

Having an Abortion Using Mifepristone And Home Misoprostol: A Qualitative Analysis Of Women's Experiences

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CONTEXT: Women choose medical over surgical abortion because it is more natural, more private and less painful. Whether their perceptions change during the medical abortion process has not been explored.

METHODS: A nonprobability sample of 43 participants in a clinical trial of abortion using mifepristone completed two open-ended questionnaires about this method, one before taking mifepristone and the second during their follow-up clinic visit 4–8 days after taking misoprostol. Thirty women participated in in-depth interviews 1–6 weeks following their abortion. Researchers analyzed transcripts to identify common themes.

RESULTS: On the first visit to the clinic, women expressed anxiety and uncertainty about the effectiveness of medical abortion, guilt or ambivalence, and a desire to avoid surgery. For most women, emotional distress decreased after their abortion. Control was the overarching theme women expressed regarding the meaning of the procedure: Women stressed the importance of being able to select the type of abortion procedure, to maintain control over their future and to preserve their family's quality of life, given the constraints of time, finances and emotional resources. In in-depth interviews, eight women remained concerned about long-term health effects; 18 said that having an abortion at home was a comfortable experience.

CONCLUSIONS: Learning whether women are concerned about personal control may help clinicians identify appropriate candidates for medical abortion. In addition, clinicians could help allay women's anxiety at their first abortion visit by explaining that the uncertainties posed by any medical procedure create similar feelings. Clinicians also should reemphasize at the follow-up visit that there are no long-term health effects related to abortion.

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Women base their decision to have an abortion on their current life setting, even though having an abortion may conflict with their moral or religious beliefs. Researchers who conducted in-depth interviews with women with unwanted pregnancies found that the decision whether to have a surgical abortion or carry a pregnancy to term was based more on practical and personal considerations than on political and ethical arguments about abortion.¹ A study of Puerto Rican women who had decided to have an abortion revealed that women integrated their decisions with other parts of their lives and considered how their lives and relationships might change if they did not have an abortion.² These women sought to maintain their current identities, preserve their emotional and physical health, cope with the threat of abandonment by their partners after giving birth and, for women whose partner wanted them to have a baby, resist male control. A study of American women reported that upon deciding to have an abortion, women expressed feelings of developing a new self, coming to terms with their bodies and using contraception, and adjusting to shifting personal relationships.³

Several studies have examined women's preferences for medical versus surgical abortion. One article reviewed 12 published studies in which respondents were offered a choice of techniques and found that 60–70% of patients

chose the medical procedure.⁴ The most common reasons women gave for selecting medical abortion were that the procedure offered greater privacy and autonomy, was less invasive and was more natural than surgery. Another study found that among 86 women requesting medical abortions, 48% wanted to avoid surgery.⁵ The same proportion gave this response in a prospective trial of 300 women seeking an elective abortion using methotrexate.⁶ Another study found that 116 of 405 patients at a freestanding abortion clinic chose methotrexate instead of a surgical abortion.⁷ A study that demonstrated the psychological safety of medical abortion also found that younger women in this study were more likely to select a surgical procedure than older women. Overall, the reasons most women listed as “very important” when deciding to have a medical abortion were the timing (the option to have the abortion before seven weeks' gestation, which is thought by most practitioners to be too early for a surgical abortion), privacy and fear of surgery.⁸ An additional study found that women chose mifepristone with home misoprostol to avoid surgery, because of the perceived naturalness of the procedure and for its privacy.⁹

Only one qualitative study exists on women's views about mifepristone followed by misoprostol versus vacuum aspiration. The researchers conducted eight focus groups at

family planning clinics in three major cities, comprising 73 women who were not pregnant and had not had an abortion within the previous two years. They found that women lacked information about the drugs, how they worked, the pain and expulsion process and the role of providers. The women also said that the social, personal and cultural aspects of their lives would play a role in their decision. The researchers also found that emotional problems related to the procedure would be more likely among women with little or no social support, women who were younger and less-educated (and more dependent on others), and women who were not Protestant.¹⁰

A secondary analysis of responses to an open-ended questionnaire among participants in a national clinical trial of mifepristone revealed that women had six clear concerns when considering an abortion procedure: side effects, privacy, avoiding surgery, control, the naturalness of the procedure and personal conflict. Nearly all women, regardless of age or educational level, experienced a strong sense of relief when the medical abortion procedure was over.¹¹ We develop these findings here to provide clinicians with a more detailed understanding of how patients view induced abortion using mifepristone.

