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Acceptability of first trimester medical abortion

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ACCEPTABILITY OF FIRST TRIMESTER MEDICAL ABORTION

Recent scientific discovery and clinical investigation have opened a new world of medical abortion. As a result, there has been an explosion of scientific, public, and political interest in the promise and problems of this technology. While some have predicted a medical utopia of easy, effective, safe, and accessible abortion services, others have raised caution in language ranging from skeptical to downright hostile. Questions have been raised about safety, efficacy, and feasibility in various cultural and clinical contexts, and also about the extent to which women would use medical methods of abortion. In fact, like Coronado searching for the gold-paved streets of the Seven Cities of Cibola, we are likely to find, instead of utopia, a landscape of considerable interest and great potential whose riches are more nuanced and subtle than at first predicted.

I. Aspects of Acceptability in Abortion Services

For a new medical technology to become widely used, it must be acceptable to the consumers and the providers of medical services and be feasible to administer within the health service delivery environment. As with consumer goods, acceptability is much more important with more elective procedures. Contraception and induced abortion are two areas in which consumer preference may be especially salient, since most of the services are both elective and provided to healthy patients. The problem of defining acceptability research was first confronted in regard to the development of contraceptive technology and family planning services. Concepts of acceptability have been evolving since the mid-1970's and have been applied to the study of medical abortion in scattered studies over the past fifteen years. Before reviewing the information developed by those studies, it is helpful to review the meaning of acceptability and acceptability research.

Acceptability research takes place at the unmarked crossroads where clinical, psychological, and marketing research intersect. Studies generally bear the flavor of the academic training of the researcher conducting the work. "Acceptability" was defined initially by the World Health Organization (WHO) as "a quality which makes an object, person, event, or idea attractive, pleasing, or welcome" (Marshall, 1977). In fact, acceptability research has been not only about qualities of various technologies but about perceptions, attitudes, and behaviors of people as well. Rather than being a quality, acceptability is an interaction between or product of (a) the values of individuals and (b) their perceptions of the attributes or qualities of particular

products. This approach, combining values and perceived characteristics, was employed in a study of perceptions of family planning services (Severy and McKillop, 1990) who note that "the combination of valued and perceived features of family planning services may be viewed as the reasons for women's choice."

Values are universal, prized characteristics that individuals seek in the products or services they choose, even as they acknowledge that all desirable values may not be represented in one product. The attributes of specific products, some tangible and verifiable and others in the eye of the beholder, can then be matched by individuals against their ideals. Insofar as the attributes of a technology are perceived to correspond or lead to valued outcomes, these products will be desired, preferred, or "acceptable."

Whatever affects either values or perceptions can, therefore, affect acceptability. Factors highly likely to be influential in shaping values and perceptions include:

- ethnicity/nationality/culture
- class/education
- personality
- experience

Perceptions are also influenced by the objective reality of the item being evaluated and the alternatives in the environment with which one might compare it. Medical technologies do, indeed, have different objective characteristics whose value is modified by the range of alternatives available in the local health service environment.

Previous research on contraception and abortion suggests some of the values that appear repeatedly as important components of acceptability (David, 1992; Winikoff, 1992):

- **Efficacy** - The desire for induced abortion represents an attempt to solve a particularly difficult and stressful problem: unwanted pregnancy. There is, logically, a high value placed upon a method that will effectively terminate the pregnancy.
- **Safety/Freedom from Side Effects** - This is highly valued in virtually all medical and surgical interventions and particularly in contraception and abortion, since patients are healthy, young, and perhaps anticipating future reproduction.
- **Freedom from Pain** - This is a self-evident preference, one strongly held in many populations. It becomes particularly important when there are alternatives that differ with respect to anticipated pain.
- **Ease/Convenience** - This can refer to the accessibility of the services or to the

troublesomeness of the method itself. Many women seeking abortion have household, child care, or employment obligations that they do not wish to disrupt. More generally, this value may refer to the desire to cause minimal inconvenience in one's life.

- **Gentleness/Non-invasiveness** - This may relate to anticipated pain but also refers to preserving bodily integrity, and a preference for techniques that will be less physically aggressive. With respect to abortion, therefore, it may also have a connotation of "more moral."
- **Privacy** - Women are particularly concerned with privacy when dealing with a problem related to sexual behavior and intimate relationships. There may also be needs for secrecy because of the real or presumed disapproval of partners, family, or society in general. Physical privacy, as in protecting one's body from exposure to strangers in a threatening environment, may also have a high value. Thus, the characteristic labeled "privacy" may have several different meanings which may attach positively and negatively to various abortion techniques.
- **Autonomy** - Some women appear to value very highly the ability to make decisions concerning their lives and bodies and to manage the processes that act upon or derive from their physiology. Methods associated with loss of consciousness may be particularly unwelcome to such women.
- **Affordability** - This is a key ingredient in the acceptability of many consumer items. It has been less often studied with respect to medical technology, because treatment is generally provided free in clinical investigations. Cost is, of course, an issue when products become available for purchase. Certainly affordability affects provider, program manager, and policy maker acceptance of new technologies.

How medical abortion "fills the bill" or corresponds to these values is determined by women's perceptions of the characteristics of the technology. Perceptions of the attributes of a method are strongly influenced by personal, community, and medical characteristics and also are influenced by which other methods are offered and what kinds of service delivery requirements surround those methods. Studies of medical abortion have, in fact, assessed very different regimens as technology has evolved. Drugs have included antiprogestins and prostaglandin analogues, both separately and in combination. The route of delivery has varied, including oral, vaginal, and intramuscular administration, and side effects have ranged from minimal to extremely

distressing. In addition, service delivery variables are not constant: some women are treated as inpatients, others as outpatients, and still others are self-treated at home. These differences may have very large impact on the perception and acceptability of the characteristics of the methods.

