

Attitudes and Decision Making Among Women Seeking Abortions at One U.S. Clinic

CONTEXT: Various restrictions on abortion have been imposed under the pretense that women may be uninformed, undecided or coerced in regard to their decision to terminate a pregnancy. Understanding whether certain women are at risk of low confidence in their abortion decision is useful for providing client-centered care and allocating counseling time to women with the greatest needs.

METHODS: Data were abstracted from the precounseling needs assessment form and clinical intake form of 5,109 women who sought 5,387 abortions at one U.S. clinic in 2008. Multivariate logistic regression was used to analyze variables associated with women's high confidence in their abortion decision.

RESULTS: For 87% of the abortions sought, women had high confidence in their decision before receiving counseling. Certain variables were negatively associated with abortions' being sought by women with high confidence: being younger than 20, being black, not having a high school diploma, having a history of depression, having a fetus with an anomaly, having general difficulty making decisions, having spiritual concerns, believing that abortion is killing and fearing not being forgiven by God (odds ratios, 0.2–0.8). Having a supportive mother or male partner was associated with increased odds of high confidence (1.3 and 1.2, respectively).

CONCLUSIONS: Regulations requiring state-approved information or waiting periods may not meet the complex needs of all women. Instead, women may benefit more from interactions with trained staff who can assess and respond to their individual needs.

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Of all of the health decisions women make in their lifetimes, the decision to terminate a pregnancy is among the most personal and socially contested. Americans' support for legal abortion has declined in recent years, while support for restrictions on abortion is on the rise.^{1,2} Abortion rights opponents have promoted this sentiment to advocate for laws that focus on influencing a woman's abortion decision. As of March 2012, 26 states had a waiting period for abortion, 26 mandated the content of information provided before an abortion and 37 required parental involvement for minors;³ increasingly, states require providers to conduct an ultrasound and offer women a chance to view the image before an abortion can be performed.⁴ The stated goal of these laws is to ensure that women have carefully considered their decision to terminate their pregnancy, understand the risks involved and make an informed decision free of coercion; abortion rights opponents also hope such laws will make women reconsider their abortion decision and carry their pregnancy to term.⁵

Research to date, however, has not found these laws to be beneficial to women. For example, studies suggest that parental involvement laws do not improve parent-child communication^{6,7} and sometimes lead minors to travel to nearby states with less restrictive laws, delaying their abortion until a later gestational age, when the procedure

carries greater medical risk.^{8,9} Studying the effects of state-mandated waiting periods is difficult because of methodological and data limitations, but the existing evidence suggests that requirements for two clinic visits have negative consequences for the most vulnerable populations, who have limited resources.¹⁰ Finally, a review of the state-prescribed information included in preabortion counseling found many scientific inaccuracies, which means that requiring such scripts or materials may, in effect, compel providers to misinform their patients.¹¹

Laws that seek to influence women's decision making through requirements such as waiting periods and mandatory information are blunt instruments that target all women uniformly, instead of focusing on the women who may be in need of additional support for their abortion decision. However, research suggests that women seeking abortions prefer approaches that take into account their individualized circumstances.¹² Women's decision-making process regarding pregnancy termination is complex and involves both practical considerations—such as educational and professional goals, finances and partner support—and moral considerations—such as attitudes toward abortion and responsibilities to existing children and other dependents.^{13–19} Moreover, most women have finalized their decision to have an abortion prior to their appointment at the clinic^{20–22} and cope well following the

procedure.²³ Despite the stigma surrounding abortion, the majority of women seek—and often receive—social support from important people in their lives.^{15,17,20,24} Even most minors willingly involve adults (often their parents or guardians) in their abortion decision, regardless of whether they live in a state that mandates parental involvement.^{6,7,25,26} And fewer than 1% of women cite pressure from a partner or parent as the most important reason for their abortion.¹⁸

Findings from the psychological literature provide some guidance as to what individual women might need regarding their abortion decision. Women's likelihood of experiencing negative reactions or emotions after an abortion has been linked to their commitment to the pregnancy, level of personal conflict about the abortion, lack of social support, exposure to protesters and experiences of stigma.^{23,27–32} Unfortunately, outside the provider community, little is known about the counseling practices used at clinics to support women's abortion decision making and influence postabortion coping.

