



Policy matters

Women's Perspectives on Ultrasound Viewing in the Abortion Care Context

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Article history: Received 16 April 2012; Received in revised form 6 September 2012; Accepted 6 September 2012

ABSTRACT

Purpose: In recent years, states have passed a range of regulations regarding ultrasound procedures in abortion care. Abortion rights opponents have promoted ultrasound viewing, believing that women who view their own ultrasound images are likely to be dissuaded from abortion. Abortion rights advocates, in contrast, routinely oppose these regulations, citing concerns that ultrasound viewing in the abortion context will be emotionally difficult for women. However, no empirical research has examined the effects of ultrasound viewing in unwanted pregnancies.

Methods: We conducted in-depth interviews with 20 respondents who received an ultrasound as part of their abortion care in one of two states in the American heartland. Interview transcripts were analyzed using grounded theory and a matrix technique for discussion of ultrasound viewing and regulations about ultrasound viewing.

Results: Respondents' accounts offer support for anti-abortion claims that ultrasound viewing can dissuade women from abortion, as well as support for abortion rights claims that viewing an ultrasound can cause emotional difficulty for a woman planning to abort. Interviews point to unexpected outcomes of ultrasound viewing, including reports that viewing better enabled respondents to cope with their abortion.

Conclusions: Ultrasound viewing does not have a singular effect. These data suggest that current assumptions about viewing effects are inaccurate, or at the least incomplete. We do not find support for legislating mandatory ultrasound viewing in abortion care. Questions about clinical care practices are best address in the medical context, not the legislative arena.

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Introduction

In recent years, ultrasound viewing in the abortion care setting has received a great deal of attention as more states pass regulations mandating specific ultrasound procedures. The use of ultrasound in obstetrical care at all is a relatively recent development. Only in the last few decades have medical professionals regularly used ultrasound imaging to aid in assessing the health of a developing fetus. In parallel, ultrasonography has become routine in abortion care, used to establish a pregnancy, confirm gestational age, and check for multiple pregnancies. Currently, 24 states have laws regulating ultrasound in abortion providing facilities (Guttmacher Institute, 2012). The

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content of these laws varies, from requiring that all women receive an ultrasound in advance of an abortion to requiring that women view their ultrasound image.

Activists on both sides of the abortion debate have voiced strong claims about the effects of these laws. Abortion rights opponents have promoted ultrasound viewing under the rubric of informed consent, believing that women who view their own ultrasounds are less likely to have an abortion than women who do not. Abortion rights advocates, in contrast, routinely oppose these regulations, questioning the appropriateness of legislators determining components of medical care. Moreover, they challenge these regulations' content, citing concerns about the impact of such laws on women's emotional experience of abortion and positing that ultrasound viewing will exacerbate emotional difficulty. Neither set of claims, however, is grounded in empirical research.

To date, research on the effects of viewing ultrasound images has been conducted only in the context of wanted pregnancies. In studies of wanted pregnancies, research has identified ultrasound viewing as a positive opportunity to facilitate

Financial support for this work was provided by the David and Lucile Packard Foundation.

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maternal–fetal bonding (Layne, 2003; Spitz, 1997). Mitchell (2001), for example, finds that viewing ultrasound images helps some women feel their pregnancy as real in a way they had not previously. Ultrasound usage has not been without its critics, however. Some feminist thinkers have asserted that ultrasound reduces women's agency in pregnancy, remaking the doctor as the knower of the "truth" of the pregnancy and positioning the fetus as a separate—and often preeminent—entity (Casper, 1997, 1998; Mitchell, 2001; Petchesky, 1987).

Although no research to date has specifically examined the use of ultrasonography on women with unwanted pregnancies, scholars have speculated on its effects in the abortion context. A 1983 editorial by Fletcher and Evans raised the possibility, albeit without empirical evidence, that ultrasound viewing would dissuade women from having abortions. Two non-peer-reviewed studies conducted in Crisis Pregnancy Centers purport to find evidence of this effect (Chandler, 2006; Piotrowski, Childs, & Keroack, 2004).

