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"Technically an abortion": Understanding perceptions and definitions of abortion in the United States

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ABSTRACT

Anti-abortion legislation in the United States exploits misinformation and ignores medical definitions to curtail access to essential healthcare. Little is known about how individuals most likely to need this care define abortion, in general or as distinct from miscarriage, and how this might impact access to, utilization of, and experiences of care. Using mixed-method card sort and vignette data from cognitive interviews (n = 64) and a national online survey (n = 2009), we examined individuals' understandings of pregnancy outcomes including abortion and miscarriage.

Our findings show that people hold varying ideas of what constitutes an abortion. Many respondents considered 'intent' when classifying pregnancy outcomes and focused on intervention to distinguish between miscarriages and abortions. Particularly, medical intervention was found as a defining feature of abortion. Lack of knowledge regarding pregnancy experiences and ambiguity surrounding early stages of pregnancy also influenced respondents' understanding of abortion.

We find that abortion and miscarriage definitions are socially constructed and multi-layered. Advancing our understanding of abortion and miscarriage definitions improves reproductive health research by elucidating potential areas of confusion that may lead to misreporting of reproductive experiences as well as highlighting ways that blurred definitions may be exploited by abortion opponents.

1. Introduction

The choice and ability to access an abortion requires knowledge of what it is; its legality; and how, when, and where care can be obtained (Coast et al., 2018). Pregnancies and their outcomes are not simple. Complexities and nuances around when someone might consider themselves pregnant and how they categorize their pregnancy outcome – e.g., as a live birth, stillbirth, miscarriage, or abortion – is grounded in subjectivity (Strong et al., 2023). Examining the blurred boundaries between abortions and other pregnancy outcomes is critical for understanding how knowledge shapes potential care trajectories, as well as how political attacks against reproductive autonomy exploit this uncertainty.

There is a paucity of evidence regarding how people define what constitutes an abortion. While there is an assumption that the definition of abortion is understood and agreed upon, there are limited public-facing definitions of abortion offered by medical organizations (e.g., ACOG, WHO). There is limited evidence examining how lack of clear definitions manifest in the general public's own understandings of what constitutes an abortion. Furthermore, definitions and perceptions of abortion are embedded in social and contextual norms, not necessarily aligned with biomedical definitions of pregnancy, abortion, and miscarriage (Bell and Fissell, 2021). Normative values shape and interact with broader community and national discourses. Within the United States (US), political and media discourses illustrate the significant misinformation and conceptual blurring between pregnancy outcomes (Schneider, 2022). The effect of this discourse is more apparent in the wake of the *Dobbs v Jackson Women's Health Organization* Supreme Court decision, which overturned *Roe v. Wade* and has resulted in state bans on abortion in 13 states (as of May 2023), thereby decreasing the accessibility of abortion (Donley and Lens, 2022; Kirstein et al., 2022). Notably, this impact is not limited to abortion. Policy restrictions on abortion, coupled with confusion about what constitutes an abortion, impact other aspects of pregnancy care, such as miscarriage

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management and ectopic pregnancy care, by sowing confusion regarding the legal status of procedures and what activities may be criminalized (Baird and Millar, 2019; Kohli, 2023). Among providers in the US, inconsistent and incorrect knowledge regarding contraception results in the erroneous labelling of other healthcare, such as emergency contraception, as an abortifacient (Swan et al., 2023).

What is socially constructed to constitute an abortion, and the language and definitions that are used, are both a cause and a consequence of abortion stigma (Kumar et al., 2009). Abortion stigma arises through (i) cultural notions of women as primarily mothers, (ii) the discourse surrounding fetal personhood, (iii) legal restrictions, (iv) the view of abortions as unhealthy (and, by extension, unsafe), and (v) active attempts by anti-abortion actors to foment stigma (Norris et al., 2011). Discourses within the US frequently use the language of 'mothers' to describe pregnant people, regardless of whether they have children or intend to carry a pregnancy to term, as well as frame abortion as murder through ascribing fetal personhood (Baird and Millar, 2019). Legal exemptions for certain abortions create notions of 'acceptable' and 'unacceptable' abortion (Nandagiri, 2019), creating hierarchies of justifications that impact a person's experience of care (Beynon-Jones, 2017). Abortion stigma is also linked to substantial underreporting of abortions in surveys (Desai et al., 2021; Lindberg et al., 2022; Maddow-Zimet et al., 2021).

Moreover, abortion stigma has been operationalized by anti-abortion groups and policymakers in the US to limit the acceptability and accessibility of abortion care (Joffe, 2013), and to shape media discourse (Nixon et al., 2016; Sisson and Kimport, 2014). This detrimentally impacts pregnant people seeking abortions and compounds existing obstacles to care (Harris, 2012). These efforts to worsen abortion stigma exacerbate inequalities in care experiences (Bommaraju et al., 2016), reduce the affordability of care (Moore et al., 2021), and increase the real and perceived threat of negative consequences post-care (Norris et al., 2011). Under these conditions, how and why a person defines what constitutes an abortion might be shaped by desires to navigate abortion stigma and mitigate the negative consequences of being stigmatized.

Little research has directly addressed how people conceptualize and define pregnancy and potential outcomes such as abortion and miscarriage. By understanding definitions of abortion as socially constructed and largely based in stigma, this paper explores tensions between conflicting social and contextual meanings assigned to various pregnancy outcomes. In the current study, we attempt to disentangle how people classify pregnancy experiences through card sort activities and a series of vignettes posed during qualitative interviews and an online survey. Understanding these nuances in how people categorize pregnancy experiences is essential for researchers, policy makers, and clinicians to study, protect access to, and provide abortions and other pregnancy-related care.

