

# Safety and Pregnancy Massage: a Qualitative Thematic Analysis

Sarah Fogarty, PhD,<sup>1\*</sup> Rebecca Barnett, BA,<sup>2</sup> Phillipa Hay, PhD<sup>1</sup>

<sup>1</sup>School of Medicine, Western Sydney University, Campbelltown NSW, Australia, <sup>2</sup>Association of Massage Therapists, Broadway NSW, Australia

**Background:** Traditionally, safety and improving safety in the treatment of pregnant women has involved identifying risks that lead to errors or adverse events, and implementing strategies to mitigate potential harm. There is research that suggests that other factors such as a lack of service, lack of care or a lack of quality also contribute to participants feeling unsafe. Currently there is no evidence-based research on the psychological aspects of the safety of massage during pregnancy.

**Purpose:** The present study aim was to investigate women's perceptions and experiences of the safety of massage during pregnancy. This included exploring what attributes of the clinician or practice and events that occur during the massage helped pregnant women feel safe.

**Setting:** Phone interview with participants from Victoria, New South Wales and Queensland.

**Participants:** 20 women who received massage whilst pregnant.

**Research Design:** Qualitative design using thematic analysis.

**Results:** There were five main themes related to safety and massage: 1) Autonomy—able to voice my needs and be heard; 2) Pregnancy massage is more than just a massage; 3) When my therapist is experienced and qualified, I feel safer; 4) The continuity of the massage industry's message about the safety of massage; and 5) Decision-making around massage safety.

**Conclusions:** Safety is made up of not only the treatment that massage therapists provide, but also the environment they provide it in and how they administer both the treatment and the consultation. The lack of cohesion in messaging about the safety of massage during pregnancy makes women doubt the safety of massage.

KEYWORDS: Safety; massage; pregnancy

## INTRODUCTION

Safety is an important aspect of clinical care, both for the practitioner and the person living with the illness/condition.<sup>(1)</sup> Safety in clinical care involves both physical and psychological safety;<sup>(2)</sup> however, the focus of most research is around types and prevalence of adverse events.<sup>(3)</sup> Psychological safety and consumer perspectives have received less research focus but are just as important, with evidence indicating that clinicians and consumers (patients) define safety differently.<sup>(3)</sup> Clinicians "focus more on outcomes, whereas consumers may focus more on processes and interpersonal dynamics".<sup>(3)</sup> Psychological aspects of patient/client safety are also important, with research showing that patients may interpret service quality incidents such as delays, poor communication, poor coordination of care, and communication mistakes as safety problems, despite there being no resultant adverse event.<sup>(3)</sup> In addition, lack of information and communication, interpersonal care, patient/client vulnerability, loss of control, and perception of lack of experience and interest, were all factors that made patients/clients feel unsafe.<sup>(2)</sup> The consumer's perception of safety has the potential to influence the therapeutic alliance including trust and patient satisfaction, as well as influencing therapeutic outcomes such as treatment benefits and compliance.<sup>(3)</sup>

Traditionally, safety and improving safety in the treatment of pregnant women has involved identifying risks that lead to errors or adverse events, and implementing strategies to mitigate potential harm.<sup>(2,3)</sup> However, there is research that suggests that other factors such as a lack of service, lack of care or a lack of quality also contribute to participants feeling unsafe.<sup>(2,3)</sup> Pregnant women may seek treatment for

many symptoms during pregnancy such as backache, pain, nausea, sleeplessness, stress, and anxiety. Often pregnant women seek nonmedication-based treatment to relieve their symptoms due to decreased medication options during pregnancy and the postpartum period.<sup>(4)</sup> Complementary and manual therapies, such as massage therapy, are a sought-after treatment options. Up to 36.8% of Australian women are reported to visit a Complementary and Alternative Medicine practitioner during pregnancy, and close to half of those seek massage.<sup>(5)</sup> A 2019 study investigated the side effects and mother- or child-related physical harm from massage during pregnancy and the postpartum period;<sup>(6)</sup> however, currently there is no evidence-based research on the psychological aspects of the safety of massage during pregnancy.

