



AOTEAROA NEW ZEALAND RESEARCH

“It’s a given now, that’s just how we communicate”: Pregnant people’s experiences with using communication technology when connecting with their midwife

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ABSTRACT

Introduction: Effective communication between pregnant women/people and midwives is important in establishing trusting and respectful relationships. Texting and email have been shown to be convenient ways for people to connect and share information.

Aim: This paper reports on findings from interviews with pregnant and recently pregnant women/people on what is important for them when using communication technology to connect with their midwife.

Method: Semi-structured interviews were conducted using an online platform. Two participants had previously completed an online survey in phase 1B of the multi-phase study and had expressed interest in participating further. Three other participants were recruited via a closed Pregnancy Facebook group and midwives. All participants were emailed an invitation to participate. Thematic analysis was used to analyse the interview data.

Findings: Three themes emerged from the findings, highlighting what was important for participants when using communication technology with their midwife during their pregnancy: being known, access and connectedness, and the midwife recognised as a professional.

Discussion: Being known was important when using communication technology, as it enabled respectful and trusting relationships to develop. These relationships were further enhanced through the functionality of communication technology which provided space for participants to compose messages and respond to their midwife, and through the convenience and flexibility with being able to communicate in a non-intrusive manner. The professionalism of the midwife was recognised with ensuring privacy of information, despite participants being unconcerned about privacy themselves.

Conclusion: The knowingness that comes from a continuity of care relationship contributed towards a relationship of trust. This was reflected in the respectful choices made by the participants when using communication technology to connect with their midwife.

Keywords: continuity of care, communication technology, midwifery, respectful relationships, privacy

INTRODUCTION

The way pregnant women/people access, connect and communicate with their midwife is important in establishing trusting and respectful relationships. Dixon et al. (2023) highlight the importance for women in establishing positive relationships with their midwife, which involve trust, honouring decisions and empowerment. These authors acknowledge that the building of a positive relationship takes time and investment and is supported within a continuity of care relationship (Dixon et al., 2023). Respectful relationships, that are tailored to meet the individual’s needs and provided by culturally safe practitioners, have been shown to strengthen a woman’s capabilities, as identified in the Quality Maternal and Newborn Care (QMNC) framework developed by Renfrew et al.

(2014). Effective communication therefore is an important conduit in the way relationships are established and developed.

Communication technology, particularly texting, has changed the way people communicate with one another, due to the ability to conveniently and quickly connect and exchange information with another person (Baggio, 2016). Asynchronous communication, such as texting and email, has been shown to be beneficial for childbearing people in enabling them to connect with, and access care effectively from, their midwife and to seek reassurance and advice (Cummins et al., 2019; Gasteiger et al., 2019; McCarthy et al., 2017; Shroder et al., 2018; Wakelin et al., 2022). It is convenient for pregnant people to access their electronic health information

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via maternity portals (Forster et al., 2015), as well as for midwives to be able to share information electronically via links or as email attachments (Wakelin et al., 2023). Virtual connection means, such as those used for telehealth, have also provided opportunities for people to connect with a healthcare provider, especially if living in rural locations and as was shown during the COVID-19 pandemic (Manatū Hauora | Ministry of Health, 2021).

Communication technology does present challenges at times for midwives, particularly if there is concern around interpretation of text messages, or when pregnant women/people text for non-urgent concerns outside of work hours (McCarthy et al., 2017; Wakelin et al., 2023). To ensure midwives are providing quality care and meeting the needs of pregnant women/people when using communication technology, it is necessary to understand what is important for pregnant women/people when using communication technology to connect with their midwife.

Gender inclusive language is used throughout this article unless the term *woman* is specifically referred to within the literature.

AIM

This paper reports the findings from interviews with five pregnant and recently pregnant women/people on how they use communication technology to connect with their Lead Maternity Carer (LMC) midwife. The question informing this phase of the study was: “What is important for pregnant women/people when using communication technology to connect with their midwife?”

METHOD

The overall design of the study was to use a mixed-method, multi-phase, sequential, transformative approach to explore how some LMC midwives and pregnant women/people use communication technology to connect, and how this contributes towards QMNC. The multi-phase, sequential, transformative design uses a theoretical framework to guide the study, with findings from data collected in one phase informing the data collected from another phase (Teddle & Tashakkori, 2009). In phase one, questions for the online survey conducted with LMC midwives (1A) and pregnant women/people (1B) were informed by an integrative literature review (Wakelin et al., 2022) and the components of the QMNC framework (Renfrew, 2014). The findings from phases 1A and 1B informed questions for online face-to-face interviews with LMC midwives (2A) and pregnant women/people (2B; Table 1).