2. Methods

2.1. Qualitative interviews

In January and February 2020, two interviewers (authors AV and JM) conducted in-depth interviews with 64 cisgender women in urban New Jersey (n = 29) and suburban Wisconsin (n = 35). The study was conducted in two locations to avoid state-specific findings. New Jersey is a state in the mid-Atlantic and Northeastern region of the US. Notably, it is the most densely populated state (U.S. Census Bureau, 2020) and is one of the most ethnically and religiously diverse in the US, ranked seventh by the Diversity Index (U.S. Census Bureau, 2021). Wisconsin is located in the upper Midwest and is ranked 26th in terms of population density (U.S. Census Bureau, 2020). Compared to the country as a whole, Wisconsin has a high percentage of residents with German ancestry and is ranked 39th by the Diversity Index (U.S. Census Bureau, 2021). States were selected for differing political and social contexts for abortion. Specifically, at the time of the interviews (notably, before the Supreme Court's overturning of *Roe v. Wade*), the Guttmacher Institute classified New Jersey as "leans supportive" of abortion rights, because New Jersey's state constitution protected abortion rights, the state allowed Medicaid coverage for abortion, and advanced practice clinicians were able to provide abortion care. By contrast, Wisconsin was listed as "hostile" to abortion rights because it had an unconstitutional abortion ban, abortion care required at least two trips to a provider, Medicaid was restricted from covering abortion, abortion care via telemedicine was banned, and parental involvement was required for minors seeking abortion (Nash, 2019). Data collection lasted for five days in each state. After completing interviews in Wisconsin, questions and probes were edited to improve comprehension prior to conducting the New Jersey interviews.

A third-party recruitment firm contacted potential respondents from its database and asked them to participate in an interview about sexual and reproductive health. Respondents were eligible to participate in the study if they were aged 18–49 years old, assigned female at birth, identified as a woman, spoke English, lived in a study state, and had ever had penile-vaginal sex. Participants were asked about their abortion history during the screening process to ensure the sample included those who did and did not report an abortion to satisfy analytic requirements for other aspects of the overall study (Lindberg et al., 2022; Mueller et al., 2022). In this study component, we did not compare differences in responses by participant abortion history or state of residence.

Interviews were conducted in English at conference and market research locations. Interviews took approximately 90 min and were audio-recorded. Verbal consent was obtained prior to the interview and participants were asked to complete a sociodemographic questionnaire at the end of the interview. The interview began with participants providing feedback on a series of questions and question introductions hypothesized to improve abortion reporting (results described elsewhere (Mueller et al., 2022). Participants then took part in a card sorting activity and heard a series of vignettes to further describe their definition of abortion. Participants received $150 cash as remuneration for their time. The Guttmacher Institute's federally registered Institutional Review Board reviewed and approved the study (DHHS identifier IRB00002197).

In the card sort activities, respondents were given a physical stack of cards containing different reproductive health experiences (e.g., "had a surgical abortion," "took emergency contraception") (see Appendix Table 1 for card wordings). They were asked to sort the cards into three groups ("yes, definitely" "no, definitely not" or "maybe, it depends") in response to three separate prompts asking whether they considered the experience to be (1) an abortion, (2) a miscarriage, and (3) a pregnancy. Respondents were asked to describe how and why they were sorting their cards during and after they placed the cards. The interviewer requested additional feedback on cards that the respondent found particularly challenging to sort. Interviewers took pictures of the sorted cards for record-keeping. Although our approach differed somewhat from past research, card sort activities have successfully been utilized in qualitative research to address definitional variation and facilitate communication between interviewer and interviewee (Mammen et al., 2016).

The interviewer also read and presented eight vignettes describing various pregnancy experiences to respondents. Vignettes have been used in other research as a powerful tool to identify components of scenarios that influence perceptions and attitudes (Sampson and Johannessen, 2019). Our vignettes included different features such as gestational age, contraceptive use, and the type of abortion procedure (see Appendix Table 2 for vignette wordings). After presenting each story, we asked respondents whether they would consider the experience to be an abortion and why they made that determination.

Audio recordings of the interviews were transcribed by a transcription service. Transcripts were then scrubbed of identifying information and reviewed for accuracy. We conducted a systematic content analysis

using NVivo12 to assign codes to transcript segments and organize responses by themes. The research team developed a deductive coding scheme based on the cards, vignettes, and existing literature.

The team coded several transcripts and reviewed coding to ensure alignment among team members. The remaining transcripts were divided among the research team and coded by at least one member of the research team. We continued to meet regularly to review coding questions and ensure intercoder alignment. After completing coding, the analysis team identified salient themes and areas of respondent ambiguity.

2.2. Quantitative survey

The items examined in the quantitative component of this analysis were part of a broader survey measuring sexual and reproductive health experiences with eligibility requirements that matched the qualitative research, except that eligible respondents had to be assigned female at birth but did not have to identify as women at the time of the interview (results published elsewhere (Lindberg et al., 2022)). Following our qualitative research, 2009 study participants were recruited via the Qualtrics online panel to complete adapted forms of both the card sort and vignette activities; Qualtrics is a private research software company specializing in Web-based data collection that partners with panel providers. Panellists were invited to participate in the survey, offered in English, via email or social media accounts. We converted the revised hands-on card sort activity in the cognitive interviews to a matrix question in the survey. Respondents were asked if they would consider each of the experiences to be an abortion, with answer choices of "yes, definitely," "no, definitely not," "maybe, it depends," or "I don't know."