Given that massage is a popular treatment and there is no robust research evidence on the psychological safety of massage during pregnancy and the postpartum period, this study used qualitative methods to investigate women's perceptions and experiences of the safety of massage during pregnancy. This included exploring what attributes of the clinician or practice and events that occur during the massage helped pregnant women feel safe.

## METHODS

### Participants, Ethics, and Recruitment

A sample of 20 women who had received massage during pregnancy was sought through purposive sampling. We aimed to recruit sufficient numbers to fully explore our questions and continued recruiting until no new data were forthcoming. A number of authors indicate that saturation often occurs around 12–15 participants.<sup>(7)</sup> More participants are required to ensure that saturation has been reached. It has been proposed that the 'sweet spot' for qualitative research numbers is 15–20 participants,<sup>(8)</sup> as this helps "improve open and frank exchange of information, and mitigates some of the bias and validity concerns inherent in qualitative research".

Potential participants were identified using the contacts and network of the study researchers. This network consisted of participants in past research studies that had consented to be contacted about future research projects, and massage therapists whom the researchers had worked/studied

with who promoted the study. Study details were distributed via email, social media, and flyers. Interested women contacted the study researchers to find out more and to participate. Potential participants were sent an information sheet, and given time to ask questions about the study and consider their participation. Women wishing to participate in the research provided consent (written or verbal), and then a time was made for the interview. An independent researcher not involved in the study conducted all interviews. The researcher conducting the interviews was neither a massage therapist nor a person working in the massage industry.

The participants sought for this research were women who had received a massage while pregnant. We were not investigating the massage therapists specifically, thus no identifying information about the massage therapist was asked. To limit the possibility of leading participants or formulating assumptions about correlation, causation, and coincidences, information about how many pregnancy massage treatments participants received, the number of therapists they saw, or the massage therapists qualifications was not asked specifically, although participants were free to respond about any of these areas if they impacted feelings of safety. It was assumed that the women would not have gone to see a massage therapist who was not a member of an association and who was not covered by insurance.

The Western Sydney University Human Ethics Committee approved the project: approval number H11891. To preserve confidentiality, pseudonyms replaced participants' names during the transcription and analysis phases.

### In-depth Interviews

In-depth interviews were undertaken to allow the researchers to explore a respondent's point of view, experiences, feelings, and perspectives around pregnancy massage and safety. Interviews were conducted one-on-one over the telephone, and the interviewer followed an interview schedule (see Table 1). Interviews were, on average, 23 minutes in length.

### Analysis and Data Interpretation

The qualitative data were analyzed using thematic analysis.<sup>(9)</sup> Qualitative data

TABLE 1. Interview Schedule

1. Can you tell me about your motivation for seeking massage during pregnancy or the postpartum period?
2. Tell me more about your decision making for getting a massage: when did you think to use massage (e.g., 1st, 2nd or 3rd trimester), what part of the body did you want massaged and were there any areas that you wanted to avoid? Did the massage practitioner avoid or recommend avoiding any areas?
3. Tell me about the factors that influenced your decision on where to go for your massage? What were the important features in deciding where to go for your massage?
4. What does patient safety mean to you?
5. Physical safety is important, but so is mental and emotional safety; what does feeling safe emotionally mean to you and what does it entail?
6. What makes you feel safe when receiving a massage?
7. What makes you feel unsafe when receiving a massage?
8. What attributes of the clinician or the practice make you feel safe when receiving a massage?
9. Was there anything that happened during your massage that made you or your unborn baby feel unsafe?
10. What really stands out as critical safety issues for you with massage during pregnancy and the postpartum period, and for what reasons are these important?
11. What are some specific massage experiences or events you have had that were good or bad during pregnancy or in the postnatal period? How did these effect your perception of safety?