The aim of phase 2B was to explore what was important for the pregnant women/people in our study when using communication technology with their midwife. This would provide potential insights for LMC midwives into how communication technology can contribute towards QMNC and identify areas that are working well and areas that require further development. Interviews took between 25 and 48 minutes. Ethical approval for this phase of the study was granted by Auckland University of Technology Ethics Committee (Reference 20/279).

Setting

Online interviews using Microsoft Teams were conducted with participants who received care during their pregnancy from an LMC midwife in Aotearoa New Zealand. These interviews occurred between September 2022 and May 2023.

Participants

Participants who had previously undertaken an online survey in phase 1B, and had expressed interest in participating further in an online interview, were invited to participate through social media platforms and third-party contacts. A follow-up email was sent to

Table 1. Indicative questions to guide interviews with pregnant women/people

Access

I am interested in knowing how comfortable you are with using communication technology and what platforms you most commonly use?

- Are there particular communication technology platforms that work better for you when contacting your midwife?
- I am interested if there is a difference in the sort of information you share with your midwife using communication technology and their response to you.
- What have you found to be the main benefits with using communication technology when contacting your midwife?
- What have been some challenges or concerns for you when using communication technology to connect with your midwife?

Negotiating contact

- Can you tell me about situations where you have needed to contact your midwife outside of a scheduled antenatal appointment? How did you do this and how did the midwife respond in this situation?
- Are there situations where you would prefer to text your midwife rather than have a conversation face-to-face or via the phone? Can you please explain the sort of information you would prefer to share in this way?
- Have you ever sent pregnancy-related photos or video clips to your midwife? Would you mind explaining what these were for and how did the midwife respond to you?
- Do you have expectations around response times from your midwife after you message them?

Privacy

I am interested in privacy issues when using communication technology with your midwife. What sort of issues have you found?

- Do you use security protection measures with your communication devices?
- What sort of information around privacy or confidentiality does your midwife discuss with you in relation to using communication technology?

Before we conclude this interview, do you have anything further to add around how you use communication technology with your midwife?

participants with information regarding the platform to be used and how to connect, along with attachments of the participant form and consent form. A day and time for the online interview were then negotiated. Criteria included:

- at least 20 weeks' gestation
- at least 18 years of age
- has access to a mobile phone which has text/email/internet capabilities
- booked with and receiving care from a midwife

Analysis of data

Thematic analysis was used to analyse the data using a six-step process outlined by Braun and Clarke (2022). This involved: 1) familiarisation with data, 2) coding, 3) generation of initial themes, 4) developing and reviewing themes, 5) refining, defining and naming themes, and 6) writing up. The interviews were video-recorded and transcribed using the online platform function. Each transcription was reviewed and amended as needed and then emailed to participants for verification. Once transcriptions were returned, a first read-through provided an opportunity to add comments in comment boxes alongside the text. The transcriptions were then read through again and colour coded for similarity, using the colour coding function on Microsoft Word. Braun and Clarke (2022) recommend using a coding table to help make sense of the data. A coding table was created to capture segments of data and the coded description. Thirty-two code categories were identified from the coding descriptions during this phase. The

coded categories were then reviewed against the research question, and potential themes and sub-themes were developed. Quotes from participants were incorporated into the themes and sub-themes, which were reviewed again. All participants consented to having their own names used in the write-up of the study. The themes and sub-themes were refined and then emailed to the first author's supervisors (who are also the co-authors) for review. The themes and sub-themes were refined further following comments until the researchers felt the themes were reflective of the data.

FINDINGS

Five participants agreed to being interviewed and opted for online interviews when offered the choice between online or in-person. Despite the small number, there was diversity with regard to the ethnicity of the participants, who identified as New Zealand European, European, Māori, Samoan and Chinese. All were fluent English speakers. Interview questions were based on the findings from the online survey completed by pregnant women/people in phase 1B. Three areas were identified from the survey findings around how pregnant women/people access their midwife using communication technology, how contact is negotiated, and privacy concerns. Indicative questions were developed from these areas.

