INTEGRATIVE LITERATURE REVIEW

The lactation and chestfeeding/breastfeeding information, care and support needs of trans and non-binary parents: An integrative literature review

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ABSTRACT

Background: The National Breastfeeding Strategy launched by the Ministry of Health in 2020, commits to the protection, promotion and support for breastfeeding with the aim of increasing exclusive breastfeeding rates in Aotearoa New Zealand. This strategy includes a recommendation that the breastfeeding/chestfeeding information and support needs of trans and non-binary parents and their whānau are identified so that those involved in their care are knowledgeable about these specific needs. Midwives are the primary providers of lactation and breastfeeding/chestfeeding information, care and support for most pregnant people in Aotearoa New Zealand.

Aims: An integrative literature review was undertaken: to ascertain the specific lactation and chestfeeding/breastfeeding information and care needs for trans, non-binary, takatāpui and other gender diverse whānau; to consider the implications of this knowledge for contemporary midwifery in Aotearoa New Zealand; and to identify continuing research needs.

Method: Literature for this integrative review was primarily sourced through the Ovid Online Database using search terms pertinent to the topic and limited to articles published in peer reviewed journals in English, excluding editorials, commentaries and opinion pieces.

Findings: Literature about trans and non-binary parents and chestfeeding/breastfeeding, although increasing since 2010, is limited internationally and absent nationally. From extant literature, connections between healthcare barriers and the negative experiences of trans and non-binary parents are identified and explored in three overarching themes: the foundations of Western perinatal healthcare systems; the invisibility of trans and non-binary people within perinatal healthcare systems; and the lack of perinatal healthcare provider knowledge.

Conclusion: Cis-normative, gender binary foundations are omnipresent in perinatal healthcare, rendering trans and non-binary people invisible, and excluded from this space. These factors contribute to the limiting of perinatal healthcare provider knowledge, an overwhelming finding in the literature. The absence of locally produced literature presents scope for research production here in Aotearoa New Zealand, exploring this topic from our unique cultural contexts. Such contributions may help inform whether adaptations and additions to current midwifery education are necessary to support midwives in the provision of equitable, safe, culturally appropriate, gender-inclusive care.

Keywords: transgender, non-binary, chestfeeding/breastfeeding, gender-inclusive care

Trans and non-binary inclusive language

This review uses trans and non-binary inclusive language to describe body parts and other terms related to reproductive embodiment and perinatal care that may be considered feminised and therefore not affirming of trans and non-binary people (Green & Riddington, 2021). One of the key principles of inclusive language is that trans and non-binary people are able to self-determine the language about their gender and body parts that affirms them. Reference to chestfeeding/breastfeeding in this review reflects the language used to affirm trans and non-binary people's lactation needs in the National Breastfeeding Strategy for New Zealand Aotearoa | Rautaki Whakamana Whāngote (Minisrty of Health, 2020). The strategy was developed in consultation with people representing the LGBTQIA+ community.

INTRODUCTION

Not all people who breastfeed/chestfeed are women, yet every person who hopes to feed a baby from their body deserves the information, care and support required to do so. For many midwives in Aotearoa NZ, breastfeeding/chestfeeding is a natural extension of one of the grounding philosophies of midwifery: that birth, although transformational, is a normal physiological event (New Zealand College of Midwives [NZCOM], 2009).

As the primary providers of information and support throughout the perinatal period, midwives have an important role in the education and support of whānau with lactation and breastfeeding/ chestfeeding. This is clearly identified within the Midwifery Scope of Practice (Te Tatau o te Whare Kahu | Midwifery Council, n.d.). Practice responsibilities are outlined in the NZCOM Consensus Statement: Breastfeeding (NZCOM, 2016). Midwives in Aotearoa NZ are guided by standards of midwifery practice, competencies for entry to the register of midwives, Turanga Kaupapa (see glossary), holistic care and the code of ethics, described in the Midwives Handbook for Practice (NZCOM, 2015). Application of these and the concepts described in The Midwifery Partnership: A model for practice (Guilliland & Pairman, 2010) place midwives in an excellent position to provide safe, culturally appropriate infant feeding care and support, irrespective of the parent's gender. Further impetus for the provision of gender-inclusive care is provided by the International Confederation of Midwives' (2017) Position Statement: Human Rights of Lesbian, Gay, Bisexual, Transgender and Intersex (LGBTI) People.

