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## Fear of Procedure and Pain in Individuals Considering Abortion: A Qualitative Study

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### Abstract

**Objectives:** To explore concerns about procedural abortion and abortion-related pain in a cohort searching for abortion online.

**Methods:** The Google Ads Abortion Access Study was a national longitudinal cohort study that recruited people searching online for abortion. Participants completed a baseline demographic survey and a follow-up survey four weeks later evaluating barriers and facilitators to abortion. This qualitative study utilized thematic analysis to produce a descriptive narrative based on overarching themes about fear of procedure and pain during abortion.

**Results:** There were 57 separate mentions from 45 participants regarding procedural abortion or abortion-related pain. We identified two main themes: 1) concerns about the procedure (with subthemes, fear of procedural abortion, comparison to medication abortion, lack of sedation) and 2) abortion-related pain (with subthemes fear of abortion-related pain, experiences of pain, fear of complications and cost-barriers to pain control).

**Conclusions:** This study highlights the need for improved anticipatory guidance and accessible resources to assuage potential fears and misconceptions regarding abortion.

**Practice Implications:** Abortion resources, particularly online, should provide accurate and unbiased information about abortion methods and pain to help patients feel more prepared. Providers should be aware of potential concerns surrounding procedural abortion and pain when counseling patients presenting for care.

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## 1. Introduction

Abortion can be a stressful and emotionally significant event. People considering abortion often have fears and uncertainties about what an abortion process entails including the steps of a procedural abortion, anesthesia [1], and possible physical and emotional reactions to abortion [2]. Fears of surgery and procedural complications have been shown to be significant factors influencing patients' choice of abortion method [3]. Furthermore, decisions about abortion method may be informed by emotions around abortion, such as feelings of guilt or sadness, or misconceptions about abortion, such as beliefs that abortion causes depression or reduces future fertility [4,5]. Lack of knowledge regarding abortion safety is common and a majority of patients in the United States report not knowing that abortion is safer than childbirth [6]. More research is warranted regarding how fears and misconceptions can impact abortion experiences.

Previous studies have typically surveyed individuals who present to a clinic, but many pregnant people considering abortion never make it to abortion-providing facility and the fears they have may not be reflected in existing literature. Because the internet is often the first place people search for medical information [7], pregnant people are very likely to find information about abortion online. Furthermore, online resources can strongly influence perceptions about abortion and abortion decision-making [8]. Recruiting individuals who are contemplating abortion online may be more representative of the general population of abortion seekers and better capture significant barriers to abortion access compared to the barriers of individuals who are recruited at a clinic. Therefore, this qualitative study seeks to explore concerns about procedural abortion and pain among pregnant people searching for abortion services online.

## 2. Materials and Methods

The Google Ads Abortion Access Study was a national longitudinal cohort study that recruited people searching online for abortion care between August 2017 and May 2018 [9]. The study was designed to understand how various factors affected pregnant peoples' ability to obtain a wanted abortion. In short, the study recruited individuals searching for an abortion provider with abortion-related keywords in Google, such as "abortion clinic near me". Participants were recruited using a stratified sampling strategy to collect data from all 50 states and the District of Columbia. The initial goal of the study was to recruit at least 20 participants from each state, but less than 20 individuals were recruited in eight less populated states. Advertisements for the study listed in the search results described the opportunity to participate in a study on abortion. Interested participants clicked on the advertisement and were directed to a landing page describing more details about the study. Participants were then screened for eligibility and provided electronic informed consent. Participants were eligible for the study if they reported being currently pregnant and considering abortion.

After providing consent, participants filled out an online Qualtrics baseline survey, which included questions regarding the estimated gestation of their pregnancy and demographic information. Pregnancy gestation at baseline was calculated based on self-reported last

menstrual period. Participants received a text or email reminder two weeks later reminding them that they would receive the follow-up survey in two weeks. Then, four weeks after initial enrollment, participants were sent a link to a Qualtrics follow-up survey by email or text message to report on their pregnancy or abortion outcome. If participants did not complete the follow-up survey, they were contacted up to four additional times, including a final phone call attempt. A total of 1,730 participants were deemed eligible and completed the baseline survey. Of those, 1005 participants completed the follow-up survey. Participants were excluded from the final analysis if they did not complete the follow-up survey, attempted the survey multiple times, or had an international address.