Our five participants were interviewed to explore what was important for them when using communication technology to connect with their midwife during their pregnancy. Three themes were identified: 1) Being known is enhanced through using communication technology, 2) access and connectedness, and 3) midwife recognised as a professional.

Being known is enhanced through using communication technology

Using communication technology within a continuity of care relationship enhanced the sense of being known, which was initially established through in-person care. This is reflected in three sub-themes, two of which highlight the beneficial or positive aspects that are derived from the knowingness within the relationship and involved: 1) Communication technology facilitates respectful relationships, and 2) reassurance and trust fostered through the midwife's use of communication technology. The third sub-theme highlights the implications for pregnant women/people when seeking out the services of an LMC midwife they did not know. This was identified as a "disconnect through anonymity and being unknown".

Communication technology facilitates respectful relationships

The way participants in our study used communication technology to connect with their midwife highlighted the respect they had for their midwife. This respect developed because of the knowingness that came about through the continuity of the relationship. Vicki was aware of the on-call nature of the way her midwife worked, and found texting offered a non-intrusive opportunity to connect, knowing her midwife would reply when able to.

I just felt more comfortable to send a text message because I know they work all sorts of strange hours. So, if she was in the middle of a birth or sleeping or something... (Vicki)

For Fiona, this knowingness and respect went two ways, especially if she had a concern during the night and wasn't sure whether to wake her midwife. She would initially search the internet with her concern to see if it was something that could wait until a more reasonable hour. There was recognition, however, that not all information obtained online is necessarily reputable or trustworthy and so Fiona would then text the midwife later to double check. In doing so, she respected the knowledge the midwife holds and trusted the decision-making around the episode of care.

Most of the things that have happened to me, either late at night or early in the morning. I don't wanna message that early, so, I Google it and then I'll just send her a text and just double check. (Fiona)

Participants identified the prescriptive information that midwives provided to them around the appropriateness of using communication technology platforms, depending on the type of contact or care that was needed. In being known, participants appeared to appreciate and respect the choices they had around when to text or phone.

They did have some guidelines around, if it's an emergency, phone us but otherwise text us. (Vicki)

Participants appeared to value and respect the way the midwife would encourage the use of technology to enable them to feel more comfortable, especially if they had concerns that were quite sensitive.

I don't want you to see down there, and she [the midwife] was fine. [The midwife said], 'If you don't wanna do it in person, you can send me a photo or take a photo and I'll look when I come.' (Flo)

Flo further highlighted the importance of this knowingness when it came to answering a phone call from her midwife, someone she knew and respected.

If it was from my midwife, I wouldn't feel uncomfortable 'cause I'd think it [the phone call] was quite important. (Flo)

The participants highlighted the respect they had for their midwife, which was developed as part of a knowingness within the continuity of care relationship. This respect was illustrated both in the way the pregnant women/people used communication technology to connect with their midwife and from the way the midwife responded to them.

Reassurance and trust fostered through the midwife's use of communication technology

The way the midwife used communication technology contributed towards participants feeling reassured by the responses. Kelly acknowledged how reassured she felt by her midwife's quick response via text to her message.

She answers texts almost straight away. She's been with me before and I've seen a text, or a call come through and she will always pick up her phone. So that's why I feel quite confident that she always gets my text. And if she doesn't reply straight away, I know she's probably seen it. (Kelly)

Whereas, for Flo and Kenya, they trusted their midwife would call them based on the context of the initial text message they had sent to their midwife. This phone call provided the necessary reassurance they needed from their midwife, as it enabled a more detailed conversation than is possible through text messaging alone.

But to reassure me, she called me back so that she could explain in detail. So, anything that required further explanation. I knew she would call me. (Flo)

I had to go to the [clinic] because I was really unwell. She rang me after that because I didn't have a good experience. So sometimes I just text her if I want her to ring me. (Kenya)

The knowingness and trust established were important for the participants and enabled them to connect using communication technology with confidence to access the care they needed. While Flo recognised there are some concerns with sending images online, the trust she had with her midwife appeared to override these concerns.

I do have general concerns about what you send over the internet. But with [midwife] there was really no boundaries because I have complete trust and faith that it would be dealt with appropriately or it would never see the light of day for anyone else. I trusted her. But it would definitely be different if I didn't have that relationship with her. (Flo)

The participants identified the importance of being known within a continuity relationship, and the reassurance and trust that were fostered by the way the midwife used communication technology when connecting with them. In contrast, there was a sense of disconnect when participants were initially contacting a midwife who was unknown to them.

