

It's About Getting the Balance Right: Midwives' Experiences With Using Communication Technology With Pregnant Women/People

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INTRODUCTION: The convenience of asynchronous communication such as texting has enabled people to quickly communicate with others. Concerns have been identified around the quality of relationships that are developed during these interactions with respect to privacy and confidentiality of information, particularly within a health care context. This has potential implications on the way midwives use technology when communicating with their clients.

AIM: This article reports on how midwives find balance when using communication technology with their pregnant clients. This is achieved through balancing societal expectations on being connected 24/7 while maintaining their own work/life balance.

METHODS: This article reports on phase 2A of a multiphase study. Semistructured interviews with 14 midwives who use communication technology such as texting with their pregnant clients were conducted online using the platform Microsoft Teams. Interview data were analyzed using thematic analysis.

FINDINGS: The findings indicate that midwives are balancing how they use communication technology when communicating with their pregnant clients in three ways: (a) midwives are balancing the convenience of the technology with the relationships they develop with their pregnant clients within a continuity of care relationship; (b) midwives are balancing these communications while ensuring privacy and confidentiality of information; and (c) midwives are finding a balance between ensuring access for their pregnant clients while maintaining their own work/life balance.

DISCUSSION: Midwives recognized that there is a need to balance the convenience of technology with the relationships they develop with their pregnant clients. They are adjusting and adapting to ensure they are connecting but also mindful of challenges with ensuring privacy and confidentiality of information. Midwives have shown how communication technology is part of a solution in enabling them to communicate with their clients while maintaining a better work/life balance.

KEYWORDS: communication technology; midwifery; privacy; work/life balance

INTRODUCTION

The Quality Maternal and Newborn Care (QMNC) framework is designed to be used to assess the quality

and effectiveness of care within a maternity context (Renfrew et al., 2014). O'Toole (2016) suggests that for communication to be effective, there needs to be a shared understanding between the sender and receiver

of verbal and nonverbal messages, with appropriate and considered responses. Use of communication technology such as texting or sending photos is rapidly evolving. This is due to the asynchronous nature of messaging which enables people to connect easily with one another from anywhere at any time. As a result of this, Floridi (2014) suggests that the digital age is not only changing how we communicate but also how communication technology is changing us and, in doing so, reshaping our sense of self, our identity, and the way we relate to society.

There are four potential concerns around communicating in this way which can have implications on the way midwives and pregnant women/people communicate with one another. The first being the quality of relationships that people are developing and the potential for becoming less skilled at communicating within an in-person face-to-face environment (Allred & Atkin, 2020; Biglbauer & Lauri Korajlija, 2023). This is due to the ease and convenience of communicating in the asynchronous space where there is a delay between sending and receiving of messages. Communication technology provides a screen behind which people can potentially hide and can develop a persona which may be different to the one they portray in person (Baggio, 2016). As people become more comfortable interacting in the asynchronous space, they may become more uncomfortable and less able to pick up on visual cues when interacting in face-to-face in-person situations. Further to this is the potential for misinterpreting text messages due to an inability to detect tone or other nonverbal cues from the message (Baggio, 2016). This was an issue identified by midwives in an online study conducted by the authors in phase 1A of their multiphase study (Wakelin et al., 2023).

The second issue that results from the way people in society use communication technology is in the need to “always be connected” which has been posited as being due to a “fear of missing out” (Roberts & David, 2020). Because of this need to be connected, there has become a blurring of boundaries between work and home, personal and professional, and private and public spheres (McKee & Porter, 2017). This “blurring” potentially creates significant challenges for lead maternity carer (LMC) midwives in Aotearoa New Zealand (NZ) who provide continuity of care to their clients. LMC midwives reported receiving texts for nonurgent concerns regardless of the time of day or night (Wakelin et al., 2023).

This leads to the third issue for LMC midwives, with how they maintain their work/life balance when their pregnant clients can access them 24/7 through use of communication technology. The midwifery model of continuity of care in NZ means that the midwives’ clients have their contact details. Despite midwives providing quite prescriptive information on when and how to be contacted, the ease of the technology meant that midwives would often receive text messages out of hours for nonurgent matters (Wakelin et al., 2023). There were no perceived boundaries around the need for always being connected, which had implications for midwives in how they maintained their work/life balance.

