lacked support and were accused of being self-interested and did not protect patients (Lee 2015). Participants in our research no longer felt part of the team, lacked acknowledgement of their contributions and grieved the loss of their profession. The nature of how participants were treated and the processes surrounding the loss of employment caused psychological trauma. Participants found the absolute ending of their employment challenging to understand and could not contest such decisions or consider alternatives. There are benefits for employers to operate flexible, fair and just human relations practices during pandemics, including timely, transparent processes out of and back into employment.

Participants also struggled to understand how a supportive employer suddenly changed their attitude to one of disrespect and judgement. There is a need for respectful communication and fair employment processes for those unable to comply with mandate requirements, especially those who claim they possess legitimate reasons not to be vaccinated. These factors included previous health conditions and vaccine risk, fear based on previous vaccine reactions (anaphylaxis), informed pro-choice views (based on research around the contents and effects of the vaccine), safety in pregnancy (based on direct contact and advice from Pfizer) and acknowledgement of a person's past service and commitment to the organisation. We found one participant who felt supported by their employer. They acknowledged the difficulty of the situation, maintained contact, included them in online social gatherings, and welcomed them back to work immediately after lifting the mandate–a contrast with the experience of all other participants. Having flexible pathways and options for pausing employment (such as leave without pay and

backroom functions) and understanding that people have medical conditions that may have increased risk to their health and well-being is needed.

Understanding healthcare professionals' commitment to providing healthcare is necessary. Furthermore, undertaking due diligence for those unable to comply with mandates, such as seeking alternative employment options, seems a logical step to retain healthcare professionals, also supported by others (Attwell et al. 2022). Also, the emphasis on anti-vax instead of anti-mandate meant participants were treated wrongly as conspiracy theorists. Yet, participants accessed highly respected international literature about vaccine developments and those informing authorities about vaccine mandates in their decision-making and, in some cases, suggested solutions to employers and decision-making officials.

Participants' stories of their trauma associated with the vaccine mandates signal the need for services for rehabilitation and healing for individuals and their families when they lose their employment. One participant supported a health professional through their trauma, including their subsequent suicidal ideation. For families, witnessing the government's inflexible and seemingly unkind treatment of a family member has effects beyond individual healthcare workers. The consequent mistrust can impact future decisions involving the health system and government, potentially having intergenerational effects.

Recommendations

The insights gained from these participants provide helpful learning for future pandemics. We recommend future government decisions should:

- Ensure that the public good (i.e. reducing disease transmission) of mandated vaccination of targeted groups, like health workers, outweighs the significant long-term harm and the unintended consequences of such decisions.
- Have a clear pathway for health workers with clinical histories of severe vaccine reactions to vaccines, serious medical conditions, or those with religious, spiritual or cultural reasons to have alternative non-patient contact work options such as Healthline or working from home.
- Implement human resource processes that focus on utilising their clinical skills and knowledge in 'backroom' activities like Healthline, and where exiting people have to occur, this is undertaken in timely and dignified ways, acknowledging their excellent work in current roles.
- Utilise transparent pathways for exiting and re-entry into employment in the health sector should be part of any vaccine mandate plan once the public health concern is over.

Limitations

This research is a relatively small qualitative study focusing on participants' experiences negatively impacted by the COVID-19 mandates. Participants reported adverse events following immunisation as 'knowledgeable' healthcare professionals. However, as

researchers we could not verify the adverse events following immunisation. We advise caution when applying the findings within other contexts for these reasons. However, participants' stories showed similarities in the effects they experienced due to their decision to be unvaccinated, as reported. We were also unable to recruit those people responsible for off-loading healthcare workers who were not complying with the vaccine mandate.

Conclusion

With an unfolding pandemic that signalled new territory for governments globally, COVID-19 vaccine mandates became one strategy to try to contain increasing cases of COVID-19. Undoubtedly, COVID-19 put tremendous strain on health services nationally and internationally as governments scrambled to implement measures to limit its spread. However, this research demonstrates the harm and unintended consequences experienced by healthcare professionals mandated to be vaccinated against COVID-19. Furthermore, the limitations of the COVID-19 vaccine to prevent the transmission of this coronavirus bring into question its public good benefits when, instead, it restricted the freedom, autonomy and agency of much-needed healthcare professionals when the most the vaccination could offer was a reduction in severity of illness and death.

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Data availability statement

The data for this study is highly sensitive and participants did not consent for their data to be shared publicly, as per the ethical approval.

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