Disconnect through anonymity and being unknown

The participants in our study identified a difference in the way some midwives responded depending on whether they were known to them. In early pregnancy when participants were seeking out the services of LMC midwives, they found that some midwives either didn't respond or replied in a manner that participants felt was inappropriate. In being unknown, pregnant women/people were anonymous or a "name on a screen" and therefore there was possibly less onus on midwives to respond.

I emailed all of the midwives on the Find Your Midwife website. None of them got back to me. (Kenya)

I sent a text. It was the refusal [by text]...I would have preferred a phone call. (Vicki)

The examples above highlight the importance of the knowingness within a continuity of care relationship. When the pregnant woman/person and midwife had become known to each other, the communications and negotiations around connection were respectful, and the participants felt reassured by their midwife's response. This, in turn, engendered a relationship of trust.

Access and connectedness

This theme was identified through the functional way with which communication technology was used to enable the participants to access and connect with their midwife. Three further sub-themes were recognised as contributing towards this theme: 1) space enabling connection, 2) convenience of access and connecting, and 3) flexibility with using communication technology.

Space enabling connection

There was recognition that texting gave participants space and time in which to reflect and compose a message before sending or responding. This space was important as it removed some of the awkwardness around expectations when having a real-time conversation.

I don't like calling... I always feel like I have to be on my game when I call someone, and I can't be awkward. So, texting or emailing, I much prefer it because then I don't have that constant interaction with someone, and I can think about what I want to say. And I don't feel pressured into trying to keep the conversation flowing. (Flo)

Fiona was concerned with how she may be perceived by her midwife, so found texting gave her the space needed to compose a message and to portray herself in a more positive way.

I don't wanna come across rude, so by sending a text, that's making sure I'm not coming across rude. (Fiona)

Fiona explained further the importance of having space and distance when sending a text message. The lack of face-to-face or real-time connection provided space which was perceived to be free from

judgement. Fiona couldn't see how the midwife was responding to her, which removed the emotional component from the response.

It's a lot easier to ask a question that you may think is stupid through a text and through a screen because you can't hear the person's response... that's why we all prefer texting rather than phone calls. You don't feel any judgement about anything because once you've sent it, you don't see what that person's doing. (Fiona)

The asynchronous nature of communication technology was important for the participants in our study as it provided space to compose and respond to their midwife. This space enabled participants to connect with, and access care from, their midwife in a way that felt more emotionally comfortable for them.

Convenience of access and connecting

Participants in our study highlighted the convenience that asynchronous communication provided in enabling them to access and connect with their midwife. There was convenience with having text messages written down which enabled participants to refer to previous communications they had had with their midwife.

We tend to use texting which works well because you still have previous conversations. (Kelly)

The convenience with asynchronous communication, such as texting and email, was highlighted by participants, both in sending messages to their midwife and in messages being received from their midwife. Messages were considered non-intrusive and preferred, as there wasn't any expectation of an immediate response as would be expected with a phone call.

It's more convenient. I don't have to make sure I'm free for a phone call or anything. I could just do whatever I'm doing and text or email. (Flo)

Vicki also found the convenience in being able to text or email for administrative-type communications, such as rescheduling appointments or if she was running late. In this sense, communications were informative and used to connect briefly without involving lengthy or in-depth conversations.

It was helpful to text for smaller things like rescheduling appointments or letting her know I was running late. (Vicki)

For Kelly, having an ability to send text messages privately to her midwife was important, particularly when at work, as it meant there was no risk of being overheard in a conversation.

We've had all these texts at work. Even though work's amazing, and they won't hear, I just don't want to look like I'm taking lots of personal phone calls... texting is just a bit easier. (Kelly)

The participants in this study identified the convenience with using communication technology to connect with their midwife in a non-intrusive manner and thus negate the need for lengthy and potentially time-consuming conversations.

Flexibility with using communication technology

For the participants in our study, accessing appropriate information was important. There was recognition of the myriad of pregnancy websites available and the challenge with navigating appropriate and reliable sources. Participants highlighted the flexibility of communication technology in providing options for midwives to share information with them. These options included texting or emailing links to reputable sources for further information, or in attaching information to an email.