Despite this lack of empirical evidence of the effects of ultrasound viewing on women seeking abortions, participants in the abortion debate, both for and against abortion rights, have made assertions about the effect seeing images of their fetuses will have on women seeking abortions. Abortion rights opponents, for instance, have presumed that, like in wanted pregnancies, ultrasound viewing will compel maternal-fetal bonding and women will be persuaded to continue their pregnancies. In reference to a piece of ultrasound regulation, one state legislator explained, "With this, we're hoping that by making them [women] see, making them hear, making them sign a sheet, that they'll be less inclined to make that decision" (Sickler, 2008). Meanwhile, abortion rights supporters have also presumed ultrasound viewing will cause maternal-fetal bonding, and see ultrasound regulations as an attempt to coerce women's decision making. For example, in a well-publicized article, an abortion clinic staff member stated: "The bottom line is no woman is going to want an abortion after she sees a sonogram" (Tilghman, 2002). For the women who view their ultrasound image and proceed with the abortion, abortion rights supporters decry the potential of these images to be emotionally upsetting. Both sets of claims assume specific effects of ultrasound viewing on women seeking abortion.

This paper offers a preliminary exploration of the impacts of ultrasound viewing on women with unwanted pregnancies who are seeking abortion, presenting findings from a small, qualitative study of women seeking abortion care in two politically conservative states. At the facilities where we recruited, all patients received an ultrasound as part of their pre-abortion care and were permitted—but not legally required—to view their ultrasound image if they desired. These data provide insight into how women who view their ultrasound image experience that viewing, pointing to both expected and unexpected outcomes. As activists opposed to abortion rights predict, some women told stories of being persuaded to continue a pregnancy after viewing their ultrasound. In addition, as abortion rights advocates expect, some women reported feeling upset by the viewing, but continued with their plan to terminate the pregnancy. Finally-significantly diverging from both sets of expectations—other women reported positive feelings about seeing their ultrasound image.

Methods

As part of a qualitative study to understand women's perspectives on abortion regulation, we conducted semistructured

interviews with 20 women who received an ultrasound as part of their abortion care at two facilities in a state in the American south and at one facility in a state in the Midwest. Because little research has examined the role of ultrasound in unwanted pregnancies—and in abortion care, specifically—qualitative, exploratory research was most appropriate.

Respondents were recruited at the facilities during one of their abortion care appointments (initial consultation, procedure visit, or follow-up). Women were eligible to participate in the study if they had undergone an abortion in the past month or were currently seeking an abortion, were over 18, and spoke English. We presumed that women who sought and/or obtained an abortion were carrying unwanted pregnancies, allowing us insight into the experience of ultrasound viewing in the context of an unwanted pregnancy. By recruiting participants at these three distinct stages of their abortion care (before the abortion, the day of the abortion, and a few days after the abortion), we aimed to capture a sample of respondents with different experiences of ultrasound. Women at their consultation appointment had not vet received an ultrasound—nor had the opportunity to view it—at this care facility (although we note that they may have had a prior opportunity at another facility to see their ultrasound); women at the facility on their procedure day and those recruited at their follow-up appointment had already had the opportunity to view their ultrasound.

Study personnel did not recruit women directly. Potentially eligible women were approached by a health worker, nurse, or clinician who gave them a study flyer and offered to introduce them to a field investigator. From these contacts, study personnel spoke to 32 women. Of these, 30 women made interview appointments and 20 completed their interviews. For women recruited at their initial consultation, interviews took place after they had received their facility-sponsored counseling, which included an ultrasound. Women recruited at later stages of their abortion care likewise had already completed counseling and received an ultrasound. Interviews were conducted in person because of expectations that the in-person format would allow greater respondent comfort and rapport around a potentially sensitive subject. Our decision to conduct all interviews in person, coupled with the fact that many of the patients served by these facilities traveled great distances for their care and thus had very limited availability, made scheduling difficult and led to the relatively high failure-to-complete-an-interview rate. We have no reason to expect there were any systematic differences between those able to be interviewed and those who were unable to participate. Participants were paid \$30 to compensate them for their time. No identifying information was collected; pseudonyms are used below. All study procedures received approval from the Institutional Review Board at the authors' institution. For more detail on the data collection methods, see Cockrill and Weitz (2010).