All participants were asked closed and open-ended questions about specific barriers and facilitators to accessing abortion, the wording of which varied slightly depending on pregnancy or abortion outcome at follow-up (see Figure 1). Participants who finished the follow-up survey and reported either having had an abortion or still being pregnant were compensated with a \$50 gift card. The Institutional Review Board of the University of California, San Francisco approved the study (approval #: 16-20627).

Participants were included in this study if they completed the baseline and four-week follow-up survey. This study specifically examined the five open-ended responses mentioned above from the four-week follow-up survey. We de-identified and extracted all open-ended responses and any responses that mentioned pain or the abortion process itself were used in this analysis. We used thematic analysis to analyze the qualitative data which provides a method for qualitative data analysis that involves searching for patterns in the data, interpreting them, and reporting on the findings through six specific steps: familiarizing oneself with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the manuscript [10].

Two researchers independently coded transcripts into categories describing specific facilitators and barriers to abortion. In the initial coding process, the researchers examined specific mentions describing barriers to abortion coded as “fear of pain/side effects/procedure/complications.” Following the initial coding, the first author and second author reviewed the responses and developed thematic codes related to fears and experiences of procedure and pain inductively, based on the data and on current literature. We developed, refined, and finalized a common codebook with themes identified in the specific mentions. The first and second authors then independently coded the responses. The Holsti Coefficient of reliability was 0.87. All three authors resolved discrepancies through discussion and consensus. Common patterns were identified and discussed with all co-authors to review the themes and clarify their prevalence and to name and define the themes. We then produced a descriptive narrative based on overarching themes from the specific mentions.

We used Stata 15 to generate descriptive characteristics of respondents included in this analysis. We classified them according to their pregnancy or abortion outcome as follows: pregnant and planning to continue the pregnancy; pregnant and still seeking abortion; had a medication or procedural abortion. The research team consisted of two abortion researchers with a doctorate and master’s degree in public health, respectively and a medical student who all identify as female. We reflected on how our positionality and intersectional

identities may affect our interpretation of the data, particularly our perspectives on abortion as an essential health care service.

### 3. Results

Following the final coding of transcripts, we identified 57 total specific mentions about fears and experiences of procedural abortion and abortion-related pain. Of the 1,005 participants who completed the baseline and follow-up surveys, 45 participants cited fear of pain or aspects of an abortion procedure as challenging parts of their abortion experience. Some participants had relevant responses across multiple questions. Among participants who cited pain or procedure, about half (n=23) had a procedural abortion, one-third (n=15) had a medication abortion, 4 were pregnant and still seeking an abortion, and 3 were pregnant and planning to continue their pregnancy at the time of the follow-up survey (Table 1).

We identified two main themes in the open-ended responses: Concerns about the procedure and abortion-related pain (including medication and procedural abortion). Within the first main theme, concerns about the procedure, we identified several subthemes, including fear of procedural abortion, comparisons to medication abortion, lack of sedation during and procedural abortion. Within the second main theme, abortion-related pain, we identified the following subthemes, fear of pain, experiences of pain during abortion, fear of complications, and cost barriers of abortion pain control.

#### 3.1. Concerns About the Procedure

**3.1.1. Fear of Procedural Abortion**—Several participants mentioned they were fearful of the steps of procedural abortion and their emotions around abortion, such as concerns about fetal pain, the method of suction curettage, and disposal of products of conception.

*“Well, it’s 2018... there has to be a more updated or less intense method of removing the fetus”* (age 30, pregnant still seeking abortion at follow-up, no prior abortion, 8 weeks gestation at baseline survey)

*“Fear of the procedure. I can’t stand the thought of them just throwing it away.”* (age 30, pregnant still seeking abortion at follow-up, no prior abortion, 9 weeks gestation at baseline survey)

**3.1.2. Procedural abortion versus medication Abortion**—Some participants described concerns with procedural abortion that they might not have had with medication abortion.

*“I am past the 10 week point so the pills aren’t an option and I am not comfortable with surgical options”* (age 31, pregnant planning to continue pregnancy at follow-up, no prior abortion, 9 weeks gestation at baseline survey)

Another participant had more visceral associations with the process of procedural abortion:

*“It’s more hard [sic] further along because it’s not just a pill you take and try to lie to yourself that it’s a period its [sic] an actual procedure where your own baby gets*

*squished in pieces*” (age 27, pregnant still seeking abortion at follow-up, no prior abortion, 5 weeks gestation at baseline survey)

**3.1.3. Lack of Sedation during Procedural Abortion**—Some participants noted that inability to receive sedation or general anesthesia prior to procedural abortion was a barrier to receiving an abortion. While several participants stated they were afraid of feeling pain while awake during their procedural abortion, other participants were more concerned about psychological distress and awareness of what was happening. One participant who endorsed this concern multiple times had not obtained an abortion at the time of the follow-up survey.

