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“I’m Sorry, I Can’t. I Feel the Tears Coming On Already”: The Views of Mothers, Midwives, and Physiotherapists on Postpartum Recovery in New Zealand

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ABSTRACT

Worldwide, mothers experience physical postpartum symptoms affecting their quality of life, such as perineal pain, urinary incontinence, faecal incontinence, pelvic girdle pain, and dyspareunia. However, the experience of postpartum recovery in New Zealand is poorly understood. The primary objective of this study was to explore the views of postpartum mothers, midwives, and pelvic and women’s health physiotherapists regarding physical postpartum symptoms. The secondary objective was to investigate perceptions of the response of New Zealand’s funded maternity services, including access to pelvic and women’s health physiotherapy. Fifteen participants completed a semi-structured interview: five mothers in the first postpartum year, five midwives, and five pelvic and women’s health physiotherapists. Through thematic analysis, five key themes were identified: (a) beliefs about the postpartum period; (b) the “knock-on” effect; (c) the current maternity model; (d) belief that pelvic and women’s health physiotherapy can help; and (e) barriers and facilitators to pelvic and women’s health physiotherapy. Physical postpartum symptoms were seen to limit daily activities and have psychological ramifications for mothers. Participants felt that there is limited support for mothers’ physical symptoms under New Zealand’s funded maternity services. Pelvic and women’s health physiotherapy was perceived as a beneficial service for postpartum rehabilitation; however, several perceived barriers to this service were noted, including cost, a lack of knowledge, and difficulty navigating the healthcare system. Greater contributions are desired for mothers’ physical symptoms under the current maternity model of care, including more funding, education initiatives, and improved referral methods.

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INTRODUCTION

The postpartum period relates to the time following childbirth during which a mother’s body undergoes a major phase of healing and recovery (Romano et al., 2010). The length of the postpartum period varies in the research literature (Romano et al., 2010). In the past, the postpartum period was proposed to be six weeks long, based on the length of time required for

reproductive organs to be restored to their near pre-pregnancy state (Tulman & Fawcett, 1988). However, more recent longitudinal studies show that mothers continue to experience physical symptoms related to pregnancy and childbirth up to one year postpartum (Chien et al., 2009; Gjerdingen et al., 1993; Nygaard et al., 2021; Saurel-Cubizolles et al., 2000; Schytt et al., 2005; Tavares et al., 2020).

Self-reported conditions during the postpartum period may include perineal pain, persistent headaches, backache, pelvic girdle pain, dyspareunia (painful sexual intercourse), haemorrhoids, constipation, urinary incontinence, faecal incontinence, and breast soreness (Cheng & Li, 2008; Tavares et al., 2020). Urinary incontinence has been shown to affect 13.9% of mothers at 1–2-months postpartum (Schytt et al., 2005), 10.7% of mothers at 6–7-months postpartum (Brown & Lumley, 1998), and 43.4% of mothers at 12-months postpartum (Nygaard et al., 2021). There is a high prevalence of general and musculoskeletal symptoms in the early postpartum period, with 77.1% of mothers reporting backache (Chien et al., 2009) and 47% reporting persistent headaches (Lagro et al., 2003) within the first 3-months postpartum.

The accessibility of postpartum services is an important predictor of maternal health outcomes (Mangesi & Zakarija-Grkovic, 2016; Miquelutti et al., 2013; Steen, 2012; Woodward & Matthews, 2010). However, in many countries, it is believed that the postpartum period is granted significantly lower priority in healthcare management, when compared to care offered during pregnancy and childbirth (Albers, 2000; Cheng & Li, 2008; Glazener et al., 1995). Comparatively, New Zealand has a gold-standard maternity service that includes fully funded midwifery care to all New Zealand mothers from conception to six weeks postpartum (Dawson et al., 2019; Grigg & Tracy, 2013). During the postpartum period, mothers are entitled to receive a minimum of seven appointments with their midwife within the first 6 weeks (Ministry of Health, 2021). The 2022 Triennial Maternity Consumer Survey found that 88% of New Zealand mothers were either “satisfied” or “very satisfied” with midwifery care “during baby’s first few weeks” (Health New Zealand Te Whatu Ora, 2024). However, when questioned about their physical symptoms, mothers were 21% less satisfied with the “physical check of you from your midwife” compared to responses in 2014. This question was the only item in the report regarding mothers’ physical symptoms, and the only item to see such a significant decrease in terms of “very satisfied” across the entire survey. Accordingly, little is known about mothers’ experiences of physical symptoms and their perceptions of the responsiveness of maternity services.

The World Health Organization recognises that, worldwide, postpartum services specific to aiding mothers’ recoveries are neglected (World Health Organization, 2022). They recommend “treatment, support and advice to aid recovery and manage common problems that women can experience after childbirth”. Pelvic and women’s health (PWH) physiotherapists are clinicians who have undertaken additional training in the management of postpartum symptoms, and positive outcomes for postpartum recovery have been associated with access to their service (Cristuta, 2019; Critchley, 2022; Mazur-Bialy et al., 2020; Rajsekhar & Sumalatha, 2015). If so desired, New Zealand mothers may access physiotherapy privately, or, if they are eligible, may receive this service fully funded via a referral to a public hospital (Health Navigator New Zealand, 2025; Health New Zealand Te Whatu Ora, 2022). However, PWH physiotherapy lies outside New Zealand’s funded maternity services and is not included in the routine midwifery referral schedule (Ministry of Health, 2021). Despite New Zealand’s

leading maternity model, it is unclear whether mothers receive sufficient support for their physical postpartum symptoms. The objectives of this study were to (a) explore the views of postpartum mothers, midwives, and PWH physiotherapists regarding physical postpartum symptoms and (b) investigate perceptions of the response of New Zealand’s funded maternity services, including access to PWH physiotherapy.

METHODS

Semi-structured interviews were utilised to collect open-ended data exploring the New Zealand postpartum experience (DeJonckheere & Vaughn, 2019). The perspectives of three populations (mothers, midwives, and physiotherapists) directly involved in the postpartum period were collected. Ethics approval was provided by the Waikato Institute of Technology Ethics Committee (reference number WTLR12110422). Findings are presented by participant populations, and quotes are anonymised to avoid participant identification.

Participants and recruitment

Purposeful sampling was used to recruit suitably knowledgeable participants (Moser & Korstjens, 2018). Participants were recruited via special interest websites (e.g., physiotherapy), social media pages, such as Facebook mothers’ groups, and word of mouth. Interested participants were included if they met one of the three inclusion criteria described in Table 1. Participants who expressed interest in this study were provided with a participant information sheet and consent form via email. The completed consent forms were returned to the researchers via email. Fifteen participants were included in this study, with two others excluded – one midwife and one mother, due to their unavailability for an interview within a suitable timeframe.