METHODS

Since 1996, Abortion Rights Mobilization (ARM) of New York City has funded several clinical trials of mifepristone through the University of Rochester, New York, at abortion clinics and private practices around the country. At the time we conducted our research, 3,143 women at 16 sites had participated in these national trials.

With some variations by trial, women are given 200 mg of mifepristone upon their first visit with a provider. After 1–2 days, women take 800 mcg of misoprostol at home, which women are randomly assigned to take orally or vaginally. At women's discretion, they are to return to the clinic 3–8 days after their first visit. Providers alert women to expect cramping and bleeding, and advise them about how to effectively manage these symptoms. Women also receive guidance about seeking medical care if pain and bleeding become excessive. At intake, women provide information about their demographic characteristics. They later respond to a questionnaire regarding their feelings about the medical abortion procedure, including whether they find the pain acceptable and whether they would recommend home use of misoprostol.

For our study, we recruited 43 women from a clinic affiliated with the Reproductive Health Program at the University of Rochester. We enrolled 22 women who previously had had an uncomplicated surgical abortion* and 21 who had never had an abortion so that we could determine whether previous experience with a surgical abortion influenced women's perceptions of medical abortion. We excluded women if they previously had had a medical abortion, because we wanted to avoid having their experiences influence their current responses. Our nonprobability sample was sufficiently large to achieve saturation, or the repetition of several themes, as women who were enrolled later

in the study did not reveal new insights about guilt, anxiety or long-term side effects.

All of the women in our study completed a brief questionnaire prior to receiving counseling and taking mifepristone. They completed the same questionnaire at their follow-up visit to the clinic 4–8 days after taking misoprostol, before seeing the provider. The questionnaire had two open-ended questions: "What feelings or concerns are you experiencing?" and "What does having this procedure mean to you?" Women returned their questionnaires in a sealed envelope.

We conducted in-depth interviews with 30 women either by phone or in person 1–6 weeks following their abortion, asking the same two questions from the questionnaire.[†] We probed with additional questions unique to each interview, as needed. Each interview took about 30 minutes.

To ensure reliability, the first author trained another author and a counselor in interviewing skills. Training included role-playing to understand how to "warm up" respondents and how to ask clear follow-up questions. The training also covered how to connect women's abortion experiences with their families and local or national communities to elicit insights into how women are affected by perceived social attitudes.

We used the principles of grounded theory to guide the interviews and to analyze women's responses.¹² Grounded theory is an inductive approach designed to develop hypotheses grounded in observation—in this case, the interviews. This method facilitates a deep understanding of the abortion process from the respondents' point of view. Unlike deductive studies, this method of interviewing permits respondents to develop their own narratives in response to semistructured questions. Thus, while the researcher sets the focus, each interview has the potential to move in unexpected directions within the main topic.

The interviews were recorded on cassettes and transcribed. We used ATLAS.ti 4.2 qualitative software to code and analyze the digital files. One researcher listened to each recording and reread the interviews during the coding process. Codes were revised, deleted or added as the data collection and analysis progressed. The same researcher identified important themes that emerged from the first questionnaire, the follow-up questionnaire and in-depth interviews. As a final reliability and validity check, two researchers reviewed the codes from the interview data before we selected the quotes to present here as representative of the overall themes.