*“I didn’t want to be awake for procedure and that was not an option ... they told me they could not put me to sleep for the procedure and that made me uncomfortable again.”* (age 26, pregnant planning to continue pregnancy at follow-up, no prior abortion, 4 weeks gestation at baseline survey)

Other participants stated that being awake during the procedure was a barrier because they were fearful of the process of dilation and curettage or the physical pain they might experience.

*“Scared of being in pain during the awake abortion procedure”* (age 31, procedural abortion at follow-up, no prior abortion, 5 weeks gestation at baseline survey)

*“...the whole scraping and sucking of it all while you’re awake. Just gives me the cringes”* (age 30, pregnant still seeking abortion at follow-up, no prior abortion, 8 weeks gestation at baseline survey)

## 3.2. Abortion-Related Pain

**3.2.1. Fear of Pain**—Several participants mentioned their fear of anticipated pain during medication and procedural abortion, together with other concerns about the procedure such as seeing products of conception.

*“The fear of the pain I would be [sic]. It coming out when it was completed.”* (age 22, procedural abortion at follow-up, no prior abortion, 8 weeks gestation at baseline survey)

*“The cost of the procedure, and anxieties about pain or suffering.”* (age 26, medication abortion at follow-up, no prior abortion, 5 weeks gestation at baseline survey)

*“It made it hard to think how much pain I was going to go through... But went well”* (age 25, procedural abortion at follow-up, no prior abortion, 4 weeks gestation at baseline survey)

**3.2.2. Fear of Complications**—Fear of pain was endorsed alongside fears of other side effects or complications, some of which were myths about abortion, such as infertility and long-term psychological effects.

*“Fear of the side effects, pain, depression, irregular bleeding or other symptoms.”* (age 33, procedural abortion at follow-up, no prior abortion, 9 weeks gestation at baseline survey)

*“I was afraid of the slim chance of being left infertile and the pain I might feel from the procedure.”* (age 22, procedural abortion at follow-up, had prior abortion, 4 weeks gestation at baseline survey)

*“The fear of complication or pain also gave me anxiety. Wondering if I’d feel regret later or not having the chance to get pregnant again also made it hard.”* (age 33, medication abortion at follow-up, no prior abortion, 7 weeks gestation at baseline survey)

### **3.2.3. Experiences of Pain during Procedural and Medication Abortion—**

When asked if they would like to share anything else about their abortion decision, several participants remarked that they had significant pain during their procedural abortion, with one participant remarking that the pain was so severe they would rather not have another abortion.

*“I will never do it again. I had a surgical abortion and I personally think it is by far the WORST pain I have EVER felt”* (age 30, procedural abortion at follow-up, no prior abortion, 5 weeks gestation at baseline survey)

*“The surgical abortion, the cheaper option, was terrifying and painful.”* (age 22, procedural abortion at follow-up, no prior abortion, 8 weeks gestation at baseline survey)

*“EVERYTHING!!! ENTIRE PROCESS AND HAVING TO PAY SOMEONE TO PICK ME UP BECAUSE I THOUGHT I WAS GOING FOR THE PILL N [sic] TOLD I WAS TOO FAR ALONG FOR THE PILL SO I HAD TO HAVE FULL PROCEDURE WHICH Was unexpected n [sic] very painful. TOOK TWO WEEKS FOR PAINS TO STOP IN MY UTERUS”* (age 36, procedural abortion at follow-up, no prior abortion, 8 weeks gestation at baseline survey)

While some participants stated their pain was poorly controlled during procedural abortion, other participants who received medication abortion were surprised at how much pain they experienced. One participant mentioned that she felt medication abortion was more invasive and painful than her prior procedural abortion.