In clinical practice, the alternative surgical abortion options may also have variable characteristics. For example, vacuum aspiration can be provided as an inpatient or outpatient procedure and can be carried out under general or local anesthesia. Individuals must thus assess the characteristics of medical abortion against an alternative that is variable from study to study.

Clinical research has shown that regardless of which drugs or procedures are used, the following characteristics appear to be true intrinsic characteristics of existing medical abortion regimens, as compared to surgical abortion:

- a slightly lower efficacy
- a longer procedure from initiation to completion of abortion
- more consciousness on the part of the patient of bleeding and of the expulsion of products of conception
- more difficulty in combining the procedure with other desired procedures for fertility regulation (e.g. IUD insertion, sterilization)

If patients object strongly to these attributes, the method may be rejected. Improvements can only come with new advances in technology.

Several other characteristics that might at first appear to be intrinsic to the method are, in fact, dependent on service delivery choices. These include:

- more visits than for surgical abortion
- more or less pain than surgical abortion, depending on the type of anesthesia used in surgery and the dose and type of prostaglandin used for medical abortion
- no admission to hospital

II. How is Acceptability Studied?

"Acceptability" can be examined in several ways (Winikoff, et al., 1992). Useful concepts include:

- primary acceptance (whether the method would be used if offered, regardless of alternatives)
- comparative acceptance (a test of the uptake of a technology in the context of other available choices to see which one(s) are preferred)
- re-use/recommendation (whether individuals, having used the technology, would

use it again and/or recommend it to others)

- side effects/complaints (stated negative aspects indicating reasons—occasionally powerful ones—that people might avoid a technology)

All of these issues can be studied through a series of questions oriented to the potential user as a consumer of an offered product:

- Will (would) you use (or prefer) it?
- Why (or why not)?
- Did you find its use satisfactory?
- Why (or why not)?
- Would you use it again (or recommend it to others)?
- How does it compare to previous experience with other technologies?

These questions form the basis of assessment of acceptability. They suggest study designs that rely heavily on interviews with users both before and after the experience of medical abortion. This provides information on what users think of the product's attributes before and after use, as well as whether experience is consonant with expectations, and if evaluation of the characteristics, benefits, or drawbacks of medical abortion changes after use. While eliciting information through patient interviews is common to all acceptability studies, other methodological issues in study design are quite variable.

Researchers studying acceptability need to decide not only when to assess acceptability but also how to design the studies that offer experience with the new technology. There are several methodological problems that loom large in this endeavor.

A. ***To Compare or Not to Compare ?***

To those who perform clinical trials, a comparative trial always seems a fairer and more scientific test. While this may be so usually, there are certain disequilibria in any comparison used to assess a new technology. Generally, a comparative trial of new technology tests an unknown method against a fairly well-known method. This means that both users and providers may have well-formed ideas about the risks, benefits, and characteristics of the more standard method but perhaps nebulous or erroneous impressions of the new technology. Personal biases, rumor, and fantasy may have more impact on attitudes about the new method than about the better-known technology. In addition, providers may give very realistic and specific information about characteristics of the usual procedure; they may not be able to provide as accurate counseling about the newer one. This may create bias in choice or excessively high or low expectations of

the newer method. Users' attitudes about newness and risk-taking in general may become more important in both method choice and method evaluation.

B. ***To Randomize or Not to Randomize?***

Classical trials of drug therapy rely heavily on random allocation of patients into groups, comparing, for example, the best available therapy and a new therapy. The ideal is a double blind study in which neither patient nor prescriber knows which drug is received. Side effects and efficacy of the two therapies are then compared appropriately. This "experiment" will identify which of two methods would be more acceptable if a similar population of patients were to be assigned to a method. The equivalent of this situation would occur if a health service needed to choose only one technology to offer for first trimester abortion.

On the other hand, patients who elect one procedure from alternatives presented are likely to be different from a random sample of the population. Distinct characteristics of each method will preferentially attract a different group of users. Thus, the results of a random allocation trial may not represent the reactions of the women most likely to use the method once it becomes available as a choice.

Randomization, of course, means that women who enroll in a study must be willing to accept any of the procedures in the trial. If a woman has an aversion to one of the study methods, she will not enroll in the study at all for fear of being assigned to a treatment she could not accept. Such refusals of treatment have occurred in random allocation studies (Rosen, 1984), indicating that randomized study populations do not represent the full range of women who will be candidates for the methods under study.

C. ***A Study is Always a Study***

The study context is, itself, distorting; there is always an effect of the research process on the research results. The study context serves as a filter for the types of people who enroll and, therefore, affects the representativeness of the group being studied. A person who volunteers for a study needs to be willing to tolerate the extra burden of the study. Such persons also may be willing to accept more onerous regimens and may not reflect the dissatisfaction that inconveniences of various methods would elicit in a general population.

Those who choose to enter the trial may be especially averse to some feature of the standard method or especially excited by some aspect of the new method, since they could get standard treatment without being in a study. If subjects choose among several methods, those

who choose to be in a study of the standard method may be very different from the general population of users of that method: for some reason they have enrolled in a study when they could receive the same method without doing so. Finally, study conditions sometimes impose many more visits than would be necessary in a normal clinical situation. This can also affect acceptability.

It is tempting to believe that the attitudes of patients with prior abortion experience are an especially good test of acceptability of new methods as the same user can rate two different technologies. However, such women usually have experienced surgical abortion, and those among them who opt for medical methods in trials may have been especially dissatisfied, disappointed, or unhappy with the results. Thus, again, the cohort of women who choose to enter a study of medical abortion (if it is the only alternative) or who choose medical abortion in a comparative study may be quite different from the general population of women who have had an abortion before.