were digitally recorded and transcribed verbatim, and then the first author read and re-read the data to immerse and familiarize herself with the depth of the data, and to ascertain and identify the key concepts.<sup>(9)</sup> Once identified, concepts were coded, data were sorted into potential themes that were reviewed and refined until the overall story, diversity, and patterns of meaning emerged.<sup>(9)</sup> The emerging themes were discussed with all members of the research team until consensus was reached. The research team consisted of two individuals involved in the massage industry and two experienced researchers not associated with the massage industry (one involved in mental health and the other in nursing). An inductive approach was utilized for analysis, as this method enables themes

to be derived directly from the text data rather than being preconceived.<sup>(9)</sup> Reflective continual internal dialogue and critical self-evaluation techniques were used by the principal researcher in recognition that she is a massage therapist who undertakes pregnancy massage and has beliefs and biases pertaining to the safety of pregnancy massage that may have affected the data interpretation.<sup>(10,11)</sup> This process involved personal self-supervision using a research journal with a continual process of reflection and self-evaluation about how the experiences, thoughts, and sensitivities of the therapist influenced and allowed a fuller engagement with the data and its interpretation.

## RESULTS

### Participant Enrolment and Characteristics

Participants (mean age 35.5 years (SD 4.2)) were all women who received massage while pregnant. Five of the women were pregnant at the time of their interview and were mean 27 (SD 4) weeks of gestation. Fifteen women were not pregnant at the time of their interview and the mean time since giving birth was 9.3 (SD 10.3) months. Twelve of the 20 women were primiparous when receiving their pregnancy massage. Nineteen of the women were Caucasian and one woman was Asian. All women had prior experience with massage before seeking a pregnancy massage.

There were five main themes related to safety and massage: 1) Autonomy—able to voice my needs and be heard; 2) Pregnancy massage is more than just a massage; 3) When my therapist is experienced and qualified, I feel safer; 4) The continuity of the massage industry's message about the safety of massage; and 5) Decision-making around massage safety. Participants felt that a number of aspects about the consultation and the therapist impacted on feeling safe. It was important to participants that they felt comfortable to voice their needs that they were seeing a therapist that specialized in pregnancy massage, that the therapist was experienced, and the therapist was able to speak to them in the language of pregnancy. The consistency in the message that massage therapists/clinics promote about pregnancy massage safety impacted participants feeling of safety. Strategies used to make decisions

about undergoing a pregnancy massage differed with participants.

## Five Safety & Massage Themes

### 1. *Autonomy—able to voice my needs and be heard*

There were a number of aspects of the consultation that impacted on participants feeling safe, heard and understood. Participants valued having the environment to be able to voice their needs and felt that this was particularly important as “you are vulnerable, especially with your first [child]” (Participant 11 and 18).

“I felt like I could ask any question and I would get an answer that wasn’t just, ‘Oh yeah, we want your business’; it was more, yes, we want you to be comfortable and for you to have the best experience (Participant 7).

“[The massage therapist] made sure I was happy with what work she was going to do and she said ‘if at any point you don’t want me to do this just say so’” (Participant 5).

Participants felt that the consultation was an important aspect of being listened to by the massage therapist and being understood, which contributed to participants feeling safe (Participant 11 and 15).

“[The massage therapist] was really thorough. She got me to fill out a really extensive form; she understood where I was coming from and my concerns” (Participant 5).

“The first thing (that made me feel safe) was talking with the massage therapist and them listening to where I was at and exactly what I was experiencing, and feeling heard” (Participant 7).

It was important to participants that they were continually involved in the treatment decisions each visit, and that the therapists did not assume that the same treatment as last time was okay.

“She [the massage therapist] was very respectful of the belly, like she wouldn’t just massage it, she asked me ‘How comfortable are you with me touching your belly?’ and each time, ‘Do you want

me to do that again, how was that?’” (Participant 9).

Some participants felt uncomfortable during their massages and, when this occurred, they did not feel able to voice their discomfort.

“I didn’t have the courage or the confidence to ask them to stop” (Participant 11, when getting a massage on an area she wasn’t comfortable with).