Despite these positive intentions, there is agreement that the knowledge level of Perinatal Healthcare Providers (PHCP) is currently inadequate to appropriately meet trans and non-binary perinatal healthcare needs (Charter et al., 2018; Falck et al., 2021; García-Acosta et al., 2020; Hoffkling et al., 2017; Martinez et al., 2020; Roosevelt et al., 2021; Wolfe-Roubatis & Spatz, 2015).

During 2021 the Ministry of Health (MOH) launched the National Breastfeeding Strategy for New Zealand Aotearoa Rautaki Whakamana Whāngote (MOH, 2020), acknowledging breastfeeding as a key determinant of health. The strategy presents nine outcomes outlining a commitment to the protection, promotion and support of breastfeeding, with the aim of increasing the exclusivity and duration of breastfeeding. Each of the nine outcomes is detailed with its own set of actions to guide change. Outcome one, "Breastfeeding parents and their whanau have equitable access to a range of culturally appropriate breast and infant feeding supports" (MOH, 2020, para. 1), is scaffolded by nine actions. Action seven asks that the breastfeeding/chestfeeding information and support needs of trans, non-binary, takatāpui and other gender diverse parents and whānau are identified, so that those involved in their care are knowledgeable about these specific needs (MOH, 2020, para. 7). It is this action that provides the foundation for this integrative literature review.

AIMS

The aim of this literature review was to explore what is currently known about the lactation and infant feeding care and support needs of trans and non-binary parents, to consider the implications for midwifery practice in Aotearoa NZ and to identify additional research needs.

METHOD

Understood as being useful for gaining "understanding of people's needs and experiences" (Griffith University, 2023, para. 7), an integrative review goes beyond simple description of the literature. Through a process of defining a question, undertaking a literature

search and the evaluation of data, themes are analysed, interpreted and presented (Bowden & Purper, 2022).

Literature for this integrative review was sourced using the Ovid Online Database. Search terms included: lactation, breastfeeding, chestfeeding, postnatal care, perinatal care, midwi*, maternity nurse, obstetric nurse, and various spellings and iterations of transgender, non-binary and gender diverse. Boolean operators AND/OR were applied to group subjects in a variety of configurations. PubMed and Google Scholar search engines were also accessed, and reference lists from sourced literature were hand searched to identify additional relevant literature. No limits were placed on date of publication. Literature was included if it was published in English in a peer reviewed journal and had an emphasis on trans and non-binary perinatal care, including lactation, chestfeeding/breastfeeding or midwifery care. Literature not published in peer reviewed journals, editorials, commentary, opinion pieces and literature focused on perinatal care for trans and non-binary people with only brief reference to lactation, chestfeeding/breastfeeding or infant feeding were excluded (Figure 1).

FINDINGS

Overview

The 25 papers included in this review were comprised of original research (9), clinical practice papers (9), literature reviews (6) and one lactation protocol. Nineteen of the 25 papers were published in the United States (U.S.). All papers were published between 2010 and 2022. Lactation and infant feeding content in 14 of these papers were incidental findings resulting from the exploration of the fuller perinatal spectrum, including in original research studies by Charter et al. (2018), Falck et al. (2021), Hoffkling et al. (2017) and Richardson et al. (2019). This has led to the specifics of individual phases of perinatal care being under-examined. It is noteworthy that many of the references used in these papers are the same. Themes identified across this literature may therefore be over-represented. This reflects the limited original research available in this space and demonstrates that additional research exploring trans and non-binary infant feeding practices is warranted.

Considered foundational research, MacDonald et al.'s (2016) qualitative study based in the U.S. is almost universally referenced in papers included in this review. This narrative-rich research about chestfeeding experiences centres the transmasculine voice. The diverse experiences MacDonald et al. (2016) uncovered highlight the specific and individualised lactation care needs of transmasculine individuals which have been widely utilised to inform clinical practice across the U.S. and Canada since its publication (AWHONN, 2021; Griggs et al., 2021; Martinez et al., 2020; Patel & Sweeney, 2021; Paynter, 2019; Roosevelt et al., 2021). Contrasting with MacDonald et al.'s (2016) research, Charter et al.'s (2018) mixed methods study based in Australia found that most transmasculine individuals chose not to chestfeed, predominantly due to their experiences with gender dysphoria. This may reflect differences in culture and in perinatal healthcare service provision, highlighting the importance of research production outside of the U.S.

