

## ORIGINAL RESEARCH ARTICLE

# What it does and does not do: Effects of ultrasound viewing on women's intention to terminate a pregnancy

DOI: 10.29063/ajrh2023/v27i3.9

Botshelo R. Sebola

Department of Health Studies, University of South Africa, PO Box 392, Pretoria, South Africa

\*For Correspondence: Email: [brsebola@gmail.com](mailto:brsebola@gmail.com); [sebolbr@unisa.ac.za](mailto:sebolbr@unisa.ac.za); Phone: (+27) 798200125

### Abstract

Ultrasound imaging is a renowned prenatal technology used globally to assess foetal growth, viability and abnormalities. In South Africa, ultrasound viewing has not been made mandatory for women who want to terminate their pregnancies. The purpose of this study was to provide a deeper understanding of the effects of ultrasound viewing on women's intention to terminate their pregnancies. Fifteen women in their first trimester were recruited for the study from a community health centre mandated for abortion. Van Manen's hermeneutic phenomenological analysis method was adopted for the study. Three major themes emerged from the data analysis: motivation beyond ultrasound viewing, the emotional burden of the experience, and viewing the ultrasound image as punishment. The study concluded that even though most participants reported the ultrasound viewing negatively affected their person, their reason for termination was so strong that they would not change their minds. However, the ultrasound viewing helped three participants to earnestly reflect on their situations, weigh the pros and cons, and subsequently decide to continue their pregnancy. (*Afr J Reprod Health 2023; 27 [3]: 71-76*).

---

**Keywords:** Hermeneutic phenomenology, intention to terminate a pregnancy, South Africa, ultrasound images, women

---

### Résumé

L'imagerie par ultrasons est une technologie prénatale renommée utilisée dans le monde entier pour évaluer la croissance, la viabilité et les anomalies du fœtus. En Afrique du Sud, l'échographie n'est pas obligatoire pour les femmes qui souhaitent interrompre leur grossesse. Le but de cette étude était de mieux comprendre les effets de l'échographie sur l'intention des femmes d'interrompre leur grossesse. Quinze femmes dans leur premier trimestre ont été recrutées pour l'étude dans un centre de santé communautaire mandaté pour l'avortement. La méthode d'analyse phénoménologique herméneutique de Van Manen a été adoptée pour l'étude. Trois grands thèmes ont émergé de l'analyse des données : la motivation au-delà de la visualisation de l'échographie, le fardeau émotionnel de l'expérience et la visualisation de l'image échographique comme une punition. L'étude a conclu que même si la plupart des participants ont déclaré que l'échographie avait eu un effet négatif sur leur personne, la raison de leur licenciement était si forte qu'ils ne changeraient pas d'avis. Cependant, l'échographie a aidé trois participantes à réfléchir sérieusement à leur situation, à peser le pour et le contre, puis à décider de poursuivre leur grossesse. (*Afr J Reprod Health 2023; 27 [3]: 71-76*).

---

**Mots-clés:** Phénoménologie herméneutique, intention d'interrompre une grossesse, Afrique du Sud, images échographiques, femmes

---

### Introduction

Ultrasonography is a socio-methodical practice<sup>1</sup>, facilitating interaction between women and the image presented by a healthcare professional. This changes the fact that women are in control, as the knowledge obtained is not independent<sup>2</sup>. Ultimately, the intent of viewing the ultrasound is for women to see the fetus as a person and not just a collection of cells. The assumption is that all women want to be mothers, excluding women who see pregnancy as an intrusion to their body image and independence, thus establishing a woman as an opponent to her womb<sup>3</sup>.

Although the National Clinical Guidelines for Implementation of the Choice on Termination of Pregnancy Act<sup>4</sup> in South Africa highlight that ultrasound is not required for TOP, where it is available, women have the right to view the image. Besides, clinical assessment of gestational age that tallies with the last menstrual period is acceptable where ultrasound is unavailable<sup>4</sup>. However, ultrasound viewing in South Africa is not mandatory<sup>4</sup>. In many countries, viewing the ultrasound image prior to TOP is part of antenatal care<sup>5</sup>. Healthcare personnel who perform abortions routinely use ultrasound scans to confirm their

patients' pregnancies, check for multiple gestations, and determine the stage of the pregnancies<sup>6</sup>. In the United States of America (USA), the National Abortion Federation's Policy Statement guidelines<sup>7</sup> – as the professional association of TOP providers – stipulate the use of ultrasound is not required for first-trimester abortion care, though it is recommended for clinical decision-making. Some states mandate women undergo an ultrasound before consenting to TOP, but the women have the option to view or not view the image themselves<sup>6</sup>. Other states oblige the physician to display the ultrasound image and describe the fetus to the mother<sup>6</sup>. The law in a few states allows women not to view the image if they so wish, but still forces the physician to display and describe the image to them<sup>8</sup>. These laws are enforced despite the absence of any identified medical need.