III. Studies of User Acceptability

The existing literature on acceptability of medical abortion is, in fact, quite small. Since 1979, 12 published studies have evaluated the acceptability of medical abortion methods in the first trimester (Table 1). Altogether the work was carried out in seven cultural environments, none in developing countries. In addition, the number of patients in each study is generally quite small. Only one study has cohorts of greater than 100 patients.

As medical abortion regimens have evolved, the methods studied have changed in important ways. Because of the variability in methods studied, there is a wide range of side effects and, therefore, patient reactions. The two earliest studies used prostaglandin vaginal suppositories alone. Later, mifepristone (RU486/Roussel Uclaf) was used alone or in combination with a prostaglandin. The prostaglandin was variously administered vaginally, intramuscularly, or orally. A combination of oral mifepristone and a vaginal suppository was evaluated in eight studies; mifepristone plus injectable prostaglandin in one; mifepristone plus oral prostaglandin in one other; and mifepristone alone was studied in two.

Of the 12 studies, two were of one method only, five involved patient choice of medical abortifacient, four involved random allocation, and one used both patient choice and random allocation. Only seven of the 12 studies report on regimens that are approved for regular clinical use, and most of these used vaginal suppositories as the vehicle for prostaglandin.

Eligibility was restricted to patients with very early pregnancies ($\leq$42 days) in two studies.

Three studies allowed enrollment to 49 days; two studies up to 56 days; and four studies through 63 days of amenorrhea. One study only states that the women requested a medical abortion in very early pregnancy. Since the experience of medical abortion can be quite different for patients at the extremes of these ranges, reactions and acceptability may have been affected. There were also varying exclusion criteria, producing groups with both unknown and obvious biases. For example, Rosen, et al., studied only women who had complete abortions (1979) or prior deliveries (1984). Grimes, et al. (1992), studied women without a pregnancy test, half of whom turned out not to be pregnant.

The number of visits required of patients was also very different from study to study; some studies required as few as two visits for a medical abortion, and two studies required seven (Tang, 1991; Holmgren, 1992). The number of interviews varied as did their timing relative to the treatment (Table 2).

Yet, because of very strong consistent findings under such variable circumstances, these studies provide clear general conclusions about factors affecting the acceptability of medical abortion services (Table 2).

Pioneering work in this field was developed by Rosen and her colleagues in Sweden (1979; 1984; 1990) who designed studies to test acceptability in patients randomly allocated to vaginal prostaglandin or vacuum aspiration. The hospital was well known for its work on medical abortion and, thus, attracted patients interested in that method. Even the random allocation of patients may not have been able to control for this bias.

In the earlier study (1979), the first 30 patients using each method who had complete abortions were evaluated. This design meant, of course, that failure as a reason for method dissatisfaction was not registered. Differentials in success rates were thus eliminated as possible reasons for preference of one method over another.

Prostaglandin treatment was, by far, the preferred method in both medical and surgical treatment groups. Women treated with medical abortion increased their preferential rating of it after the abortion and valued the naturalness of the method and privacy during treatment. However, they gave negative evaluations regarding pain and the duration of treatment. They also reported more bleeding.

The most striking finding of the study was the enormous increase in the acceptability of surgical abortion among surgical patients. They appreciated a quick and painless procedure. After treatment, most of the patients in this group switched to a preference for vacuum aspiration. Women in both groups were positive about the hypothetical possibility of a self-administered

method. Women in the prostaglandin group became even more positive toward such a possibility after the experience of medical abortion.

A later study (1984) compared surgical abortion to both medical abortion in the hospital clinic and medical abortion at home. A specific intent was to assess acceptability of a home abortion remedy. Initially, home treatment was a stated preference of 69%, and medical methods were preferred by 84% of the women enrolled. In fact, when the study was randomized, four patients found their assigned method to be so unacceptable that they withdrew from the study and changed methods. Of these women, two switched out of home treatment (one each to hospital prostaglandin and vacuum aspiration) and two switched into home treatment (one from the hospital prostaglandin and one from the vacuum aspiration group).

Success rates were high for both treatments (97% for medical abortion and 100% for surgical), but duration of bleeding was longer for the medical group (about double the number of days). There was also a substantial incidence of vomiting and diarrhea in the medical group; neither of these side effects occurred in the vacuum aspiration group. Analgesic injections were required by 39% of the prostaglandin hospital treatment group but only 6% of the home treatment group. No surgical patients required analgesia after the dose given at surgery. Women did not change their positive attitudes toward medical abortion after their experience of it. The truly striking finding was the extent to which vacuum aspiration patients became very positive in their evaluation of the surgical method.

In a summative evaluation of the two studies (Rosen, 1990), 81% of patients who experienced prostaglandin treatment had preferred medical abortion initially and 78% preferred it after treatment. Among vacuum aspiration patients, however, while only 38% preferred surgery before treatment, 69% preferred it after the experience. Most patients stated that they would select the method that they had used if they needed a repeat abortion and would recommend it to others. This preference was slightly stronger among the medical group (75% to 68%). On the other hand, a slightly larger number of women in the medical group (16% versus 13%) said that they would prefer and recommend the method they had <u>not</u> used.

Most of the medical abortion users who switched preference did so because of pain and/or amount or duration of bleeding. Some reacted negatively to the length of the procedure. A substantial portion (31%) of the surgical patients persisted in a preference for medical treatment, because it was more natural, involved less risk of infection, and required no hospital admission. Surgical patients who preferred surgery cited a quick, easy procedure with no pain.