In this article, we address this gap in knowledge by describing the counseling tools and practices at one large abortion clinic. We examine how confidence in decision making varies by demographic and socioeconomic characteristics of women and pregnancy-related attributes. Furthermore, we review women's responses to questions aimed at identifying those with specific beliefs about spirituality or abortion, who may need more in-depth counseling from the clinical staff. The results can guide the provision of preabortion counseling in other clinics.

METHODS

Study Context

The data used in this study were from all women seeking an abortion at one privately owned, dedicated abortion facility in 2008. This clinic provides 5,000–6,000 first- and second-trimester abortions annually and is located in a state that does not mandate parental involvement for minors seeking abortion services. All women seeking an abortion at the facility are asked to complete a precounseling needs assessment form along with other intake forms at the time they present for care.

The precounseling needs assessment form is a two-page questionnaire with 13 items, including scaled responses and checklists, designed to identify women who need additional counseling or more time to consider their decision. It examines several dimensions of women's emotions and decision making, including how they feel on the day of the clinic visit, how confident they are about their decision to have an abortion, whether they have spiritual concerns about abortion, whom they informed about their decision and the social support they have received. The form was written by Anne Baker and was based on a needs assessment tool created by Charlotte Taft—both nationally known experts in abortion counseling. It is widely disseminated to members of the National Abortion Federation and serves as a model for abortion providers throughout the country.³³

After intake, patients have an ultrasound to determine the gestational age of the fetus; learn about the abortion procedure, possible complications and aftercare; and then meet individually with a counselor. Counselors—who have at least a bachelor's degree and have received significant training in pregnancy options and abortion counseling—answer any questions and review women's needs assessment form with them. In addition to confirming that patients have come to a final, voluntary decision and ensuring informed consent, counselors routinely offer contraceptive information and family planning referrals; they offer referrals for postabortion emotional support and other health and social services when they think they would be beneficial to patients.

However, if counselors notice any signs that a patient might feel regret or cope poorly after her abortion, they advise her to go home and return to the clinic at a later date if she still desires to terminate her pregnancy. (Warning signs include a woman's describing uncertainty about the decision, a feeling that someone had pressured her to have an abortion, a lack of support, extreme guilt or shame, and an expectation of regret or inability to cope.) Such patients are given reading materials and referrals designed to help clarify their decision, resolve conflicts and bolster support for whatever decision they make about the pregnancy, including abortion, parenting and adoption.

Data

Data on women's demographic characteristics and medical history, the gestational age of the fetus and information related to the abortion procedure were abstracted from the clinical intake form and medical records; all other information was abstracted from the precounseling needs assessment form. Three clinic staff members entered responses from the forms and limited medical information into an Access database using coded identifiers. The study coordinator trained clinic staff to use the database and provided an operations procedures guide, in-person training and frequent telephone consultations over the course of the data abstraction period. The research coordinator monitored the data for completeness throughout the abstraction period. No personal identifiers were abstracted or shared with the researchers.

The study was approved by the institutional review board of the University of California, San Francisco. Because the researchers used medical record data abstracted by clinic staff and made available without personal identifiers, it was not possible or necessary to request consent directly from individual patients. As such, the institutional review board provided an exemption from obtaining consent.

Measures

- Maternal and pregnancy characteristics.** We included variables for women's age, race and ethnicity, religion, level of education, parity and abortion history, as well as whether they had ever been depressed or ever had anxiety

or panic attacks. For each abortion sought by women, we examined such pregnancy-related characteristics as the gestational age of the fetus, presence of a fetal anomaly and whether the pregnancy was the result of rape.

•**Attitudes.** For each abortion, we examined six measures of the woman's abortion attitudes and decision-making process, which were based on statements in the needs assessment form to which women could respond "true," "kind of" or "false." Confidence in one's decision to have an abortion was measured by women's responses to four statements: "I am sure of my decision to have an abortion," "I want to have the baby instead of abortion," "I want to put the baby up for adoption instead of an abortion" and "Abortion is a better choice for me at this time than having a baby." We considered women to have high confidence in their decision if they chose "true" for the first and last statements and "false" for the second and third; women who chose any other combination were considered to have low confidence. General decisiveness was measured by women's response to the statement "Generally after I make a decision, I keep thinking about it and doubting myself." We assessed whether women felt pressured by others to have the abortion with the item "I'm here for an abortion mostly because someone else wants me to"; we considered a woman to have felt pressured if she replied "true" or "kind of" and had low confidence in her abortion decision.