She texted me links. And she was able to help me find reputable sources. (Vicki)

She would email the links through at the bottom of the notes or whenever she flicked me an email. She always emailed me pretty much straight after appointments. (Flo)

In Kelly's situation, the midwife suggested she take a photo of a poster on the wall which was advertising free acupuncture. The flexibility of smartphones in having camera devices enabled Kelly to conveniently photograph the poster to ensure she had the correct information for accessing pregnancy services available in her area.

She's also told me to take a photo when I was at a clinic once. She had a poster on the wall for free acupuncture at the hospital, which was so cool. (Kelly)

Kelly further highlighted the flexibility in being able to receive results by email from her midwife when she was overseas.

She emailed through the results. We were talking via email when I was in [country] so that worked really well because there's no way I would have been able to text her over there. (Kelly)

While the participants in our study identified that the flexibility with communication technology enabled them to access information, they also identified a lack of flexibility when health platforms did not integrate with one another. There was familiarity with the electronic patient portal established through general practitioner practices; however, maternity electronic health systems used by midwives did not integrate with this system. As a result, there was often frustration when participants tried to access their blood results from their midwife when using this portal.

I use 'Manage my Health' for blood test results. It should be connected into one system, but I know that the health system is unlike that which is annoying. If I go to the GP, he always gives me a blood test and then I can see it. But if [midwife] orders that, I can't see the results and I can't see what she's prescribed either. (Kenya)

The flexibility with functional aspects of communication technology enabled participants to access and connect with their midwife in a variety of ways. However, participants identified a need for an integrated electronic health system that would improve access to results.

Midwife recognised as a professional when using communication technology

When it came to how these pregnant women/people were using communication technology, there were two aspects identified in recognising the midwife as a professional. The first acknowledged the boundaries around using communication technology and the second concerned privacy of information.

There was recognition by participants that certain communication technology platforms or ways of connecting were better suited to certain people or situations. Fiona indicated that, while it is important to have a good relationship with the midwife, the midwife was still a professional and not your friend, and therefore boundaries were needed around how communication and connection occurred.

You got to have some sort of boundary. As well as it being a great way for people to connect, sometimes people can connect way more than is appropriate and cross that line of the midwife is the professional and not your friend. I mean you can have a good relationship. (Fiona)

In a similar way, Vicki alluded to this when commenting about needing to be friends with someone to connect with them using social media platforms such as WhatsApp and Messenger. The midwife was recognised as a professional and not as a "friend" and therefore texting and phone calls with the midwife were deemed easier and more appropriate.

It never occurs to me to use WhatsApp unless somebody else tells me to use WhatsApp and Facebook Messenger. I feel you have to be friends to message someone... Texting and phone calls seem like the easiest. (Vicki)

Participants recognised the midwife's professional role in ensuring privacy and confidentiality of information. Kenya's midwife took time to share what would happen with her information, despite Kenya herself not being overly concerned about this.

[Midwife] was reading me all the privacy things and saying everything's confidential... I don't really care. Just tick it. And she went through every single point. (Kenya)

Both Kenya and Fiona indicated they were not concerned about privacy of their information when using communication technology and couldn't understand why someone might be interested in their information if they could access it.

I don't know what anyone would get hearing about how sick I've been, doesn't worry me. (Kenya)

I don't really mind if people know things. I text a lot with my GP. So, none of that really bothers me. (Fiona)

The participants highlighted the difference between the professional responsibility the midwife has in protecting pregnant women's/people's information, compared with the laissez-faire attitude some participants had around their own information. It may be that this had more to do with an acceptance that this is the way people communicate, as Flo indicates.

It's a given now, that's just how we communicate. (Flo)

The participants in our study recognised the professional role the midwife had when using communication technology to communicate and connect with them. They indicated there was a potential to over connect when using communication technology, and that certain platforms were deemed inappropriate to use with their midwife, given the professional nature of the relationship. The participants also recognised the professional role the midwife has in upholding the privacy and confidentiality of the person's information, despite the people themselves not being overly concerned with the strict confidentiality of their own information.

DISCUSSION

The question informing the study was to identify what was important for pregnant women/people when using communication technology to connect with their midwife.

The participants in our study highlighted how the effective and respectful use of communication technology both enabled and enhanced the sense of being known in the continuity of care relationship with their midwife. This was highlighted in the way participants used communication technology to message their midwife, knowing that their midwife would respond when able to. While there was no expectation around the response time, the response was usually quick for the participants, providing further reassurance and trust.