Hill, et al. (1990), studied 100 women using mifepristone plus a vaginal suppository. Of

interest is that only 64% of the women offered the method agreed to try it instead of the routine surgical abortion. About half of those who declined ascribed their reluctance to the length of the trial and the required follow-up, and about half stated that they would prefer to be asleep during the procedure. Eighty-eight percent of the women interviewed after the procedure would use the method again; 9% would not, while 3% remained unsure. Of the 9% who would not, one-third were dissatisfied because of method failure, and two-thirds claimed that the method had been too painful. All 18 patients with previous surgical abortion experience preferred the medical abortion.

In a 1991 study, Tang reported on a trial of mifepristone plus vaginal prostaglandin suppository versus surgical abortion. Women were allowed to choose their method, and the final sample included 23 who chose a medical abortion and 19 who chose vacuum aspiration. Reasons given for choosing medical abortion included that it would produce less trauma to the body (38%), it was a more natural means (22%), or patients perceived physician preference for the method (13%). Fears about aspects of surgery were also prominent: fear of pain (11%), fear of general anesthesia (5%), and rejection of hospitalization (9%). The women in Tang's study who said that medical abortion was easy referred to the ease of taking medication as compared to hospitalization and surgery. Nonetheless, most were not favorably disposed toward the idea of using a medical method at home. Reasons given for not choosing medical abortion were worries about efficacy or side effects (28%), the length of the abortion procedure (18%), or desire to get the abortion over quickly (16%). Almost two-thirds of the patients who were requesting a repeat abortion chose to use surgery a second time rather than switch to medical abortion.

Reactions to the medical therapy were assessed at three points in time. At each assessment, a substantial number of patients (30-50%) expressed their relief or stated that they felt good. At 43 days after treatment, patients liked the medical therapy because it was "natural" or like menstrual regulation (39%). Negative comments included that the bleeding was too long (11%) and that the visits were inconvenient (9%). (This study's protocol for medical abortion required seven visits.) Almost all women experiencing medical abortion (96%) would recommend it to friends. Two of the 23 medical abortion patients would not use it again. These two were not among the three method failures. In the surgical group, all women said they were satisfied with their method.

Single women found mifepristone more convenient as it did not require an overnight stay, and they could go to work as usual. Thus, they would not have to explain an absence at home or at work and could keep the abortion secret. These women also were afraid surgery might have an effect on their future fertility. Married women, on the other hand, often chose surgery because

child care obligations meant they could not afford the time for the treatment schedule of the medical abortion, and they did not have as many worries about future fertility. In addition, the authors speculate that experience of childbirth may have made surgical intervention more acceptable.

Tang and colleagues (1993) extended this work in a second study, enrolling 144 women of whom 99 (69%) chose medical abortion with mifepristone plus prostaglandin vaginal suppository and 45 (31%) chose vacuum aspiration. Younger, single, and nulliparous women preferred the medical method. Reasons for choice of the medical method were remarkably similar to the previous study, including: fear of surgery (81%) or general anesthesia (11%), less injury to body (21%), and convenient for work (41%). Surgery was preferred because it was quick and convenient (82%), and patients did not like the number of visits or length of the medical abortion process (69%) or were worried about drug efficacy and side-effects (11%).

Almost all the women who tried medical abortion would use it again (85%), including four of the 12 women for whom the method had failed. Of the 27 women who used medical abortion and had previous experience of surgical abortion, 70% felt that medical abortion was better. At the final evaluation (43 days after treatment), the most common reactions were relief (38%) and complaints that the procedure took too long (11%) or that there was too much bleeding (10%).

Urquhart and Templeton (1991) assessed psychiatric morbidity and acceptability following medical and surgical abortion. The medical abortion method was mifepristone followed by a vaginal prostaglandin suppository. The medical abortion patients chose their method, but surgical patients were recruited from the usual clinic patient population. The clearest finding of this study is a large decrease in anxiety and depression after successful abortion using either method.

When asked if the same method would be acceptable again, 75% of the medical abortion and 94% of the surgical patients said yes. Women tended to be less positive toward medical abortion if they were younger, nulliparous, had a failure or problems with the procedure or saw the products of conception. Patients cited as positive features: awareness of what was happening, feeling more in control, a more natural and more discreet method, and no anesthesia. Of the 13 women who had a previous abortion, 77% said that they preferred the medical alternative.

This is the one study that shows not only an improvement in attitude toward surgical abortion but a higher preference for it among the patients in the surgical group than for medical abortion among the medical abortion patients. This may be due, in part, to study design. Patients experiencing medical abortion were recruited for a clinical trial, whereas the vacuum aspiration patients were recruited after having experienced the usual medical service. The patients using

medical abortion might have had higher expectations for the new treatment under study. These differences may have meant that the composition of the two groups was not comparable or that there were substantial differences in the experience of treatment. Nonetheless, in both groups, the large majority of the women were satisfied and would use again the treatment they had experienced.

Legarth, et al. (1991), conducted a random assignment study in Denmark using surgical abortion with general anesthesia and mifepristone alone. Mifepristone patients reported both longer persistence of pain and higher pain scores as well as longer bleeding than the vacuum aspiration patients. However, women who experienced uncomplicated medical abortion spent fewer days in bed than women who experienced an uncomplicated vacuum aspiration. Both groups rated their method as acceptable, but the mifepristone group "evaluated the procedure more positively." Four women in the mifepristone group had had previous abortions, and all preferred the medical procedure.

One unusual feature of the study is a high rate of serious complications. Three of 25 vacuum aspiration patients developed Pelvic Inflammatory Disease (PID), and another had a uterine perforation requiring emergency laparotomy. Six of 25 mifepristone patients had incomplete abortions treated by surgical evacuation, three of whom developed PID. Even with such high failure and complication rates, women found the procedure acceptable.