Interviews

Data were collected, between July to September 2022, through one-on-one semi-structured interviews using an online communication programme (Zoom Video Communications Inc, Version 5.9). Population-specific interview guides (Appendix A) were developed based on the research aims, previous research, and test pilot interviews (Martin et al., 2014). The individual guides were tested in pilot interviews with the relevant populations of interest (mother, midwife, and PWH physiotherapist). The pilot interviews were overseen by two research supervisors (KSK and SB). Feedback from the pilot interview participants and supervisors enabled the finalised interview guides (McGrath et al., 2018). The interviews were conducted by three student researchers: AW interviewed mothers, DW interviewed midwives, and EW interviewed physiotherapists. The interviews were audio and video recorded via Zoom, with space for field notes available on the interview guide. Interviews took between 18 and 60 minutes. No prior relationship existed between the researchers and the participants.

Data analysis

The Zoom recordings were transcribed verbatim first using a software program (Otter.ai) and then checked by each of the student researchers against the relevant audio recording. Interviews were anonymised. Each researcher independently analysed the dataset for the population they interviewed. A thematic approach based on the six phases described by Braun

Table 1*Inclusion and Exclusion Criteria of Participant Groups*

Participant groups	Inclusion criteria	Exclusion criteria
Mothers	<p>Within the first postpartum year: between 6 weeks and 12 months postpartum.</p> <p>Given birth in New Zealand and continue to live in New Zealand since giving birth.</p> <p>Primary caregiver since birth.</p> <p>Mothers have experienced at least one physical health condition since childbirth.</p> <p>Over 18 years of age.</p>	<p>Currently pregnant.</p> <p>If the mother had a complicated birth and an extended stay in hospital.</p>
Midwives	<p>Registered with the New Zealand midwifery council.</p> <p>Working as a midwife for a minimum of 1 year.</p> <p>Currently practising in New Zealand.</p> <p>Over 18 years of age.</p>	<p>Midwives who have not worked with mothers during the postpartum period.</p>
Physiotherapists	<p>Registered with the Physiotherapy Board of New Zealand.</p> <p>Currently practising in New Zealand as a pelvic and/or women's health physiotherapist.</p> <p>Over 18 years of age.</p>	<p>Physiotherapists who had no experience working in pelvic and women's health.</p> <p>Physiotherapists who had not been working in the field for the last year.</p>

and Clarke (2006) was used to identify themes and subthemes. The analysis process included each researcher reading the transcripts and field notes to become familiar with the data they had obtained via the interviews. Generation of initial codes and categories was completed independently using Microsoft Office package tools such as colour codes, or other organisational software (QDA Minor lite). Multiple group discussions took place between the three student researchers to look for patterns relating to similarities and differences between the data, codes, and categories, which were eventually collated into themes and subthemes. The themes, subthemes, and supporting evidence were submitted for final review to the two research supervisors.

Reflexivity

The research team comprised three final-year physiotherapy students and two research supervisors. The students' backgrounds included sport and exercise (AW), massage therapy (DW and EW), and natural science (DW). The students undertook the processes of study design, participant recruitment, data collection, analysis, and interpretation. The two research supervisors (KSK and SB) have a background in physiotherapy and education, and, additionally, KSK is a qualified osteopath. KSK and SB have both quantitative and qualitative research experience. As supervisors they reviewed student processes, data, analysis, and interpretation.

RESULTS

Study group

A total of 15 interviews were conducted and analysed across the three groups (five mothers in the first postpartum year, five midwives, and five PWH physiotherapists). The majority of participants across all cohorts identified as either New Zealand European ($n = 9$) or European ($n = 4$); one mother identified as Māori and New Zealand European and another as Pacific Island and Filipina. All mothers were multiparous, and most lived in the Waikato region (80%). The experience of the health

professionals ranged from 3 to over 15 years. Most (80%) midwives were based in the Waikato; however, the included physiotherapists practised across New Zealand (Table 2).

Themes

Five major themes were identified, supported by 11 subthemes (Table 3). The major themes were: (a) Beliefs about the postpartum period; (b) The "knock-on" effect; (c) The current maternity model; (d) The belief that PWH physiotherapy can help; and (e) Barriers and facilitators to PWH physiotherapy. Each theme and subtheme is discussed below.

Theme 1. Beliefs about the postpartum period

Three sub-themes emerged related to beliefs about the postpartum period: A time for healing and adjusting, Length of the postpartum period, and Mothers' health is not a priority.

Sub-Theme 1.1. A time for healing and adjusting

When asked about the postpartum period, participants described experiences of physical pain and dysfunction attributed to pregnancy and childbirth. One midwife commented:

All the time their bodies are sore you know, their bodies are sore, their bones like if you think about when a woman births a baby and how their bones in the pelvis everything moves to let this baby ... women like feel like they've been hit by a bus after they have a baby and I hear it all the time. (Midwife #4)

This was supported by a physiotherapist's perspective: "So PGP [pelvic girdle pain] and back pain and all that and then postnatal musculoskeletal stuff as well but also diastasis, stress incontinence, overactive bladder urge incontinence, and painful sex after having a baby" (Physiotherapist #5).

The postpartum period was understood to be the designated time after childbirth for the mother to heal from these physical symptoms and adjust to the new changes in her life: "Just the time after having a baby. So, I guess adjusting your body

Table 2*Background Characteristics of Participants (n = 15)*

Participants	Ethnicity	Professional experience (years) ^a	Location of residence
Mothers			
#1	New Zealand European		Waikato
#2	European		Waikato
#3	New Zealand European		Bay of Plenty
#4	Māori/New Zealand European		Waikato
#5	Pacific Island/Filipina		Waikato
Midwives			
#1	English/European	5–10	Waikato
#2	New Zealand European	5–10	Waikato
#3	New Zealand European	≥ 15	Waikato
#4	New Zealand European	10–15	Waikato
#5	Irish/European	10–15	Wellington
Physiotherapists			
#1	New Zealand European	≥ 15	Waikato
#2	English/European	10–15	Wellington
#3	New Zealand European	0–5	Canterbury
#4	New Zealand European	≥ 15	Southland
#5	New Zealand European	10–15	Auckland

Note. All mothers were multiparous. # = identification number.

^a Relevant only to midwives and physiotherapists.

and your mind and being a mum” (Mother #2); and “My understanding is until you're recovered, I suppose physically and emotionally, I suppose and gotten into some sort of routine” (Mother #4). These sentiments were shared by midwives: “Until, you know, really, you start to feel kind of back to yourself” (Midwife #1).

Sub-Theme 1.2. How long is the postpartum period?