Interviews were semistructured and included questions on women's knowledge of, opinions about, and perceived personal impact of the laws in their state regulating abortion care. Interviews were retrospective and not limited to discussion of the current pregnancy. We matched our interview questions to the participant's fluency in health care and policy, adjusting the interview questions as appropriate. Interviewers asked follow-up and probing questions to elicit rich narratives of women's experience of abortion-related regulations. Although we anticipated wide variation in women's reports of their experience of abortion regulations, themes emerged quickly and saturation was reached with a relatively small sample. All respondents

completed a demographic questionnaire, including information about age, race, ethnicity, education, and pregnancy history.

Interviews ranged in length from 45 to 60 minutes. They were tape recorded and transcribed. Transcriptions were compared with the audio recordings to check for accuracy and analyzed in Atlas.ti 5.0 using grounded theory analytical techniques (Charmaz, 2006). Initial line-by-line coding led to the development of axial codes based on themes discovered in the text. The codes produced useful categories of behaviors, experiences, feelings, and beliefs. We conducted further analysis using a matrix technique (Ulin, Robinson, & Tolley, 2005), which allowed us to compare responses across participants and to explore the opinions of each participant across questions and themes.

Results

Table 1 presents demographic characteristics for all respondents. Respondents' accounts offer some support for the claims of abortion rights opponents that ultrasound viewing can dissuade women from terminating a pregnancy and some support for claims by abortion rights supporters that viewing an ultrasound can be emotionally difficult for a woman intending to terminate her pregnancy. However, interviews also point to unexpected outcomes of ultrasound viewing, including reports that viewing better enabled respondents to cope with their abortion. Although we anticipated some variation in women's narratives about ultrasound based their stage in the care process (i.e., before or after the abortion), we found no differences and so do not specify care stage for respondents discussed below. Key qualitative findings are summarized in Table 2.

The Expected

Stories from some respondents supported the contentions of both sides of the debate over ultrasound viewing. Amanda's (25, White) experience with ultrasound viewing in a prior pregnancy

Table 1Respondent Demographics

Respondent Demographies						
	Age (yrs)	Race/Ethnicity	No. of Births	No. of Previous Abortions		
Aisha	21	Native American	1	1		
Amanda	25	White	4	0*		
Angela	20	Black	1	1		
Beth	39	White	2	1		
Cassie	25	White	0	0		
Cheryl	43	White	2	0		
Deb	41	White	1	0		
Jackie	_	Black	3	1		
Jennifer	27	White	0	0		
Jessie	18	Polynesian/Native	0	0		
		American				
Jordan	25	Black	1	0		
Joy	28	Native American	0	2		
Lisa	23	White	2	1		
Lyndsay	18	White	1**	0		
Makayla	27	Black	2	0		
Maricel	24	Hispanic	1	1		
Sonja	25	Black	0	1		
Tanya	25	Black	4	0		
Tricia	19	White	0	0		
Vanessa	23	Black	0	0		

^{*} For one of her pregnancies, Amanda sought abortion care but changed her mind and continued the pregnancy to term.

Table 2Summary of Key Findings of Women's Experience of Ultrasound Viewing in Abortion Care

Responses	Example			
Expected				
Persuaded respondent to continue the pregnancy	"It [seeing my ultrasound] freaked me out. I left and didn't go back." -Amanda			
Caused emotional trauma	"[Seeing the ultrasound] gave me some psychological problems" -Cheryl			
Unexpected				
Improved coping	"It's a healing thing" –Lisa "It made me feel even better [about my abortion]" –Jennifer			

offers some support for anti-abortion contentions that ultrasound viewing will convince women to continue an unintended pregnancy. Amanda became pregnant at age 23 as the result of rape. She had three children already and initially considered abortion. On the one hand, she said, "I wanted to have her [the baby from that pregnancy], no matter what happened." On the other, she experienced pressure from others to terminate the pregnancy because of the rape. Amanda made an appointment at an abortion clinic. She said,

I walked in, paid the money, went and had an ultrasound, and the lady asked me if I wanted to look, and I didn't think too much about it . . . I went ahead and looked and it was [my daughter], and she was moving around and it freaked me out. I left and didn't go back. I walked out and that was it, and I had [my daughter].