*“Women should know that you get a vaginal ultrasound before and after taking the pill, so it’s 2x as invasive as just having a doctor do it. Also, it’s at least 100x more painful, worst pain I’ve ever felt, like resetting a bone for hours. Having a doctor do it is hardly any more painful than a pap smear if I recall correctly”* (age 27, medication abortion at follow-up, had prior abortion, 5 weeks gestation at baseline survey)

Other participants acknowledged that their abortion was not as painful as they had anticipated. One participant mentioned that their procedural abortion was less painful than expected, even though they initially wanted a medication abortion:

*“I went in thinking that I wanted a pill abortion but I am so glad I decided on the surgical. I could not have sedation because I had to drive home by myself. The procedure was quick, it was somewhat painful, but it was over in about 10 seconds. I was able to walk out myself in 10 minutes and by getting the surgical abortion it did not interfere with breastfeeding my 2.5 year old”* (age 29, procedural abortion at follow-up, no prior abortion, 5 weeks gestation at baseline survey)

**3.2.4. Cost Barriers of Abortion Pain Control**—One participant mentioned the cost of anesthesia and pain medication as a barrier to obtaining an abortion:

*“...The whole process made me feel as if I was being punished in small ways for making this decision... Paying for anesthesia while the whole procedure is covered also felt like being punished, if you’re poor that is, that’s an attack on the less fortunate. No pain meds or scripts for Ibuprofen were given out or to take home, which is another thing that could make it hard for woman who can’t afford to buy things like Advil or Tylenol”* (age 33, procedural abortion at follow-up, had prior abortion, 6 weeks gestation at baseline survey)

## 4. Discussion and Conclusion

### 4.1 Discussion

Fear of procedure and pain were mentioned as barriers among both people who had obtained an abortion and those who were still pregnant at follow-up. Participants mentioned fears about the steps of procedural abortion, concerns about seeing products of conception, and perceptions that medication abortion was less invasive than procedural abortion. Some of these fears appeared to be connected to misinformation about procedural abortion (such as risk of depression and future infertility) as opposed to scientific evidence that abortion procedures have very low risks of complications [11]. These misconceptions about abortion are commonly repeated in the media [12] and reflected in prior research on people’s abortion concerns and misinformation [2–4].

For participants seeking medication abortion but beyond the eligible gestational limit, fear of procedural abortion may be a contributing factor to not having obtained an abortion when surveyed at follow-up. Many pregnant people may not be able to obtain medication abortion due to gestational age, cost, and logistical challenges. Improving access to a pregnant person’s abortion method of choice is critical from a reproductive justice standpoint to ensure health equity and enhance patient care delivery. However, improved counseling, patient education, and pain control options may help patients feel more prepared for a procedural abortion if they cannot have a medication abortion for any reason. It is worth nothing that this study was conducted in 2017 – 2018 before telehealth for medication abortion was more widely available and before providers began offering medication abortion up to 77 days, as opposed to 70 days [13]. Both of these changes have since expanded medication abortion access in the US [14,15].

Some participants cited inability to receive deep sedation or general anesthesia prior to procedural abortion as a challenging part of considering or obtaining an abortion. Deep



sedation during procedural abortion is a safe and effective method of pain control, but may not be routinely offered to patients due to practice limitations, distance to a nearby hospital, or patient medical comorbidities [16]. Conversely, patients who do not want deep sedation or cannot receive it outside of a hospital setting (as with individuals who have a high BMI or other medical conditions) may face significant barriers to abortion access especially as a consequence of state policy requirements for deep sedation or general anesthesia to reduce “fetal pain” during abortion [17]. (It is worth noting capacity for fetal pain is limited and highly unlikely before the third trimester, thus deep sedation may be imposed on pregnant people as the result of a dubious medically dubious policy [18].)

Moreover, the cost of pain control or sedation during procedural abortion can also be a significant barrier to abortion access. The Hyde Amendment bans the use of federal funds, including Medicaid, for abortion and many states have restrictions on private insurance coverage for abortion [19]. Most patients in the United States pay out-of-pocket for abortion care [20] and a recent study found the median prices of a first trimester and second trimester abortion to be \$490 and \$750, respectively [21]. While it is well-known that cost is a significant barrier to abortion access [20–22], the limitations caused by the cost of pain control in particular reiterates inequities in both access and quality of care, especially for low-income or uninsured people seeking abortion. In Illinois, after the state Medicaid program began to cover all costs of the abortion for patients with Medicaid, more patients began to opt for sedation [23]. To ensure health equity and quality of care, it is essential for insurance to cover abortion and all associated costs such as pain control.

Several of the participants who cited fear of pain had received an abortion by the time of the follow-up survey. This may be attributed to recall bias of participants who experienced inadequate pain control during their abortion, which they perceived to be a challenging part of their abortion experience. Anticipatory guidance about pain and pain relief during medication and procedural abortion, as well as offering patients multiple options for comfort measures and pain control, can help improve patient experiences during abortion [24]. While patients are generally satisfied with abortion care services [25] with most abortion care facilities providing standard services including informed consent, patient education, and emotional support [26], there is room for improvement in both anticipatory guidance and online resources to help patients feel more prepared for their abortion experience [1] and make informed decisions about abortion.