“I wish I could have spoken up a little bit more...I should have asked them to stop (Participant 17).

### 2. *Pregnancy massage is more than just a massage*

Pregnancy massage was interpreted as a term that involves more than just a massage on a pregnant woman, with participants indicating that they viewed pregnancy massage as “a specific skill” (Participant 19). Pregnancy is a unique condition and participants emphasized the importance of seeking a therapist who has more than a cursory knowledge of pregnancy. This included the “therapist’s knowledge of stages of pregnancy and positioning to match stages of pregnancy” (Participant 12), and “awareness of the way the body changes during pregnancy” (Participant 14). Participants felt that “the body is so different when pregnant, knowledge of that, rather than expecting me to be a ‘normal’ person” (Participant 20), was crucial when going to get a pregnancy massage. Pregnancy massage was viewed as more than just a ‘normal’ massage on a pregnant woman even when it was administered by a qualified and experienced remedial or relaxation massage therapist.

“...people do massage while someone is pregnant but it is not pregnancy massage” (Participant 17).

“I think it would have made me feel uncomfortable if I was getting a generic approach to my massage when, obviously, I was in a very particular physical condition, where I felt a more specialized approach would be safer” (Participant 1).

The participants felt that some clinics/practitioners used pregnancy massage as a marketing tool to increase their business,

but that they did not have specific training in pregnancy massage: “They sold it as pregnancy massage, and I still go to them now, but I doubt they were properly trained” (Participant 18), and “They claimed to know about pregnancy massage, however I don’t know that they actually did; they just sold it” (Participant 9).

### **3. When my therapist is experienced and qualified, I feel safer**

The experience and qualifications of the massage therapist impacted how the participants felt safe in a number of ways. The clients wanted a specialist/expert in pregnancy massage, and they viewed qualifications as an integral part of being an expert and pregnancy massage as a specialty which was highly sought-after, as explained by Participant 11: “You definitely want to go to someone that has some kind of training in pregnancy massage when you are so heavily pregnant.”

Having a therapist who is qualified did impact how participants felt, with participants feeling safer and being reassured and less anxious when they were seeing an expert.

“As soon as I feel like I am dealing with a professional, it takes a lot of the anxiety away” (Participant 3).

“Qualifications make me feel safe; knowing that they have qualifications, knowing what they have done, is a reassurance” (Participant 5).

Participants voiced their concerns about seeing a nonqualified pregnancy massage therapist, and how seeing a nonpregnancy qualified therapist led them to feel unsafe and uncomfortable, such as Participant 13 who “had a pregnancy massage from a remedial massage therapist and it was uncomfortable, and they made me lie on my stomach and I didn’t relax properly”; and Participant 18 who “didn’t feel comfortable with ‘the people down the road’ and not wanting them to touch my lower back”.

Concerns were also raised by participants about aspects of the massage with a nonqualified pregnancy therapist, such as the firmness of the massage with Participant 18, “feeling safe with firm massage with a qualified therapist”, and concerns about the areas the therapist worked on “because you have to be quite careful about where you are pressing” (Participant 4).

In addition to qualifications, experience was an important aspect for pregnant women and they sought out therapists who were experienced in pregnancy massage, which provided participants with comfort and made them feel safer, such as Participant 18 who felt that “experience speaks volumes as well, you just feel safer with someone who is experienced”.

This was reiterated by Participant 3 who felt that “it brought a lot of comfort for me knowing that this was the type of patient they treated all day, every day”. This was similar for other participants who felt “treating pregnant women frequently was an important part of the practice” (Participant 12 and 18).

Experience and qualifications were particularly important in making participants feel safe especially if there were issues such as previous loss, uncertain test results, discomforts or conditions related to pregnancy. Participants wanted a therapist who “understood what the body was going to go through physically and emotionally” (Participant 12).

“... she (the massage therapist) understood the risks of pregnancy and changed her techniques, which made me feel safe” (Participant 16).