From the outset, Amanda experienced some ambivalence about having an abortion, ambivalence that was resolved, in her account, by viewing the ultrasound. Any effect of the ultrasound viewing seems to be limited to that particular pregnancy, however, as Amanda received an abortion for her most recent pregnancy; viewing her ultrasound image did not dissuade her from future abortions.

Cheryl (43, White), carrying an unwanted pregnancy, viewed her ultrasound and had a different response: She experienced seeing the ultrasound and hearing the fetal heart beat as emotionally difficult, as abortion rights supporters have contended. Cheryl discovered one day that she had a quickly growing mass in her uterus that was endangering her health. When she sought treatment at the local hospital, she learned she was pregnant and was shown her ultrasound without her request.

I said [to the doctor], "You can tell me if I'm pregnant. I need to know because I'm going to terminate the pregnancy." And he turned the screen around and said, "Right there's the fetus." And thump, thump, thump, you know, I could hear the heart beating and I put my hands on my ears and I said, "That's enough."

This had negative emotional consequences for Cheryl. She explained,

That gave me some psychological problems right there, because then I knew there was a human life there and all. But still, I knew I didn't want to give birth to it. I couldn't.

Viewing the ultrasound did not change Cheryl's mind about having an abortion, but it did exact an emotional toll on her.

^{**} Placed for adoption.

The Unexpected

Not all respondents described experiences with ultrasound that fell into the response categories anticipated by abortion rights opponents and supporters. Some respondents had decidedly unexpected responses to ultrasound viewing, embracing the opportunity even as they felt no equivocation about their plan to terminate the pregnancy.

Joy (28, Native American) considered viewing her ultrasound to be an important part of being a responsible abortion patient. She asked to see her ultrasound image unprompted. Explaining why, she said,

I had an ultrasound so I could actually see it right there. And I actually have that imprinted in my mind. You know, I wanted to be completely aware as to what I was doing.

She made clear that she was committed to the importance of ultrasound viewing despite the emotional difficulty it caused her. She continued,

I think it's also kind of traumatizing but it is what's occurring. I don't think there's any reason to pretend like it's not.

Lisa (23, White), too, felt it was important to view her ultrasound in advance of her abortion, in part to honor the complexity of her choice and recognize the fetus inside her:

I asked to see the picture 'cause, I mean, you know, it's a healing thing—or not necessarily a healing thing but, you know, I wanted to feel all the pain of what I was doing because it's not about me, you know, it's not my life.

Although both of these women used language that framed ultrasound viewing as causing some emotional difficulty (as abortion rights supporters have asserted), they sought this difficulty and did not find viewing traumatic. Contrary to the predictions of abortion rights opponents, they terminated their pregnancies, despite viewing their ultrasound images.

Jennifer (27, White) had an even more unexpected response to the ultrasound: She experienced viewing as helping her be comfortable with her choice to terminate the pregnancy. She said, "When she showed me the sonogram, it made me feel even better [about my abortion]." Echoing Mitchell's (2001) finding that ultrasound viewing can help women to feel that their pregnancy is more "real," Jennifer reported positively that seeing her ultrasound made the pregnancy and abortion decision more real: "I really liked it. I really liked it because it made it feel more real."

The Importance of the Option to View

Although women made different decisions about whether or not to view their ultrasound image, across respondents there was consensus that having the option to view one's ultrasound was a good thing, whether as a result of clinic policy or legal regulation. However, respondents emphasized that having the option to view is not the same as mandatory viewing. No respondent felt that all women seeking abortions should have to view her ultrasound image. Jessie (18, Polynesian and Native American) insisted that "it should be your choice whether you want to look at it or not." It is worth noting that some respondents were supportive of other regulations, including a mandatory 24-hour waiting period, but mandatory ultrasound viewing was unique in gaining no support in this sample.