The fourth issue relates to the security of people’s personal and private information and who has access to this when communicated through the cyberspace of texting, emailing, and online social media platforms. Globally, the number of scams, cyberattacks, and ransomware demands has increased particularly since the COVID-19 global pandemic where increasing numbers of people were working remotely from home due to the need for isolation (Al-Qahtani & Cresci, 2022). In a recent statement released by the Office of the Privacy Commissioner in NZ, all agencies whether big or small are to introduce two-factor authentication to protect the security and privacy of their client’s information, and to not do so will be found in breach of the Privacy Act (Privacy Commissioner, Te Mana Mātāpono Matatapu, 2023).

LMC midwives in NZ, therefore, have to balance the convenience of using communication technology with how it impacts the relationships they develop with their clients and how they maintain boundaries around work and personal life. An additional concern is how they ensure they are protecting their client’s information. These issues were identified in interviews with LMC midwives with how they use communication technology when connecting with their pregnant clients in phase 2A of the multiphase study.

AIM

The aim of this article is to report on the findings from interviews with LMC midwives on how communication technology is used with their pregnant clients. This article will report and discuss the findings from the third theme, finding balance.

The findings from the other two themes have been submitted as separate publications.

METHODS

This present study reports on the findings from semistructured interviews with LMC midwives in phase 2A of a mixed-method multiphase sequential transformative design which uses a theoretical framework to guide the study (Teddlie & Tashakkori, 2009). The QMNC framework is the guiding framework for this multiphase study (Renfrew et al., 2014). Questions for the semistructured interviews were informed by the findings from an online survey with LMC midwives in phase 1A of the study. The interviews were piloted with a midwifery colleague who was not involved in the interviews to ensure there were no technical difficulties with using the online platform (Gray et al., 2020). Piloting the questions also served to gauge the natural flow of the interview. The questions used to inform the interviews are provided in Table 1. These questions were informed from findings of the online survey with LMC midwives in phase 1A of the study.

Semistructured interviews were conducted using Microsoft Teams, which is an online platform the first author was comfortable and familiar with using. The online interviews took between 40 and 60 minutes. Ethical approval for the study was granted by Auckland University of Technology (AUTEK) 20/279.

Setting

Online interviews took place using the Microsoft Teams platform with LMC midwives in NZ from September to October 2022.

Participants

In phase 2A, midwives who had previously undertaken an online survey in phase 1A and had expressed interest in participating further in an online interview were emailed an invitation to participate. Fourteen midwives responded to the email invitation. A further email was then sent to the participants with information regarding the platform to be used and how to connect along with attachments of the participant information form and consent form. A day and time for the online interview were then negotiated once they agree to take part. The 14

midwives who agreed to take part in the interview were representative of the midwifery workforce in Aotearoa NZ in terms of age (average age, 47 years), ethnicity (NZ European, Māori, Pasifika, Asian, and other European), years as an LMC midwife (with most having worked between 2 and 15 years), and geographical location (urban, rural, and remote rural; Midwifery Council of New Zealand, Te Tatau o te Whare Kahu, 2021).

Analysis of Data

Analysis of the data was undertaken using a six-step process as outlined by Braun and Clarke (2022). This process involves (a) familiarization; (b) coding; (c) generation of initial themes; (d) developing and reviewing themes; (e) refining, defining, and naming themes; and (f) writing up. As part of familiarization, the recorded interviews were transcribed by the first author and returned to participants for member checking within 1 week of the interview taking place to ensure the transcription was accurate (Stahl & King, 2020). The transcription and recording functionality of the platform provided a convenient way to simultaneously listen to the recording while reading the transcript. If errors were noted, the recording was stopped, and the transcript was amended. All transcripts were returned, and only one interview required a minor change to some wording. The transcripts were then reread several times by the first author, alongside reviewing the recorded interview with comments made in comment boxes prior to the commencement of coding. Once the initial color coding began, transcripts were again reread, and then, categories were created using an Excel spreadsheet. The spreadsheet was an efficient way to work with substantial amounts of data. Once initial themes were generated, the first author then provided the coding table to the other authors (who were the first author's supervisors) and had not been involved with the coding process. The other authors were able to take an objective and critical review of the themes, coding categories, and data segments to ensure validity of the process. The final themes were then rereviewed to ensure they reflected the participants experiences.