“In the first trimester, there were a few hiccups where we thought that we could have lost bubs, so it was a pretty hard time, so that definitely contributed to the fact that I wanted someone who knew what they were doing” (Participant 5).

Qualifications and experience were not limited just to the massage itself, but also to the massage set-up. The fact that the room and the massage were specifically tailored to the pregnant client, especially the massage table and the client’s positioning, was reassuring and important to the participants.

“It wasn’t just the massage (pregnancy massage), it was the way that you were handled, the way they put you on the bed. It was very comfortable, you felt much more cared for and very safe” (Participant 12).

“I did want to target someone who specifically knew how to deal with a heavily pregnant person; it was about positioning” (Participant 9).

“The way the room was set up and them explaining to me why they were positioning me in a particular way, what they would be doing, and how things would actually progress through the massage” (made me feel safe) (Participant 7).

#### **4. The continuity of the massage industry’s message about the safety of massage**

Participants did not receive a seamless narrative about the safety of massage and, as a result, they felt uncomfortable and started doubting the safety of massage when they received inconsistent messages from massage professionals. Some massage “places seem to have different rules, some say no to first trimester, some to second trimester, and some to third trimester, so I didn’t like the inconsistencies and didn’t know which one was right” (Participant 2), and some “therapists refused foot massage when I was pregnant” (Participant 8).

These different messages about the safety of massage made participants doubt the safety of massage.

“Yeah, well, obviously there is a lot of people that don’t want to massage pregnant woman, so that kind of put a little bit of like, not doubt, but it made me a bit more wary of where I go. So I wanted to make sure they knew what they were doing” (Participant 19).

“I went to a massage therapist and was told that it is best not to massage a point on the trapezius too hard, but then I have been to other therapists who have said otherwise...but once that person said that to me, it definitely got me thinking” (Participant 6).

Some participants were told specific risks associated with massage such as “massage can release toxins that can, I think they said, that massage was a risk to miscarriage during the first trimester if they perform massage” (Participant 10).

#### **5. Decision-making around massage safety**

Many participants ‘Googled’ the term “pregnancy massage” and via this they were aware of the ‘risks’ of pregnancy massage, including the following concerns: “Deep tissue and stone therapy can release toxins into the body and that is not good for

the baby” (Participant 5); “There are some things that you shouldn’t get massaged when pregnant as it will put you into labor” (Participant 1).

The effect of social media content was mixed with some participants being influenced negatively and feeling nervous, worried or avoiding massages altogether in certain trimesters, particularly first trimester (Participant 12 and 19).

“I was nervous initially in the first trimester as they (Google) say it can bring on labor” (Participant 9).

“I didn’t want them to touch near the points used for early labor, worried about miscarriage or inducing early labor; I felt unsafe about these areas” (Participant 18).

Whereas, for other participants, they knew of apparent risks of pregnancy massage but social media content did not influence their feeling of safety of massage.

“I did research as lots of friends and therapists said they wouldn’t get massage at certain stages, but I spoke to people rather than ‘Googling’” (Participant 7).

“I researched the benefits of massage during pregnancy and I was confident in my own decision that it was, that there were plenty of benefits, and even though people do associate risks with pregnancy massage, that is why I took care in choosing the place that I went to” (Participant 10).

## **DISCUSSION**

Our study found that safety was important for pregnant women, and there were a number of factors that impacted their feeling of safety, many of which would not classically be labeled unsafe practice. These included the practitioner’s level of experience and expertise, asking specific pregnancy questions, and the importance of the consultation.