Discussion

Our interviews uncovered an array of experiences with viewing ultrasound images among women undergoing abortion, some expected and some unexpected. Even in our small sample, women did not have a singular experience of ultrasound viewing. Nor did they report just the two responses predicted by the current political debate about ultrasound viewing, namely that ultrasound viewing will discourage women from abortion or that it will be emotionally difficult but will not dissuade women intending to terminate the pregnancy. We also found widespread support for requiring clinics to offer women the opportunity to view these images, as long as women have the right to decline.

This diversity of response points to the importance of understanding ultrasound viewing in the broader context of a woman's life. Amanda, for example, explained that, from the outset, she wanted to continue her pregnancy, and seeing the ultrasound cemented this commitment. But, the fact that her choice to carry her previous unwanted pregnancy to term did not preclude her from seeking abortion for her current pregnancy underscores the importance of understanding ultrasound viewing in the context of the circumstances around each pregnancy. Ultrasound viewing does not have just one effect even on a particular woman. Although other studies have suggested that ultrasound viewing can serve as an abortion deterrent (Chandler, 2006; Piotrowski, et al., 2004),1 these studies do not include analysis of how the context of that viewing may influence women's interpretation of her ultrasound image. Given findings about how the narratives that accompany ultrasound viewing in wanted pregnancies matter (Mitchell, 2001), this is an important consideration.

This study is limited by its small sample size and these findings are not generalizable to the larger population of women seeking abortions. We note, in addition, that our findings may be limited because we recruited women at abortion facilities; recruitment of women with unwanted pregnancies through other means (e.g., at crisis pregnancy centers) might yield different results. Further, we did not explore objective differences in the actual ultrasound viewing (moving vs. static image; print-out vs. on screen; with or without audio). Nonetheless, this preliminary study points to the importance of continued research on ultrasound viewing in the abortion context. Presently, its impact on women's decision making around abortion is largely unknown. These data suggest that some of the current assumptions about viewing effects are inaccurate, or at the least incomplete. Even more important, with the exception of Cheryl, we report here on the experiences of women who specifically chose to view their ultrasounds. We do not know more broadly what impact mandatory ultrasound viewing would have, although Cheryl's experience suggests that it could have a negative impact.

Finally, this study began from the premise that women carrying unwanted pregnancies may have a different experience of ultrasound than those with wanted pregnancies, but these data suggest some consistencies. For example, the accounts from women such as Jennifer that seeing her ultrasound image helped to make the experience more real is similar to work on ultrasound in other contexts (Mitchell, 2001). Looking at an ultrasound, even for women who choose to abort, may feel like a "natural part" of the pregnancy process because our culture is

We remind readers that these studies have not been peer reviewed.

full of images of women viewing ultrasounds. Future research should explore these questions.

Implications for Practice and Policy

Recent pushes for regulations in abortion care—as well as their attendant opposition—have brought ultrasound practice into the controversy over abortion care. From legislation requiring abortion care facilities to inform women where they can receive a free ultrasound to legislation mandating that all women seeking an abortion view their ultrasound and hear a description of the image, the debate about the use of ultrasound in abortion care is intensifying (Eckholm, 2012). And yet, these regulations are being forwarded without empirical study of the impact of ultrasound viewing in the abortion context on women.

In this study, we sought to learn from women experiencing an unwanted pregnancy what role ultrasound played. In this small sample, some respondents considered ultrasound viewing a key informational aspect of their abortion experience, although none used the language of informed consent. Other respondents experienced ultrasound viewing differently and reported extreme distress from viewing their ultrasound images. We did not find support for government policies mandating ultrasound viewing based on the claim that such viewing constitutes information women need for their pregnancy decision making. To the extent that such policies are motivated by a desire to dissuade women from abortion, our findings suggest that mandatory ultrasound viewing may have the opposite effect on some women, improving their overall experience of abortion and satisfaction with their decision.