Being known was identified as an important component of the continuity of care relationship between the woman and the midwife, and is described as being "the vehicle through which

trust is built, personalised care is provided, and the woman feels empowered” (Perriman et al., 2018, p. 228). We would agree and add that communication technology could be considered as adding to the fuel which assists in driving and enabling some of the connections and access to occur, thus further contributing towards a relationship of trust. However, participants in our study described the challenges they had when trying to initially find a midwife, when they weren't known to the midwife. In being “unknown”, they were a name on the screen to the midwives they were trying to connect with, and the midwives were unknown to the pregnant women/people. No relationship had been developed and therefore, possibly, some midwives might have felt under less obligation to respond. Kegley (2018) suggests that, when there is a lack of direct human contact, the sense of caring or ethical obligation is removed. It is perhaps the distance from this sense of ethical obligation that makes it easier to not respond to someone, particularly if midwives are inundated with messages from potential clients, as there is no “real-time” connection or investment in the relationship. When someone is “anonymous”, they can hide behind a screen when communicating with others asynchronously, or perhaps portray themselves in a way that they wouldn't normally do because they are “hidden” (Baggio, 2016).

In contrast to the negative connotation associated with “being hidden” behind a screen was the protective space that this afforded. For Fiona, this provided her with an opportunity to not only ask questions but also to have space to compose and respond to a text message without fear of being judged. Flo alluded to this in a similar way when commenting on the discomfort she has with phone calls and the anxiety with having to keep a conversation flowing. Having space to compose a message provided these participants with an opportunity to present themselves in a positive manner. This ability to create a persona within an electronic environment has increasingly developed through the asynchronous non-face-to-face connections enabled through communication technology (Allred & Atkin, 2020; Floridi, 2014). The participants in our study were empowered by their use of communication technology when connecting with their midwife and, therefore, able to access the care they needed. This was highlighted further through the convenience and flexibility of the technology that supported these connections and enabled participants in our study to connect in a non-intrusive manner. They could choose whether to send a quick message to update their midwife, reschedule an appointment or ask the midwife to call them. The convenience of text messaging a midwife has similarly been reported in other studies (Gasteiger et al., 2019; Shroder et al., 2018). Kelly further identified how texting enabled her to have a private communication with her midwife without fear of being overheard by work colleagues through a phone conversation. While Baggio (2016) suggests that privacy is one of the main reasons people choose to text, Kelly identified that the importance of this privacy was in being able to quickly check in and be reassured by her midwife's response.

The negotiations and prescriptive information that midwives had previously shared with participants during in-person care further enabled participants to understand when texting was appropriate and when a call was required instead. While the participants in our study appeared to respect the guidance their midwife offered around the appropriate use of communication technology, this may not be the case for every interaction across a larger population. Respondents from the authors' previous survey of midwives identified the potential risk with asynchronous communication which could result in midwives potentially missing text messages if they were used for urgent concerns (Wakelin et al., 2023).

There was recognition among these five participants that the midwife was a professional and not a friend when using communication technology. As a result, they understood that texting and email were appropriate communication platforms for them to use, rather than other forms of social media. This, however, differed from the findings from the authors' previous survey of midwives where inappropriate forms of communication technology and lack of boundaries were of concern for midwives (Wakelin et al., 2023), and also from Basevi et al.'s (2014) study, where clients have contacted health professionals using their personal social media accounts.

Another area where there was a perceived difference between midwives and the pregnant women/people in our studies was around the protection and privacy of information. The participants in our study recognised the professionalism of midwives with respect to certain platforms being more appropriate to use than others. They also recognised the professional role midwives have in ensuring privacy of their information. However, for the participants themselves, there was a lack of concern around why anyone would want to access their information. This lack of concern by some people around storage of their electronic health information has similarly been reported in other studies (Esmailzadeh & Sambasivan, 2017; Hadland et al., 2022). A possible explanation could be in the devolving of cyber security responsibility to health organisations for ensuring safety of electronic health information. Zwilling et al. (2020) identify this as a finding in their study when comparing the cyber security awareness, knowledge and behaviour of university students in Israel. While the study participants' characteristics differ to those of our study, the devolving of cyber security responsibility offers a possible explanation around some of the participants' lack of concern for private health information stored electronically.