We adapted the vignettes used in the qualitative interviews and presented survey respondents with six vignettes, asking if they thought the person in each vignette had an abortion. Respondents were randomized to one of two vignette options for each vignette, out of a total of 12 vignettes possibilities (see Appendix Table 2 for vignette characteristics varied in quantitative surveys). The vignette options varied the following items: medication abortion success, feelings about the pregnancy, contraceptive use, number of weeks for missed period, miscarriage intervention occurrence, and miscarriage intervention type.

Eligible respondents who agreed to participate could skip any question and end the survey at any time. The survey did not collect identifying information and the study team did not have access to respondents' IP addresses. Panellists received $1.07 or the equivalent in points from Qualtrics when they completed the survey. Study procedures were approved by the Guttmacher Institute's Institutional Review Board.

The survey utilized quota sampling to ensure racial/ethnic, regional, and age diversity. Although the study was not designed to be fully representative of the national population, the sample broadly mirrored the regional and racial/ethnic breakdown of the US based on the 2010 Census. We excluded responses from participants who did not meet criteria for providing valid or complete responses.

The survey data were analyzed using Stata 17.0. We examined the proportion of respondents that considered each card to be an abortion, to not be an abortion, and to maybe be an abortion. We identified the matrix questions with the most and least consistent responses across all respondents. We then repeated this process when examining vignettes. In analyzing the vignettes, we looked across the six vignettes for inconsistency and between randomized options to better understand the impact that abortion success, pregnancy emotion, contraceptive use, gestational age, and medical intervention might have on how people determine whether an experience is or is not an abortion. We conducted bivariate regressions to test for significant differences between vignette options.

3. Results

Our qualitative and quantitative analyses highlighted topics and themes that elicited the most confusion or controversy among respondents. We begin by presenting the quantitative results to give an overall picture of how the varying cards and vignettes were characterized by our participants. We then use the qualitative results to provide depth to the themes highlighted by our larger quantitative sample. Our qualitative results allow us to explore the reasons behind ambiguous or inconsistent responses regarding how respondents categorize pregnancy experiences.

3.1. Quantitative results

When asked to sort experiences as definitely an abortion, maybe an abortion, or definitely not an abortion, survey respondents largely agreed (>66% agreement) on which experiences were not an abortion (stillbirth, sick when pregnant, ectopic pregnancy, miscarriage, and missed period) (see Fig. 1). Conversely, only two experiences had at least 66% agreement that they *were* an abortion (procedure with a provider and surgical abortion).

Despite this general pattern of agreement, it is noteworthy that there was disagreement for every experience respondents were asked to evaluate. Additionally, none of the procedures obtained uniformly decisive responses, with at least some respondents categorizing each card as "maybe an abortion." Together the patterns continue to highlight the blurred distinctions.

We also found mixed patterns of agreement and disagreement in what counted as an abortion across the various vignettes. For eight of the 12 vignettes, at least 80% of survey participants agreed on whether the scenario was or was not considered an abortion (see Table 1). Four vignettes had less agreement among respondents, namely: self-managed abortion (failed abortion), miscarriage intervention at 12 weeks (medical miscarriage management), miscarriage intervention at 12 weeks (surgical miscarriage management), and miscarriage intervention at five weeks (medical miscarriage management).

In most cases, changing aspects of the vignette did not shift the results in the paired vignettes significantly ($p < .05$), with two exceptions. When we changed the self-managed abortion vignette from a successful termination to a failed one, the percentage of respondents classifying the experience as an abortion changed from 85% to 27%. Additionally, when the vignette about miscarriage intervention at five weeks pregnant described medical miscarriage management, 33% of respondents considered the experience an abortion, as opposed to only 11% when the vignette described expectant miscarriage management.

Ultimately, our quantitative results highlighted ambiguity surrounding whether to classify an experience as an abortion and how to categorize medical intervention during a miscarriage. We explore these themes in combination with additional themes that emerged in the qualitative interviews in the next section.

3.2. Qualitative results

Four major themes emerged from our analysis of the qualitative results. The first theme, like the findings of the quantitative survey, centers on ambiguity regarding how to characterize pregnancy outcomes and when pregnancy begins, which in turn influences respondents' perceptions of abortion. The second was that many respondents relied on their perception of the pregnant person's intent to end the pregnancy when determining whether to classify an experience as an abortion. The third theme was the role of intervention in creating a boundary between miscarriage and abortion. Finally, some respondents' lack of knowledge about potential pregnancy outcomes had an important influence on their notions of what constituted an abortion.