Predominant findings within this literature have been grouped into three interconnected themes which will be explored independently. These themes are intricately linked within a cycle of the barriers trans and non-binary people face when accessing perinatal healthcare services and fielding negative perinatal healthcare experiences (Figure 2). Areas for potential further research will also be identified.

Figure 1. PRISMA diagram

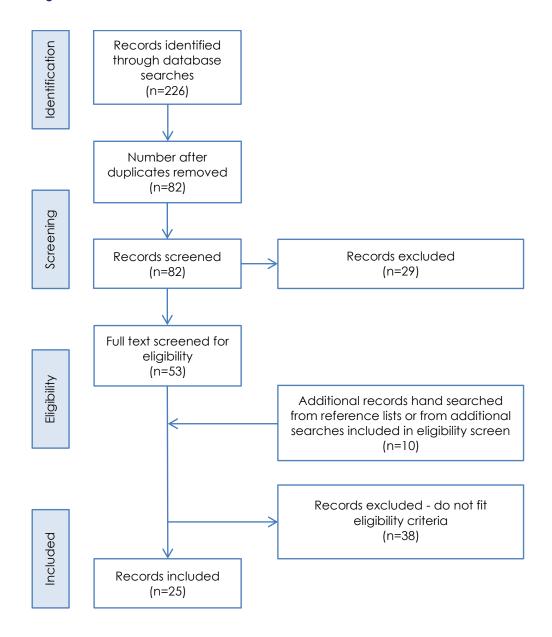
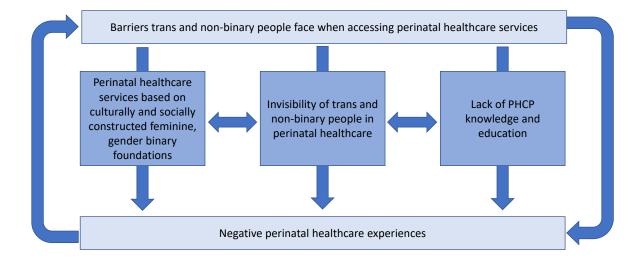


Figure 2. Connections between healthcare barriers and negative experiences derived from extant literature



The foundations of Western perinatal healthcare systems

There is consensus within the literature that Western perinatal healthcare systems are built upon culturally and socially constructed cis-normative, heteronormative, feminine, gender binary foundations (Charter et al., 2018; Duckett & Ruud, 2019; Falck et al., 2021; García-Acosta et al., 2020; Jackson et al., 2022; MacDonald et al., 2016; McCann et al., 2021; Richardson et al., 2019; Wolfe-Roubatis & Spatz, 2015). While cis-gender is a term used when someone identifies with their gender assigned at birth, cis-normative is the assumption or belief that being cis-gender is normal and is therefore privileged over all other expressions of gender (Stewart et al., 2022). Ferri et al. (2020) identify that this highly gendered assumption causes access barriers to perinatal healthcare. Unchallenged trans-exclusionary services can foster the assumption that all people who come to PHCPs will be female (Jackson et al., 2022; Wolfe-Roubatis & Spatz, 2015). This assumption is mirrored in Falck et al.'s (2021) study where trans participants expected to be seen and treated as women when accessing perinatal healthcare services. Trans and non-binary people are currently excluded from perinatal healthcare models but are challenging socially and culturally constructed assumptions, signifying that pregnancy, lactation and chestfeeding/breastfeeding are not processes that are dependent on gender (Charter et al., 2018; García-Acosta et al., 2020; MacLean, 2021).

There are authors who provide a variety of consequences for unchallenged gender-exclusionary perinatal healthcare services. Duckett and Ruud (2019) suggest PHCPs may have to contend with the perceived challenge of providing care for parents who do not fit the gender binary. This sentiment is reflected by a case study participant who described an inability of PHCPs to "disentangle pregnancy and lactation from womanhood" (Wolfe-Roubatis & Spatz, 2015, p. 34). Assumptions associated with perinatal healthcare being held within a dominant gender-binary framework can affect the quality of care provided. Medical risk is increased due to the needs of those who differ from the gender binary remaining hidden, ignored, poorly understood or pathologised (Falck et al., 2021; McCann et al., 2021). Falck et al. (2021) imply that continued regard for gender essentialist foundations could limit PHCP knowledge development in this area. Richardson et al. (2019) recommend that the heavily gendered environment that exists in perinatal healthcare must be challenged if the needs of the gender diverse population are to be met.