A similarity that was identified by the participants in both the present study and in interviews with midwives in phase 2A was around the need for an integrated electronic health system. The participants in the present study were comfortable accessing electronic notes through their general practitioner patient portal, which supports the findings from Elers and Nelson (2018). However, there was frustration and annoyance at not being able to access results from their midwife in the same way. While the participants in our study have identified this as an area for further development, there have been concerns identified around who would have access to a person's private health information and whether it could be adequately protected (Kisekka & Giboney, 2018; Papoutsi et al., 2015). While these concerns would require careful consideration, there seems a general acceptance that when people perceive health information technologies as being beneficial to care, the privacy risks are more acceptable to them (Kisekka & Giboney, 2018).

STRENGTHS AND LIMITATIONS

The mixed method, sequential approach enabled a deeper exploration of the issues identified from the online survey, despite there only being five participants involved in this phase of the study.

Due to the length of time between analysing the findings from the online survey in phase 1B to the interviews in phase 2B, two of the participants were no longer pregnant. While these participants were asked to consider their responses during the time they were pregnant, their recall may not be as accurate as that of the participants who were in the third trimester of their pregnancy. A potential further limitation is in not gathering socio-economic status or age of participants. While this, along with the small sample size, could potentially limit the interpretation of the

findings, nevertheless, valuable information was obtained from the participants that can help to inform midwifery practice.

CONCLUSION

The participants in this study have identified the importance of being known when using communication technology within a midwifery continuity of care relationship. This knowingness contributed towards a relationship of trust, which was reflected in the respectful choices participants made around how they used communication technology to connect with their midwife. The flexibility and convenience of communication technology were further enhanced through the reassurance provided to participants by the midwives' responses, and in being able to privately connect and communicate with their midwife. While some participants were not overly concerned around privacy of their information, they recognised the professional role of the midwife in maintaining this privacy. There is a need, however, for electronic health systems to be integrated to enable easier and more convenient access across all health-related client information.

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The authors declare that there are no conflicts of interest.

KEY POINTS

- Communication technology when used within a continuity of care relationship contributed towards pregnant women/people "being known", which they felt enhanced the development of trusting and respectful relationships with their midwife.
- The flexibility and convenience of communication technology assisted pregnant women/people to connect with, and access care from, their midwife in a variety of ways.
- The professionalism of LMC midwives was recognised by participants in the way midwives upheld their privacy and protected their information.