Women who had "any belief in God (or a Higher Power)" were asked to respond to two additional items: "I have spiritual concerns about abortion" and "Spiritually, I am at peace with this decision." We considered women to have spiritual concerns about abortion if they answered "true" or "kind of" to the first item and "false" or "kind of" to the second item. A measure of women's fear of not being forgiven by God was based on the item "I'm afraid God won't forgive me"; we considered women who answered either "true" or "kind of" to be concerned about not receiving God's forgiveness. We assessed this separately from spiritual concerns because it has a distinct emphasis on the role of God in one's life and whether God is punitive in nature.

Finally, among all women, we measured the belief that abortion is "killing" by the item "At my stage of pregnancy, I think [abortion is] the same as killing a baby that's already born."

•**Social support.** We examined women's sources of social support for the abortion decision by the item "Who are the only people who know you're having an abortion?" Possible responses were "male partner," "friend," "mom" and "nobody." For each individual named, the woman was asked "Is this person supportive to you in what you want to do?"

Analysis

We conducted descriptive analyses to explore the characteristics of women seeking abortions, characteristics of the pregnancies to be terminated, and women's attitudes and decision-making process; chi-square tests were used

to examine differences by age-group and gestational age in pregnancy-related characteristics and social support. In analyses of coerced abortion, we distinguished between minors and 18–19-year-olds, because parental notification laws are targeted to individuals younger than 18; in the rest of our analyses, we divided respondents by whether they were younger than 20 or were 20 or older.

Multivariate logistic regression was used to identify variables associated with women's high confidence in their abortion decision, controlling for basic demographic variables as well as characteristics of the pregnancy and abortion decision. For our model, we created two race and ethnicity categories (black and white/other) by combining the few women who were neither white nor black with white women. In addition, we created four educational levels (no high school, high school diploma, some college or technical school, and college diploma). Abortions were identified by whether they were sought because of fetal anomaly or rape and whether women presented for care in the first trimester (less than 13 weeks' gestation) or in the second trimester (13 weeks' or later). All analyses were conducted using Stata SE 11.0.

After completing the data analysis, we conducted a phone interview with the clinic's director of counseling to solicit her interpretations of the results and to provide a clinic perspective on the women's responses.

RESULTS

Characteristics of Women and Abortions

During the 2008 study period, 5,109 women sought abortions at the clinic; 9% were 10–17 years old, 11% were 18–19, 56% were in their 20s, 21% were in their 30s and 2% were in their 40s (Table 1, page 120). Fifty-six percent were white or Hispanic, and 39% were black. Most women had had at least one child (62%). Twenty-three percent had not finished high school, 35% had received their high school diploma, and 36% had at least some college or technical school. Twelve percent of women reported a history of depression, and 11% had had anxiety or panic attacks.

Women sought 5,387 abortions from the clinic over the study year; in 5% of cases, women had had a previous abortion at the same clinic that year. Eighty-one percent of the pregnancies women were seeking to terminate were in the first trimester (Table 2, page 120); second-trimester pregnancies were more common among women younger than 20 than among older women (25% vs. 18%). In 49% of cases, women had had a previous abortion; the proportion was greater for older women than for younger women (56% vs. 21%). One percent of pregnancies had resulted from rape, and in 1%, the fetus had an anomaly.

Seven percent of abortions sought by women were not performed. In 2% of cases, the woman changed her mind and left the clinic or, demonstrating ambivalence about the decision, was sent home by the counselor for further reflection and did not return (not shown). In another 2%, the woman wanted an abortion, but her pregnancy was

TABLE 1. Percentage distribution of women seeking an abortion at one U.S. clinic, by selected characteristics, 2008

Characteristic	% (N=5,109)
Age	
10–17	9.3
18–19	10.5
20–29	55.6
30–39	20.9
40–49	2.4
Missing	1.4
Race/ethnicity	
Black	38.8
White/Hispanic	56.1
Asian	0.7
Mixed/other	2.6
Missing	1.8
Parity	
0	38.3
1	28.4
2	20.5
≥3	12.7
Missing	0.1
Education	
<high school diploma	22.7
High school diploma	34.6
Some college/technical school	18.6
≥college diploma	17.8
Missing	6.1
History of depression	
Yes	11.7
No	88.3
History of anxiety/panic attacks	
Yes	10.6
No	89.4
Total	100.0

Note: Percentages may not add to 100.0 because of rounding.