FINDINGS

In this phase of the study, midwives were interviewed to explore how they used communication technology to communicate with their pregnant

TABLE 1. Questions to Inform Semistructured Interviews With LMC Midwives

Findings from the online survey with LMC midwives indicated that Wi-Fi can be problematic.

- How do you negotiate contact with your pregnant clients when this is the case?
- What strategies do you use if you are out of “cell phone” or “Wi-Fi” coverage?

How do you use communication technology in your day-to-day practice?

- Do you use communication technology to reinforce information shared or to provide health messages?
- Do pregnant clients share information with you outside of scheduled appointments?

What have been some of the main concerns for you when using communication technology to connect with your pregnant clients?

Can you tell me how you have managed concerns if pregnant clients contact you in a way you deem to be inappropriate?

How have you used communication technology to sustain yourself in practice?

- Are there some platforms that work better for you than others?

Do you have any concerns around privacy or confidentiality of information if shared over online platforms?

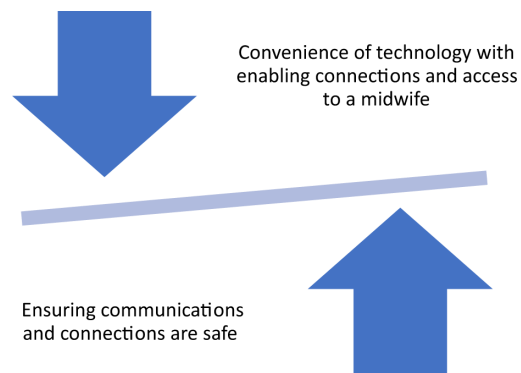
- Do you use security protection measures with your communication devices?

Have you needed to adapt the way you contact your pregnant clients?

clients. There were not notable differences reported by midwives in the way they used communication technology with their pregnant clients in terms of age; ethnicity; length of time as a midwife, or whether they worked in urban, rural, or remote rural settings. Where such differences were noted, they have been discussed within the findings and discussion sections. All participants expressed comfort with using communication technology, and age of the midwife did not appear to influence their uptake or use of the technology. Reid and Reid (2010) suggest that the ability to use communication technology and feel comfortable using it has more to do with a person's self-efficacy and belief in their ability to understand and master the use of technology rather than their age. This notion of self-efficacy would appear to be supported by the midwives in our study.

Finding Balance

The findings indicate that what midwives appear to be doing is finding a balance. They balance the convenience of technology while ensuring that communications and connections are safe for their clients, all the while balancing these connections with maintaining and protecting their own work/life balance to ensure that they are practicing in a sustainable way.



Three subthemes were identified: (a) balancing the convenience of technology with relationships, (b) balancing convenience with safety of data (privacy/confidentiality), and (c) balancing communications with maintaining work/life balance. Table 2 outlines the development of the three subthemes with examples from interview text.

Balancing the Convenience of Technology With Relationships

Communication technology has enormous benefits which midwives identified especially in relation to the convenience and efficiency with which they could connect with their clients through texting. Midwives can check their phone for messages at their convenience, choose how and when to respond, share information, and incorporate texts into their

documentation (Wakelin et al., 2023). While there is no denying the benefits that communication technology has in enabling people to connect, Linda warns of the potential “deskilling as humans” that may occur because of our reliance and increasing use of asynchronous communication. In doing so, we begin to lose the ability to communicate within an in-person face-to-face interaction.

“Digital technology will never make sense, no matter how clever it gets. It is useful across how we keep our notes, how we communicate with people and how we share information. It can be part of that feast at the table, but it doesn’t beat the sitting around and consuming it together and that dynamic that happens when human beings get together... And we have to be careful that we don’t deskill our humanness” (Linda).

Sarah further highlights the challenge with trying to communicate with clients when in person. The ability for people to text or communicate in written form rather than verbalize would appear to provide an avenue for people to express themselves and to hold space for their humanness which they otherwise would not be able to do.

“Some people are very different via text and then you get face-to-face with them and they’re very awkward, and you think wow, you don’t sound the same at all like you do on texts. On texts you’re very eloquent and you’ve got a lot of questions and ha-ha emojis and all this sort of stuff, but in person, you’re super awkward, but I guess it’s the whole keyboard warrior culture. There’s anonymity in texting or, where they feel more comfortable and able to express themselves but face-to-face there is the awkwardness of one on one” (Sarah).