We analyzed the predominant themes in women's experiences at each of the three points in time—the first visit,

*We define uncomplicated to indicate the absence of serious medical or clinical problems (for example, infection, hospitalization or significant bleeding after the procedure). It is important to screen for complications because some women who have had a surgical abortion involving complications may switch to medical abortion for a subsequent abortion simply to avoid repeating a bad experience. While this screening would not rule out the confounding effects of wanting to avoid surgery or emotional problems that a woman experienced in conjunction with a past surgical procedure, it would minimize these effects.

†The other 13 women either did not return our calls or declined to participate further because they did not have time.

the follow-up visit and the in-depth interview—rather than tracking each woman’s responses. Therefore, and because this study is more descriptive than causal, we present our results in the chronological order of the medical abortion procedure according to these themes.

RESULTS

Sample Characteristics

Despite a few differences, the women in our study are generally representative of those in the overall ARM trials. A larger proportion of women in our study were white (77% vs. 66%) and single (75% vs. 66%). The proportion of women finding that the level of pain associated with the procedure was acceptable was smaller in our sample than in the larger ARM sample (63% vs. 72%). The same was true for women’s opinions about whether home use of misoprostol was acceptable (82% vs. 88%). However, there were no differences in their mean years of education (14) or age (26), or in the proportion agreeing that the overall mifepristone procedure was acceptable (93% vs. 91%). We found no substantive differences between the accounts of women who had had prior surgical abortions and those of women who had never had an abortion. The employment status of women in our sample is similar to that of women nationally in that most of them worked full-time.¹³

The First Visit

When women arrive at an abortion clinic, they have completed much of the difficult process of deciding to have an abortion. Though some women in our study had little difficulty making this decision, for most it was difficult. When we asked women about the feelings and concerns they were experiencing, they referred to guilt; ambivalence; anxiety and uncertainty over efficacy, cramping and pain; and wanting to avoid surgery. The following are typical remarks:

“I am torn. I feel guilty but at the same time would feel relief.”—33-year-old mother of three

“My feelings are sad but strong that this is what I need to do. I do, however, also feel angry at myself because I am pregnant, just due to the fact of not being able to carry this pregnancy out.”—25-year-old mother of three

The influence of psychological and sociological factors—the politicization of abortion, questions about the morality of abortion and the expectations placed on women—were at least partially displaced by a more pragmatic focus at the first visit. Women asked questions such as “Will it work?” “Will it hurt?” “Will there be any long-lasting effects?” Five women expressed concerns about how the drugs would work. One typical response from a 19-year-old childless woman was, “I am feeling nervous, scared. And I am concerned about my health and how I am going to feel afterwards.”

Remarks of nine women indicated that pain was a concern. For example:

“I just want something that is not going to hurt when having an abortion.”—26-year-old mother of three

“I am most concerned about the pain of [a medical] abortion, and about any problems it will cause between me and

my partner, as he wants children more than I do.”—31-year-old childless woman

Sixteen women said they wanted to avoid a surgical procedure. A typical statement was that of a 19-year-old childless woman who said that medical abortion sounded “a little bit more relieving [mentally] than the surgical procedure.” One woman’s statement, less typical of women who expressed this concern, was much stronger:

“To avoid having a machine inserted into my uterus, I would have gone to France, if necessary.”—31-year-old childless woman

These women’s desire to avoid surgery involved wanting to maintain control, to avoid pain and physical trauma, to reduce vulnerability to judgmental clinic staff and to minimize guilt.

When we asked women what the procedure meant to them, the overarching theme—expressed by 24 women—was directly related to control. This theme had two dimensions, one related to the medical abortion procedure, the other to the impact of abortion in general in their lives. For example, one woman was delighted to have the option of medical abortion:

“This procedure means to me that a woman’s decision about her body can finally happen, that a woman finally has more options that were not available before.”—22-year-old childless woman

She went on to say that taking mifepristone was both mentally and physically easier on her because its result was more like having a period than an abortion.