Holmgren's 1992 report documents an interview study of women who underwent either vacuum aspiration (40 women at 5-8 weeks of pregnancy), dilatation and aspiration with heavy sedation (43 women at 9-12 weeks of pregnancy), or medical abortion with mifepristone and gemeprost vaginal suppository (45 women who had volunteered for studies in "very early pregnancy"). The women were interviewed about the acceptability of the abortion experience about two weeks after treatment. The large majority of women gave a positive evaluation of the experience: 88% of those using early vacuum aspiration, 72% undergoing later dilatation and vacuum aspiration, and 87% experiencing medical abortion.

Medical abortion patients reported more pain and evaluated the blood loss as heavier than did the women who experienced surgery. Nonetheless, 40% of the medical abortion patients noted their relief not to have needed a surgical procedure. As in the other studies of this type, most women (70-80%) reported that, if another abortion were necessary, the same method would be preferred.

Bachelot, et al.'s 1992 study is the only one that compares the acceptability of non-experimental methods in a general clinic population. It reports on the choices of nearly 500

women who came for abortion in six French clinics. The available choices for women requesting early abortion were medical abortion (mifepristone, then intramuscular prostaglandin), vacuum aspiration under general anesthesia, and vacuum aspiration with local anesthesia. Amenorrhea had to be 42 days or less at enrollment in order for all of the interviewed women to be eligible for medical abortifacient treatment by 49 days, including the one week waiting period required by French law.

Women's initial choices favored the medical method (64%). Some women expressed no preference among the methods offered. After women consulted with physicians, the procedures performed were medical abortion, 59%; vacuum aspiration with local anesthesia, 31%; and vacuum aspiration with general anesthesia, 11%. Generally, women who elected the medical method or surgery with local anesthesia had higher educational levels, higher occupational levels, and were more often from North American or European ethnic/cultural backgrounds. More of the women who initially had no preference or preferred general anesthesia came from Africa and South America.

Eighty-six percent of the women were later interviewed to learn their impressions of the characteristics and acceptability of the methods. Valued characteristics most significantly associated with medical method selection included:

- newness of the method
- efficacy of the method
- less invasiveness
- possibility of seeing the expulsion
- "naturalness" of the method

Women who elected vacuum aspiration tended to value the guarantee of medical precautions, the waiting period, and a method of proven reliability. Substantial proportions of women in all the groups placed high value on methods that were less traumatic, less dangerous, more effective, and safer for future pregnancies but assigned these qualities to different methods. The possibility of failure was less important among those who chose the medical method and avoidance of trauma less important among those who chose vacuum aspiration under local anesthesia. Worry about risk for future pregnancy was more important for women who chose medical abortion.

Most of the women who chose the medical method of abortion knew that they would choose this method before they arrived at the clinic (68%). Surgical patients only half as frequently had a preference for surgical abortion before arrival at the clinic. Women who used the

medical abortion method were characterized by wanting to see what was expelled and a desire to control the situation that they were encountering. They also expressed the need for more rest after the procedure.

At interview, most women in all groups expressed satisfaction with their chosen experience. There were more expressions of dissatisfaction, however, among the medical abortion group (12%) than the surgical group (4%). The authors note that women appeared to have heard about the new method as a "magic one," but later felt the abortion was "not so easy and quick" as they had been expecting. Satisfaction decreased where abortion was unsuccessful and more side effects were recorded. It is noteworthy that the rate of follow-up in the groups was fairly different: 94% of the medical abortion patients returned for interview, but only 78% of the vacuum aspiration/local anesthesia and 71% of the vacuum aspiration/general anesthesia did so. It is possible that women less satisfied with their treatment in the latter groups did not return for the extra visit. This would affect the differential in recorded dissatisfaction among the methods.

In order to take account of patient preference for method of abortion in study design, Henshaw and colleagues (1993) carried out a study that combined both patient choice and random allocation between medical (mifepristone followed by prostaglandin vaginal suppository) and surgical (vacuum aspiration under general anesthesia) abortion methods. Women who were eligible for both methods were asked if they were willing to be randomly assigned a method, and those who were not were given their choice of technology. Most women were apparently willing to cooperate with the initial suggestion of random assignment and were allocated to medical (27%) or surgical (26%) treatment. Those who declined to be assigned a method had a strong preference for one or the other: surgical abortion, 26%, and medical abortion, 20%.

Women who chose surgery lived significantly further from the clinic, and this may have affected their method choice because of the extra visits required for the medical procedure. Medical abortion was assessed as "too slow" by 40% of the women who chose surgery, and 39% preferred to be unconscious during the procedure. Some (23%) also feared adverse physical effects from a medical procedure. Those who preferred the medical procedure expressed fear of surgery or anesthesia (59%), felt medical abortion was "more natural" (21%), and that surgery was "too fast" (21%).

Acceptability was similar and extremely high in both medical and surgical abortion patients who chose their method. Only 4% of each group would certainly choose the other method if another abortion were necessary; 95% of medical patients and 90% of surgical patients would choose the same method again. Vacuum aspiration (under general anesthesia) was rated

as less painful, but in all other aspects the two methods were rated equally.

This was not true of the women assigned a method. Among these women, medical abortion ranked lower on six of 12 features. Most women would choose the same procedure again, but the rates were lower than for those who chose their method and lower for the medical (74%) than for surgical (87%) group. Gestational age was the only predictor of dissatisfaction among women assigned to medical abortion: 95% of those who rated the procedure unacceptable had had the abortion at 50 or more days' gestation. At earlier gestational ages, there were no differences in acceptability among the women allocated randomly to medical or surgical abortion.