The awkwardness that Sarah identified while communicating face to face was also highlighted through the awkwardness or discomfort that people have when speaking over the phone. Jordan indicates that this awkwardness may be more prevalent now because of a generation of people who have grown up with text as the mode of communication. As a result, young people will not call the midwife even if it is something they are concerned about.

“A lot of younger clients won’t call for things that they should, they will text. Even if they are wanting a response soon.... They have a lot of anxiety around phone calls, and they won’t answer phone calls, they don’t like making calls. Anyone under 30 I find is very common” (Jordan).

The difficulty or discomfort with speaking over the phone was not just an issue identified by midwives with their clients but also an issue some midwives had themselves with speaking over the phone, and this was largely due to not being able to “see the person.”

“It’s just the whole phoning. You have to have a conversation with someone or start the conversation up. It’s really awkward... I can’t read people’s body languages and try and pick up those cues as easily as I can when I see someone face to face” (Amy).

While midwives acknowledge the convenience of using communication technology, whether it is via text, sending a photo, or even via a phone call, there was recognition of the limitations around non-in-person face-to-face communication due to an inability to pick up on nonverbal visual cues and the potential for misinterpreting text messages. Midwives were concerned that they may miss something, which could only be achieved through an in-person visit.

“There are some people that can’t really express themselves that much via text or phone calls. So, if it’s anything that’s concerning them, usually it means that we’re going to have to see them for a face-to-face physical visit because there’s lots of information that could only be gained if you see them in person, especially with midwifery because if you have to take a blood pressure or do a palpation” (Mary).

“If it is something simple, text and pictures is fine. There probably would be some words that someone might say to me that it wouldn’t matter how many pictures they sent me. I am still going to do a physical assessment” (Denise).

TABLE 2. Development of Themes: “Finding Balance”

Finding balance	Balancing convenience of technology with relationships	<p>“Digital technology will never make sense, no matter how clever it gets. It is useful across how we keep our notes, how we communicate with people and how we share information. It can be part of that feast at the table, but it doesn’t beat the sitting around and consuming it together and that dynamic that happens when human beings get together... And we have to be careful that we don’t deskill our humanness” (Linda).</p> <p>“Some people are very different via text and then you get face-to-face with them and they’re very awkward, and you think wow, you don’t sound the same at all, like you do on texts. On texts you’re very eloquent and you’ve got a lot of questions and ha-ha emojis and all this sort of stuff but in person, you’re super awkward, but I guess it’s the whole keyboard warrior culture. There’s anonymity in texting or, where they feel more comfortable and able to express themselves but face-to-face there is the awkwardness of one on one” (Sarah).</p>
	Balancing convenience of technology with safety of data (privacy/confidentiality)	<p>“Some of the apps, once you open a picture, it’s automatically downloaded onto my gallery, which is why I prefer, them to use Messenger. Messenger won’t do that. But WhatsApp and Viber, they are defaulted to flick it through to your gallery. I don’t want these photos on my phone” (Renee).</p> <p>“You can put a woman in a very unsafe position. I will never, ever, ever e-mail any woman, ever, because you don’t know who is receiving that. And, that can cause immense unsafe situations, especially if it’s a young teen who’s not disclosed the pregnancy” (Irihapeti).</p>
	Balancing communications with maintaining work/life balance	<p>“I’ve really found that auto responder has been a game changer. I don’t have my notifications on at all for text messages. It doesn’t light up or anything. There’s not even a little symbol that says there’s a text messages. I have to go in to check my text messages. So that’s been really good” (Adrienne).</p> <p>“The pager gives a sense of separation The client rings the pager number, and then they talk to someone at the call centre. And then that call centre person will put a message across... if I’m off for the weekend or if I went on holiday or sleeping after a birth, my pager is off. So, I don’t have to deal with it. I know that it’s being covered” (Bella).</p>

Both Mary and Denise have highlighted the value with using technologies as a guide to determine whether a more thorough assessment is required. There is a recognition that communication technology has value in enabling connections to happen; however, it is about ensuring the balance is right, so that the essence of the relationship that midwives develop with their clients is not lost within the convenience of the technology.

So, getting the balance right with how midwives and their clients are using communication technology when communicating with one another is highlighted further when considering how to balance convenience of the technology with issues of privacy and confidentiality of client information.