First, ambiguity regarding the determination of when pregnancy begins contributed to respondents' categorization of abortion. This

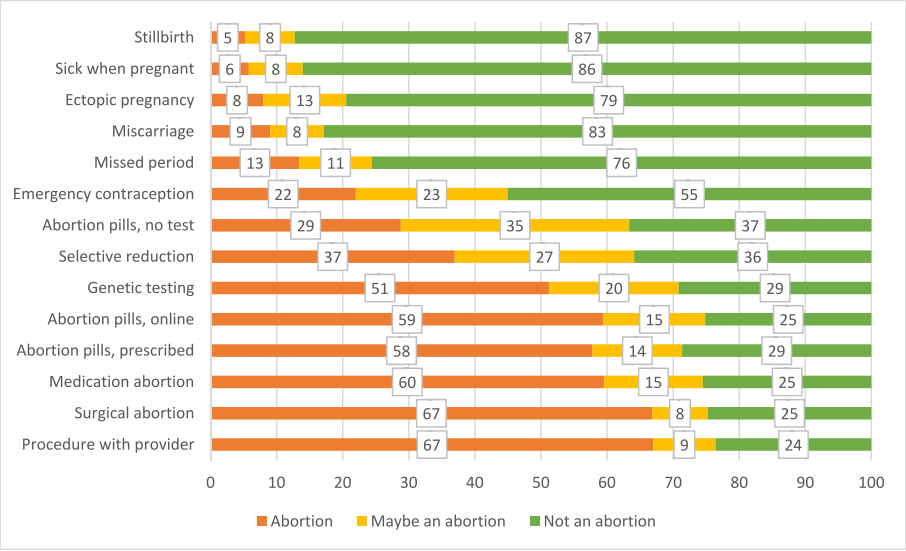

Fig. 1. Distribution of abortion categorization of reproductive experiences from survey (N = 2009).

Table 1
Vignette pairs with abortion categorization from survey (N = 2009).

Vignette	Variation	%	
		Abortion	Not an abortion
Medication abortion in clinic	Period six weeks late	89	11
	Period three weeks late	86	14
Fetal anomaly	No emotion named	87	13
	Thrilled about pregnancy	83	17
Self-managed abortion	Successful abortion	85	15
	Failed abortion	27	73
Miscarriage intervention at 12 weeks pregnant	Medical miscarriage management	36	64
	Surgical miscarriage management	32	68
Miscarriage intervention at 5 weeks pregnant	Medical miscarriage management	33	67
	Expectant miscarriage management	11	89
Emergency contraception	No condom use	16	84
	Condom breaks	15	85

ambiguity stemmed in part from the possibility of a person not knowing, or choosing not to find out, they were pregnant and the complications this circumstance could introduce for assessing whether the end of a pregnancy constitutes an abortion. Many respondents expressed doubt regarding the reliability of home pregnancy tests, mentioning the need to take multiple to confirm a result or requiring a clinical confirmation of pregnancy to consider a pregnancy "real."

> *"No [not an abortion], because you don't know if you were ever really pregnant. A lot of those little pregnancy tests are not accurate. Now, you could have changed it to say that she went to the doctor and confirmed [a pregnancy]. Like say she took a pregnancy test at home, and it's a positive, and she got an appointment to see her doctor, and her doctor confirmed that she was pregnant. And then she ordered the pills. Then that's something completely different."* 219, in response to self-managed abortion vignette

However, in cases where the respondent viewed a pregnancy as confirmed, some respondents conflated the pregnancy with a baby, and when respondents used the word "baby" they often described the situation as constituting an abortion.

> *"Yes, they had an abortion. […] They gave them abortion pills and they took it, according to the directions. Baby gone. They went back, shows no baby. No fetus."* 210, in response to medication abortion in clinic vignette

> *"Yes, I would say they had an abortion because the person knows for sure they are pregnant and they are going out of their way to research ways to lose the fetus. I feel like when I think of abortion, I think about you choosing to voluntarily go through with a way or procedure to lose your baby. I feel like that's exactly what [this person] did. They looked up online supplements that were advertised that most of the times end pregnancy, and [they] took them as directed. They knew most likely what was going to happen. Their intention was to get rid of the baby. So I feel like that is abortion, especially since the person lost the baby."* 212, in response to natural supplements vignette

This quote further demonstrates that pregnancy recognition was often a precursor for respondents to consider situations as constituting an abortion, as an individual who recognizes a pregnancy ("knows for sure they are pregnant") is assumed to understand what will happen when taking action to terminate a pregnancy.

The second quote above intersects with the second major theme; many respondents classified pregnancy outcomes as an abortion if the pregnant person intended to end the pregnancy and took action to do so. Intention overlapped with "choice" for many respondents, meaning that choosing to end a pregnancy in many cases was assumed to be an abortion. Many respondents clearly indicated that they would categorize taking action to end a pregnancy as an abortion even without knowing that the action had the intended result. These results provide insight into why 27% of survey respondents categorized as abortion the vignette describing an unsuccessful attempt at self-managed abortion.

> *"'Ended a pregnancy by taking abortion pills prescribed by a health care provider.' Yes, definitely [an abortion]. That's an act that you're intentionally doing. Maybe it'll work, maybe it won't, but you have an intention to eliminate your pregnancy, intentionally."* 220, in response to abortion pills prescribed card

> *"Yes, this is an abortion … They decided to terminate a pregnancy for no reason at all other than their independent choice."* 202, in response to medication abortion in clinic vignette

This respondent highlights how for them intention and "choice" are unequivocal where there is no other "reason" for a person to end their pregnancy. Similarly, ambiguity was introduced for some respondents

when the pregnant person experienced a wanted pregnancy but terminated it for medical or financial reasons, such as severe fetal abnormalities.