Both fear of procedural abortion and abortion-related pain may stem from misinformation or lack of information about abortion. Perceptions about abortion safety are significantly influenced by information found online [8], but numerous resources about abortion are not written by medical or public health professionals and may be biased or inaccurate [27,28]. Emerging research has explored how pregnant people share information about abortion online, specifically how online resources impact abortion decision-making. A recent study at the University of Wisconsin, Madison analyzed Reddit posts mentioning choice of abortion method and found that pregnant people expressed concerns surrounding emotional or physical pain, duration, and effectiveness when contemplating which abortion method they wanted [2]. These studies highlight the need for reliable and accurate online

resources for abortion that address patient concerns and help them feel more prepared for their abortion experience.

The strengths of this study include a multi-state sampling design including all 50 states and the District of Columbia, as well as recruitment of individuals while they were still deciding about abortion or to continue their pregnancy. Surveying pregnant people who are still early in their abortion decision-making process may allow researchers to better explore the impact of fear of procedure and pain as a barrier to abortion, capturing the perspectives of individuals who may never make it to a clinic or abortion-providing facility.

This study had several limitations. All reports and responses from this study were volunteered organically from participants through open-ended free response questions as opposed to direct questions about procedure and pain as barriers to abortion specifically. While this methodology limited our ability to ask follow-up questions or have participants further elaborate on their answers, this also allowed us to elicit participants' greatest concerns as opposed to probing them to choose from a pre-determined set of common barriers. However, it is possible that more participants in the study may have endorsed fear of procedure or pain had we explicitly asked about these factors. In addition, our study did not explicitly ask about whether participants received pain control or sedation prior to their abortion, which may make it difficult to contextualize their experiences of pain in open-ended responses.

Our positionality as abortion researchers and a future abortion provider may impact our interpretation of the data. For the first author who is a clinician in training, interpretation of the data may be altered by her relative position of power over patients who seek abortions. In addition, our privilege and perspective as people with access to salaries, health insurance, and high health literacy is in contrast with the study participants, as most people who receive abortions in the United States have an income below the federal poverty line. Furthermore, we acknowledge our research lens is grounded in reproductive justice and this may influence our perceptions of the data, given that the right to not have children, including through access to abortion care, is a key principle of a reproductive justice framework.

## 4.2 Conclusion

Fear of procedure and pain can be challenging parts of an individual's abortion experience. Concerns surrounding procedural abortion may stem from uncertainty surrounding the steps of a procedural abortion, as well as psychological distress and endorsement of abortion-related myths. In some cases, patient preference for one abortion method over another may be due to fears about the experience of procedural abortion, anticipated pain, or inability to access certain pain control methods. Uncertainties and fears about abortion, particularly when accurate and reliable information about abortion may be difficult to find online, can be significant barriers to abortion access. This study highlights the need for high-quality, accessible resources for individuals seeking abortion services to help them address their greatest concerns and feel more prepared for their abortion.

### 4.3 Practice Implications

Abortion resources, particularly online, should provide accurate and unbiased information regarding abortion methods and pain control to help improve patient experiences during abortion and facilitate informed decision-making. These materials should include the risks and benefits of both medication and procedural abortion to address potential misconceptions about what this process entails. Providers, counselors, and staff should specifically address concerns surrounding procedural abortion and anticipated pain to set expectations and help patients feel more prepared for their abortions.