All cohorts attempted to define the postpartum period according to the length of time they felt it took for the mother to recover from her pregnancy and birth-related symptoms. One midwife commented, “We always used to say 6 weeks, but yeah, that always to me felt ridiculously short” (Midwife #5). A mother voiced, “Maybe I'd say about 6 months before you feel like ... your body has recovered” (Mother #4).

Participants expressed that pregnancy and childbirth altered mothers' physical bodies and suggested the postpartum period is of an indefinite duration: “Yeah, basically for life once you've had a baby, your body's permanently changed, and you'll always be postpartum” (Physiotherapist #4); and “Once postpartum always postpartum” (Physiotherapist #5). This was echoed by a mother, who expressed, “I guess you, you know, once you have a baby, your body and everything has changed forever. So, I don't know if it maybe lasts forever” (Mother #3).

Sub-theme 1.3. Mothers' health is not a priority

Mothers stated that they tend to prioritise other responsibilities before their health, including caring for their infant and family:

It was hard for me to rest and to take that time out because I needed to take care of everybody else ... I will always put everybody else, everything else ahead of my own health, which is really bad. But I will sacrifice. (Mother #5)

This was also acknowledged by physiotherapists, with one commenting:

You've got this period of your life where you've never been so vulnerable, and when you are sleep deprived and you're feeding this new baby ... And then you've got all these physical things going on as well. So, it's just adding more stress to the already full stress bucket. (Physiotherapist #5)

Midwives further added that when it comes to routine midwifery care in the postpartum, the baby's health is prioritised over the mother: “It's essentially all about baby, there isn't a lot that's about mum and I feel that that's a part that's lacking” (Midwife #3).

Theme 2: The “knock-on” effect

This theme comprised three sub-themes: Postpartum physical symptoms, More than just physical symptoms, and Effects on daily living.

Table 3*Themes and Subthemes*

Themes and subthemes	Supporting quote
1. Beliefs about the postpartum period	
1.1 A time for healing and djusting	"Just the time after having a baby. So, I guess adjusting your body and your mind and being a mum" (Mother #2) "My understanding is until you're recovered, I suppose physically and emotionally" (Mother #4)
1.2 How long is the postpartum period	"Maybe I'd say about six months before you feel like ... your body has recovered" (Mother #4) "We always used to say six weeks, but yeah, that always to me felt ridiculously short" (Midwife #5) "Ultimately, maybe there's no end to it, because maybe you're always slightly different after you've, your body's gone through that you know" (Midwife #5)
1.3 Mothers' health not a priority	"It's essentially all about baby, there isn't a lot that's about mum..." (Midwife #3)
2. The "knock-on" effect	
2.1 Postpartum physical symptoms	"Incontinence, urinary and faecal. Pelvic organ prolapses, perineal tears levator ani avulsions. DRAM [diastasis recti abdominus] ... pelvic girdle pain..." (Physiotherapist #1)
2.2 More than just physical symptoms	"I'm sorry, I can't. I feel the tears coming on already. I was just tired. I was just exhausted ... Breastfeeding was really, really sore. I remember close to being like being in tears almost. Because it was so painful" (Mother #4) "...if they're leaking when they're doing the exercise that they love that can affect their physical and mental health" (Physiotherapist #3)
2.3 Effects on daily living	"Walking hurt or laying down hurt which was quite challenging with like picking up the baby or feeding the baby..." (Mother #2) "...she would consider quitting her job ... basically because of her urinary incontinence" (Physiotherapist #3)
3. The current maternity model	
3.1 Six weeks is not long enough	"The only thing is that I feel like the six weeks isn't long enough" (Midwife #1) "In New Zealand, women are discharged from the LMC about 4 to 6 weeks postnatal, but some of their pelvic health stuff or the musculoskeletal stuff might not start bothering them until after that even like a year later" (Physiotherapist #5)
3.2 Midwife to the rescue	"If I needed anything ... like, she's so amazing. And, and I feel like she's part of our family" (Mother #1) "Whether it's a case of midwife, like their job is just so big and so huge that it becomes too much to add something else onto the list and you know chronically understaffed and overworked as well" (Physiotherapist #4)
4. A belief that pelvic and women's health physiotherapy can help	
	"When it comes to physical health, and physical, you know, exercise or physiotherapy, and things like that I feel that's a real lacking area" (Midwife #5) "We need that visit around 4 to 6 weeks post and then the ability to see them after that as needed because that will reduce incontinence and will reduce the costs and socialisation embarrassment, anxiety, stress levels that will enable them to care for their children better to have relationships" (Physiotherapist #1)
5. Barriers and facilitators to pelvic and women's health physiotherapy	
5.1 Cost	"I mean, for me, that's kind of that is a bit of a barrier to go and get like a check. It's like, it's quite expensive." (Mother #3)
5.2 Knowledge	"There's people that don't know what pelvic health physios are or what is normal or not in terms of symptoms..." (Physiotherapist #5) "If they showed you all, you know, gave you some information on how to do your pelvic floor exercises ... just something that was more informative so you could be prepared for it" (Mother #1)
5.3 Navigating the system	"I don't know whether I could self-refer myself to a physiotherapist or if I have to go to the GP" (Mother #5) "If there was a more robust referral system ... I would probably refer 99% of them" (Midwife #3)

Sub-theme 2.1. Postpartum physical symptoms

All participants attempted to describe various physical health symptoms that mothers may experience during the postpartum period. Physiotherapists appeared to have a clearer indication of the variety of symptoms: "So, incontinence, urinary and faecal, pelvic organ prolapses, perineal tears, levator ani avulsions, DRAM [diastasis recti abdominus] ... pelvic girdle pain. Those are the major ones we see, oh and coccyx injuries" (Physiotherapist #1). Comparatively, mothers had difficulty understanding their symptoms and often struggled to know if they were related to maternal experiences: "I'm still having like a really bad pain that goes through my spine, my back to my like toe to my leg ... I'll have to Google the name of it" (Mother #2); and "It's my wrist, which is weird. I know, it has nothing to do with my, my like body. But it was my wrist like, even now like I can't like, if I push it it's sore" (Mother #5).

Sub-theme 2.2. More than just physical symptoms

All cohorts recognised that the mothers' physical symptoms had an impact on psychological domains of their health, with one mother sharing:

I'm sorry, I can't. I feel the tears coming on already. I was just tired. I was just exhausted ... Breastfeeding was really, really sore. I remember close to being like being in tears almost. Because it was so painful. (Mother #4)

A midwife noted that "I think my world has opened up to really other things that go on in the postnatal period for mums and it's hard, it is a hard period to be honest" (Midwife #4).