The importance of autonomy is reflected in our study findings, specifically being able to voice if something made the client/patient feel uncomfortable and feeling listened to. It may be that the practitioner’s inability to hear the needs of the

client and or the client's vulnerability (i.e., inability to act and the client-practitioner power differential) contributes to women feeling that they were not able to voice their discomfort and ask their massage therapists to stop treatment. Our findings may be understood within the framework of Spiers emic perspective of vulnerability, which is an experience or a state of being threatened and a feeling or fear of harm which she defined as an "individual's perceptions of self and challenges to self, and of resources to withstand such challenges define vulnerability" (p.719).<sup>(12)</sup> The emic theory of vulnerability includes a number of key constructs, such as lack of capacity for action and power differentials, which may constrain a person's ability to express vulnerability.<sup>(12)</sup>

While vulnerability is an individual experience,<sup>(12)</sup> our study findings indicate that it was common for women to feel vulnerable and be anxious for their unborn child. First-time mothers have been identified as a potentially vulnerable group,<sup>(13)</sup> and this was particularly noticeable in our cohort with first-time mothers and women with a history of issues or potential issues with their unborn child. Vulnerability is influenced not only by the above factors, but also by expertise and knowledge,<sup>(2,13-15)</sup> and by massage therapists capacity to use reparative processes.<sup>(13)</sup> In this context, the reparative process is the restoration of damaged muscle tissue by the healing processes of massage. Our study findings indicated that experience and expertise were important attributes in pregnant women feeling safe. A practitioner who has received training in pregnancy massage and has experience should be better able to identify the appropriate treatment required to instigate a reparative process in their clients than those with no training. In addition, the consultation, the language used during the consultation, and the set-up of the massage room all lead to the perception that the massage therapist is trained, knowledgeable, and competent in pregnancy massage, and thus pregnant women feeling safer.

Pregnant women received mixed messages about the safety of massage and these mixed messages lead to women feeling unsafe about massage during pregnancy. Ideally, all providers of pregnancy massage and the wider industry (e.g., massage associations and massage educators) need to provide some cohesion

about the safety of massage during pregnancy. The simplest way to do this is via research that looks specifically at pregnancy massage safety, especially around areas highlighted as potentially unsafe such as first trimester pregnancy massage and massage leading to preterm labor. If such research can be undertaken, it should include how the research will be translated into practice and how the massage industry can share a cohesive message around massage safety.

The study findings indicate that pregnant women were aware of the risks of massage, but were influenced by different sources of information in making decisions about the safety of massage. Pregnant women are able to source a plethora of information during pregnancy from multiple sources, yet not all pregnant women have the health literacy to be able to "extract health information from various sources, evaluate the information, and apply it to their own individual situation to derive maximum benefit to their health" (p. 14).<sup>(16)</sup>

### Clinical Implications

This study provides some information about what makes pregnant women receiving massage feel safe. Having a therapist who conveys that they have specific training and expertise in pregnancy expertise is very important. Our findings also suggest that utilizing a range of approaches to disseminating health information about massage during pregnancy, via varied sources such as written information, mobile phone apps, blogs, and websites, is important to ensure that information meets clients at their level of understanding, and that using varied approaches rather than just verbal communication could enhance health literacy.<sup>(16)</sup>

It is important for massage therapists treating pregnant women to be aware of the environmental, interactional, and educational factors that contribute to a feeling of safety during a pregnancy massage treatment so as to provide the safest possible consultation and treatment

### Limitations

The study did not investigate pregnant women who did not choose to seek a massage during pregnancy due

to concerns about safety, so these study findings reflect the experiences of women who felt safe to seek a massage whilst pregnant. Future research could use triangulation by interviewing the massage therapists, as well. The recruitment process involved the colleagues of researcher Sarah Fogarty, all of whom are members of registered massage associations, with the majority have training in pregnancy massage. Thus, the study participants are predominately women who received massage treatment from pregnancy massage trained therapists.

## CONCLUSION

Safety is comprised of not only the treatment that massage therapists provide, but also the environment they provide it in and how they administer both the treatment and the consultation. This study has identified features of practice that made women feel psychologically safe, such as experience and expertise, autonomy, feeling listened to, the importance of the consultation, and including specific pregnancy questions at intake. The lack of cohesion in messaging about the safety of massage during pregnancy makes women doubt the safety of massage.