Younger women without children primarily expressed a need to maintain control over their future:

“I also have dreams and goals in my future that I can’t accomplish if I had a baby.”—20-year-old childless woman

The comments of another woman make it clear that abortion often is a difficult decision because women have to weigh their own interests against what is expected of them, as society still views motherhood as women’s central role:

“I’ve made a mistake by being pregnant at the wrong time in my life. Hopefully, this will give me the opportunity to continue with my studies and pursue my career. I do want to have children in the future.”—27-year-old woman without children

Because this woman did not participate in the in-depth interview, we do not know what she meant by a “mistake.” Her declaration that she intends to have children in the future may indicate a genuine desire or an attempt to demonstrate that she is not rejecting motherhood.

By contrast, older women with children focused more on maintaining control in terms of their current families. One woman talked about “not having to worry about the responsibility of bringing another child into my life right now.” She explained:

“I wish things could have been different. I do feel terrible, but financially and economically, I can’t have three kids.”—29-year-old mother of two

She said that her life was comfortable and she was afraid that if she had another child, she would have to go on welfare. Another woman, who could not afford day care, was concerned that a fourth child would jeopardize her job. She

said that having an abortion means:

"I can go on with my life, not have to worry about another mouth to feed. I have no support from the father of this child. He [already] has one child with me, and I do not get support [for] her."—33-year-old single mother of three

The Follow-Up Visit

Women's responses at their follow-up visit 4–8 days after taking mifepristone revealed greater psychological comfort than their replies to the initial questionnaire. Nine women expressed relief. One woman who had had positive feelings on the first day also had felt uncertain about the outcome. At her follow-up visit, she reported:

"Now that the experience is over, I feel relieved. The scariest part of the whole thing was not really knowing what to expect from my body. Everything went smoothly. I did experience a lot of pain for about five hours, but that was it."—23-year-old childless woman

Other women felt both relief and guilt at their follow-up visit, or intimated that they might feel sad later on:

"I am relieved that it is over with. The cramping was the worst part of it. I don't really feel sad. I guess it hasn't really hit me yet. I know in my heart that this was the best thing for me to do."—19-year-old childless woman

Still, eight women were eager to receive medical confirmation that everything was fine:

"I'm relieved that this procedure, assuming it worked, was so relatively uncomplicated and painless. My only concern is that it will not have been successful."—31-year-old childless woman

This statement illustrates the influence that medical providers have, as some women do not recognize or believe that their symptoms are real and think that they are no longer pregnant until a clinician has rendered a diagnosis. Even though a woman may have experienced cramping and bleeding, she cannot know for certain that her abortion is complete until a provider performs either a sonogram or a hormonal pregnancy test.

Five women were concerned about whether there would be any long-term health effects. A 29-year-old woman with one child was concerned about "any side effects that can happen to a pregnancy I plan some time down the road." She expressed this concern again during her in-depth interview, even though she said that the clinic staff had answered all of her questions about long-term effects clearly. Similarly, an 18-year-old woman without children said, "I'm wondering, since it is a study drug, if there will be some kind of side effect that no one could know until I'm 60 years old or something."

Control over their lives remained a major theme of women's responses to the question of what having this procedure meant to them. Nine women spoke about control. A 38-year-old mother said that if the procedure is effective, it "will have allowed me to continue to focus on my two children, ages six and nine." Other women were less concrete in their response, like the 23-year-old mother of two who asserted that having the procedure means "I have a chance

to do whatever it takes to make sure I don't have to go through this again....I will be more careful."