Conversely, gestational age did not have any impact on acceptability among the women who chose their own method of abortion. The authors recommend that eligible women who express a preference for method of abortion be accorded their choice regardless of length of gestation. The study demonstrates both the importance of existence of choice for women with different preferences and the fact that the process of choice may be associated with higher overall satisfaction.

It is interesting to speculate on how many women might have expressed a preference for a method if the first option presented had been choice rather than random assignment. In a slightly different study design, women eligible for both methods were give a choice and only those who were undecided were randomly assigned a method (Winikoff, et al.). In this study of over 1000 patients in three countries, only 1% of patients did not express a preference between medical and surgical abortion and were therefore assigned a method.

Thong and colleagues (1992) in Scotland studied 180 women choosing medical abortion to determine preferences in aspects of service delivery for this technology. The women were apparently participating in another study as well, since they received one of four different doses of mifepristone followed by either vaginal suppository (52%) or oral misoprostol (48%). Route of administration of prostaglandin does not appear to have been by patient choice. Efficacy of the regimens with the two prostaglandins was similar (94/95%), but patients using vaginal suppositories required more and stronger pain relief.

Place of treatment with the prostaglandin was randomized to a sitting-room with outpatient atmosphere or a more formal hospital admission to a ward. Women were interviewed about their experience prior to discharge. Most women would have preferred treatment in the sitting-room (77% of those assigned there and 69% of ward patients). Admission at the same time as other women, to either setting, appeared to strengthen the stated preference for sitting-room treatment. Virtually all the patients were satisfied with their medical abortion experience—one

woman was "unsure"—and 85% would recommend it to a friend. All 41 of those who had had a surgical abortion previously were satisfied with the medical regimen.

This work provides evidence that individualized options need to be available in several dimensions. Some women in the sitting-room wanted to lie down, so some provision for this was needed. About half of women would have wanted a partner or friend with them, but a slightly larger group did not want anyone. It should be possible to accommodate both preferences. One quarter of the women expressed preference for a home abortion, an option that is not yet available.

Grimes and coauthors (1992) report on a different sort of acceptability study. They enrolled women interested in medical abortion, in a randomized manner, to use mifepristone alone or a placebo in very early pregnancy. The delay in expected menses could be no more than 10 days, and there was no pregnancy test prior to enrollment. In effect, this study tested a medical version of "menstrual regulation." Effectiveness was clearly documented to be higher with mifepristone than with placebo but side effects did not differ. In fact, two of four women who were pregnant and received drug reported passing tissue as did two of four women who were not pregnant and received placebo. Women expressed a favorable impression of the effectiveness of the drug, lack of side effects, privacy of not having to come to an identified abortion facility, and convenience. They stated a preference for a medical regimen if another abortion were needed and would recommend it to friends.

Virtually all of the work assessing acceptability shows a strong interest in medical methods among women requesting abortion (about two-thirds of patients). While Bachelot's study gives some indication that women in France who come from developing countries have less interest in this method, other information from developing countries suggests that preference for a medical abortion method may be high there as well (Coyaji, 1990; Winikoff, et al., 1992).

In all studies, women are overwhelmingly positive about any method that safely and effectively resolves the problem of unwanted pregnancy for them. Many authors have noted the sense of relief that women feel at the end of abortion treatment (Tang, Urquhart and Templeton, 1988; Tang, 1991; Urquhart and Templeton, 1991; Zolese, 1991; Grimes, et al., 1992; Tang, et al., 1993). Consistent with their great concern for solving a difficult problem, women value the effectiveness of methods, and those women for whom a method fails are more often dissatisfied with it. On the other hand, the technology of medical abortion has evolved to the point where around 95% of eligible women will have a successful outcome with a medical method (Silvestre, et al. 1990; Ulmann, et al. 1992; Peyron, et al. 1993). A 5% failure rate can have only a small

impact on overall levels of dissatisfaction, although for any one woman the experience of failure may be very unpleasant.

Generally, both prolonged bleeding and multiple visits may be associated with less positive attitudes toward the technology. Similarly, the type of prostaglandin used and its side effects will be important in the overall experience. The use of oral misoprostol, one of the newer developments in medical abortion regimens, promises lower levels of pain and cramping than vaginal suppositories or intramuscular prostaglandins.

One phenomenon documented in several studies (Urquhart and Templeton, 1991; Bachelot, et al. 1992) is higher disappointment with medical abortion than surgical abortion. This may be because the method is new and has been oversold in the press or by medical personnel with little experience of it. As the method becomes better known, expectations may become more realistic. On the other hand, a very small group of women may be more likely to be unhappy with medical than with surgical abortion. Paradoxically, the medical abortion method seems to produce greater levels of high satisfaction along with slightly greater levels of dissatisfaction. In these studies, women who have experienced both procedures rate the medical abortion procedure higher (Urquhart and Templeton, 1991; Legarth, et al., 1992; Thong, et al., 1992; Tang, et al., 1993).

It is difficult to say exactly what the acceptability of medical abortion will be in clinical practice, as this will surely be different from the study context. As one illustration of the importance of context, Rosen (1990) interviewed non-patients as well as patients for their preference of medical or surgical abortion. The non-patient group divided 50% to 50% about which technology they would prefer for abortion if need be, but the patient group, currently seeking an abortion, preferred medical abortion 74% to 26%.

IV. Acceptability to Providers

Although patient acceptability has been discussed and studied, the issue of provider acceptability has been much less frequently addressed. Nonetheless, it is clear that women will not have the opportunity to choose medical abortion if the technology is rejected by providers, program managers, and policy makers. Availability of abortion services is clearly an important determinant of whether women will be able to use the services they desire (Richards, 1973), and if providers reject a service it will not be offered as widely.