It was believed that the psychological impact may have influenced mothers' attitudes and behaviours:

And so sometimes I don't want to leave the house unless I've gone to the toilet. You know, I've had that, that you know a bowel motion beforehand, because it's kind of scary if I'm out and about for that to happen. (Mother #3)

Physiotherapists also acknowledged this: "If they're leaking ... every time they stand up, they flood. They isolate ... they are embarrassed, they don't understand what's happened" (Physiotherapist #1). A physiotherapist noted this impact on mothers' relationships with others:

It also can affect so many factors in their life, like if they're unable to be intimate with their partner that can affect the relationship. If they're leaking when they're doing the exercise that they love that can affect their physical and mental health. (Physiotherapist #3)

Sub-theme 2.3. Effects on daily living

Participants described how physical symptoms in the postpartum period influenced activities of daily living, including the ability to care for the infant. For example, "Walking hurt, or laying down hurt, which was quite challenging with like picking up the baby or feeding the baby but that was like really bad pain" (Mother #2); and "It took her a year almost a year to, like, so there was no intercourse, like, she couldn't have intercourse or anything like that, it took her a year" (Midwife #4).

Physiotherapists also recognised the effects it had on participation in society.

One lady recently ... will only wear dresses and her workplace is thinking about implementing a uniform like polo and trousers and she said if you do that, I will quit ... She finds in dresses she is able to manage the incontinence better and she's worried if she wears trousers she will leak through the trousers, and it'll be visible and smelly and stuff like that ... she would consider quitting her job ... basically because of her urinary incontinence. (Physiotherapist #3)

Theme 3: The current maternity model

The current maternity model refers to New Zealand's funded maternity services. Two sub-themes emerged related to the current model: Six weeks is not long enough and Midwife to the rescue.

Sub-theme 3.1. Six weeks is not long enough

All cohorts voiced that the standard six-week allowance of care under New Zealand's funded maternity services was not considered sufficient to support mothers with their physical symptoms: "The only thing is that I feel like the six weeks isn't long enough" (Midwife #1). A mother expressed, "All the real pains, real struggles started after my midwife stopped seeing me" (Mother #1). A physiotherapist echoed these views:

In New Zealand, women are discharged from the LMC [lead maternity carer] about four to six weeks postnatal, but some of their pelvic health stuff or the musculoskeletal stuff might not start bothering them until after that even like a year later. (Physiotherapist #5)

Sub-theme 3.2. Midwife to the rescue

All mothers expressed appreciation for their midwife and the support they provided: "If I needed anything ... I could call her and stuff like that. I didn't want her to leave because I really liked her. Like, she's so amazing. And, and I feel like she's part of our family" (Mother #1).

Participants expressed a need for mothers to have support with their physical symptoms; however, as the lead maternity carer, midwives believe they are often obliged to cover these topics, which they feel lie outside their scope of practice.

That's not really our specialty, but I feel like a lot of that stuff kind of gets put on midwives to then kind of cover and it can be a little bit like, 'uhm' especially when we don't feel like we've probably had the education. (Midwife #1)

Participants also recognised the high work volumes of midwives. They felt that adding to their workload would be a burden: "Whether it's a case of midwife, like their job is just so big and so huge that it becomes too much to add something else onto the list and you know chronically understaffed and overworked as well" (Physiotherapist #4). When asked how much longer she would prefer the midwife to stay, a mother said, "Maybe, you know, another 3 or 4 weeks ... And man, that would put a massive strain on their workload. They're already so stressed" (Mother #3).

Theme 4: A belief that PWH physiotherapy can help

When exploring the services available within New Zealand's maternity model of care, participants expressed a desire for rehabilitation support such as physiotherapy. A mother mentioned, "...to have the option to consult with a

physiotherapist about my hips ... it was just the fact that I was still rolling out of my bed until maybe about 3 months" (Mother #5). Physiotherapists believed their services could improve mother's symptoms and quality of life:

We need that visit around 4 to 6 weeks post, and then the ability to see them after that as needed, because that will reduce incontinence and will reduce the costs and socialisation embarrassment, anxiety, stress levels that will enable them to care for their children better to have relationships. (Physiotherapist #1)

Theme 5: Barriers and facilitators to PWH physiotherapy

Three subthemes emerged related to barriers and facilitators: Cost, Knowledge, and Navigating the healthcare system.

Subtheme 5.1. Cost

Participants identified cost to be a barrier to accessing PWH physiotherapy. On average, PWH physiotherapists indicated their services to cost approximately \$150–\$200 for an initial, 1-hour consultation:

\$195 is a lot of money ... that's the thing that I hate about it as I realise it costs money but then I also I think of the amount of money I've spent on training and go like this is ... reflective of my training and my experience. (Physiotherapist #3)

In contrast, when asked what mothers could afford, the responses ranged from \$0 to \$60: "I mean, for me, that's kind of that is a bit of a barrier to go and get like a check. It's like, it's quite expensive" (Mother #3). Midwives understood the cost barrier: "You're thinking in your head, you go, damn you really need to go and see a pelvic floor physiotherapist but there's no way you can afford it" (Midwife #2).

Physiotherapists gave examples of their attempt to address cost barriers.

I do say it quietly to people if they are struggling with cost, they just need to speak to me ... I am very happy and very keen that women can always access quality healthcare and cost shouldn't be a barrier. But I've also got to run a business, so it's a balancing act. (Physiotherapist #2)

Across the cohorts it was voiced that every mother should have access to at least one funded physiotherapy appointment in the postpartum period, regardless of their birth history or postpartum experience. For example, a physiotherapist stated:

Everybody has a funded GP appointment and 6-week LMC [lead maternity carer] check after having their baby, so I think needing to add a 6-week or a 12-week pelvic floor physio check to that, so that just becomes part of the funded maternity care. (Physiotherapist #5)

A mother and midwife shared the same view: "I think that every woman should be able to go and have a, a pelvic floor check ... I think that should be free just to have a one-off check. To make sure everything's going well" (Mother #3); and "I wish everyone had access to ... funded physiotherapy sessions postnatally regardless of how they'd given birth, or regardless of the trauma that they'd had" (Midwife #5).

Subtheme 5.2. Knowledge

Participants voiced that mothers had a lack of knowledge about their symptoms and felt this prevented them from seeking help: "I'm still having like a really bad pain that goes through my spine, my back to my like toe to my leg ... I'll have to Google the name of it" (Mother #2). A physiotherapist commented that:

There's people that don't know what pelvic health physios are or what is normal or not in terms of symptoms or how they feel after having a baby so they don't know if they should be getting help or who from. (Physiotherapist #5)

Additionally, midwives often felt unsure which mothers would be appropriate candidates for referral to physiotherapy: "... more information needs to be shared with midwives for assessing what they can access for, what they can refer for" (Midwife #4).