Some studies have argued that an ultrasound viewing is unnecessary, but physicians continue to perform ultrasounds on women seeking an abortion as standard practice<sup>8</sup>. There is a strong belief in the extant literature that viewing the ultrasound could dissuade women from terminating the pregnancy, as they would view the image as a living being<sup>9</sup>. Debates on the merits or demerits of ultrasound viewing as a noble practice thus continue, but its effects on women's intention to terminate are not wholly known, illustrating the need for this study.

### ***Problem statement***

The effects of viewing and receiving explanations of ultrasound images on women's decision to terminate a pregnancy are unknown. While ultrasound sonography is commonly used for TOP care in some clinics in South Africa, the setting of this study, there is a general absence of published empirical work exploring what effects ultrasound viewing has on women who intend to terminate their pregnancy, reflecting the need for this study.

### ***Purpose***

The aim of this study was to explore the effects of ultrasound viewing on women's intention to terminate a pregnancy.

### ***Research question***

This study purports to answer questions regarding ultrasound viewing effect or its lack of effect on

women's intention to terminate a pregnancy. The research question was thus: How does ultrasound viewing affect women's intention to terminate a pregnancy?

## **Methods**

A qualitative, explorative research design grounded in Van Manen's hermeneutic phenomenological approach was used for this study<sup>10</sup>. Basic lifeworld constructions are crucial in empirical research<sup>10</sup>. Van Manen's emphasis is on the lived space, lived body, lived time, and lived human relations as being helpful to the reflective process<sup>11</sup>. The approach allowed the researcher to delve deeper and gain an understanding of the details of the effects of ultrasound viewing on women's intention to terminate their pregnancies.

### ***Recruitment and participants***

The purposive sampling technique was used to recruit participants for the study. Participants were therefore selected based on who would most advantage the study by addressing the study's focus<sup>12</sup>. Fifteen participants were recruited from the community health centre (CHC) offering pregnancy termination services. Of the 15 participants, 12 were individually recruited by the researcher after they underwent ultrasound imaging and pregnancy termination. The researcher was introduced to the women by the TOP clinic manager on their post-TOP follow-up day, that is, 2 weeks after TOP. Twelve women agreed to participate after the researcher explained the contents of the information leaflet and the consent in their preferred language. For variation of viewpoints, six women who underwent ultrasound scanning but never turned up for the TOP procedure were traced through clinic records<sup>12</sup>. Of the six, three were not traceable (two did not answer the telephone, and one did not have a telephone number), while the other three were contacted telephonically by the clinic manager, who introduced the researcher and the study to them. The researcher then explained the study to each and they all agreed to participate. To be included in the study, the women had to be 10 years or older, willing to participate in the study, had undergone ultrasound imaging at 12 weeks' gestation (or less), and attended a CHC designated as an abortion clinic in South Africa, Tshwane district. All the women had

to be conversant in one of the 11 official languages of South Africa and able to reflect in-depth on their ultrasound viewing experience.

Fifteen women aged 20-35 were included in the study and met all the inclusion criteria. Twelve women had undergone TOP, and three had decided not to terminate their pregnancies. All the women signed the consent form after the researcher thoroughly explained it and they chose to be interviewed at the CHC. Their transport money was fully reimbursed by the researcher after the interviews. Seven participants reported being coerced by their partners to terminate, so they went through with TOP. Three participants feared their parents and felt they should go through it, while two participants terminated of their own accord, one mentioning body image as her motivation while the other felt she was not ready for motherhood.

### **Data collection**

In-depth interviews were conducted between May and June 2022 with 15 women who met the study's inclusion criteria. Seven of the women were interviewed twice to promote the researcher's understanding, validate what had been captured, and create an opportunity for participants to elaborate on their experiences if they wished to do so. The individual interviews lasted for 40 to 60 minutes and were conducted in a designated office at the CHC. An interview guide was prepared before data collection commenced to ensure all participants were asked about the effects of ultrasound viewing on their decision to terminate a pregnancy. Participants were encouraged to freely share how viewing the ultrasound image prior to TOP affected them. All interviews followed a broad statement: "Please tell me how viewing the ultrasound image affected your decision to terminate a pregnancy".