But still others were more pragmatic:

"It means I didn't miss much work and I didn't have to explain to anyone what I was doing or why I was gone."—31-year-old mother of one

In-Depth Interview

The interviews provide much better insight into women's experiences, not only because they were more personal and took place at a time convenient to the women, but also because they took place 1–6 weeks after their abortion, giving women time to return to their daily lives and reflect on how their abortion influenced their lives. Two women—a 33-year-old mother and a 19-year-old childless woman—who had expressed guilt in their questionnaire responses now expressed positive feelings about their decision. Three other women expressed concerns similar to those of a college senior who was preparing for a career in theater:

"I really don't know if it has to do with the actual abortion pills that I took, but the most feelings and concerns I'm having right now are of getting pregnant again."—22-year-old childless woman

Long-term health effects continued to concern eight women. This remark is illustrative:

"Well my concern now, at this point, is I'm wondering if, since it's a test, if there is going to be any long-term effects that they had no way of knowing about."—18-year-old childless woman

Two women wondered about the baby they would have had. One of them, lowering her voice and obviously feeling a loss, said:

"Well, sometimes you wonder what this life would've been—who he or she [would have been], what kind of person, what they would have looked like."—41-year-old childless woman

Some women were concerned about the morality of their decision, including one divorced woman who felt very irresponsible and had been concerned about her decision since the day she took the mifepristone:

"There's always, always going to be just a struggle, I think, with the whole moral issue. And that will always be there, I'm sure, for the rest of my life. And I'll just have to, you know, work on that myself."—38-year-old mother of two

Another woman said that she had not wanted to get pregnant and felt that she had not taken adequate precautions. She had not told her family about the abortion and had had to lie about her doctor visits and feeling sick:

"I don't regret having to do it. I mean there are times when I get upset and I think, you know, I killed a baby, but at the same time it wasn't really a child. And I think people should be allowed to have an abortion if they so choose without someone directing negative feelings about it."—22-year-old childless woman

The themes that were most prominent in the questionnaires—the importance of continuing school, devoting resources to current families and avoiding surgery—were also

common in the in-depth interviews. Women referred to these issues 27 times. Given their limited time and financial and emotional resources, women saw limiting the number of children they had as an important way to preserve their family's quality of life. One woman summed up this view as follows:

"The day I found out that I was pregnant it was like everything came to me....I had plans to go to school....I don't have health insurance. My husband don't have either....I'm giving everything I can to my daughter."—28-year-old mother of one

Having an Abortion at Home

Through our interviews, we investigated whether women felt comfortable taking misoprostol at home. Eighteen women said that being at home was a comfortable experience, even though they had cramping and nausea. (Despite this, compared with the ARM sample, somewhat smaller proportions of women in this sample agreed that pain and the home use of misoprostol were acceptable.) For example, one woman was home alone and prepared for her at-home abortion by stocking up on food and magazines to make the process easier while she watched television. By contrast, another woman recounted a less-private experience:

"I was in my own home. I wasn't in a hospital bed or anything....I was with my family....My ex was there with me. My mom was there. My sister was, but she just thought I was just sick. And my dad was at work....I had friends calling."—22-year-old childless woman

Even among women who said they experienced a significant amount of pain, having their abortion at home was manageable, as the following cases illustrate:

"I mean, it was painful, but that's to be expected....I don't think it was really a terrible, terrible experience. You know what I mean. I didn't die or [have] anything major happen....I was expecting like my worst period, and this was just like phenomenal....for three hours...I took two more painkillers, and I went back to bed."—28-year-old childless woman

Another woman reported a bad case of nausea because she had become so anxious, perhaps because she was alone:

"I wanted to do it first thing in the morning and just get it over....Well, I basically didn't sleep the night before, woke up at like 7:30 in the morning, had a little something to eat, and felt really nauseous in the morning...the anxiety was getting to me. And I took the pill at 8:15...and then waited the 45 minutes like they said, and took the codeine, and then waited another hour and took another codeine....I had slight cramping, but it was basically almost nothing."—23-year-old childless woman

Avoiding Surgery

Women's reports of a relatively comfortable experience of medical abortion stood in strong contrast to reports of 10 women who previously had had a surgical procedure or had heard accounts of friends' surgical procedures. The theme of wanting to avoid surgery surfaced many times throughout the questionnaire responses and interviews.