> *"I'd say 'maybe [it's an abortion], it depends'. It's kind of hard for me on that one, because they know that the quality of life probably wouldn't be there. I guess it's not technically considered a miscarriage because they did get [an abortion as] their own choice"* 105, in response to genetic testing card

> *"I guess, I mean, maybe [it's an abortion]. It depends on if you know you're not able to take care of a severe – a sickly child I guess, then what choice do you have? Would you rather go all the way through, you know. I think it's considered abortion only when you personally know you can take care of a child and you're being selfish."* 103, in response to genetic testing card

Several respondents noted a distinction between medical necessity and choice, despite no clear boundary being indicated in the card sort and vignette activities, such as in the card describing a person pregnant with triplets having one fetus removed.

> *"'Had one fetus removed when pregnant with triplets.' Maybe [it's an abortion], it depends, because maybe there was a medical reason you had to have it removed. If you had it removed by choice, yes, definitely [an abortion]."* 106, in response to selective reduction card

The third major theme in our qualitative results is that most respondents understood miscarriage to mean a pregnancy ending without intention, choice, or action taken by the pregnant person. Crucially, many respondents viewed any action taken to remove a fetus as an abortion. These respondents viewed miscarriage as something that happens without intervention of any kind (e.g., medical management, vacuum aspiration).

> *"Yes, I think it would definitely be an abortion … Miscarriage is something that happened just through nature, whereas taking pills is something that happened through an outside source."* 205, in response to abortion pills prescribed card

This finding was especially prevalent in response to the vignette that described a person bleeding heavily at five weeks pregnant and taking pills to remove the fetus. Many respondents considered the action to remove the pregnancy an abortion because it involved intervention, although the pregnancy described in the vignette was no longer viable.

> *"It could be an abortion or it could be a miscarriage … They may have already had the miscarriage prior to them taking the pills, but I don't know how these pills are. I didn't even know you could have an abortion like that, but in any case, it could be."* 203, in response to miscarriage intervention at 5 weeks pregnant vignette

In a few cases, respondents seemed to contradict themselves when attempting to describe whether vignettes referring to pregnancy removal constituted abortions or not. This incongruity may stem in part from the use of the biomedical term for miscarriage being "spontaneous abortion," or it may be due to a lack of familiarity with the need for miscarriage management.

> *"I would say yes [definitely an abortion]. They had the surgical procedure. It was technically an abortion. Again, I struggle with it because it wasn't elective. So, that's where I think like sometimes with the abortion question, it softens it a little bit if you say elective versus spontaneous. And even though I guess technically this would still be elective, it still is [an abortion]. There's just so much like it's not black and white. All of this is kind of gray."* 120, in response to miscarriage intervention at 12 weeks pregnant vignette

> *"It kind of says two things here. One thing is like the person starts to bleed heavily for several hours, which does say that [this] is a miscarriage there. But then it says the doctor prescribed some pills to remove it. It changes the whole context and says that it's a surgical or medicinal abortion … So I'm not sure, I would be a maybe [it's an abortion] on this."* 213, in response to miscarriage intervention at 12 weeks pregnant vignette

Similarly, unfamiliarity with miscarriage management led to confusion for many respondents responding to the vignette in which a pregnant person begins bleeding heavily and is told by a doctor that the fetus will not continue to grow. Acting (in this case, taking medication) to remove the fetus meant to some respondents that the experience was distinct from miscarriage while also distinct from abortion since it was not the choice of the pregnant person to end the pregnancy.

> *"But it's – it's because it's doctor recommended so does not change – [this person] didn't have a choice. So, yes … She had an abortion, but it was medically necessary for her to have the abortion."* 206, in response to miscarriage intervention at 12 weeks pregnant vignette

> *"I guess maybe I am not clear on what the proper definition of abortion is, because my definition of an abortion is … I would say, technically, yes, but technically, no, because I feel that an abortion is an unplanned or unwanted pregnancy that you decide to terminate, but this person is not, in a sense, something has gone wrong with her pregnancy. I feel like abortion has a stigma that they terminate it, but that's not what she did, or possibly wanted to do. She had a medical abortion. I guess I would go with that [yes, it's an abortion]."* 223, in response to miscarriage intervention at 5 weeks pregnant vignette

The nuances expressed here, in which respondents felt discomfort associating miscarriage with abortion due to stigma, develop on the survey results, which demonstrated that any medical intervention for a miscarriage, regardless of the gestational period (12 weeks or 5 weeks), resulted in higher numbers of respondents labelling the miscarriage an abortion compared to situations involving no medical management (see Table 1).

The final major theme to emerge from our analysis is that many respondents lack health literacy regarding pregnancy experiences. Lack of knowledge regarding miscarriage management was one of many areas where respondents expressed confusion or held medically inaccurate beliefs. Many respondents did not know what ectopic pregnancy was, and those who did were often uncertain as to whether resolving an ectopic pregnancy required medical intervention and whether it was dangerous for the pregnant person.

> *"'Had an ectopic pregnancy.' Again, not an abortion because it's not … it has to be taken out, but that's because the baby is dead inside, but it's not … I guess I don't know. I can … it depends. Yeah, not [an abortion], I think, but it depends, because it does have to be taken out because the baby is found dead inside the body."* 229, in response to ectopic pregnancy card

> *"'Had an ectopic pregnancy.' That means outside of the uterus. Will this be considered an abortion? At the end, she's going to have a miscarriage. Maybe. Sometimes, the babies that are born outside, they will just normally come. So, it's not an abortion. Maybe [it's an abortion], sometimes. It depends on the situation of the woman."* 215, in response to ectopic pregnancy card

Similarly, some respondents expressed confusion about how emergency contraception works, in particular whether it prevents or ends a pregnancy. While nearly half of respondents correctly identified that emergency contraception prevents a pregnancy, many others viewed emergency contraception as potentially ending a pregnancy.