Invisibility of trans and non-binary people within perinatal healthcare systems

The invisibility of trans and non-binary people within perinatal healthcare systems is compounded by inadequate data collection systems (Falck et al., 2021; Griggs et al., 2021; Hoffkling et al., 2017; MacLean, 2021; Richardson et al., 2019; Wolfe-Roubatis & Spatz, 2015). Several authors report that trans men and non-binary people, who have not accessed medical or surgical gender affirming healthcare, often present as cis-gender women rather than disclose their gender, to avoid discriminatory care (Duckett & Ruud, 2019; Ferri et al., 2020; García-Acosta et al., 2020; Hoffkling et al., 2017; Richardson et al., 2019; Wolfe-Roubatis & Spatz, 2015). This practice can have opposing effects: removing gender as a focus for PHCPs to navigate is felt to help ensure healthcare needs are met (Wolfe-Roubatis & Spatz, 2015); yet, not having the opportunity to disclose gender, and therefore not having gender affirmed, can lead to increased exposure to microaggressions and dysphoric experiences (Hoffkling et al., 2017). An inadvertent

consequence of this health provider induced, self-protective practice is decreased data collection accuracy.

It is noteworthy that published literature exclusive to the nonbinary population in lactation and perinatal healthcare is absent. By exploring the literature, possibilities for this include: as mentioned above, non-binary people may not be given the opportunity to disclose their gender, or choose not to disclose their gender as a form of protection from discrimination; that the majority of literature is grounded in the binary understanding of gender, therefore rendering the non-binary individual invisible; non-binary people are included in transgender research and review (Jackson et al., 2022; Roosevelt et al., 2021), possibly due to their shared rejection of the gender binary construct; and their inclusion in LGBTQ+ amalgamated review (Duckett & Ruud, 2019; Greenfield, 2022; MacDonald, 2019; Martinez et al., 2020; McCann et al., 2021). The amalgamation of LGBTQ+ communities that occurs in research is not always useful. This practice generalises findings, reducing the visibility of each group, who all have unique and often specific needs (Griggs et al., 2021; Jackson et al., 2022; McCann et al., 2021; Wolfe-Roubatis & Spatz, 2015).

Hoffkling et al. (2017) associate the invisibility of trans and non-binary populations as contributing to the lack of confidence experienced by PHCPs, as they feel uninformed and ill-prepared to care for pregnant people outside of the gender binary foundations of perinatal care. Griggs et al. assert: "As the nature of what is considered a family is changing in our society, so must our understanding of the individuals who form a family unit" (Griggs et al., 2021, p. 51).

One reason provided for the perceived rapid increase in trans and non-binary people accessing perinatal healthcare is that the representation of gender diversity in all forms of media has been advancing social awareness (Brandt et al., 2019; Duckett & Ruud, 2019; MacDonald et al., 2016). Hoffkling et al. (2017) suggest that having role models in other trans men, who are being open about their experiences, is empowering and affirming for others' journeys, further increasing visibility. Recent changes to international legislation removing forced sterilisation as a condition for receiving gender affirming medical and surgical care (Duckett & Ruud, 2019; Falck et al., 2021; Ferri et al., 2020; McCann et al., 2021; Roosevelt et al., 2021) is an additional factor. Coupled with fertility preservation practices, evolving reproductive technologies have more recently influenced the number of trans and non-binary people utilising their reproductive ability for family creation (Ferri et al., 2020; García-Acosta et al., 2020; Griggs et al., 2021; MacDonald et al., 2016; Wolfe-Roubatis & Spatz, 2015). Naturally, it follows that trans and non-binary people creating families will also need to make decisions around how to feed their children, which may include chestfeeding/breastfeeding (Wolfe-Roubatis & Spatz, 2015).

Lack of perinatal healthcare provider knowledge

Without exception, literature examined for this review at some point referenced healthcare provider knowledge, or lack thereof, as having an impact on trans and non-binary perinatal healthcare experiences. Where PHCPs lack knowledge about the trans and non-binary population and their perinatal healthcare needs, negative perinatal healthcare experiences occur. Hoffkling et al. (2017) describe misgendering, use of inappropriate language, gender assumptions based on appearance, misunderstanding and confusion of healthcare needs, transphobia, pathologisation of transness and, ultimately, trauma. Falck et al. (2021) report

exoticisation of the trans body, constant microaggressions and increased chances of negative healthcare experiences. Richardson et al. (2019) illustrate in their hypothetical case their subject being met with confusion, stereotyping and gender bias, and Jackson et al. (2022) speak of non-inclusive policy and practices. Additionally, several authors report inadequate access to information, support and healthcare choices (Falck et al., 2021; Ferri et al., 2020; Jackson et al., 2022; Richardson et al., 2019; Wolfe-Roubatis & Spatz, 2015). Falck et al. (2021) indicate that trans and non-binary people have low expectations of care efforts from their PHCP and may often endure such disrespectful care because of the necessity for healthcare provision.