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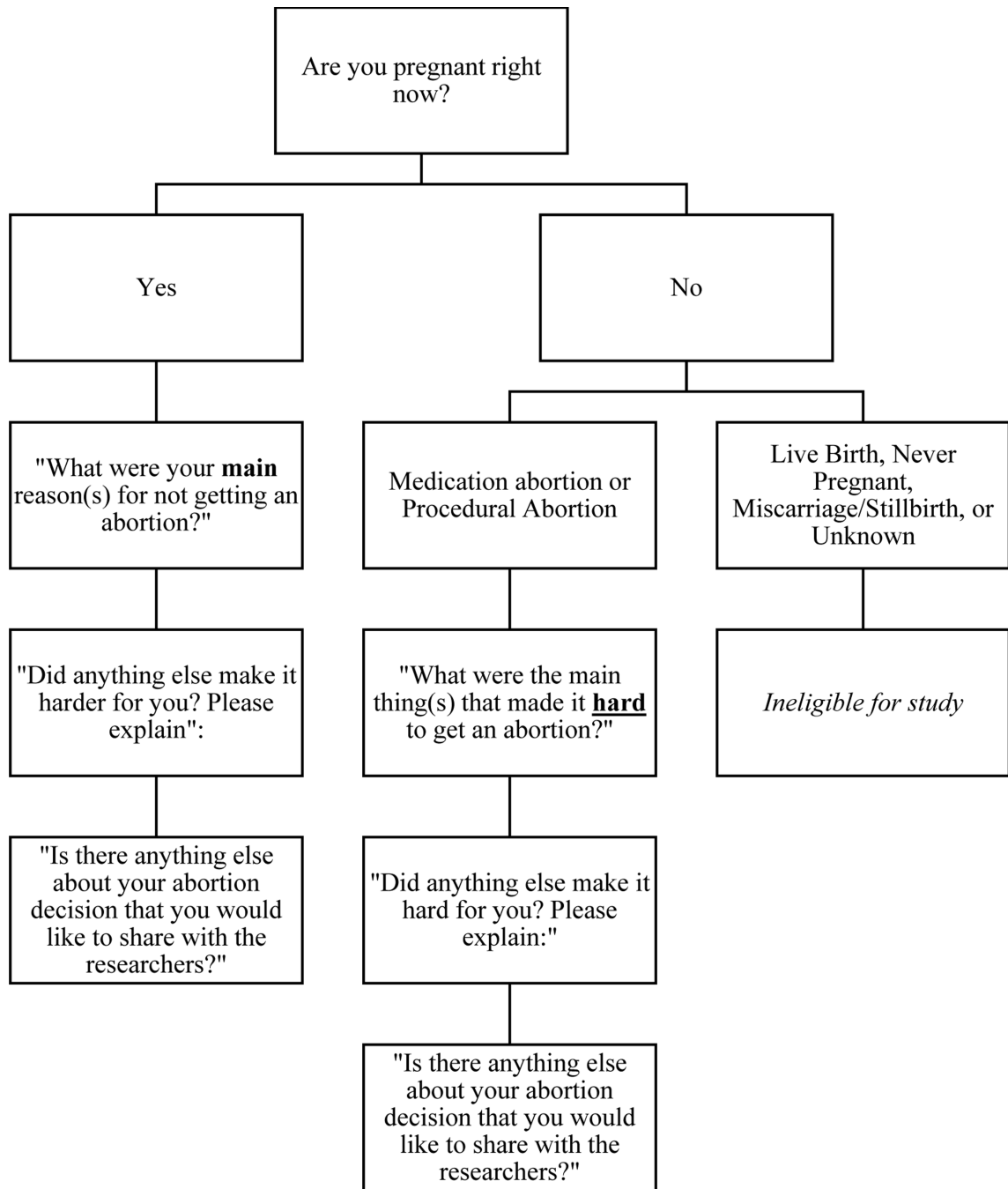
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**Figure 1: Open-ended questions in follow-up survey depending on abortion or pregnancy outcome.**

**Table 1:**  
**Demographic characteristics of participants with relevant procedure and pain responses**  
**(n=45)**

Characteristic	n
<b>Pregnancy outcome at follow-up</b>	
Had procedural abortion	23
Had medication abortion	15
Pregnant, still seeking abortion	4
Pregnant, planning to continue pregnancy	3
<b>Age (years)</b>	
<25	13
25–34	28
>34	4
<b>Race/Ethnicity</b>	
White	29
Black/African-American	7
Hispanic/Latinx	7
Asian, Native Hawaiian, or Pacific Islander	1
American Indian, Native American, or Alaska Native/Multi-racial/Other	1
<b>Insurance status</b>	
Private	11
Medicaid/Medicare/State exchange	27
None	7
<b>Has difficulty meeting basic needs</b>	
	22
<b>Education</b>	
High school graduate or less	18
Some college, college, or professional degree	27
<b>Gestation of pregnancy at baseline</b>	
10 weeks	38
10.1 – 14 weeks	6
Missing	1
<b>Previously pregnant</b>	
	34
<b>Previously had an abortion</b>	
	13
<b>Previously had childbirth</b>	
	32
<b>Region of residence</b>	
Northeast	10
South	13
Midwest	6
West	16
<b>Distance to nearest abortion clinic (miles)</b>	

Characteristic	n
< 5 miles	14
5–24 miles	20
> 25 miles	11

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