Balancing Convenience With Privacy and Confidentiality

Midwives have identified the need to balance the convenience of receiving texts, photos, and use of electronic health systems, with ensuring privacy and confidentiality of information. While midwives take measures themselves with passwords and double

“The two need to come hand in hand and the two need to be at the table together. But I wouldn’t say they should be evenly at the table. The electronics should be about 40% and the people should be about 60%. And if you can get that balance about right, you’re actually showing respect and meaningfulness” (Irihapeti).

authentication, there was concern with who has access to this information and the security of these systems.

"I don't know how to protect the technology better. You have safeguards on your computer, you're trusting Apple security when you're using an iPhone and all the other Android phones, but there's people in positions of immense power that have access to sensitive data. If all my notes are digital, it means that anyone who is any bit clever can hack into that, and all that woman's information is there. That worries me and I don't think as a nation we are up to speed enough... I don't think we have it in health-care, and we've seen that because we've seen the DHB's [District health Boards] hacked out and closed out and held to ransom" (Linda).

On the other hand, Denise was quite pragmatic about security of information implying that security has always been a concern regardless of the mode in which it was sent.

"People contact me by email, and they say, people can get into Gmail and it's not secure. Well, people can get into your post if they want to go to your mailbox. And well, that it just is what we are living in these days" (Denise).

A particular issue identified by several midwives was around the storage of photos sent to them by their clients. While electronically being able to send a photo has been helpful for midwives in informing decision making, they are then downloaded and sit within the gallery on the midwife's phone. Midwives who were aware of this would take measures such as deleting them or negotiating with clients to use other platforms; for others, it came as a shock when they opened their photo gallery to find client's photos sitting there.

"...with What's App, the photo will get saved into your phone, and it becomes part of your photo gallery, so you do have to be quite careful. It is not great from a privacy perspective, and you have to be careful to delete them" (Bella).

"Some of the apps, once you open a picture, it's automatically downloaded onto my gallery, which is why I prefer, them to use Messenger.

Messenger won't do that. But WhatsApp and Viber, they are defaulted to flick it through to your gallery. I don't want these people's photos on my phone" (Renee).

The convenience for midwives with using communication technology to send emails, texts, or even leave voice messages needs to be weighed up with knowing who is receiving these messages. Midwives were aware of their role and the potential implications on a person who is pregnant in terms of privacy and confidentiality of information, especially when communicating in a non-face-to-face situation.

"You can put a woman in a very unsafe position. I will never, ever, ever e-mail any woman, ever, because you don't know who is receiving that. And, that can cause immense unsafe situations, especially if it's a young teen who's not disclosed the pregnancy" (Irihapeti).

"There are issues with calls, texting, especially with a lot of people have voice messages that don't have their name, or it will have someone else's name, but it is still their phone. How much information can I leave on this phone? Can I even say I'm a midwife? Does everyone know that you've had a baby or that you're pregnant?" (Jordan).

Midwives have acknowledged the convenience of using communication technology when connecting with their clients and the need to balance this through ensuring pregnant people's confidential information can be protected. Another area requiring balance was in the protection of midwives' personal space and the need to find a sustainable work/life balance.

Balancing Convenience of Connection With Sustainability (Work/Life Balance)

Midwives were very aware of the convenience of communication technology in enabling connections with their clients. They discuss with their clients early on in their relationship when it is appropriate to text or when a phone call is required and as such were aware of how technology can be used to sustain themselves in practice while ensuring there was always someone for the person to contact if they had urgent

concerns. One such convenience was the ability to set up autoreplies which enabled midwives to establish boundaries around sustaining a better work/life balance for themselves.

“I’ve really found that auto responder has been a game changer. I don’t have my notifications on at all for text messages. It doesn’t light up or anything. There’s not even a little symbol that says there’s a text messages. I have to go into check my text messages. So that’s been really good” (Adrienne).

There was convenience for midwives in having a phone which was able to use two SIM cards, with two separate numbers. This meant midwives were able to keep in contact with friends and family using one number, while keeping their work number separate. They would then set up an autoreply on the work phone number to maintain work/life boundary.

“I’ve got a dual SIM on my phone. So, I’ve got a work number, and the auto reply is only associated with my work phone number” (Renee).

For other midwives, having two phones meant there was a physical boundary between communications between their clients, friends, and family. They preferred to keep these two aspects of their life separate and would physically put their work phone away when off call to create this balance.