Several authors reference high proportions of trans and nonbinary people who felt the need to educate their PHCPs about their unique and specific care needs (García-Acosta et al., 2020; Hoffkling et al., 2017; Martinez et al., 2020; Roosevelt et al., 2021; Wolfe-Roubatis & Spatz, 2015). PHCPs who recognised knowledge limitations and took responsibility to educate themselves were appreciated by research participants in both the Falck et al. (2021) and Wolfe-Roubatis and Spatz (2015) studies. One participant in Hoffkling et al.'s (2017) study identified the importance of PHCPs distinguishing between their own lack of knowledge, "I don't know" (Hoffkling et al., 2017, p. 11) and lack of research and information, "Science doesn't know" (Hoffkling et al., 2017, p. 11) when making decisions about their healthcare. Charter et al. (2018) and Wolfe-Roubatis and Spatz (2015) assert that PHCPs require education to better support chest changes, lactation and chestfeeding for trans and non-binary populations. This is supported by Falck et al. (2021) who identify that participants with a desire to chestfeed found their PHCPs illprepared with the information and support that was required to help them do so.

There are various infant feeding options available to trans and nonbinary parents, many of which are similar to those of cis-gender parents (Ferri et al., 2020; Roosevelt et al., 2021). However, where diverse and individualised options need to be discussed, it is important that PHCPs first look beyond the common assumptions and gendered understanding of "mother-baby" infant feeding (Greenfield, 2022), then have some knowledge of the diverse feeding options available and the factors that may challenge lactation initiation and maintenance (AWHONN, 2021; MacDonald et al., 2016; McCann et al., 2021). There is also a need for awareness of the different medical and surgical gender affirming care approaches and the potential impact each of these may have on lactation so that appropriate individualised lactation and infant feeding support is provided (Ferri et al., 2020; Hoffkling et al., 2017; MacDonald et al., 2016; Martinez et al., 2020; Obedin-Maliver & Makadon, 2016; Patel & Sweeney, 2021; Roosevelt et al., 2021).

Charter et al. (2018) report that many trans men do not access chest surgery prior to pregnancy, identifying inaccessibility due to cost as a potential cause for this. However, chestfeeding can be possible after chest masculinisation surgery (MacDonald et al., 2016; Paynter, 2019), which differs significantly from mastectomy surgery (García-Acosta et al., 2020). A multi-disciplinary approach may be required to coordinate appropriate lactation and chestfeeding support (Patel & Sweeney, 2021).

Ferri et al. (2020) affirm the benefits of supporting any lactation potential after chest masculinisation surgery. Where lactation and chestfeeding are desired, MacDonald et al. (2016) suggest promoting the non-nutritive benefits of chestfeeding to help negotiate potentially variable milk production ability where chest

masculinising surgery has occurred. Similarly, Duckett and Ruud (2019) describe a "bidirectional nurturing interaction" (p. 229) between an infant and parent, when discussing chestfeeding, as about more than just nutrition for the infant.

The practicalities of chestfeeding after chest masculinisation surgery are only briefly mentioned in the literature, with the potential need for "sandwiching" taut chest-tissue to achieve attachment (García-Acosta et al., 2020; MacDonald et al., 2016), and the suggestion that the rugby-hold and crossover hold may be more optimal positions for latching (García-Acosta et al., 2020).

Minimal consideration has been given to hormone therapy within this literature. Patel and Sweeney (2021) caution about the limited data and therefore limited knowledge associated with long-term outcomes of gender affirming medical care, hormone treatments and medications used for inducing lactation in trans women. They also highlight the lack of knowledge around the reintroduction of gender affirming testosterone, after lactation is well established. However, Paynter (2019) has warned against withholding care options based only on over-pathologised assumptions of lactation for trans parents.