### **Data analysis**

The data of the entire audio-recorded interviews was manually transcribed verbatim into written text. Van Manen's hermeneutic analysis method was used to analyse the data<sup>11</sup>. This approach enabled the researcher to look at the data as a whole as it enabled an exploration of vital facets of the phenomenon. The researcher read the interviews, and a colleague who is an expert in qualitative research read all 15 transcripts independently; they came to an

agreement on the preliminary themes. Both then searched for the essential meaning of the phenomenon, which produced three major themes: the motivation beyond ultrasound viewing, the emotional burden of the experience, and viewing the ultrasound image as punishment.

### **Ethical considerations**

The University of South Africa, Department of Health Studies scientific review committee and the ethical committee of the College of Human Sciences approved the research (HSHDC/870/2018). The study was also approved by the National Department of Health South Africa's review board (NHR Ref. GP\_201906\_006), and the management of the CHC gave the researcher permission to conduct the study at their facility. The study followed the Declaration of Helsinki's principles<sup>13</sup>. Confidentiality and anonymity were safeguarded, and participants' identities were preserved.

### **Results**

The study's findings represent the views of 12 women who terminated a pregnancy at the CHC and three who changed their minds about TOP and never terminated. All 15 participants viewed their ultrasound images. Three major themes emerged from the data analysis: the motivation beyond ultrasound viewing, the emotional burden of the experience, and viewing the ultrasound image as punishment.

#### **Motivation beyond ultrasound viewing**

Despite the challenges imposed by ultrasound viewing, the three women who decided not to terminate did not lose hope about their support systems and that somehow things would work out. Three stories of encouragement thus emerged, including one of not feeling good about TOP.

Participant 18 was convinced she needed family support. She shared:

*"I did see the image on the screen. Ijoo!! I was frightened by the fact of having a baby ... asking myself how will I raise this child when I am without a job because even my partner is not always around. But now I am 'sharp' because ...they accepted it. My*

*partner also supports me. I decided... if they accepted and supported me I would not continue with TOP, but if they don't accept it I was going to continue with termination. But still I was not feeling good about aborting. I feel better because family accepted. But I keep asking myself about how the future will be. Thinking about aborting the pregnancy made me sad. So far all is well"* (P18: 22 years old).

Participant 19 also elaborated:

*"Me and my husband had just divorced. I got involved with another partner and immediately fell pregnant...we haven't been long enough together and I am already pregnant. I did not understand this man yet. So, I decided to go for abortion"* (P19: 34 years old).

Further exploring what caused her to change her mind about TOP, she shared:

*"I have always wanted another child... I was happy because I could see there was a baby on the screen. Before, I believed I had no more babies because my eldest was 9 years. Initially I wanted to abort because ...with the coming baby my life would be heavy ... raising a child without a job. So, I decided to abort... when I saw there is a baby and also hoping to get a job, I felt I could raise this baby."* (P19: 34 years old).

Participant 20's reason for continuing with her pregnancy was unrelated to viewing the ultrasound. She mentioned:

*"I had issues with the father of my first born child. So, I had a relationship with another guy and I fell pregnant. I was to abort if the new boyfriend made me pregnant or to keep the pregnancy if it was my old partner. I was not connecting the dots as to who is the father of the pregnancy. I was afraid to ask the sister at the abortion clinic about this. She was unfriendly to me. So, after sonar I went to see a private doctor about the pregnancy age. The doctor clarified the pregnancy belonged to the father of my first child. So, I was keeping the pregnancy."* (P20: 23 years old).

### ***The emotional burden of the experience***

Participants reportedly experienced various emotions after viewing the ultrasound image. A

participant said the viewing brought many emotions into focus for her:

*"The nurse told me I am 11 weeks pregnant and that I have only one week to change mind. I started debating on when and how I conceived. It was made worse when the nurse told me that it's my little gal and I need to decide. I went from an abnormal elation to extreme sadness, after all I had to terminate this pregnancy"* (P1: 20 years old).

Another reflected:

*"What I saw was real, but I could not continue with this pregnancy. Keeping it will disgrace my family but fulfil my dream of one day being a mother. Maybe this is the last time I will conceive. I had many thoughts, it was not easy for me. In the end, I terminated"* (P4: 23 years old).