That said, respondents did believe women should be offered the opportunity to view their ultrasound, provided they could decline. We suggest that this finding should inform clinic practice and that abortion clinics should offer women the opportunity to view their ultrasound image. Giving women the option to view their ultrasound did not generate distress. Further, we find evidence that, for the respondents who want to view, viewing can improve their emotional experience of abortion. We recognize that this may add to the burdens already placed on abortion clinics, potentially increasing the time spent with patients and the costs associated with abortion provision; thus, it must be balanced with other care delivery needs. But our findings suggest that offering women the option to view their ultrasound is what some patients want—and it represents patient-centered care.

Thinking more broadly about healthcare, we argue that open questions about clinical care—in abortion and otherwise—are best addressed in the medical context, not the legislative arena. In essence, we are arguing for a distinction between law and clinic practice. Although offering women the opportunity to view their ultrasound may be a good clinical practice, it is not appropriate to legislate this requirement, especially not based on the small number of participants in this study. Furthering legislation around ultrasound in the abortion context does little to improve patient experience and may actually make it worse. Research has shown that creating obstacles clinic staff must navigate that are not directly related to a patient's care can have negative impacts on patients' emotional experience (Kimport,

Cockrill, & Weitz, 2012). Instead, abortion care facilities should design and test models of optional viewing and determine how best to meet patient needs. These studies should take into account what other aspects of care are affected, with attention to overall patient satisfaction not simply satisfaction with the viewing experience.

References

Casper, M. (1997). Feminist politics and fetal surgery: Adventures of a research cowgirl on the reproductive frontier. *Feminist Studies*, 23, 233–262.

Casper, M. (1998). The making of the unborn patient: A social anatomy of fetal surgery. New Brunswick. NI: Rutgers University Press.

Chandler, M. A. (2006). Antiabortion centers offer sonograms to further cause. Washington Post.

Charmaz, K. (2006). Constructing grounded theory. London: Sage.

Cockrill, K., & Weitz, T. A. (2010). Abortion patients' perceptions of abortion regulation. Women's Health Issues, 20, 12–19.

Eckholm, E. (2012, February 25, 2012). Ultrasound: A pawn in the abortion wars.

New York Times

Fletcher, J. C., & Evans, M. I. (1983). Maternal bonding in early fetal ultrasound examinations. *New England Journal of Medicine*, 308, 392–393.

Guttmacher Institute. (2012). State policies in brief: Requirements for ultrasound. New York: Author.

Kimport, K., Cockrill, K., & Weitz, T. (2012). Analyzing the impacts of abortion clinic structures and processes: A qualitative analysis of women's negative experience of abortion clinics. Contraception, 85(2), 204–210.

Layne, L. (2003). Motherhood lost: A feminist account of pregnancy loss in America. New York: Routledge.

Mitchell, L. M. (2001). Baby's first picture: Ultrasound and the politics of fetal subjects. Toronto: University of Toronto Press.

Petchesky, R. P. (1987). Fetal images: The power of visual culture in the politics of reproduction. *Feminist Studies*, 13, 263–292.

Piotrowski, Z. H., Childs, D. S., & Keroack, E. J. (2004). Patient characteristics and attitudes about viewing an ultrasound in a pregnancy resource center: Chicago and Boston studies. Paper presented at the American Public Health Association, 132nd Annual Meeting, Washington, DC.

Sickler, S. C.-V. (2008). Added rule for abortion blocked. St. Petersburg Times, p. A1. Retrieved from. http://www.lexisnexis.com.

Spitz, J. L. (1997). Sonographer support of parental-fetal bonding. In M. C. Berman, & H. L. Cohen (Eds.), Obstetrics and gynecology: Diagnostic medical sonography. (pp. 629–638). Philadelphia: Lippincott, Williams and Wilkins.

Tilghman, N. H. (2002, February 24). Dillon and Spitzer clash over abortion. *New York Times*. Retrieved from. http://query.nytimes.com.

Ulin, P. R., Robinson, E. T., & Tolley, E. E. (2005). Qualitative methods in public health: A field guide for applied research. San Francisco: Jossey Bass.

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