> *"I mean, yeah, of course it's considered an abortion because you're terminating something. I mean, you found out you're pregnant and you take something, it's still going to terminate it."* 206, in response to emergency contraception vignette

Other respondents viewed use of emergency contraception as potentially causing an abortion because it is intended to prevent

pregnancy.

> *"Somebody doesn't want to get pregnant so they take a medication to prevent that from happening so it could definitely be considered an abortion. But there's also the fact that nothing has happened yet, a fetus hasn't been formed so it could be 'no, definitely not'. So I think this one it would be 'maybe [it's an abortion], it depends'."* 136, in response to emergency contraception card

> *"'Took emergency contraception plan B.' This is [a] form of an abortion? Yes. But […] how do we know it was successful? Again, I don't really know much about this pill. So, is it possible for someone to maybe take the morning after pill and then the termination not be successful? But I think that if I had to choose and put it anywhere – okay, assuming that there is a pregnancy, assuming that there was a morning after pill being taken and assuming that the termination was successful, I will put it here and say yes [definitely an abortion]."* 209, in response to emergency contraception card

> *"Plan B is to get rid of a baby. I mean, that's—that's how I feel about it. Everybody's different … that's not saying that you are pregnant, but it's to prevent a pregnancy. So yes, I'm going to leave it like this [yes, definitely an abortion]."* 102, in response to emergency contraception card

The above quotes provide context for the 22% of survey respondents who considered use of emergency contraception as an abortion. On the other hand, some interviewees viewed taking emergency contraception as not an abortion expressly because they assumed the person taking the medication did not know whether they were pregnant. In doing so, some respondents suggested that recognition of a pregnancy is a necessary prerequisite for labelling an experience an abortion.

> *"'Took emergency contraception/Plan B.' I don't know how this can be an abortion, because you don't even know if you are pregnant [no, definitely not an abortion]."* 203, in response to emergency contraception card

Confusion regarding emergency contraception overlapped in part with lack of knowledge regarding medication abortion and conflation of medication abortion and emergency contraception.

> *"'Had a medication abortion.' Actually I'm moving that one to 'maybe [it's an abortion]' because I don't know if you're referring to Plan B or not."* 120, in response to medication abortion card

As mentioned above, other respondents expressed confusion regarding the boundaries between medical and lay definitions of abortion, which may stem in part from medical use of the term "spontaneous abortion" to refer to miscarriage. Several respondents were also unfamiliar with stillbirth or were unsure how to distinguish it from miscarriage.

> *"'Had a stillbirth.' Trying to think of my nursing class, I think technically that isn't a [abortion]—I'd say maybe [it's an abortion], it depends for this one. I don't know. Abortion to me, the word itself just sounds like it's a choice, but I'm learning in school like it's not necessarily a choice. It can just be like the way the pregnancy went. So the baby is dead, so that could be seen as an abortion. But it wasn't the person's choice, so I would say maybe [it] depends, if you like look at all the logistics of it."* 111, in response to stillbirth card

This respondent's uncertainty illuminates potential rationales and considerations employed among the minority of survey respondents who labelled stillbirth as definitely an abortion (5%) or maybe an abortion (8%).

4. Discussion

This study highlights that people do not hold a consistent, shared, biomedically-based understanding of what constitutes an abortion. In both our quantitative and qualitative results, we found that definitions of abortion were varied, sometimes incongruous, and demonstrated significant ambiguity. Respondents relied on societally influenced ideas of when pregnancy begins, which reasons for abortion are "justified," and which situations are "natural," as well as the role of intention, medical intervention, and their knowledge of reproductive health when identifying a pregnancy outcome as an abortion. Respondents' hesitation to categorize certain situations and tendency to fluctuate between labels for some pregnancy outcomes demonstrate the complexity of these experiences.

Across the qualitative and quantitative data, perceptions of intention and choice were significant factors that respondents used to classify situations as abortion. Unsuccessful attempts to induce an abortion were classified as an abortion by over a quarter of survey respondents, likely because respondents associated the attempt with intention to end the pregnancy. Within our qualitative data, respondents elaborated on their perception that even when there was no embryo, action in combination with the intention to not be pregnant, such as using emergency contraception, created ambiguity over whether they viewed the situation as constituting an abortion. This complicates our understanding of abortion experiences by illustrating that pregnancy recognition may not be necessary for someone to believe that they have had an abortion (Coast and Murray, 2016; Strong et al., 2023). Furthermore, the ambiguity around abortion demonstrated in our findings provides additional evidence regarding how and why people may misunderstand the legal situation surrounding abortion where they live (Assifi et al., 2016).

When intention and choice were unclear and difficult to determine, respondents utilized notions of 'naturalness' to create distinctions between miscarriage and abortion. 'Natural' was framed against medical intervention – whether through a provider interaction or the use of pharmaceuticals. This generated ambiguity between abortions and miscarriages and was particularly pronounced in the case of miscarriage management, which many categorized as an abortion due to the involvement of medical intervention. Incongruities that result from the natural/unnatural paradigm may contain critical information about how pregnant people interpret their pregnancy-related experiences and seek subsequent care, particularly in environments considered hostile to abortion care, making it essential to incorporate abortion into pregnancy loss discourses (Donley and Lens, 2022). Furthermore, these results highlight how the conceptualization of a natural/unnatural paradigm can shape the real or anticipated stigma people may experience when deciding to seek care. This can shape whether they seek care at all, where they seek care, and their ability to discuss their experience with their support networks and community (Heuser et al., 2023).