Presumably, these experiences would have created an additional incentive for these women to try something other than a surgical abortion. Many women said something similar to the following statement:

"I was so thankful that there was an alternative to having a surgical abortion. And that was...my biggest concern."—23-year-old childless woman

Women reported several reasons for this attitude, including fear of pain and of the procedure's invasiveness and the feeling that surgical abortion patients are moved along a production line or are judged by clinic staff. One woman told us what her best friend had told her about her abortion when the latter was 27 years old:

"She was told that she should know better at this point...[than] to get pregnant and that, as she put it, they insert the scraper or vacuum tube or something inside of you, and it's like having your soul scraped. And she said that the doctor was just kind of moralistic and cold."—31-year-old childless woman

Similarly, a 22-year-old childless woman recalled that when a friend's sister had an abortion at age 16, "she said it was excruciating."

Images like these are passed on not only through families and friends, but also through schools. Two women described how abortion was presented to them in class. One said:

"I can still see images in my head from sophomore year [in health class], when they showed us the video on abortion. And they showed them sucking the baby out and all that stuff, and...it was just an awful, horrible video of...badly performed abortions, surgically done."—18-year-old childless woman

A few women who had had a surgical abortion gave accounts of the impersonality of abortion clinics:

"They kind of herded you in like cattle, and there were like five or six women sitting in the same room. And then one by one you got called in and you could hear the screaming in the other room. It was like the fear of the unknown; it was just horrible. I mean, I know it's not that bad anymore for surgical procedures, but that was my thought [when I was deciding what to do]."—29-year-old mother of two

DISCUSSION

This study confirms past findings that some women choose medical abortion for its naturalness, for the privacy it affords and to avoid the perceived pain and trauma of surgery. There is evidence that women's experience of pain associated with medical abortion is partially related to their reproductive history. One clinical trial showed that women who had had one or more live births were 2.7 times more likely to find the pain associated with a medical abortion acceptable than women who had not given birth.¹⁴ We did not find women's accounts of their medical abortions to be dependent on whether they had had a prior surgical abortion. For most women, emotional distress was most intense at the first visit, decreased by the time of their follow-up visit and remained low at their in-depth interview.

Throughout the interviews, personal control was the

most common theme that emerged from women's responses. Contrary to abortion opponents' criticism that women who have abortions are selfish for denying their motherhood role, most of the women in our sample either planned to have or already had one or more children. Control is perhaps most acute for poorer women. The reality is that public policy subjects poor women to a double bind. On one hand, they are criticized for being on welfare, which has become more difficult to qualify for and is limited to five years. On the other hand, young women from poor backgrounds who have children are more likely to remain trapped in poverty than those who do not have children.¹⁵ This is illustrated by the women who said that having an abortion would allow them to fulfill their goals. If a woman's education is curtailed because she carried an unwanted pregnancy, she could risk not only her future, but the future of her children, who would be less likely to be prepared emotionally, occupationally and financially to contribute to society.

Many women also are in a precarious position as the result of the feminization of poverty over the last 30 years, illustrated by two women who cited financial reasons for not being able to have another child. Census data clearly show that the proportion of women who are the sole heads of households is rising¹⁶ and that women are poorer than men.¹⁷ Women's median income in 1998 constant dollars was only 54% of men's median income.¹⁸ Being the sole head of a household is a heavy burden for women, as many do not receive child support from their former partners.

The appeal of medical abortion for women who want to maintain personal control has several implications for clinicians and counselors. Providers need to account for the amount of time needed for counseling women about medical abortion, which generally takes more time than counseling about surgical abortion because women need to know how to take misoprostol and what to expect thereafter. In addition, eliciting from women whether they are concerned about control may be a way for clinicians to identify women who are appropriate candidates for medical abortion. Our experience indicates that with adequate information, women often select the abortion procedure most appropriate for them. Furthermore, we have learned that women who indicate that they want more control are more likely to follow through with the regimen, thus increasing the odds of a positive outcome.