“I feel confident enough to have two phones and be able to put one in a drawer and not worry about it if I’m off call because that’s more to do with burnout and sustainability being able to not see stuff that’s going on when you are off call” (Adrienne).

Having a pager was a way for midwives to also create separation from work and personal life. It provided reassurance for the midwife that when they were off, clients were still able to contact another colleague.

“The pager gives a sense of separation. The client rings the pager number, and then they talk to someone at the call centre. And then that call centre person will put a message across... if I’m off for the weekend or if I went on holiday or sleeping after a birth, my pager is off. So, I don’t have to deal with it. I know that it’s being covered” (Bella).

Midwives were able to take different measures to create a boundary between work and personal life when using a mobile phone or pager with a contact number. Where maintaining work/life balance became problematic was when social media accounts were linked with a mobile phone. The ability to connect via social media accounts was problematic for midwives when clients used midwives personal accounts to connect with them. This required midwives to take measures through suggesting other ways for this communication to occur to protect their personal boundary space.

“I am a bit picky about Messenger. I’ll suggest a different one if I can unless I already knew them only because obviously it connects to your Facebook, so that’s not so boundary friendly...otherwise I’ll be like, ‘have you got Viber or WhatsApp?’ because then that’s not necessarily connected to your actual personal social media account” (Renee).

“And the other would be like Messenger with Facebook Messenger. I don’t have a business Facebook and they somehow reach my personal Facebook and start messaging me with it. I’m like contact me on my work phone” (Mary).

Midwives recognized the need to balance how they used communication technology with how they sustain themselves in practice. Balancing the workspace and the personal space can be a challenge for LMC midwives, particularly when technology platforms enable pregnant people to connect so easily and readily. Establishing boundaries to protect personal space was important especially in a world where instant connection is so accessible.

DISCUSSION

This article focuses on the theme “finding balance” which is what midwives appear to be weighing up when considering the quality of the relationships that midwives develop with their clients, the protections around client information, and the sustainability of midwives’ own practice in terms of ensuring work/life balance.

Getting the Balance Right

Midwives identified a need to ensure the balance is right when considering the convenience of using communication technology with the relationships that midwives develop with their clients. Floridi (2014) suggests that communication technology has not only changed how we communicate when using technology but also in the way people use the technology to communicate with one another. There is recognition within the literature that ethnicity may have an impact on the way people use communication technology (Kim et al., 2007; Urrutia et al., 2015; Zwimpfer et al., 2017). While ethnic or cultural differences that may impact how communication technology is used did not feature with the midwives in our present study, it is acknowledged that there may be differences with how technology is used and is an area that requires further investigation.

What was identified and commented on by participants was concern with the impact that reliance on technology might have with the potential for losing skills when interacting in a face-to-face in-person context. This concern was not unfounded given the evidence to support overuse of smart phones negatively impacting the quality of face-to-face interactions in areas outside of health care settings (Allred & Atkin, 2020; Botrugno, 2021; Rotondi et al., 2017). This is thought to be due to young people growing up within a digital environment and being less comfortable communicating or engaging in face-to-face interactions (Allred & Atkin, 2020). The concern with this type of communication and the relational aspect that goes with it is that communication is happening at a distance in what is described as a disembodied environment, which is devoid of nonverbal visual cues to assist with understanding communication (Kegley, 2018). When there is a lack of visual cues, there is the potential for misinterpretation of messages due in part to what Baggio (2016) describe as a two-dimensional space. In

contrast, for people who are socially awkward within face-to-face interactions, communication technology offers a space with which connections and communications can take place (Biglbauer & Lauri Korajlija, 2023). This highlights the importance therefore of negotiating and tailoring the use of communication technology to individual needs. The potential to misinterpret a message within a health context could have far greater concerns than say misinterpreting a message in a social environment.

Another aspect identified by midwives in the study concerning non-face-to-face communication was the anxiety that some people seemed to have with speaking over the phone. Again, this could be due to the increasing preference that people have for texting and communicating in this way (Pinchot et al., 2012; Swanson et al., 2018). So, while some people may be uncomfortable interacting in a “real-time” synchronous space, communication technologies would appear to provide opportunity for people to develop skills and hold space to enable effective communications to take place. Baggio (2016) would suggest that texting provides an anonymous way in which to communicate and therefore could impact on the way people express themselves. This was certainly identified by Sarah in the study when she commented on how eloquently her client was able to express herself via text in comparison to being in person. In an equivalent way, communication technology has enabled people to ask questions in a virtual environment that they cannot ask when face to face (Gasteiger et al., 2019; McCarthy et al., 2017; Wakelin et al., 2023).