While many respondents viewed a person intentionally taking action as the antithesis of "natural," "choice" was a mediating factor, meaning they considered whether a person had a choice regarding the outcome of their pregnancy, without reference to broader social, economic, and political conditions (Ross, 2018). Whether a person had a 'choice' in their pregnancy outcome shaped respondents' value judgements regarding the situations posed. Reticence among respondents to label some pregnancy outcomes as abortions due to the surrounding circumstances reveals that definitions of abortion are mired by stigma associated with the term "abortion" and a subsequent desire to stratify abortion and avoid a singular definition (Mueller et al., 2022). For some respondents, their emotional response to a situation, such as a case of fetal indication, made them question how to label the experience and even to create sub-categories of abortion to make justifications and value-based distinctions, mirroring prior findings among women and providers (Beynon-Jones, 2017; De Zordo, 2018). Respondents' implicit and explicit views of 'abortion' as a negative and stigmatizing word, outcome or action meant that there was a preference to avoid labeling something an abortion or someone as having an abortion, even when respondents understood the experience to meet the biomedical definition of abortion. This may impact whether and how people report their own abortions, as they may feel that their own abortion experiences do not completely align with the stigma they associate with abortion and

therefore may not report their own care as an abortion, potentially contributing to significant (50–70%) underreporting of abortions in national surveys (Lindberg et al., 2020). The recent Supreme Court decision overturning *Roe v. Wade* and removing the constitutional right to abortion in the US will only add more stigma to the reporting of abortion experiences.

Ideas of what constituted an abortion were also influenced by respondents' knowledge of pregnancy outcomes other than live birth. The ability to decide whether there was 'choice' in a pregnancy outcome, for example in the case of an ectopic pregnancy, requires knowledge of necessary and appropriate care, as well as the risks and potential outcomes associated with the condition. Variations in knowledge created considerable ambiguity, particularly between emergency contraception and medication abortion and miscarriages requiring medical intervention, similar to research that finds even physicians mislabel emergency contraception as an abortifacient (Swan et al., 2023). However, even when knowledge of pregnancy outcomes is high, ideas of when a pregnancy begins remain socially constructed (Bell and Fissell, 2021). Some women's notions that conception – and therefore pregnancy – occurred during sex shaped their view that emergency contraception was an abortifacient. These perceptions of conception and the notion of potential conception intersect with intention in ways that allow people to believe that an abortion has occurred, even when there is no embryo or fetus present. Such incongruities, ambiguities, and conceptions are able to be exploited by anti-abortion legislation that deliberately creates elisions between different types of care, which will only grow more pronounced with the overturning of *Roe v. Wade*.

Women's complex and nuanced relationship to the health system and medical technology impacted their perception of what constituted a pregnancy and, therefore, an abortion. For some respondents, situations in which no pregnancy test had been performed meant they were unclear on whether medication abortion would constitute an abortion, relying first on what they considered necessary evidence of a pregnancy. Yet, across interviews, ambiguity was shaped by their level of trust (or distrust) in diagnoses of pregnancy-related conditions or fetal indication, as well as in pregnancy testing. The desire for greater assurance – e.g., through a second opinion or through taking multiple pregnancy tests – highlights the types of certainties respondents sought when trying to define whether something was an abortion.

4.1. Limitations

While this study is a first look at how people define and label pregnancy and pregnancy outcomes, future efforts may consider the format in which information is gathered. In our qualitative interviews we used a hands-on card sort activity wherein participants held and moved cards to match their determination of whether the experience on the card did or did not match the proposed label (miscarriage, abortion, or pregnancy). However, when we adapted this approach to a larger sample using an online platform, the format of the question changed to a matrix style question. This may have altered the ability or willingness of participants to return to previously sorted experiences and adjust their response. Similarly, while our focus on abstract people rather than personal experiences allowed for an innovative exploration of perceptions of pregnancy outcomes, future research should examine the extent to which the blurred definitions of abortion apply to people's descriptions of their own experiences. Furthermore, during our analysis phase, after achieving inter-coder alignment, some transcripts were only reviewed by one team member.

Additionally, as with all qualitative research, the identities of the interviewers may have impacted how individuals responded to the questions. Both interviewers identify as white, cisgender women, and, at the time of the interviews, one in her late twenties and one in her late thirties. Although they attempted to remain neutral and non-judgmental regarding the topics covered in the interviews, their identities and self-presentations may have influenced participants' willingness to disclose their personal opinions and experiences, and the rapport established in the earlier part of the interviews, during which respondents disclosed their own abortion histories, may have affected how willing respondents were to share their understandings of abortion in the interview context.

Research has shown that willingness to disclose an abortion experience is impacted by personal characteristics, and it is possible that conceptualizing abortion is similarly impacted. Our qualitative sample was limited to cisgender women, so our results should not be considered to speak for all women nor all people with the ability to become pregnant, but rather they are reflective of the people within our quantitative and qualitative samples. We expanded the eligibility criteria for the survey to include people assigned female at birth regardless of gender identity, in recognition that people with the capacity for pregnancy who are not woman-identified are often excluded from research about pregnancy and abortion. However, due to the small number of survey respondents indicating a gender identity other than cisgender woman, we were unable to further analyze survey data by gender identity. Future research should consider how diversifying the sample may impact responses and how people who were born male might categorize different pregnancy experiences; prior research suggests that men also perceive abortion as a stigmatized and sensitive behavior (Maddow-Zimet et al., 2021).