Mothers and physiotherapists voiced that additional information on the postpartum period was needed, including education about physical changes and knowing what to do if symptoms occurred: "If they showed you all, you know, gave you some information on how to do your pelvic floor exercises ... just something that was more informative so you could be prepared for it" (Mother #1); and "So that's where us as pelvic health physios come in, where we can get in quite early on in that postnatal period and ... give them lots of education" (Physiotherapist #5).

Midwives expressed a desire for inter-professional education to facilitate a better understanding of what physiotherapy could offer mothers: "I think the next best thing would be some sort of collaborative education between midwives and physios where we could meet in the middle somewhere and share knowledge and wisdom" (Midwife #2). Physiotherapists supported this: "Education particularly for midwives, of what pelvic floor physios can offer and when to send patients to pelvic floor physio and developing those relationships and connections between the pelvic floor physio and the midwife" (Physiotherapist #4).

Subtheme 5.3. Navigating the healthcare system

Navigating the healthcare system was a barrier to accessing physiotherapy. For example, one woman commented, "I don't know whether I could self-refer myself to a physiotherapist or if I have to go to the GP" (Mother #5). Physiotherapists and midwives discussed the complexity of navigating referrals and wait times through the public healthcare system:

In New Zealand there's a range of 1-week wait list, which is amazing and I don't know which DHB [district health board] does that but they are nailing it and, then like a 60-something week wait, which isn't good enough. (Physiotherapist #5)

The only physio that we can refer to that I know will be free would be the DHB physios. And then I know that there's also a bit of a barrier there because the wait times seem tend to be very long. (Midwife #1)

All cohorts talked about the desire for a multidisciplinary approach to postpartum care, including a referral system where

mothers could transition from a midwife to a physiotherapist. One mother suggested, "...maybe if it's your midwife, referring you to a, you know, a women's health physio and maybe there should be more [of] that sort of working hand in hand. That should be more of a normal thing" (Mother #5). Midwives and physiotherapists agreed: "If there was a more robust referral system and they could be seen for those sore bits and pieces you know shoulders, hips, pelvis, whatever, I would probably refer 99% of them" (Midwife #3); and "I guess, it's getting that link between midwife and referral to pelvic floor physio" (Physiotherapist #4).

DISCUSSION

Worldwide, postpartum recovery is a neglected area of maternity care, and the experiences of mothers regarding their physical symptoms is poorly understood (World Health Organization, 2022; Clark & Thorpe, 2023). This study presents information on mothers' and clinicians' experiences of physical postpartum symptoms, and perceptions of the response of New Zealand's funded maternity services, including access to PWH physiotherapy.

Mothers, midwives, and PWH physiotherapists provided a unique insight into the postpartum experience. Despite their varying roles in the postpartum experience, all three cohorts shared many common views; therefore, much of the information in this study is presented as a combined viewpoint. For example, there was a common concern regarding the negative impact physical symptoms can have on mothers' quality of life. Our findings suggest that experiences of physical pain and dysfunction create debilitating experiences for mothers, impacting their ability to care for their infant and carry out basic daily activities. It was suggested that secondary effects of their symptoms could also lead to feelings of isolation, fear, social embarrassment, self-consciousness, and heightened awareness. These findings align with recent research on the bio-social impact of physical postpartum symptoms on New Zealand mothers' ability to engage in physical activity (Clark & Thorpe, 2023).

The perceived quality of postpartum care was an important topic of discussion. New Zealand is believed to have a leading model of maternity care comparable to countries such as the United Kingdom or Australia (Gilkinson et al., 2016). For example, the Ministry of Health (2021) states that in New Zealand a midwife "will be available 24 hours a day, 7 days a week" to address mothers' needs. Accordingly, our findings suggest that the midwife was the most accessible health professional to mothers in the postpartum period, and mothers felt attentively cared for. This is in contrast with other countries where mothers do not receive postnatal home visits and feel their midwife's ability to provide emotional and social support is insufficient to meet their needs (Razurel, 2011; Shorey et al., 2015).

All cohorts reported that as the first line of support for mothers, the midwife is frequently relied on for help with any physical health conditions that might arise. As government funding already exists for a midwife to be the full-time maternity carer (Ministry of Health, 2021), this raised discussion from all cohorts about whether midwives should also become the primary health

professionals to provide management of physical postpartum symptoms. In response, mothers and PWH physiotherapists felt that while it might be appropriate for midwives to do so, they recognised that midwives are already overworked and exhausted with their current workload. This theme is also reflected in a study by Oliver and Geraghty (2022) where midwives reported feeling overworked and time-poor and, as such, felt they did not have the capacity to provide the necessary support to mothers. Midwives in this study acknowledged that due to time pressures and limited education, they are not equipped to support mothers with the various physical symptoms that may arise and felt that many symptoms fall outside their scope of practice. Therefore, despite New Zealand's respected model of care, the results of this study suggest that more support for managing physical symptoms is needed. All cohorts talked of the need for another health professional to have a routine role in the management and rehabilitation of postpartum symptoms. Participants across all cohorts proposed that physical rehabilitation with a PWH physiotherapist would be an appropriate service to aid mothers with their physical symptoms due to their expertise in pelvic and women's health. Studies have shown that physiotherapy can have a positive outcome on common postpartum symptoms including urinary and faecal incontinence and diastasis recti abdominus (Critchley, 2022; Mazur-Bialy et al., 2020). Likewise, mothers in this study who had accessed PWH physiotherapy felt it contributed to positive outcomes for their postpartum recovery, and PWH physiotherapists who had supported mothers with postpartum-related symptoms felt they had contributed to successful results for their patients.

Navigating the healthcare system without guidance was a barrier commonly voiced by mothers. Mothers expressed their desire for a better referral system. All cohorts felt that midwives would be best placed to refer mothers to physiotherapy services prior to discharge from midwifery care. In addition, they believed that enhancing the relationship between the midwife and physiotherapist would naturally promote continuity of postpartum care. Similarly, a lack of knowledge was seen as a factor preventing referrals to PWH physiotherapy. All cohorts expressed concern that mothers and midwives alike have an insufficient understanding of physical symptoms, which prevented them from accessing management solutions including PWH physiotherapy. It was suggested that this barrier could be mitigated if midwives were further educated on identifying symptoms and could then initiate the referral process to PWH physiotherapy. These findings align with a qualitative study conducted in Sweden, which found a perceived lack of education for midwives regarding postpartum symptoms (Gustavsson & Eriksson-Crommert, 2020). The study proposed that improving education could enhance collaboration and referrals between midwives and physiotherapists, ultimately leading to better outcomes for mothers.