In addition to the clinical practicalities of chestfeeding, PHCPs' understanding of dysphoria has been commonly identified in the literature as essential for delivering appropriate lactation and infant feeding support to trans and non-binary parents (Duckett & Ruud, 2019; Ferri et al., 2020; García-Acosta et al., 2020; Hoffkling et al., 2017; MacDonald et al., 2016). The development of breasts and breastfeeding are traditionally understood as profoundly gender bound to the feminine, contributing to experiences of dysphoria for some people (Brandt et al., 2019; MacDonald et al., 2016). Duckett and Ruud (2019) remind us that a willingness to utilise reproductive ability does not remove the potential for dysphoric experiences. Contributing to gender identity incongruence, Ferri et al. (2020) identify potential triggers for dysphoric experiences as cessation of testosterone during pregnancy, and the hormone and body changes of pregnancy - particularly chest tissue development. MacDonald et al. (2016) emphasise the importance of understanding the difference between dysphoria that is embedded in a person's feelings about themselves and their own body, compared with dysphoria triggered by PHCPs and others misgendering them.

An additional potential barrier for PHCPs providing safe and effective care for trans and non-binary populations is that the language used by, and for, this population is perceived as constantly changing (Duckett & Ruud, 2019; MacLean, 2021; Roosevelt et al., 2021). The consensus is that this can be solved very simply, and the message is clear: ask every pregnant person what language they use for themselves (name and pronouns), for their body and for their parenting choices; listen, then mirror this language (AWHONN, 2021; Duckett & Ruud, 2019; Falck et al., 2021; Ferri et al., 2020; García-Acosta et al., 2020; Griggs et al., 2021; Hoffkling et al., 2017; Jackson et al., 2022; MacDonald et al., 2016; MacDonald, 2019; MacLean, 2021; Martinez et al., 2020; McCann et al., 2021; Obedin-Maliver & Makadon, 2016; Richardson et al., 2019; Roosevelt et al., 2021; Wolfe-Roubatis & Spatz, 2015). This is echoed by the participant voice in qualitative research. Positive encounters are described when their PHCP is respectful, uses gender affirming language and correct pronouns (Falck et al., 2021; Hoffkling et al., 2017; MacDonald et al., 2016). With such overwhelming consensus among authors, failing to provide opportunities for pregnant people to disclose and affirm their gender, and use their pronouns, could be considered an omission of care.

Roosevelt et al. (2021) advocate the use of culturally humble, trauma-informed care, which incorporates many concepts already described here that result in positive care experiences: partnership, patient-centred care, communication, informed decision-making and taking our language cues from those to whom we are providing care.

This literature clearly identifies that PHCPs need more education to address the lack of knowledge and cultural understanding (Brandt et al., 2019; García-Acosta et al., 2020; Griggs et al., 2021; Hoffkling et al., 2017; Obedin-Maliver & Makadon, 2016), and to address the substantial gap between what is known, what is taught and the real healthcare needs of trans individuals (García-Acosta et al., 2020; McCann et al., 2021). Trans healthcare providers attending a World Professional Association for Transgender Health Conference, and surveyed by Trautner et al. (2020), predominantly indicated a desire for further knowledge about inducing lactation for their trans feminine clients.

While Duckett and Ruud (2019) assert that it is a professional obligation for PHCPs to inform themselves, MacDonald et al. (2016) urge PHCPs to recognise that, without seeking education and improving their knowledge, they are capable of causing iatrogenic harm. This statement from Hoffkling et al.'s (2017) research mirrors this: "In the absence of sufficient training, even the best-intentioned providers are likely to miss chances to provide medically and culturally appropriate care. Furthermore, less motivated providers are likely to make gross errors" (p. 17).

It is interesting to note that trans people seek midwifery care at significantly higher rates than the general population in the U.S. (Falck et al., 2021; MacDonald et al., 2016; Obedin-Maliver & Makadon, 2016; Richardson et al., 2019). This may be related to seeking perinatal care outside of institutional systems to avoid discriminatory care (Hoffkling et al., 2017; Greenfield, 2022). MacLean (2021) states: "If transgender men are gravitating toward midwifery care, providers should be examining how the midwifery model of care supports pregnant transgender men to understand their needs and translate these findings into practice" (p. 131). Contributing to perceptions of support and consistent messaging, one aspect of midwifery care that has been reported to positively influence perinatal healthcare experiences is continuity of care (Jackson et al., 2022; McCann et al., 2021). Conversely, participants reported increased feelings of vulnerability in Falck et al.'s (2021) study where participants had to navigate barriers to healthcare with each new PHCP.