## ACKNOWLEDGMENTS

Thank you to the Association of Massage Therapists for funding the study. Thank you to all the women who gave up their time to participate in the research.

## CONFLICT OF INTEREST NOTIFICATION

This study was funded by the Association of Massage Therapists. The Association was not involved in the analysis of the results nor the study findings. Phillipa Hay receives sessional fees and lecture fees from the Australian Medical Council, *Therapeutic Guidelines* publication, and New South Wales Institute of Psychiatry, and royalties from Hogrefe and Huber, McGraw Hill Education, and Blackwell Scientific Publications, and receives support from Shire Pharmaceuticals for speaking engagements. Sarah Fogarty is a practicing massage therapist. Rebecca Barnett is the CEO of the Association of Massage Therapists.

## COPYRIGHT

Published under the [Creative Commons Attribution-NonCommercial-NoDerivs 3.0 License](https://creativecommons.org/licenses/by-nc-nd/3.0/).

## REFERENCES

1. Gaal S, Verstappen W, Wensing M. Patient safety in primary care: a survey of general practitioners in The Netherlands. *BMC Health Services Res.* 2010;10(1):21.
2. Kenward L, Whiffin C, Spalek B. Feeling unsafe in the healthcare setting: patients' perspectives. *Br J Nurs.* 2017;26(3):143–149.
3. Rathert C, Brandt, J., Williams, E. Putting the 'patient' in patient safety: a qualitative study of consumer experiences. *Health Expectations.* 2012;15(3):327–336.
4. Hall HR, Jolly K. Women's use of complementary and alternative medicines during pregnancy: a cross-sectional study. *Midwifery.* 2014;30(5):499–505.
5. Frawley J, Adams J, Sibbritt D, Steel A, Broom A, Gallois C. Prevalence and determinants of complementary and alternative medicine use during pregnancy: results from a nationally representative sample of Australian pregnant women. *Austral New Zealand J Obstetr Gynaecol.* 2013;53(4):347–352.
6. Fogarty S, McInerney C, Stuart C, Hay P. The side effects and mother or child related physical harm from massage during pregnancy and the postpartum period: an observational study. *Complement Ther Med.* 2019;42:89–94.
7. Guest G, Bunce A, Johnson L. How many interviews are enough? An experiment with data saturation and variability. *Field Methods.* 2006;18(1):59–82.
8. Crouch M, McKenzie H. The logic of small samples in interview-based qualitative research. *Soc Sci Info.* 2006;45(4):483–499.
9. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol.* 2006;3(2):77–101.
10. Finlay L. Negotiating the swamp: the opportunity and challenge of reflexivity in research practice. *Qual Res.* 2002;2(2):209–230.
11. Berger R. Now I see it, now I don't: researcher's position and reflexivity in qualitative research. *Qual Res.* 2015;15(2):219–234.
12. Spiers J. New perspectives on vulnerability using emic and etic approaches. *J Adv Nurs.* 2000;31(3):715–721.
13. Briscoe L, Lavender T, McGowan L. A concept analysis of women's vulnerability during pregnancy, birth and the postnatal period. *J Adv Nurs.* 2016;72(10):2330–2345.
14. Kelly C, Alderdice F, Lohan M, Spence D. 'Every pregnant woman needs a midwife'—the experiences of HIV affected women in maternity care. *Midwifery.* 2013;29(2):132–138.



15. Shakespeare J, Blake F, Garcia J. Breast-feeding difficulties experienced by women taking part in a qualitative interview study of postnatal depression. *Midwifery*. 2004;20(3):251–260.
16. Hussey L, Frazer C, Kopulos MI. Impact of health literacy levels in educating pregnant millennial women. *Int J Childbirth Edu*. 2016;31(3):13–18.

**Corresponding author:** Sarah Fogarty, PhD, School of Medicine, Western Sydney University, PO Box 8218 Ferntree Gully, Victoria, Australia 3156  
**E-mail:** s.fogarty@westernsydney.edu.au