Clear provider preferences for different abortion technologies have been recorded. With respect to second trimester abortion, providers seek to distance themselves from an unpleasant

procedure: physicians prefer medical abortions (where they need not be present at the expulsion of the fetus), and nurses prefer D & E procedures (where the physician does the "distasteful" surgery) (Kaltreider, et al., 1979). Some have held that medical termination of pregnancy in the second trimester is morally preferable to surgery (Lilford and Johnson, 1989). Such considerations are less likely to be important with respect to abortion early in the first trimester. In fact, since earlier abortions are more acceptable to professionals (Evans, et al. 1991), it may be that a medical method that allows very early abortion (even earlier than vacuum aspiration) will be particularly preferred by providers.

Provider attitudes toward abortion depend on many characteristics including personality and values (Bourne, 1972a; Bourne, 1972b). Weisman, et al. (1986), have documented that women providers tend to be more likely to provide abortion services than male providers. Thus, if women providers share women patients' enthusiasm for medical methods, this may increase the propensity of the provider community to make available medical alternatives to surgery.

The service delivery environment will also influence the acceptability of a new method. Reimbursement policies of various government and insurance entities will be of interest to private practitioners. In environments where there is harassment of abortion providers, the possibility of providing abortion services less visibly than in a surgical clinic may be appealing. On the other hand, the burdens of provision of information and counseling to patients may be higher with a medical method. The anxieties of patients waiting for an abortion to take place, perhaps over a period of days to weeks, may also place more demands on providers and may reduce their enthusiasm for the method (Greenslade, et al., 1993).

Providers are responsive to the well-being of their patients as well as to their own practice constraints. Thus, any method that works well and is consonant with patient safety and comfort is of interest. When, in addition, it is obvious that many patients would prefer the method, provider interest grows.

V. Conclusion

Unwanted pregnancy is a serious and stressful problem for women. Technologies that afford safe and effective abortion are very well accepted and provide relief from a great difficulty.

Many women fear surgery and will go far to avoid it. There is substantial apprehension about general anesthesia during surgery and at the same time fear that local anesthesia may not prevent pain. This leads to a high demand for a medical abortion alternative.

An "easy" abortion procedure is highly valued. Some women consider that the quick and

definitive surgical alternative is easier; some find that swallowing a pill is "easier."

Privacy is greatly valued both in the sense of keeping the need and fact of abortion secret and in the sense of preserving bodily autonomy and preventing physical exposure before strangers. Medical abortion technology seems to meet this need more than surgical abortion, especially if the surgical alternative mandates hospital admission and absence from home.

The high values placed on privacy, autonomy, and the wish to be able to be at home combine, in at least some settings, to create a demand for a self-administered home treatment for early abortion. A safe and effective regimen for such use would be acceptable and important for many women.

Failure of an abortion method is frequently a cause for dissatisfaction, but both medical and surgical modalities now provide such a high degree of success that this will not be the cause of a large amount of recorded dissatisfaction. On the other hand, if a method becomes known in the community as less reliable, it will probably be less well regarded.

Pain and gastrointestinal disturbances are clearly a problem with the use of some prostaglandins but do not cause wholesale rejection of medical abortion using these drugs, because other characteristics of medical abortion seem compelling to many women. Newer medical abortion regimens using misoprostol may provide substantially more comfortable experiences for women.

The prolonged bleeding experienced by some women using medical abortifacients is perceived as unpleasant and inconvenient. If this could be reduced, the method would be viewed even more favorably.

A regimen requiring many visits is likely to be less acceptable, but many women will agree to a fair number of visits simply to have the opportunity to choose a medical alternative. Two or three visits seem to pose no special burden to women already able to avail themselves of existing services. On the other hand, program planners should be considerate and reduce the number of mandated visits to the fewest possible. Improvements in technology may also be able to help with this issue if the antiprogestin and prostaglandin can be formulated to be taken at the same time.

Given a choice between surgery and any of several medical abortion methods, most eligible women appear to prefer the medical method. In groups studied to date, satisfaction with the experience is extremely high. When measured against surgical procedures, women generally report more high levels of satisfaction and willingness to use again and/or to recommend to others. At the same time, however, the size of the small dissatisfied minority is often larger than among surgical patients. This may be due to unrealistic expectations about a new technology or

lack of experience in identifying or counseling women likely to be unhappy with the known characteristics of the method. In addition, there are indications that the act of selecting an abortion method is itself associated with increased satisfaction (Henshaw, et al., 1993).

New service delivery approaches to medical abortion can be developed that might better serve the needs of certain women and the constraints of specific service delivery environments. For example, the suggestion of Grimes, et al. (1992), that it may be possible to develop a "medical menstrual regulation" regimen deserves attention. This could be especially appropriate in certain developing countries where menstrual regulation is already a well-developed health service.

New approaches to the delivery of the two-drug regimen might also be considered. Since mifepristone is a very safe drug with few side effects and since problems, when they occur, are much more likely in association with the administration of prostaglandin, it might make sense to broaden the availability of the mifepristone while maintaining medical oversight after prostaglandin administration. This might increase both accessibility and acceptability by allowing women to initiate the procedure at a facility or office closer to home and complete it at a more comprehensive health care site.

No doubt the most profound significance of the availability of safe and effective medical abortion is choice for women in a domain where previously there was none. It is clear that many will avail themselves of this new option. Not only is medical abortion acceptable, for some it is markedly preferable. The task now is to improve the technology and make the service delivery even more convenient and responsive to women's needs.