Further, although we utilized quota sampling that broadly mirrored the regional and racial/ethnic breakdown of the US based on the 2010 Census, our quantitative sample utilized an opt-in approach and was not fully nationally representative. Our qualitative sample was limited to people living within one of our two study states and should therefore not be considered representative of the US. This research was conducted prior to the Supreme Court's *Dobbs* decision. The new decision and the wave of related state-level abortion bans, as well as the increased public discourse around abortion, may influence peoples' pregnancy outcomes definitions. Thus, our findings refer to a particular point in time and revisiting these questions is essential, in order to understand how public discourse and legal challenges to abortion access may affect the blurred boundaries around abortion.

5. Conclusion

The blurred boundaries between different types of pregnancies and their outcomes emphasize the differences in people's notions of what constitutes an abortion. It shapes how abortion stigma can arise across different pregnancy outcomes, as well as people's own perceptions of the care they have sought, the legality of this care, and their experience in accessing it. Understanding how people construct boundaries around abortion allows for more effective healthcare messaging and advocacy, which is increasingly relevant as legal restrictions on abortion mount while telemedicine and medication abortion become more widely available to some. This research further affirms the necessity of trusting people to make their own reproductive healthcare decisions, given that individuals' own definitions of abortion and other pregnancy outcomes are deeply personal and may not conform to those of other people. Respecting bodily autonomy and voluntary decision-making requires recognizing the nuance in individuals' definitions of abortion and allowing them to follow their own values regarding their personal care. Policies that attempt to police abortion leverage the opacity of abortion definitions, such as efforts to outlaw treatment of ectopic pregnancies or to suggest that legal exceptions will reduce the harm of such policies. It is imperative that we critically examine how to incorporate people's meanings and definitions of abortion, miscarriage, and reproduction in research, clinical practice, and policy, in order to produce data, protect access, and provide abortion care that more accurately reflects lived realities.

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Interview transcripts that can be shared are available here: https://data.qdr.syr.edu/dataset.xhtml?persistentId=doi:10.5064/F6V5VGX3

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Appendix

Appendix Table 1
Scenarios presented for the card sort activity

Label	Card wording
Abortion pills, online	Ended a pregnancy by taking abortion pills ordered online
Sick when pregnant	Got sick while pregnant and lost the pregnancy as a result
Ectopic pregnancy	Had an ectopic pregnancy
Miscarriage	Had a miscarriage
Stillbirth	Had a stillbirth
Missed period	Missed a period
Abortion pills, no test	Took abortion pills before taking a pregnancy test
Abortion pills, prescribed	Ended a pregnancy by taking abortion pills prescribed by a healthcare provider
Procedure with provider	Had a procedure to end a pregnancy at a doctor's office or clinic
Surgical abortion	Had a surgical abortion
Genetic testing	Ended a pregnancy after genetic testing revealed severe birth defects
Medication abortion	Had a medication abortion
Emergency contraception	Took emergency contraception/Plan B
Selective reduction	Had one fetus removed when pregnant with triplets

Appendix Table 2
Vignettes presented during interviews and characteristics varied in surveys

Vignette description	Vignette wording in interviews	Characteristics varied in surveys
Self-managed abortion	Person A realizes their period is three weeks late. They decide to take a pregnancy test at home. The test is positive. They order abortion pills online. Once the pills arrive, they take them according to the directions. They take another pregnancy test two weeks later at home. The test is negative.	Successful abortion Failed abortion
Fetal anomaly	Person B is thrilled to be pregnant. At their prenatal visit at 20 weeks, their health care provider recommends routine screening for birth defects. The test reveals the fetus has a heart defect. They go to a clinic to have surgery to end the pregnancy.	No emotion named Thrilled about pregnancy
Emergency contraception	Person C always makes sure their partner uses condoms when having penile-vaginal sex. One night, the condom breaks. The next day, they go to the pharmacy to get emergency contraception. They take the emergency contraception as directed.	No condom use Condom breaks
Medication abortion in clinic	Person D realizes their period is three weeks late. They take a pregnancy test at a clinic. The test is positive. They get abortion pills at the clinic. They take the pills according to the directions. They go back to the clinic a week later and take another pregnancy test. The pregnancy test is negative.	Period three weeks late Period six weeks late
Natural supplements	Person E misses their period. They take a pregnancy test at home. The test is positive. They order natural supplements online that advertise ending pregnancy. They take the supplements as directed. Two weeks later they take another pregnancy test, which is negative.	Not included in surveys
Miscarriage intervention at 5 weeks pregnant	Person F is 5 weeks pregnant and starts to bleed heavily for several hours. Their doctor says the pregnancy will not grow anymore and prescribes pills to remove it. Six weeks later, Person F gets their period.	Medical miscarriage management Expectant miscarriage management
Miscarriage intervention at 12 weeks pregnant	Person G is 12 weeks pregnant. When they have their first ultrasound, there is no cardiac activity, and their doctor recommends having the fetus removed. Person G has a surgical procedure to remove the fetus.	Surgical miscarriage management Medical miscarriage management
Missed period	Person H misses their period. They order an herbal supplement online and the next week their period comes, heavier than usual.	Not included in surveys

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