A further barrier highlighted by all cohorts was the cost of PWH physiotherapy services. Mothers and midwives talked of the significant cost barrier to accessing PWH physiotherapy privately. According to the PWH physiotherapists in this study, the average cost of their services is \$150–\$200. In contrast, the price mothers were able or willing to pay ranged between \$0 and

\$60. New Zealand's current funding options were not discussed by participants; however, it was frequently suggested by mothers and midwives that New Zealand's maternity model of care should include fully funded PWH physiotherapy following discharge from midwifery care. All participants voiced that "6 weeks isn't long enough" to be deemed recovered and "fit-for-discharge" from the healthcare system, and that extending the existing funding to include private PWH physiotherapy would improve maternal outcomes.

Current sources may exist to receive fully or partially funded PWH physiotherapy in New Zealand; however, eligibility for funding may not be available to all mothers. For example, at the discretion of their healthcare provider, mothers may be eligible to receive fully funded PWH physiotherapy via a referral to a public hospital; however, referrals may only be accepted if mothers meet certain criteria (Health Navigator New Zealand, 2025; Health New Zealand Te Whatu Ora, 2022). Additionally, it was perceived by participants that referrals through the public health system often involve a lengthy wait. Another avenue may be through New Zealand's Accident Compensation Corporation (n.d.) which subsidises the cost of private treatment for a limited number of birth injuries. This initiative was implemented on 1 October 2022, through the Accident Compensation (Maternal Birth Injury and Other Matters) Amendment Act 2022, to be inclusive of more birth injuries (New Zealand Government, 2022); however, this policy discounts many additional physical symptoms that several international studies have reported exist amongst postpartum mothers, such as persistent headaches, backache, and breast soreness (Chien et al., 2009; Gjerdingen et al., 1993; Saurel-Cubizolles et al., 2000; Schytt et al., 2005). Furthermore, ACC funding is commonly offered as a subsidy to partially cover the cost of treatment, but based on the monetary expectations identified in this study, future queries should investigate the degree to which ACC funding improves affordability.

Study limitations

Limitations of this study include the geographic location of participants, with 60% based in the Waikato region. This means that the mothers' perspectives may not be reflective of the general population across New Zealand. Potentially, a future recruitment process could more effectively target other regional geographical locations, giving a greater national distribution. Additionally, this study did not distinguish postpartum experiences according to ethnicity, socioeconomic status, or urban or rural regions; and some demographical information (e.g., age) was not collected from the healthcare professionals. Future research into these population demographics may provide valuable insight into varying experiences and potential health disparities.

Future directions

This study acknowledges that potential funding opportunities exist for birth injuries within New Zealand's healthcare system. However, considering the limited eligibility criteria, as well as the cost barriers identified in this study, further review of policies to support all mothers' access to PWH physiotherapy is encouraged.

To better address the needs of postpartum mothers, this study proposes that an updated, evidence-based definition of the postpartum period, including its length, be determined. To do so could support decisions regarding the continuity of New Zealand's maternity care.

As there is limited national-level epidemiology or quantitative research regarding the prevalence of physical postpartum conditions and/or symptoms within New Zealand, future research in this field would be beneficial to determine the socioeconomic cost of these conditions.

CONCLUSION

Exploring the views of mothers, midwives, and pelvic and women's health physiotherapists paints a picture of the realities of physical postpartum recovery. Understanding these perspectives is an integral step in recognising potential areas for improving maternal health outcomes. The information in this study may be used to guide health professionals and policymakers to better respond to mothers' needs and mitigate barriers to quality postpartum care.

KEY POINTS

1. Physical postpartum symptoms limited daily activities and had psychological ramifications for mothers; however, there is limited support under New Zealand's current maternity model of care to address these symptoms.
2. Pelvic and women's health physiotherapy was recognised as a beneficial solution to managing many postpartum symptoms.
3. Greater contributions are desired to improve access to PWH physiotherapy, including funding, education initiatives, and improved referral methods.
4. An updated, evidence-based definition of the postpartum period, including its length, may support decisions regarding the continuity of New Zealand's maternity care.

DISCLOSURES

No funding was obtained for this study. The researchers are unaware of any conflicts of interest.

PERMISSIONS

Ethics approval for this study was granted by the Waikato Institute of Technology Ethics Committee (reference number WTLR12110422). Informed consent was obtained by all participants prior to their participation in this study.

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CONTRIBUTIONS OF AUTHORS

Design conceptualisation and methodology, AW, DW, EW and KSK; validation, KSK and SB; formal analysis, AW, DW, EW, KSK and SB; data curation, AW, DW, EW and KSK; writing—original draft preparation, AW, EW and DW; writing—review and editing, AW, ED, DW, SB and KSK.