While texting may offer a space for initial connections and questions to be asked, there is still value with in-person face-to-face contact when interacting with a midwife (Gasteiger et al., 2019). Swanson et al. (2018) also noted in their study exploring communication preferences of collegiate students aged 18–29 years that in contrast to Allred and Atkin’s (2020) study of university students, there was a preference for face-to-face interactions over the telephone as it offered people an opportunity to “pick up” on visual cues. This was identified by Amy in our study. While she found speaking over the phone difficult, she would much prefer face-to-face interactions as she could pick up visual cues from her clients. Lupton and Maslen (2017) comment on the importance of “sensory engagement” which involves visualizing, listening, and touching, along with asking questions to ascertain information to inform clinical decision making. Midwives in general rely on using

their senses when undertaking physical assessments, such as abdominal palpation or blood pressure. So, it is about finding the balance to ensure that the communication modes that are available are used in an appropriate way at the appropriate time. When getting the balance wrong, however, has implications on quality care for pregnant people as was identified in a recent case by the Health and Disability Commissioner in NZ, where a midwife was criticized for the advice given to a laboring person using text (Deputy Health and Disability Commissioner, 2023). Baggio (2016) suggests that just because there is convenience and familiarity with using technology to communicate, it does not mean people understand how to use it effectively. This has implications with the notion of always being connected and the ability to send a message at any time of the day or night. Just because something can be done, does it mean it should be, particularly when considering the impact this may have on boundaries between a midwife's private and work life. For example, one of the midwives in the present study reported on a client sending a text late at night about a scan appointment they had the next day. The midwife chose not to respond until the next day. Knowing when and how to disconnect from the technology is important for midwives to sustain themselves in practice.

Establishing and Setting Boundaries

Sustainability of midwifery practice within NZ has been an issue identified by midwives for many years and seems to focus around two areas: sustainability through the relationships that midwives develop with their clients and in boundaries around work/life practice (Gilkison et al., 2015; Leap et al., 2011; McAra-Couper et al., 2014; McLardy, 2002; Pace et al., 2022; Wakelin & Skinner, 2007). It is the latter that was a focus for midwives in this present study around how communication technology such as use of the autoreply message to texts which enabled them to sustain themselves through creating a better work/life balance. Pace et al. (2022) define the concept of work/life balance as "the midwife's ability to have time they personally required... for their own needs" (p. 225). It is important to point out that midwives negotiated with their clients on the appropriateness of the technology, being dependent on the concern. For example, with an urgent concern, pregnant people were asked to

call their midwife, whereas for nonurgent concerns, texting was appropriate. It was, however, the functionality of the technology (along with negotiating how the technology was to be used) that enabled the midwives in our study to set boundaries around creating a work/life balance and the lengths they would go to in finding a system that was going to work for them.

Geser (2004), in discussing the increasing usage of the cell phone, commented that "users gradually change habits and learn to apply the new technology for a growing variety of purposes and in a widening range of situations" (p. 7). While these comments were made 20 years ago, the ability to apply modern technology into a variety of purposes still stands today. The midwives in the present study identified two strategies that they adopt to sustain themselves in practice and create a better work/life balance. The first was in the use of autoreplies which were set up on their phone to respond to texts or phone calls (as indicated by Adrienne), and the second was in having two separate phones, one for work and one for family/friends (as highlighted by Renee). This choice appeared to be a personal one, and midwives who did not want to carry two phones, would instead use two SIM cards in one phone.

Challenges With Finding Balance

Midwives in this present study also identified challenges when trying to protect their work/life balance which was made more difficult through the ability for people to connect to the midwife through their personal social media accounts. Basevi et al. (2014) identified similar challenges with health professionals receiving friend requests or being contacted by clients. For the midwives in our study, this resulted in them taking measures to protect their own personal space by not engaging, indicating a more appropriate means for contact, or not using their own name when creating a social media account. Dual citizenship is the term referred to when people create different private or professional identities within the online space (Gagnon & Sabus, 2015). It highlights, once again, not only the convenience with which communication technology enables engagement and connection with others but also the need for balance when using the technology within a professional workspace and when considering the implications around privacy and confidentiality of people's information.