Our findings are in concert with those of a study that found that only 5% of women experience strong guilt about having an abortion.¹⁹ However, this is not to say that psychological and sociological factors do not play a role in making this decision difficult. For example, the 22-year-old woman who said she sometimes thought about how she had "killed a baby" said others should not direct negative feelings toward women who have an abortion. Her statement and use of the term "baby" illustrate that some women perceive that society disapproves of their decision to have an abortion. Women's use of the term "baby" was often related to feelings of guilt or conflict, possibly because the

notion that life begins at the moment of conception has been emphasized by several religious denominations and strongly proclaimed by antiabortion groups.

But in spite of some women's expressions of guilt, at their first visit to the clinic, their concerns were related less to their moral or religious beliefs than to the practical considerations of pain, side effects and efficacy. Although there have been no scientific studies of the long-term effects of mifepristone abortion, no patients over the last 13 years have reported long-term effects.

It occurred to us only after we had reviewed the interviews in detail that women's concerns about side effects may be similar to those experienced by patients undergoing other medical or surgical procedures. Thus, while some anxiety is related to the moral and political issues surrounding abortion, these may be less influential than previously thought.

To explore this issue, we reviewed the literature related to anxiety and day surgery. Some researchers see anxiety as helpful to surgical patients in preparing for stress. One researcher describes the "work of worry" as necessary to render surgery less threatening.²⁰ Another study suggests that treatments to reduce anxiety may interfere with adjustment to stress.²¹ However, anxiety is an outcome of stress, and it is experienced as adverse; therefore, anything that can reduce stress and anxiety certainly is warranted. One possibility is to provide the patient with information. Unfortunately, it is not clear how this should be done. One British study of day surgery yielded no conclusive findings about the amount of information required to allay stress, though some information was clearly necessary.²² The researcher recommended that educational programs, visits, booklets and discussions be provided a few days or up to a week prior to hospital admission. A friend or relative should also remain with the patient for as long as possible and be involved in the decision-making.

Another study of day surgery found that anxiety scores tended to be higher among females, as well as among those with no experience with anesthesia.²³ A comparison study found that several types of surgery were equally stressful.²⁴ Patients experience anxiety because of the fear of complications or death, which are greatly reduced after surgery. However, patients experience other types of distress before surgery that seem to continue up to at least three months after their operation, possibly because of their perceived lack of ability to function as before.

During counseling prior to an abortion, the provider should discuss thoroughly with a patient the benefits of medical and surgical abortion. If it appears that control, naturalness and privacy are important to the patient, the clinician should assess whether the patient is both able and willing to comply with the demands of the medical abortion procedure. At the very least, women must be instructed on how to assess their own bleeding at home after taking misoprostol. They also must be informed about the importance of returning for follow-up care and of calling if they perceive a problem developing. All the basic informa-

... women's concerns about side effects [of medical abortion] may be similar to those experienced by patients undergoing other medical or surgical procedures.

tion a provider discusses could be reinforced in an information packet. Although the amount of information a patient receives is not associated with stress level, each patient might be given a choice regarding the amount of information she wants. The packets could be organized ahead of time into small, medium and large amounts of information.

Women's negative comments about surgical abortion facilities and providers may reflect the realities of current abortion practice or the influence of antiabortion media campaigns that portray abortion providers negatively. Although these accounts could be based on women's experiences with insensitive staff, they could also reflect the reality of crowded facilities, given the shortage of clinics and providers around the country. Many clinics can perform abortions only on days when a physician, possibly one who must travel from out of town, is present.

Although we cannot generalize our findings to all women who have medical abortions, we conclude that clinicians could ease the intense feelings of many patients at their first visit by explaining that some of their feelings may be related to the uncertainties that any medical procedure poses. Clinicians should also reemphasize at the follow-up visit that there are no long-term health effects related to abortion.