TABLE 2. Percentage distribution of abortions sought at one clinic in 2008, by selected characteristics, according to women's age

Characteristic	All (N=5,387)	<20 (N=4,256)	≥20 (N=1,122)
Trimester			
First	80.6	75.2	82.1*
Second	19.4	24.8	17.9
Woman had had a previous abortion			
Yes	48.5	20.9	55.7*
No	51.5	79.1	44.3
Pregnancy resulted from rape			
Yes	0.7	0.9	0.6
No	99.3	99.1	99.4
Fetal anomaly present			
Yes	0.5	0.1	0.6
No	99.5	99.9	99.4
Procedure done			
Yes	92.8	89.7	93.6*
No	7.2	10.3	6.4
Total	100.0	100.0	100.0

*p<.05.

beyond the gestational limit at which the clinic would perform the procedure; teenagers were significantly more likely than adults to present beyond the clinic's gestational limit. In 1% of cases, women did not have a uterine pregnancy: They either had already miscarried, had not been pregnant or had an ectopic pregnancy. Fifteen women were referred to another provider for medical reasons.

Abortion Attitudes and Decision Making

•**Confidence and general decisiveness.** For nearly all abortions, women answered "true" or "kind of" to the statements "I am sure of my decision to have an abortion" (94% and 5%, respectively; Table 3) and "Abortion is a better choice for me at this time than having a baby" (95% and 3%), and "false" or "kind of" to the statements "I want to have the baby instead of abortion" (95% and 5%, respectively) and "I want to put the baby up for adoption instead of an abortion" (99% and 1%). Overall, we considered that women had high precounseling confidence in their decision to terminate their pregnancy in 87% of the abortions sought (not shown). Women disagreed that they are generally indecisive in 87% of cases. Ease in general decision making was associated with high confidence about the abortion decision. In only 9% of cases, women who reported high confidence in their abortion decision also reported having difficulty making decisions in general, whereas in 43% of cases, women who reported low confidence also reported general difficulty making decisions ($p<.05$, not shown).

•**Pressure to have an abortion.** For 1% of abortions, women replied "true" to the statement about seeking an abortion mostly because someone else wanted them to (Table 3); in another 3% of cases, women replied "kind of." In 2% of cases, women felt that they had been pushed to have an abortion against their wishes—that is, women responded "true" or "kind of" to the statement that someone else wants them to have the abortion and also reported having low confidence in their decision (not shown). Minors were more likely than those 18 or older to report having been pushed into an abortion (7% vs. 2%, $p<.05$). Abortions sought by minors were as likely as those sought by older women to involve pressure from a male partner (1% each), but abortions sought by minors were much more likely to involve pressure from a parent (3% vs. 0%, $p<.05$). Overall, in cases involving pressure to have an abortion, male partners were the more common source of pressure for adults than for minors (66% vs. 25%, $p<.05$); in cases involving women younger than 18, mothers were the most common source (52%), followed by male partners (30%).

•**Spiritual concerns and God's forgiveness.** During the study year, 4,926 abortions were sought by women who reported believing in God or a higher power. For 36% of those abortions, women reported having at least some spiritual concerns about abortion, and for 28%, women reported that they were not totally at peace spiritually with

TABLE 3. Percentage distribution of abortions sought, by women's responses to statements related to abortion attitudes and decision making