### ***Viewing the ultrasound image as punishment***

Some participants reported that viewing the ultrasound image felt like a punishment for their intent to abort. They mentioned that healthcare professionals personalised and spiritualised the image, referring to it as an innocent baby, 'your little boy or girl', and this tormented them. Two participants relayed:

*"I had to do an ultrasound because I needed to assure myself that I am not carrying a life child yet. The nurse who showed me the ultrasound exclaimed that 'See, there is a heartbeat' I looked away and cried but I knew I had to do it. I also felt the nurse was actually driving me to not go through my intention to abort"* (P12: 30 years old).

*"Before the termination and before seeing the image on the sonar I was not feeling that bad. But after seeing the sonar and being told the baby was 7 weeks, the truth was revealed – that it was a baby. I started feeling really bad about aborting. Even after abortion I was feeling bad but I accepted what happened"* (P6: 28 years old).

## **Discussion**

The aim of this study was to explore the effects of ultrasound viewing on women's decision to

terminate, from the perspectives of women who viewed the ultrasound image. The findings emanated from Van Manen's hermeneutic phenomenological analysis<sup>10,11</sup>, and the discussion follows Van Manen's fundamental lifeworld existential philosophy.

Most women in the study were initially confronted with situations they would not overcome after childbirth. Hence, pregnancy termination, according to them, was the sole solution to their crisis. However, three women reflected deeply on their reasons for termination after viewing the ultrasound images, and they embraced alternative solutions to termination.

Of the three participants who decided not to terminate their pregnancies, one confronted her family to reveal her pregnancy. After the family accepted and promised their support, she no longer viewed TOP as an option. Another participant who doubted her child's paternity decided not to terminate but verify paternity through a physician. The third participant was happy to discover she was pregnant since she thought she would never conceive, but she planned to abort due to financial constraints. After deep reflection on a promised job, she decided to continue the pregnancy.

Even though the three narratives were not directly related to ultrasound viewing, these reflections were possibly reinforced by the viewing experience. It is evident that some participants in the current study reported to the TOP clinic while still weighing their options, though most were already convinced about terminating, even after viewing the ultrasound. These outcomes align with the findings of a mixed-method study evaluating the impact of mandatory pre-abortion ultrasound viewing laws<sup>6</sup>. In their study, of the 23 interviewed women who viewed the ultrasound image, most indicated no effect on their abortion decision. Two participants reported the viewing experience influenced their decision to continue the pregnancy despite pre-existing decision uncertainty<sup>6</sup>. Similarly, in a study on the relationship between ultrasound viewing and proceeding to abortion, it was concluded that ultrasound viewing before TOP seldom causes women to change their abortion plans<sup>14</sup>.

The women's body image and their readiness to be mothers were other factors that some participants considered. Humans identify with their own bodies<sup>11</sup>. One of the participants in this study who

terminated a pregnancy thus referred to the resulting changes in her body, and she perceived pregnancy as affecting her body image. Another participant perceived her pregnancy as a confirmation of her ability to conceive, and had she not feared her parents, she would have embraced these physical changes.

The participants felt emotionally burdened by the roller-coaster feelings they experienced. Previous studies<sup>5,15</sup> have reported that women faced with the decision to terminate a pregnancy experience a conflict of feelings related to the current reality of their lives. In this study, emotions related to parental fear, body image and partners were the realities that drove participants' decision to terminate or not terminate their pregnancy.

Through lived human relations, humans strive to engage in relationships with others<sup>11</sup> and this social interaction is necessary for human existence<sup>10</sup>. In this study, relationships were altered by the pregnancy and the decision to terminate. Some participants did not tell their parents or other family members about their pregnancy, while others terminated as a result of being coerced by their partners<sup>16</sup>. The lived space is also shaped by social relations<sup>11</sup>. The healthcare providers who were in the participants' lived space were viewed as being judgemental and opposed to the termination. Their statements were perceived by most participants as punishment for their decision to terminate their pregnancy.

Some women may be unreasonably overwhelmed by easy to solve situations based on their level of maturity. Women thus need to be encouraged to open up about their reasons for terminating a pregnancy, especially if the intention to terminate is clouded with doubts.