Midwives are very aware of the need to balance the convenience of communicating via text, email, or phone with the need to ensure privacy and confidentiality of client's information. This concern around privacy and the potential for breach of confidentiality has also been identified by general practitioners regarding text messaging (Leahy et al., 2017). What is different for the midwives in our study is that in providing continuity of care and in knowing their clients, they were able to take measures before texting, sending emails, or leaving messages on a phone unless they were certain that the person receiving the information is the person it was intended for. Further conveniences were highlighted with the ability to share and receive photos either from their clients or colleagues, which have similarly been found in other areas of health care (Nettrour et al., 2019). This ability to share photos through communication technology or store images in electronic notes has become what Botrugno (2021) describes as "the digitalisation process that patients' bodies are not only increasingly virtualised but also datafied, stored and accessed over the wire" (p. 7). One of the concerns, which was highlighted by Linda, is what happens with this sensitive private information that is now contained within an online format and who potentially has access to this.

The National Cyber Security Centre reports each year on the number of cyberattacks within NZ, both from national and international sources (Te Tira Tiaki, Government Communications Security Bureau, 2023). Within the 2020/2021 financial year, health care was a primary target, with the breach of patient data from one of the larger hospitals uploaded to the dark web (Health Informatics New Zealand, 2022; Ofshteyn et al., 2021). These malicious software attacks are designed to cause damage to a victims' computer or to organizations networks that provide services and require the user to pay a ransom to retrieve access to their data (Reshmi, 2021). While midwives are taking measures such as using pin codes, double authentication, or face recognition on their phone (Wakelin et al., 2023), once their phone is hacked, the information stored on it is then accessible to whoever gains access. This is concerning when considering that photos sent to midwives in some cases are automatically and unwittingly downloaded onto the midwife's personal photo gallery. This was a surprise to midwives in this present study who had chosen to use one phone with a separate SIM card to delineate between their

work and private lives. They had not appreciated that the photo gallery was associated with the phone and, therefore, photos did not differentiate between the two phone numbers.

The findings have highlighted the challenges that LMC midwives are faced with when trying to balance the convenience of the technology with ensuring privacy of information while, at the same time, trying to protect their personal boundary space. Irihapeti sums this up nicely when commenting "on the need for the two to come hand in hand and be at the table together." It is this weighing up and having awareness of the strengths and limitations of communication technology and then incorporating both into the kete of knowledge that midwives draw on when connecting with their clients.

Strengths and Limitations

A strength of the study is the mixed-method multiphase design which enabled the 14 midwives who took part in the online survey as part of phase 1 of the study to undertake interviews for phase 2. The issues identified in phase 1 of the study provided valuable information. They were able to expand on issues identified from phase 1 and provide further insights into the balance that is required by midwives when using communication technology with their pregnant clients.

Limitations, however, are recognized as this article focused on one theme that might lack contextual information when considered separate from other findings. There is potential that some context maybe missing such as detail exploring the importance of the continuity of care relationship and the impact this can have on the way midwives sustain themselves in practice. A further limitation to this present study is on focusing solely on how LMC midwives used communication technology with their pregnant clients. It is unknown whether the issues identified by the midwives in this present study would be similar for all midwives regardless of whether they work in the community or are hospital based.

CONCLUSION

Midwives have identified the balance that is needed when weighing up the convenience of using communication technology with the relational aspect of connecting with their pregnant clients and privacy and

confidentiality of client information. Communication technology is often touted as being problematic with the lack of face-to-face connection and connect ability 24/7. However, the midwives in our study have shown that communication technology is also part of the solution, particularly with the adoption of strategies used to assist midwives in maintaining a better work/life balance. Midwives are using the technology to find a balance between how they connect with their clients and how they sustain their work and private lives. It is this functionality that has been considered game changing for the midwives in our study. This balance and awareness are what helps contribute toward quality maternal and newborn care, through enabling midwives to practice in a more sustainable manner. Ethnicity or cultural differences were not reported on by midwives in this present study. It does, however, identify an area that would benefit from further research to understand the impact this may have and how balance is achieved through use of communication technology between midwives and their clients.

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