Statement	True	Kind of	False	No response	Total
Confidence in the abortion decision					
I am sure of my decision to have an abortion	94	5	1	0	100
I want to have the baby instead of abortion	1	5	95	0	100
I want to put the baby up for adoption instead of an abortion	0	1	99	0	100
Abortion is a better choice for me at this time than having a baby	95	3	2	0	100
Generally after I make a decision, I keep thinking about it and doubting myself	3	11	87	0	100
I'm here for an abortion mostly because someone else wants me to	1	3	96	0	100
Spiritual concerns†					
I have spiritual concerns about abortion	15	21	53	11	100
Spiritually, I am at peace with this decision	62	19	9	10	100
I'm afraid God won't forgive me‡	5	13	71	11	100
At my stage of pregnancy, I think abortion is the same as killing a baby that's already born	4	13	83	0	100

†Based on 4,926 abortions sought by women who reported believing in God or a higher power. Note: Percentages may not add to 100% because of rounding.

their decision to have an abortion (Table 3). Women had some spiritual concerns about abortion in 43% of cases (not shown). For 18% of abortions, women reported being afraid or kind of afraid that God would not forgive them if they had an abortion.

•**Abortion as “killing.”** In 4% of cases, women answered “true” to the statement that abortion at their stage of pregnancy was the same as killing a baby already born; in another 13%, women answered “kind of.” The proportion of cases in which women held the view that abortion is the same as or similar to “killing” differed significantly by gestational age (15% of first-trimester pregnancies vs. 26% of second-trimester pregnancies, $p<.05$; not shown) and by age-group (28% of abortions among women younger than 20 vs. 14% of those among women 20 or older, $p<.05$).

Social Support

Nearly all women seeking abortion had told someone their decision (Table 4). In 82% of the abortions sought, women had told their male partner; in 36%, their mother; and in 51%, a friend. The proportion of abortions in which women had notified their mother differed by age (54% if the woman was younger than 20 vs. 31% if she was 20 or older). Women had not told anyone about their decision in only 2% of cases; the proportion differed by age (1% of abortions sought by teenagers vs. 2% of those sought by older women). Overall, the people women had told were supportive (87% for partners, 92% for mothers and 94% for friends); the proportion of friends who were supportive differed by age (90% for teenagers vs. 95% for older women).

High Confidence in Abortion Decision

Most of the variables included in our regression model were associated with women’s high confidence in their decision to have an abortion (Table 5, page 122). The

odds that an abortion was being sought by a woman highly confident in her decision were reduced if she was younger than 20, was black, had less than a high school education (rather than a college degree) or had a history of depression (odds ratios, 0.6–0.8). The presence of a fetal anomaly was associated with reduced odds that a woman had high confidence in her abortion decision (0.2). Having a supportive mother or male partner was associated with increased odds of having high confidence (1.3 and 1.2, respectively). In addition, having general difficulty making decisions, having spiritual concerns, equating abortion with killing and being afraid that God will not forgive were negatively associated with high confidence (0.3–0.7).

Interview with the Clinic’s Director of Counseling

During the interview with the clinic’s director of counseling, she explained that items on the needs assessment form—especially the provocative ones, such as the statement equating abortion with killing—were included with the aim of sparking discussion about personal values, stigma and anticipated coping. She reported that women frequently change their responses to items to reflect less

TABLE 4. Percentage of abortions sought, by measures of women's social support, according to women's age

Measure	All	<20	≥20
Knows about the abortion			
Male partner	82	83	81
Mother	36	54	31*
Friend	51	53	50
Nobody	2	1	2*
Supportive‡			
Male partner	87	86	88
Mother	92	91	92
Friend	94	90	95*

* $p<.05$. †Based on abortions sought by women who informed someone about their abortion decision.

TABLE 5. Odds ratios (and 95% confidence intervals) from logistic regression analyses assessing characteristics associated with the likelihood that an abortion was being sought by a woman who had high confidence in her decision

Characteristic	Odds ratio
Maternal	
Age <20	0.75 (0.59–0.96)*
Black	0.67 (0.55–0.82)*
Education	
<high school diploma	0.66 (0.48–0.90)*
High school diploma	0.82 (0.61–1.10)
Some college/technical school	0.85 (0.61–1.18)
≥College diploma (ref)	1.00
History of depression	0.62 (0.48–0.81)*
Had a previous abortion	1.00 (0.82–1.23)
Abortion	
Second-trimester	0.98 (0.77–1.24)
Fetal anomaly	0.20 (0.08–0.52)*
Pregnancy resulted from rape	1.91 (0.44–8.30)
Social support	
Told nobody	1.07 (0.48–2.38)
Mother supportive	1.25 (1.01–1.55)*
Male partner supportive	1.24 (1.01–1.52)*
Attitudes/decision making	
Difficulty making decisions	0.25 (0.20–0.31)*
Any spiritual concerns about abortion	0.55 (0.44–0.68)*
Abortion is same as killing	0.46 (0.37–0.57)*
Afraid God will not forgive	0.69 (0.55–0.87)*