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REFERENCES

- Accident Compensation Corporation. (n. d.). *Maternal birth injuries*. <https://www.acc.co.nz/for-providers/provider-contracts-and-services/maternal-birth-injuries>
- Albers, L. L. (2000). Health problems after childbirth. *Journal of Midwifery and Women's Health*, 45(1), 55–57. [https://doi.org/10.1016/S1526-9523\(99\)00003-3](https://doi.org/10.1016/S1526-9523(99)00003-3)
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Brown, S., & Lumley, J. (1998). Maternal health after childbirth: Results of an Australian population-based survey. *British Journal of Obstetrics and Gynaecology*, 105(2), 156–161. <https://doi.org/10.1111/j.1471-0528.1998.tb10045.x>
- Cheng, C.-Y., & Li, Q. (2008). Integrative review of research on general health status and prevalence of common physical health conditions of women after childbirth. *Women's Health Issues*, 18(4), 267–280. <https://doi.org/10.1016/j.whi.2008.02.004>
- Chien, L.-Y., Tai, C.-J., Hwang, F.-M., & Huang, C.-M. (2009). Postpartum physical symptoms and depressive symptomatology at 1 month and 1 year after delivery: A longitudinal questionnaire survey. *International Journal of Nursing Studies*, 46(9), 1201–1208. <https://doi.org/10.1016/j.ijnurstu.2009.02.007>
- Clark, M., & Thorpe, H. (2023). "I just don't trust my pelvic floor": Examining the bio-social barriers to maternal health and physical activity participation in a sample of mothers from New Zealand. *SSM – Qualitative Research in Health*, 3, Article 100261. <https://doi.org/10.1016/j.ssmqr.2023.100261>
- Cristuta, M.-A. (2019). Role and importance of prophylactic physiotherapy during the postnatal period. *Sciences of Human Kinetics*, 12(61), 209–214. <https://doi.org/10.31926/but.shk.2019.12.61.12>
- Critchley, C. J. C. (2022). Physical therapy is an important component of postpartum care in the fourth trimester. *Physical Therapy*, 102(5), Article pzac021. <https://doi.org/10.1093/ptj/pzac021>
- Dawson, P., Jaye, C., Gauld, R., & Hay-Smith, J. (2019). Barriers to equitable maternal health in Aotearoa New Zealand: An integrative review. *International Journal for Equity in Health*, 18(1), Article 168. <https://doi.org/10.1186/s12939-019-1070-7>
- DeJonckheere, M., & Vaughn, L. M. (2019). Semistructured interviewing in primary care research: A balance of relationship and rigour. *Family Medicine and Community Health*, 7(2), Article e000057. <https://doi.org/10.1136/fmch-2018-000057>
- Gilkinson, A., Pairman, S., McAra-Couper, J., Kensington, M., & James, L. (2016). Midwifery education in New Zealand: Education, practice and autonomy. *Midwifery*, 33, 31–33. <https://doi.org/10.1016/j.midw.2015.12.001>
- Gjerdengen, D. K., Froberg, D. G., Chaloner, K. M., & McGovern, P. M. (1993). Changes in women's physical health during the first postpartum year. *Archives of Family Medicine*, 2(3), 277–283. <https://doi.org/10.1001/archfam.2.3.277>
- Glazener, C. M., Abdalla, M., Stroud, P., Templeton, A., Russell, I. T., & Naji, S. (1995). Postnatal maternal morbidity: Extent, causes, prevention and treatment. *British Journal of Obstetrics and Gynaecology*, 102(4), 282–287. <https://doi.org/10.1111/j.1471-0528.1995.tb09132.x>
- Grigg, C. P., & Tracy, S. K. (2013). New Zealand's unique maternity system. *Women and Birth*, 26(1), 59–64. <https://doi.org/10.1016/j.wombi.2012.09.006>
- Gustavsson, C., & Eriksson-Crommert, M. (2020). Physiotherapists' and midwives' views of increased inter recti abdominis distance and its management in women after childbirth. *BMC Women's Health*, 20, Article 37. <https://doi.org/10.1186/s12905-020-00907-9>
- Health Navigator New Zealand. (2025). *Physiotherapist*. Healthify He Puna Waiora. <https://www.healthnavigator.org.nz/healthcare-in-nz/types-of-health-providers/physiotherapist/>
- Health New Zealand Te Whatu Ora. (2022). *Physiotherapy*. <https://www.waikatodhb.health.nz/about-us/a-z-of-services/allied-health/physiotherapy/>
- Health New Zealand Te Whatu Ora. (2024, July 5). *The triennial maternity consumer survey: Technical report*. <https://www.tewhatuora.govt.nz/publications/the-triennial-maternity-consumer-survey-reports>
- Lagro, M., Liche, A., Mumba, T., Ntebeka, R., & van Roosmalen, J. (2003). Postpartum health among rural Zambian women. *African Journal of Reproductive Health*, 7(3), 41–48. <https://doi.org/10.2307/3583287>
- Mangesi, L., & Zakarija-Grkovic, I. (2016). Treatments for breast engorgement during lactation. *Cochrane Database of Systematic Reviews*. <https://doi.org/10.1002/14651858.CD006946.pub3>
- Martin, A., Horowitz, C., Balbierz, A., & Howell, E. A. (2014). Views of women and clinicians on postpartum preparation and recovery. *Maternal and Child Health Journal*, 18(3), 707–713. <https://pubmed.ncbi.nlm.nih.gov/articles/PMC4304667/>
- Mazur-Bialy, A. I., Kołomańska-Bogucka, D., Oplawski, M., & Tim, S. (2020). Physiotherapy for prevention and treatment of fecal incontinence in women—Systematic review of methods. *Journal of Clinical Medicine*, 9(10), Article 3255. <https://doi.org/10.3390/jcm9103255>
- McGrath, C., Palmgren, P. J., & Lijedahl, M. (2018). Twelve tips for conducting qualitative research interviews. *Medical Teacher*, 41(9), 1002–1006. <https://doi.org/10.1080/0142159X.2018.1497149>
- Ministry of Health. (2021, June 30). *Primary maternity services notice 2021*. <https://gazette.govt.nz/notice/id/2021-go2473>
- Miquelutti, M. A., Cecatti, J. G., & Makuch, M. Y. (2013). Evaluation of a birth preparation program on lumbopelvic pain, urinary incontinence, anxiety and exercise: A randomized controlled trial. *BMC Pregnancy and Childbirth*, 13, Article 154. <https://doi.org/10.1186/1471-2393-13-154>
- Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European Journal of General Practice*, 24(1), 9–18. <https://doi.org/10.1080/13814788.2017.1375091>
- New Zealand Government. (2022). *Accident compensation (maternal birth injury and other matters) amendment act 2022*. <https://www.legislation.govt.nz/act/public/2022/0051/latest/whole.html>
- Nygaard, I. E., Wolpern, A., Bardsley, T., Egger, M. J., & Shaw, J. M. (2021). Early postpartum physical activity and pelvic floor support and symptoms 1 year postpartum. *American Journal of Obstetrics and Gynecology*, 224(2), 193.e1–193.e19. <https://doi.org/10.1016/j.ajog.2020.08.033>
- Oliver, K., & Geraghty, S. (2022). A mixed-methods pilot study exploring midwives' job satisfaction: Is being of service to women the key? *European Journal of Midwifery*, 6, Article 25. <https://doi.org/10.18332/ejm/146087>
- Rajsekhar, H., & Sumalatha, P. (2015). Physiotherapy exercises during antenatal and postnatal. *International Journal of Physiotherapy*, 2(5), 745–750. <https://doi.org/10.15621/ijphy/2015/v2i5/78229>
- Razurel, C., Bruchon-Schweitzer, M., Dupanloup, A., Irion, O., & Epiney, M. (2011). Stressful events, social support and coping strategies of primiparous women during the postpartum period: A qualitative study. *Midwifery*, 27(2), 237–242. <https://doi.org/10.1016/j.midw.2009.06.005>
- Romano, M., Cacciato, A., Giordano, R., & La Rosa, B. (2010). Postpartum period: Three distinct but continuous phases. *Journal of Prenatal Medicine*, 4(2), 22–25. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3279173/>
- Saurel-Cubizolles, M. J., Romito, P., Lelong, N., & Ancel, P. Y. (2000). Women's health after childbirth: A longitudinal study in France and Italy. *British Journal of Obstetrics and Gynaecology*, 107(10), 1202–1209. <https://doi.org/10.1111/j.1471-0528.2000.tb11608.x>