DISCUSSION

Inadequate PHCP knowledge specific to the needs of trans and non-binary people accessing perinatal healthcare has been illuminated as a factor affecting accessibility, equity and quality of healthcare. The call for evidence based education to improve PHCP knowledge and gender-literate care is echoed in much of the literature reviewed. With care, respect and attention to language, the clinical practicalities of lactation and chestfeeding/ breastfeeding care for trans and non-binary parents can often be adapted from the vast amount of clinical lactation and breastfeeding information already available (Ferri et al., 2020; García-Acosta et al., 2020).

There is limited research generation outside the U.S. context and an absence of literature produced in Aotearoa NZ about lactation care and chestfeeding/breastfeeding support for trans and non-binary people. As a result, midwives and other PHCPs in Aotearoa NZ have limited research available to expand their knowledge and inform the provision of this care. The cultural context and

perinatal system in Aotearoa NZ are vastly different from the U.S., where the majority of this literature has been produced. Therefore, takatāpui who identify as trans and non-binary, and the potentially important cultural context they may contribute, are rendered invisible. Internationally, the foundations of the perinatal system, and the language projected within it, have been based on dominant Western social and cultural norms, including heteronormative, feminine, cis-normative and gender binary frameworks. Although drawing from international literature can be useful, this means current literature does not capture Aotearoa NZ's unique cultural or midwifery care perspectives. Kerekere (2017) asserts that gender diversity is not a new concept in Aotearoa NZ and that gender binary ideals, introduced to Aotearoa NZ by colonisation, have been, and continue to be, predominantly responsible for the invisibility of gender diversity in Aotearoa NZ.

The New Zealand Health Research Prioritisation Framework states: "All researchers, regardless of research stage or discipline, should consider and address how their research will contribute to health equity in the short and long-term" (Health Research Council of New Zealand, 2019, p. 13).

Research conducted in Aotearoa NZ can contribute to increasing the visibility and equitable care of trans and non-binary parents in perinatal services, and mātauranga Māori perspectives will enrich this research landscape. Funded by the Health Research Council of New Zealand, research about understanding the need for trans, non-binary and takatāpui-inclusive maternity care commenced in July 2021 (The Trans Pregnancy Care Project, n.d.), the first research project of this type in Aotearoa NZ. This funding could be seen as an acknowledgement that it is time for research of this nature in Aotearoa NZ. An article reporting on data collected from the initial phase of this study has recently been published (Parker et al., 2022), beginning to fill some knowledge gaps within this research sphere.

In addition to PHCP knowledge, research gaps identified include: the effects of hormones and gender affirming care protocols on lactation and chestfeeding/breastfeeding (Patel & Sweeney, 2021); the process and impact of chest binding during pregnancy and while chestfeeding (Griggs et al., 2021; MacDonald et al., 2016); and knowledge about, and the experiences of, trans women using lactation induction protocols where breastfeeding is desired (Paynter, 2019; Trautner et al., 2020). Further, the effects of intersectional identity are not apparent in extant literature, reflecting an absence of cultural acknowledgment within this sphere so far. Further research about the clinical practicalities of chestfeeding after chest masculinisation surgery would enhance knowledge, as would research exploring PHCP understandings of the lactation and infant feeding care and support needs of trans and non-binary whānau, and the factors that influence PHCPs to seek further education about this topic.

Only one paper explored the concept of trauma-informed care as it relates to trans and non-binary people accessing maternity and lactation care (Roosevelt et al., 2021). Owens et al. (2022) succinctly articulate why trauma-informed care deserves further consideration in trans-inclusive care provision: "Given the disproportionate burden of trauma in marginalized communities, trauma-informed care implementation is an opportunity to decrease disparities in healthcare and health outcomes" (p. 675).

Midwives in Aotearoa NZ already have the frameworks in place to provide safe, equitable and culturally safe care for trans and non-binary parents. However, without midwives having further education about how to provide the environment or opportunity

for all pregnant people to feel safe about sharing who they are, trans and non-binary people may not be able to access this potentially positive healthcare experience. In a newly published article, Parker et al. (2023) urge us to take up the challenge of incorporating gender inclusive care into midwifery education. Based on the work of Parker et al. (2023) and this review, additional education, to support the midwifery profession to meet the clinical and cultural needs of trans and non-binary whānau in the perinatal healthcare space in Aotearoa NZ, is warranted.