REFERENCES

- Allred, R., & Atkin, D. (2020). Cell phone addiction, anxiety and willingness to communicate in face-to-face encounters. *Communication Reports*, 33, 95-106. <https://doi.org/10.1080/08934215.2020.1780456>
- Baggio, B. G. (2016). Why we would rather text than talk: Personality, identity and anonymity in modern virtual environments. In B. G. Baggio (Ed.), *Analyzing digital discourse and human behavior in modern virtual environments* (pp. 110-126). IGI Global.
- Basevi, R., Reid, D., & Godbold, R. (2014). Ethical guidelines and the use of social media and text messaging in health care: a review of literature. *New Zealand Journal of Physiotherapy*, 42(2), 23-35.
- Braun, V., & Clarke, V. (2022). *Thematic analysis. A practical guide*. SAGE Publications Ltd.
- Cummins, A., Coddington, R., Fox, D., & Symon, A. (2019). Exploring the qualities of midwifery-led continuity of care in Australia (MiLCCA) using the quality maternal and newborn care framework. *Women and Birth*, 33(2), 125-134. <https://doi.org/10.1016/j.wombi.2019.03.013>
- Dixon, L., Daellenbach, S., Anderson, J., Neely, E., Nisa-Waller, A., & Lockwood, S. (2023). Building positive respectful midwifery relationships: An analysis of women's experiences of continuity of midwifery care in Aotearoa New Zealand. *Women and Birth*, 36(6), e669-e675. <https://doi.org/10.1016/j.wombi.2023.06.008>
- Elers, P., & Nelson, F. (2018). Improving healthcare through digital connection? Findings from a qualitative study about patient portals in New Zealand. *Australian Journal of Primary Health*, 24(5), 404-408. <https://doi.org/10.1071/PY17116>
- Esmailzadeh, P., & Sambasivan, M. (2017). Patients' support for health information exchange: A literature review and classification of key factors. *BMC Medical Informatics and Decision Making*, 17(1), Article 33. <https://doi.org/10.1186/s12911-017-0436-2>
- Floridi, L. (2014). *The 4th revolution. How the infosphere is reshaping human reality*. Oxford University Press.
- Forster, M., Dennison, K., Callen, J., Georgiou, A., & Westbrook, J. I. (2015). Maternity patients' access to their electronic medical records: Use and perspectives of a patient portal. *Health Information Management Journal*, 44(1), 4-11. <https://doi.org/10.1177/183335831504400101>
- Gasteiger, N., Anderson, A., & Day, K. (2019). Rethinking engagement: exploring women's technology use during the perinatal period through a Kaupapa Māori consistent approach. *New Zealand College of Midwives Journal*, 55, 20-26. <https://doi.org/10.12784/nzcomjnl55.2019.3.20-26>
- Hadland, M., Smyth, W., Craswell, A., Kearney, L., & Nagle, C. (2022). Women identify benefits with the use of electronic maternity records. *Women and Birth*, 35(S30). <https://doi.org/10.1016/j.wombi.2022.07.082>
- Kegley, J. (2018). Royce on self and relationships: Speaking to the digital and texting self of today. *The Journal of Speculative Philosophy*, 32(2), 285-303. <https://www.jstor.org/stable/10.5325/jspephil.32.2.0285>
- Kisekka, V., & Giboney, J. S. (2018). The effectiveness of health care information technologies: Evaluation of trust, security beliefs, and privacy as determinants of health care outcomes. *Journal of Medical Internet Research*, 20(4), e107. <https://doi.org/10.2196/jmir.9014>
- Manatū Hauora | Ministry of Health. (2021). *Patient portals*. <https://www.health.govt.nz/our-work/digital-health/other-digital-health-initiatives/patient-portals>
- McCarthy, R., Choucri, L., Ormandy, P., & Brettell, A. (2017). Midwifery continuity: the use of social media. *Midwifery*, 52, 34-41. <http://doi.org/10.1016/j.midw.2017.05.012>
- Papoutsis, C., Reed, J., Marston, C., Lewis, R., Majeed, A., & Bell, D. (2015). Patient and public views about the security and privacy of electronic health records (EHR) in the UK: Results from a mixed methods study. *BMC Medical Informatics and Decision Making*, 15, Article 86. <https://doi.org/10.1186/s12911-015-0202-2>
- Perriman, N., Davis, D., & Ferguson, S. (2018). What women value in the midwifery continuity of care model: A systematic review with meta-synthesis. *Midwifery*, 62, 220-229. <https://doi.org/10.1016/j.midw.2018.04.011>
- Renfrew, M., McFadden, A., Bastos, M., Campbell, J., Channon, A., Cheung, N., Silva, D., Downe, S., Powell Kennedy, H., Malata, A., McCormick, F., Wick, L., & Declercq, E. (2014). Midwifery and quality care: findings from a new evidence-informed framework for maternal and newborn care. *The Lancet*, 384(9948), 1129-1145. [https://doi.org/10.1016/S0140-6736\(14\)60789-3](https://doi.org/10.1016/S0140-6736(14)60789-3)
- Shroder, M., Anders, S., Dorst, M., & Jackson, G. (2018). Communication technology use and preferences for pregnant women and their caregivers. *AMIA Annual Symposium Proceedings*, 1515-1523. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6371273/pdf/2974959.pdf>
- Teddle, C., & Tashakkori, A. (2009). *Foundations of mixed methods research. Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Sage Publications Inc.
- Wakelin, K. J., McAra-Couper, J., Fleming, T., & Erlam, G. D. (2023). Communication technology practices used by midwives with pregnant women/people in Aotearoa New Zealand to ensure quality maternal and newborn care. *Midwifery*, 120, Article 103637. <https://doi.org/10.1016/j.midw.2023.103637>
- Wakelin, K., McAra-Couper, J., Fleming, T., & Erlam, G. (2022). Exploring the ways communication technology is used by midwives and pregnant women/people: An integrative review. *New Zealand College of Midwives Journal*, 58, 11-18. <https://doi.org/10.12784/nzcomjnl58.2022.2.11-18>
- Zwilling, M., Klien, G., Lesjak, D., Wiecheteck, L., Cetin, F., & Basim, H. (2020). Cyber security awareness, knowledge and behavior: A comparative study. *Journal of Computer Information Systems*, 62, 82-97.