- Schytt, E., Lindmark, G., & Waldenström, U. (2005). Physical symptoms after childbirth: Prevalence and associations with self-rated health. *International Journal of Obstetrics and Gynaecology*, *122*(2), 210–217. <https://doi.org/10.1111/j.1471-0528.2004.00319.x>
- Shorey, S., Chan, S. W.-C., Chong, Y. S., & He, H.-G. (2015). Perceptions of primiparas on a postnatal psychoeducation programme: The process evaluation. *Midwifery*, *31*(1), 155–163. <https://doi.org/10.1016/j.midw.2014.08.001>
- Steen, M. (2012). Risk, recognition and repair of perineal trauma. *British Journal of Midwifery*, *20*(11), 768–772. <https://doi.org/10.12968/bjom.2012.20.11.768>
- Tavares, P., Barrett, J., Hogg-Johnson, S., Ho, S., Corso, M., Batley, S., Wishloff, K., & Weis, C. A. (2020). Prevalence of low back pain, pelvic girdle pain, and combination pain in a postpartum Ontario population. *Journal of Obstetrics and Gynaecology Canada*, *42*(4), 473–480. <https://doi.org/10.1016/j.jogc.2019.08.030>
- Tulman, L., & Fawcett, J. (1988). Return of functional ability after childbirth. *Nursing Research*, *37*(2), 77–81. <https://doi.org/10.1097/00006199-198803000-00004>
- Woodward, A. P., & Matthews, C. A. (2010). Outcomes of revision perineoplasty for persistent postpartum dyspareunia. *Female Pelvic Medicine and Reconstructive Surgery*, *16*(2), 135–139. <https://doi.org/10.1097/SPV.0B013E3181CC8702>
- World Health Organization. (2022, March 30). *WHO urges quality care for women and newborns in critical first weeks after childbirth*. <https://www.who.int/news/item/30-03-2022-who-urges-quality-care-for-women-and-newborns-in-critical-first-weeks-after-childbirth>

Appendix A

INTERVIEW GUIDE

Questions – Participant group A: Mothers

Pre-interview questions

- Gravida (number of pregnancies)
 - Parity (number of births with gestational age greater than 24 weeks)
 - Ages of children
 - Mode of delivery for all births (e.g., caesarean, instrumental, epidural, normal vaginal delivery)
-

Overview of the early postpartum experience. The following questions are regarding the recent birth:

- Think back to the first few days after leaving the hospital/birth-care centre, can you paint a picture of yourself and what your experience was like?
 - What are the biggest challenges you have faced since having a baby? You can list as many as you can think of.
 - How long did your midwife care for you after childbirth? Did you feel you were ready for your midwife to discharge you when they did? Why/why not?
 - At that time, your midwife discharged you, would you have liked more “care” offered to you?
 - If yes, what care would you have liked offered? If not, why?
-

Physical health conditions

- What physical health conditions have you experienced as a result of childbirth or caring for your baby (e.g., physical pain or discomfort)? You can list as many as you want to.
 - For each of the problems you've mentioned, how did they impact on your ability to carry out day-to-day activities?
 - Where would you prioritise your physical health needs in a typical day?
 - Do you think your midwife prioritised your physical health needs as part of your postpartum care?
 - Did you feel you had all the support you needed to help you with your physical health condition(s)?
 - If yes, what was your experience? If no, what support do you wish you had and from whom?
-

Barriers to healthcare and physiotherapy

- Did you try to reach out to any healthcare professionals for help with any of the physical health condition(s) that you mentioned? Who did you see?
 - If yes, what was your experience? Did your midwife refer you to that/those healthcare professional(s) you mentioned? Was there anything that made it difficult to reach out to the (insert healthcare professionals name(s))?
 - If they saw a physiotherapist – Go to Question 2.
 - If no, can you elaborate on what your life looked like and why this prevented you from getting help? Can you think of any other reasons you didn't get help? Did you see a physiotherapist for your physical condition(s)?
 - If yes: What was your experience with physiotherapy? Did your midwife refer you? Was there anything that made it difficult for you to see the physiotherapist?
 - If no: What were the reasons you didn't see a physiotherapist? Did you know whether or not a physio could have helped you with your [insert condition(s)]? Do you wish you could have seen a physiotherapist?
-

Questions – Participant group B: Midwives

Pre-interview questions

- How many years have you been practising midwifery?
 - Which setting/practice of midwifery do you work in, for example, in a DHB, or in the community?
 - What setting of midwifery have you worked in previously?
 - What location are you currently practising in? Or What as the last location you were practising in?
-

Midwifery in New Zealand

- Can you explain to me what it is like being a midwife in New Zealand when it comes to the postpartum period?
 - If prompting is needed.
 - What do you normally focus on?
 - Can you explain what midwife care is involved in during the 6 weeks after birth?
 - What happens at the very end of the 6 weeks, when it comes to discharging?
 - Are you happy with the current way the postpartum period is set up for midwives?
 - If yes, what are you happy with?
 - If no, what are you unhappy with?
-

Physiotherapy and midwife relationship

What physical conditions do your women often develop after their pregnancy and birth?

If additional prompting is needed.

What impact have you noticed this has on the mother's life?

What physical conditions do you know that a physiotherapist can help with?

What conditions would you refer to a physiotherapist?

Where did you learn your knowledge about physiotherapy and how they can help during the postpartum period?

If further prompting is needed.

During the degree? Past personal experience? Past work experience?

Can you roughly estimate how often you refer postpartum mothers to a physiotherapist? Is this the same as how often you would like to refer your women to a physiotherapist?

Barriers and solutions

What stops you from being able to refer your mothers to a physiotherapist?

Do you feel confident referring mothers to any of the physiotherapists regardless of the setting (DHB or private)? Why or why not?

What do you think stops your mothers from going to the physiotherapist?

What do you think would help you in referring women to physiotherapists?

Is there anything else you would like to add about any of the topics/questions we have talked about?

Questions – Participant group C: Physiotherapists

Pre-interview questions

Tell me about your practice?

What made you want to work as a pelvic and women's health physiotherapist?

What are the most common physical conditions that you treat in postpartum women?

What other physical conditions do you treat, but aren't so common?

How do these conditions impact the mother's quality of life?

Quality of care

Is postpartum physiotherapy standardised across New Zealand? For example, would a woman receive the same level of care across different healthcare settings – for example, private practice/hospital.

In your opinion, where does New Zealand stand globally for postpartum physiotherapy care?

Barriers to access

In your experience, what are the most common barriers that New Zealand women currently face to access physiotherapy services in the postpartum period?

To the best of your knowledge, does a mother have to pay for the consultation. If so, what is the average cost?

Are there other routes for the patients to receive funding to cover the costs of their treatment?

To the best of your knowledge, how easy/difficult is it for a mother to book in an appointment?

Prompt: What is the current wait time?

Facilitators for the future

If there was an opportunity to grow a pathway for postpartum women to regularly receive physiotherapy care, do you think this could improve health outcomes? If so, which health outcomes and why?

What would be your suggestion to improve/develop a pathway for women postpartum to receive referral and care?

Do you think that mothers would benefit from prenatal classes to educate them on the physical conditions they could potentially acquire and how to prevent, manage, or treat these conditions?