*p<.05. Notes: All measures are dichotomous except education.ref= reference group.

negative views about abortion after having a chance to clarify their meaning, learning more about the abortion procedure and reflecting on their feelings in a nonjudgmental, supportive environment. For example, she said the great majority of patients change their response away from believing that abortion is like killing after discussing their beliefs with a counselor.

According to the director, an important aspect of the counseling session is attempting to calm women who are upset by their interactions with antiabortion protesters outside the clinic. She explained that protesters would regularly attempt to discourage patients from entering the clinic by addressing them, giving them antiabortion materials and presenting graphic signs. In her opinion, exposure to protesters may influence some women's responses, given that women fill out the needs assessment form shortly after entering the clinic.

The director suspected that our definition of confidence may have excluded women who were nearly positive about their decision to terminate the pregnancy, including women who considered themselves "95% sure," but had complex feelings. She believed that women may not report being sure of their decision if they are extremely fearful of the pain involved in the procedure, misinformed about the abortion procedure, concerned about the perceived health or social consequences of abortion or ashamed about the abortion.

Likewise, she suspected that our definition of low confidence in the decision may have mischaracterized

some women because they considered the question about wanting to have a baby instead of an abortion hypothetically, focusing their answers on what would need to be different for them to feel that having a baby was the best choice for them at that time. For example, the director related that some women who may appear to have low confidence according to the needs assessment form express the sentiment "If my circumstances were different, I would want the baby, but I know I'm not ready or able to take care of this baby now." In addition, she has noticed that women seeking to terminate a pregnancy because of a fetal anomaly sometimes mark on the form that they would rather have the baby than an abortion, but explain in the counseling session that they are certain about their decision to have an abortion and only wish their baby were healthy, in which case they would be happy carry it to term and raise it. Women may also appear not to be confident in their decision if they feel a conflict between what they want to do and what they feel they should do. For example, the director related conversations she has had with women who have said, "There are so many women who can't have a baby, I know it would be the unselfish thing to do—to have it and give it up. But I just couldn't part with my baby once I carried it for nine months and gave birth" or "I believe abortion is wrong in God's eyes, so I can't say abortion is better (more right morally) than having the baby. But I know it's what I need to do, and I just pray God will forgive me."

DISCUSSION

Abortion public policy focuses on requirements such as waiting periods, state-mandated information and parental involvement. These laws are based on the premise that women are unaware of the nature of the abortion and the risks involved, and need additional information and time to make a thoughtful decision. Data from this study suggest that such assumptions are not accurate. In nearly nine out of 10 cases, women expressed high confidence in their abortion decision before they received any counseling; these women would likely not benefit from additional mandated counseling or delay. Furthermore, one-size-fits-all policies may not address the complex needs of women who experience ambivalence, have negative beliefs about abortion, feel pressured to have an abortion, have spiritual concerns about abortion or have low levels of social support. These women may or may not need additional information, counseling, support or time to make a final decision or to feel confident about their decision. Instead of blanket regulations, these women may benefit more from interactions with caring, nonjudgmental, trained counseling staff who can assess and respond appropriately to their individual needs.

Limitations

All of the data used in this study came from clients of one large U.S. abortion clinic. Our clinic population was demographically similar to the national population

of women seeking abortion, except women in our sample were more likely to be white and less likely to be Hispanic, to have received a high school diploma and to have completed some college or technical school.³⁴ In addition, women in our sample were more likely than women nationally to be seeking a second-trimester abortion, because the study clinic—unlike many—performs such procedures.³⁵ Furthermore, fetal anomalies may have been undercounted in our data set: The total number of fetal anomalies was less than a separate clinic inventory of fetal anomalies cases for 2008.³⁶ The discrepancy may be due to missing data in the medical records. Pregnancies resulting from rapes may also have been undercounted, because women may not disclose a sexual assault, especially if they did not report the assault to the police or if they are fearful of being involved in prosecutions. Thus, this study is limited in its ability to draw conclusions about women who seek abortions because the fetus has an anomaly or the pregnancy resulted from rape.