CONCLUSION

The purpose of this literature review was to explore what is currently known about the lactation and infant feeding care and support needs of trans and non-binary parents, to consider the implications for midwifery practice in Aotearoa NZ and to identify additional research needs. Evidence from this review clearly demonstrates that cis-normative, gender binary foundations are omnipresent in perinatal healthcare. Trans and non-binary people are therefore rendered invisible and are excluded from this space. These factors contribute to the limiting of PHCP knowledge. This model eventually leads to negative healthcare experiences for trans

and non-binary people, contributing to a cycle that generates and perpetuates barriers to perinatal healthcare access.

This review has identified three dominant themes related to the gap in PHCP knowledge about the lactation care and chestfeeding/breastfeeding support needs for trans and non-binary people. These themes were consistently identified and reported. There is an absence of research in Aotearoa NZ exploring the lactation and chestfeeding/breastfeeding care and support needs for trans and non-binary parents.

Conducting research of this nature here in Aotearoa NZ could help inform whether adaptations and additions to current midwifery education are necessary, the goal being to support midwives and other PHCPs to competently provide equitable, safe, culturally appropriate, gender-inclusive care. Additionally, research examining the knowledge and beliefs of Aotearoa NZ midwives about the lactation care and chestfeeding/breastfeeding support needs of trans and non-binary parents will also help inform ongoing education needs.

CONFLICT OF INTEREST DISCLOSURE

The authors declare that there are no conflicts of interest.

GLOSSARY	
Cis	A term for someone whose gender identity aligns with their sex assigned at birth (Oliphant et al., 2018).
Cis-normative	A discourse based on the assumption that cis-gender is the norm and privileges this over any other form of gender identity (Stewart et al., 2022).
Gender	One's actual, internal sense of being male or female, neither of these, both, etc. In some circles, gender identity is falling out of favor, as one does not simply identify as a gender, but is that gender (Trans 101: Glossary of trans words and how to use them, 2023).
Gender affirming care	Healthcare that is respectful and affirming of a person's unique sense of gender and provides support to identify and facilitate gender healthcare goals. These goals may include supporting exploration of gender expression, support around social transition, hormone and/or surgical interventions. This may also involve providing support to whānau, caregivers or other significant supporting people (Oliphant et al., 2018).
Gender dysphoria	A clinical term referring to a dissonance between one's assigned gender and/or body and their personal sense of self (Trans 101: Glossary of trans words and how to use them, 2023).
Mātauranga Māori	Māori knowledge
Microaggression	A small act or remark that makes someone feel insulted or treated badly because of their race, gender, etc. that can combine with other similar acts or remarks over time to cause emotional harm (Cambridge University Press, n.d.).
Non-binary	A commonly accepted umbrella term used in Aotearoa NZ representing all genders other than female/woman/girl and male/man/boy (Trans 101: Glossary of trans words and how to use them, 2023).
Takatāpui	A Te Reo Māori term, which is used similarly to "rainbow person" or "rainbow community" or BTQI+ (Trans 101: Glossary of trans words and how to use them, 2023).
Trans	Another commonly accepted umbrella term used in Aotearoa NZ representing people who disagree with, or do not identify with, the gender they were assigned at birth (Trans 101: Glossary of trans words and how to use them, 2023).
Transmasculine	"Transmasculine individuals are people who were assigned as female at birth but identify on the male side of the gender spectrum" (MacDonald et al., 2016, p. 1).
Turanga Kaupapa	Guidelines for cultural competence developed by Ngā Maia o Aotearoa and formally adopted by both the Midwifery Council of New Zealand and the New Zealand College of Midwives (New Zealand College of Midwives, 2019)
Whānau	"Whānau is an inclusive term that is used to recognise the diversity of individuals within their social context. Whānau is a word indigenous to Aotearoa New Zealand. Who decides what a whānau is, is determined by whānau and this is critically important to maintain the integrity of the full meaning. Whānau are the determiners of what health and wellbeing means for them. Individual rights and interests are not subsumed by the recognition of the collective" (Te Tatau o te Whare Kahu Midwifery Council, n.d.).

Key points

- The highly gendered assumptions present in Western perinatal healthcare produce barriers for trans and non-binary people to access this care.
- The invisibility of trans and non-binary people in perinatal healthcare contributes to the limiting of perinatal healthcare provider knowledge.
- Additional literature production can contribute to improved understanding and increased provision of gender-inclusive perinatal healthcare, enhancing midwifery care.

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