## Conclusion

The aim of this study was to explore the effects of ultrasound viewing from the perspectives of women who viewed the ultrasound image and continued with or decided against termination. The findings illustrate that participants were perplexed about the lack of understanding among healthcare professionals, whose words were viewed as punishment and resulted in varied emotions. Hence, the study concluded that health professionals should be considerate and clearly explain processes to their clients who are non-professionals; this may assist them

in dealing with the turmoil they experience when deciding to terminate a pregnancy. The study concluded that even though participants showed how the ultrasound viewing affected their person, their reasons for termination were so strong that they would not change their minds. Most were influenced by coercion from their parents, partners or friends. A few who decided against termination were apparently influenced by the ultrasound viewing experience.

## Acknowledgements

The author is grateful to the manager of the participating CHC for her support during the study. The researcher also thanks the participants for their availability. The contribution of the author's mentor in reading the transcripts and noting patterns in the data is highly appreciated.

## Competing interests

The author declares not to have any financial or personal relationship that may have influenced the writing of this paper.

## Author's contribution

The author is accountable for all aspects of the paper.

## Funding

No funding agency in the public, commercial or not-for-profit sectors funded this study.

## Data availability

For anonymity and confidentiality, the study's data sets are not publicly available but can be made available by the author upon reasonable request. Personal identifiers in the data will be removed before data sharing.

## Disclaimer

The views and opinions shared in this paper are those of the author and are not related to any official policy.

## References

1. Beynon-Jones SM. Re-visioning ultrasound through women's accounts of pre-abortion care in England. *Gender & Society* 2015; 29(5): 694-715. [Google Scholar]
2. Roberts J. 'Wakey, wakey, baby': narrating four-dimensional (4D) bonding scans. *The Sociology of Medical Screening: Critical Perspectives, New Directions* 2021; 34(2): 161-314. [Google Scholar]
3. Neff CL. Women, womb, and bodily integrity. *Yale Journal of Law and Feminism* 1991; 3(327). [Google Scholar]
4. National Department of Health. *National Clinical Guidelines for Implementation of the Choice on Termination of Pregnancy Act*. Pretoria: National Department of Health Republic of South Africa; 2019. [Google Scholar]
5. Kjelsvik M, Sekse RJ, Aasen EM and Gjengedal E. Viewing the image? Ultrasound examination during abortion preparations, ethical challenges. *Nursing ethics*. 2022; 29(2): 511-522. [Google Scholar]
6. Upadhyay UD, Kimport K, Belusa EK, Johns NE, Laube DW and Roberts SC. Evaluating the impact of a mandatory pre-abortion ultrasound viewing law: a mixed methods study. *PloS one*. 2017; 12(7): e0178871. [Google Scholar]
7. National Abortion Federation. *Clinical Policy Guidelines*. 2020. [Google Scholar]
8. Venkatraman R. "Women's Right to Know" Informed Consent Informational Materials. Downloaded from <https://hpsrepository.asu.edu/handle/10776/13275> on 10 May, 2022. [Google Scholar]
9. Gius M. Using the Synthetic Control Method to Determine the Effect of Ultrasound Laws on State-Level Abortion Rates. *Atlantic Economic Journal*. 2019; 47: 205-215. [Google Scholar]
10. Van Manen M. *Researching lived experience: Human science for an action sensitive pedagogy*. London, Ontario: Althouse Press. 1990. [Google Scholar]
11. Van Manen M. *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing*. New York: Routledge; 2014. [Google Scholar]
12. Polit DF and Beck CT. *Nursing Research, Generating and Assessing Evidence for Nursing Practice*. New York: Wolters Kluwer Health; 2012.
13. Gray JR, Grove S K and Sutherland S. *The Practice of Nursing Research Appraisal, Synthesis and Generation of Evidence*. St. Louis, Missouri: Elsevier; 2017.
14. Gatter M, Kimport K, Foster D G, Weitz TA and Upadhyay UD. Relationship Between Ultrasound Viewing and Proceeding to Abortion. *Obstetrics & Gynecology*. 2014; 123 (1): 81-87. [Google Scholar]
15. Kirkman M, Rowe H, Hardiman A and Rosenthal D. Abortion is a difficult solution to a problem: A discursive analysis of interviews with women considering or undergoing abortion in Australia. *In Women's Studies International Forum*. 2011; 34(2): 121-129. [Google Scholar]
16. Silverman JG, Decker MR, McCauley HL, Gupta J, Miller E, Raj A and Goldberg AB. Male perpetration of intimate partner violence and involvement in abortions and abortion-related conflict. *American Journal of Public Health*. 2010; 100(8): 1415-1417. [Google Scholar].