The needs assessment form was not developed for research, but rather for clinical care; however, it has been used and revised for decades, and is endorsed by the National Abortion Federation as an effective tool for eliciting abortion patients' counseling needs. Although the answer categories ("true," "kind of" and "false") are certainly unorthodox in research, they may accurately reflect women's complex feelings on abortion. The measure of history of depression is inadequate; it is based on a single item and likely undercounts women with depression. Additionally, our measure of general decisiveness may not be an unbiased measure of difficulty making decisions, because it asks the woman to describe her decision-making abilities in general, while she is deciding about the abortion. A woman who is normally very decisive but who is having difficulty with the abortion decision may be inclined to report difficulty in all decisions. For reasons described by the director of counseling, we may have overestimated the proportion of women with low confidence in their decision to terminate their pregnancies. Finally, women may be less likely to divulge negative feelings about abortion if they think that revealing ambivalence may result in their being turned down for a desired abortion.

Conclusions

It was not the goal of this study to follow the emotional outcomes of women following an abortion, or to provide evidence supporting the implementation of a particular needs assessment tool or a specific model for educating or counseling abortion patients. Instead, we demonstrate a need for individualized approaches to patient education and counseling regarding abortion. A needs assessment form that can elucidate women's specific concerns may be a useful tool for offering client-centered care, allowing providers to allocate counseling time to women with the greatest needs. Future research should explore how

differing approaches to needs assessment, education and counseling affect women's emotional well-being following an abortion.

REFERENCES

1. Smith G and Pond A, *A Slight but Steady Majority Favors Keeping Abortion Legal*, Washington, DC: Pew Forum on Religion & Public Life, 2008.
2. Pew Research Center for the People & the Press and Pew Forum on Religion & Public Life, *Issue Ranks Lower on the Agenda, Support for Abortion Slips: Results from the 2009 Annual Religion and Public Life Survey*, Washington, DC: Pew Research Center for the People & the Press and Pew Forum on Religion & Public Life, 2009.
3. Guttmacher Institute, An overview of abortion laws, *State Policies in Brief (as of March 2012)*, 2012, <http://www.guttmacher.org/statecenter/spibs/spib_OAL.pdf>, accessed March 22, 2012.
4. Guttmacher Institute, Requirements for ultrasound, *State Policies in Brief (as of March 2012)*, 2012, <http://www.guttmacher.org/statecenter/spibs/spib_RFU.pdf>, accessed March 22, 2012.
5. Moulthrop K, Enhancing informed consent, ensuring a woman's right to know, in: Burke DM, ed., *Defending Life 2008: Proven Strategies for a Pro-Life America. A State-by-State Legal Guide to Abortion, Bioethics, and the End of Life*, Chicago: Americans United for Life, 2008, pp. 129–133.
6. Blum RW, Resnick MD and Stark TA, The impact of a parental notification law on adolescent abortion decision-making, *American Journal of Public Health*, 1987, 77(5):619–620.
7. Henshaw SK and Kost K, Parental involvement in minors' abortion decisions, *Family Planning Perspectives*, 1992, 24(5):196–207 & 213.
8. Henshaw SK, Factors hindering access to abortion services, *Family Planning Perspectives*, 1995, 27(2):54–59 & 87.
9. Joyce T, Kaestner R and Colman S, Changes in abortions and births and the Texas parental notification law, *New England Journal of Medicine*, 2006, 354(10):1031–1038.
10. Joyce TJ et al., *The Impact of State Mandatory Counseling and Waiting Period Laws on Abortion: A Literature Review*, New York: Guttmacher Institute, 2009.
11. Richardson CT and Nash E, Misinformed consent: the medical accuracy of state-developed abortion counseling materials, *Guttmacher Policy Review*, 2006, 9(4):6–11.
12. Cockrill K and Weitz TA, Abortion patients' perceptions of abortion regulation, *Women's Health Issues*, 2010, 20(1):12–19.
13. Aléx L and Hammarström A, Women's experiences in connection with induced abortion—a feminist perspective, *Scandinavian Journal of Caring Sciences*, 2004, 18(2):160–168.
14. Allanson S and Astbury J, The abortion decision: reasons and ambivalence, *Journal of Psychosomatic Obstetrics and Gynaecology*, 1995, 16(3):123–136.
15. Faria G, Barrett E and Goodman LM, Women and abortion: attitudes, social networks, decision-making, *Social Work in Health Care*, 1985, 11(1):85–99.
16. Broen AN et al., Reasons for induced abortion and their relation to women's emotional distress: a prospective, two-year follow-up study, *General Hospital Psychiatry*, 2005, 27(1):36–43.
17. Fielding SL and Schaff EA, Social context and the experience of a sample of U.S. women taking RU-486 (mifepristone) for early abortion, *Qualitative Health Research*, 2004, 14(5):612–627.
18. Finer LB et al., Reasons U.S. women have abortions: quantitative and qualitative perspectives, *Perspectives on Sexual and Reproductive Health*, 2005, 37(3):110–118.