REFERENCES

1. Maloy K and Patterson MJ, *Birth or Abortion? Private Struggles in a Political World*, New York: Plenum Press, 1992.
2. Peterman JP, *Telling Their Stories: Puerto Rican Women and Abortion*, Boulder, CO: Westview Press, 1996, pp. 13–25.
3. Kushner E, *Experiencing Abortion: A Weaving of Women's Words*, New York: Haworth Park Press, 1997.
4. Winikoff B, Acceptability of medical abortion in early pregnancy, *Family Planning Perspectives*, 1995, 27(4):142–148.
5. Creinin MD and Park M, Acceptability of medical abortion with methotrexate and misoprostol, *Contraception*, 1995, 52(1):41–44.
6. Creinin MD and Burke AE, Methotrexate and misoprostol for early abortion: a multicenter trial, *Contraception*, 1996, 54(1):19–22.
7. Wiebe ER, Choosing between surgical abortions and medical abortions induced with methotrexate and misoprostol, *Contraception*, 1997, 55(2):67–71.
8. Henshaw R et al., Psychological responses following medical abortion (using mifepristone and gemeprost) and surgical vacuum aspiration: a patient-centered, partially randomized prospective study, *Acta Obstetrica et Gynecologica Scandinavica*, 1994, 73(10):812–818.
9. Elul B et al., In-depth interviews with medical abortion clients:

thoughts on the method and home administration of misoprostol, *Journal of the American Medical Women's Association*, 2000, 55(Suppl. 3):169–172.

10. Castle MA et al., Listening and learning from women about mifepristone: implications for counseling and health education, *Women's Health Issues*, 1995, 5(3):130–138.

11. Fielding SL and Fuller LL, The influence of race and educational level on women's perceptions in a clinical trial of mifepristone (RU486), Rochester, NY: University of Rochester, 2001.

12. Glaser B and Strauss AL, *The Discovery of Grounded Theory*, Chicago: Aldine Publishing, 1967; and Strauss AL, *Qualitative Analysis for Social Scientists*, New York: Cambridge University Press, 1987.

13. Stevens LK, Register CA and Sessions DN, The abortion decision: a qualitative approach, *Social Indicators Research*, 1992, 27(4):327–344.

14. Schaff EA et al., Vaginal misoprostol administered 1, 2, or 3 days after mifepristone for early abortion: a randomized trial, *Journal of the American Medical Association*, 2000, 284(15):1948–1953.

15. Barber JS, Axinn WG and Thornton A, Unwanted childbearing, health, and mother-child relationships, *Journal of Health and Social Behavior*, 1999, 40(3):231–257.

16. U.S. Bureau of the Census, *Historical Poverty Tables*, 2000, <<http://www.census.gov/hhes/poverty/histpov/hstpov4.html>>, Table 4.

17. U.S. Bureau of the Census, *HH-1 Households by Type: 1940 to Present*, 2001, <<http://www.census.gov/population/socdemo/hh-fam/tabHH-1.txt>>.

18. U.S. Bureau of the Census, *Statistical Abstract of the United States: 2000*, Washington, DC: U.S. Government Printing Office, 2000, Table 751.

19. Fielding SL and Fuller LL, 2001, op. cit. (see reference 11).

20. Janis IL, *Psychological Stress*, New York: Wiley, 1958.

21. Salmon P, The reduction of anxiety in surgical patients: an important nursing task or the medicalization of preparatory worry? *International Journal of Nursing Studies*, 1993, 30(4):323–330.

22. Mitchell M, Patient's perceptions of pre-operative preparation for day surgery, *Journal of Advanced Nursing*, 1997, 26(2):356–363.

23. Mackenzie JW, Daycase anaesthesia and anxiety: a study of anxiety profiles amongst patients attending a day bed unit, *Anaesthesia*, 1989, 44(5):437–440.

24. O'Hara MW et al., Psychological consequences of surgery, *Psychosomatic Medicine*, 1989, 51(3):356–370.

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