19. Sihvo S et al., Women's life cycle and abortion decision in unintended pregnancies, *Journal of Epidemiology and Community Health*, 2003, 57(8):601–605.
20. Finer LB et al., Timing of steps and reasons for delays in obtaining abortions in the United States, *Contraception*, 2006, 74(4):334–344.
21. Kumar U et al., Decision making and referral prior to abortion: a qualitative study of women's experiences, *Journal of Family Planning and Reproductive Health Care*, 2004, 30(1):51–54.
22. Skjeldestad FE, The decision-making process and information needs among women seeking abortion: results from 2 studies conducted with a 10-year interval, 1983–93, *Tidsskrift for Den Norske Laegeforening*, 1994, 114(19):2276–2279 (in Norwegian).
23. Major B et al., Abortion and mental health: evaluating the evidence, *American Psychologist*, 2009, 64(9):863–890.
24. Major B et al., Perceived social support, self-efficacy, and adjustment to abortion, *Journal of Personality and Social Psychology*, 1990, 59(3):452–463.
25. Resnick MD et al., Patterns of consultation among adolescent minors obtaining an abortion, *American Journal of Orthopsychiatry*, 1994, 64(2):310–316.
26. Zabin LS et al., To whom do inner-city minors talk about their pregnancies? Adolescents' communication with parents and parent surrogates, *Family Planning Perspectives*, 1992, 24(4):148–154 & 173.
27. Coleman PK et al., The psychology of abortion: a review and suggestions for future research, *Psychology & Health*, 2005, 20(2):237–271.
28. Cozzarelli C et al., Women's experiences of and reactions to antiabortion picketing, *Basic and Applied Social Psychology*, 2000, 22(4):265–275.
29. Cozzarelli C, Sumer N and Major B, Mental models of attachment and coping with abortion, *Journal of Personality and Social Psychology*, 1998, 74(2):453–467.
30. Lydon J et al., Pregnancy decision making as a significant life event: a commitment approach, *Journal of Personality and Social Psychology*, 1996, 71(1):141–151.
31. Major B and Gramzow RH, Abortion as stigma: cognitive and emotional implications of concealment, *Journal of Personality and Social Psychology*, 1999, 77(4):735–745.
32. Major B et al., Mixed messages: implications of social conflict and social support within close relationships for adjustment to a stressful life event, *Journal of Personality and Social Psychology*, 1997, 72(6):1349–1363.
33. Paul M et al., *Management of Unintended and Abnormal Pregnancy: Comprehensive Abortion Care*, West Sussex, UK: Blackwell Publishing, 2009, pp. 52–53.
34. Jones RK, Finer LB and Singh S, *Characteristics of U.S. Abortion Patients*, 2008, New York: Guttmacher Institute, 2010, <<http://www.guttmacher.org/pubs/US-Abortion-Patients.pdf>>, accessed March 22, 2012.
35. Jones RK and Kooistra K, Abortion incidence and access to services in the United States, 2008, *Perspectives on Sexual and Reproductive Health*, 2011, 43(1):41–50.
36. Unpublished data from review of medical records of women seeking abortion at clinic in 2008.

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