Table 1. Studies of Acceptability of First Trimester Medical Abortion

AUTHOR/ DATE	PLACE	NUMBER STUDIED	METHODS	RECRUITMENT	ALLOCATION TO METHOD	LENGTH AMENORRHEA	TOTAL NO. VISITS	OTHER COMMENTS
Rosen, et al., 1979	Sweden	30 30	Vacuum aspiration with diazepan and cervical block 0.8-1.0 mg 16,16 dimethyl PGE_2 vaginal suppository, q3h x 4	Patients admitted to hospital's regular abortion service	Random	≤ 56 days	3+ 3+	Acceptability study only for women who had complete abortions with method
Rosen, et al., 1984	Sweden	18 18 17	Vacuum aspiration with 50-60 mg 9-methylene PGE_2 Vaginal suppository in hospital 96h x 2 PGE_2 vaginal suppositories at home	Patients admitted to hospital's regular abortion service	Random	≤ 49 days	2+ 2+	No women admitted to study unless one full term delivery prior
Hill, et al., 1989	England	100	Mifepristone 600 mg, then gemeprost* vaginal suppository @ 48 hours	First 100 who accepted method from women referred for abortion	One method	≤ 63 days	5	
Tang, 1991	Hong Kong	19 23	Vacuum aspiration Mifepristone p.o. followed by vaginal suppository* on day 4	From women requesting abortion at a family planning association. Surgical patients referred.	Patient choice after information on both methods	< 49 days	2 7	
Urquhart & Templeton, 1991	Scotland	37 54	Vacuum aspiration/general anesthesia Mifepristone p.o. then gemeprost*	Regular abortion patients, agreed to be interviewed. Abortion patients offered opportunity to try medical abortion in a	No choice of method. Had accepted medical method as part of a study.	≤ 63 days	3 4	

			vaginal suppository	study.				
Legarth, et al., 1991	Denmark	25 25	Vacuum aspiration/general anesthesia Mifepristone 600 mg p.o.	Patients referred for abortion	Random	≤ 42 days	3 3	
Holmgren, 1992	Sweden	43 40 45	Dilatation and vacuum aspiration; heavy sedation Vacuum Aspiration/local anesthesia Mifepristone then gemeprost* vaginal suppository	Women requesting abortion by the specific method used	By patient choice within medical guidelines. Research environment for medical abortion.	9-12 weeks 5-8 weeks "very early"	2 2 7	In group 1, only women who wished to come for a two- week post-procedure visit were enrolled

*16,16 Dimethyl-trans-$\_^{2}$ - PGE_1, methylester
Acceptability trial is really of one method

Table 1 (Continued)

AUTHOR/DATE	PLACE	NUMBER STUDIED	METHODS	RECRUITMENT	ALLOCATION TO METHOD	LENGTH AMENORRHEA	TOTAL NO. VISITS	OTHER COMMENTS
Bachelot, et al., 1992	France	33 107 251	Vacuum aspiration/general anesthesia Vacuum aspiration/local anesthesia Mifepristone 600 mg p.o. then nalador 0.25, I.M. after 48 hrs	From women presenting for early abortion at 1 of 6 clinics in France	By patient choice within clinical context	≤ 49 days	3-4 3-4 4-5	All three methods were freely available without enrolling in study. None was an experimental abortion method.
Grimes, et al., 1992	U.S.A.	8 8	Mifepristone, 600 mg p.o. Placebo	Women with delay in menses ≤ 10 days. No pregnancy test.	Not applicable**	< 42 days	4 4	Half of patients in each group were not pregnant
Thong, et al., 1992	Scotland	94 86	Mifepristone then gemeprost suppository* at 48 hours Mifepristone then misoprostol 600 mcg p.o. at 48 hours (various doses)	Referred by G.P. for abortion Most arrived expecting a medical method	•Not stated in regard to the drug •Randomized (ward vs. sitting room) for location of PG treatment	≤ 63 days	5	Purpose was to study preference for ward vs. sitting room as place for abortion
Tang, et al., 1993	Hong Kong	99 45	Mifepristone 600 mg p.o. then vaginal suppository* on day 3 Vacuum aspiration	From women requesting abortion at family planning association	Patient choice after information on both methods.	< 49 days	2 5	Vacuum aspiration patients were referred to a hospital for the procedure
Henshaw, et al., 1993	Scotland	73 chose	a) Mifepristone 600 mg p.o. then gemeprost 1 mg vaginal suppository b) Vacuum aspiration/general anesthesia	Women requesting abortion eligible for both medical and surgical methods	Women who agreed to be randomized were assigned; those who declined randomization received method	≤ 63 days	Surg. = 2 Med. = 3	Randomization offer preceded offer of choice

					of choice.			
Winikoff, et al., (unpublished)	India Cuba China	250 250 300	a) Mifepristone 600 mg p.o. then misoprostol 400 mcg, p.o. b) Vacuum aspiration/general anesthesia a) Mifepristone 600 mg p.o. then misoprostol 400 mcg b) Vacuum aspiration/general anesthesia a) Mifepristone 600 mg p.o. then misoprostol 400 mcg b) Vacuum aspiration/topical anesthesia	Women who came to clinic requesting abortion	Patients eligible for either method could choose the method to use	≤ 56 days	Surg.= 2 Med. = 3	

*16,16 Dimethyl-trans-Δ_2 - PGE_1, methylester

**Randomization with respect to placebo

Acceptability trial is really of <u>one</u> method

Table 2. Results of Studies of Acceptability of First Trimester Medical Abortion

AUTHOR/ DATE	TYPE OF MEDICAL ABORTION	NUMBER AND ASSIGN-MENT OF PATIENTS	INTERVIEWS	ATTITUDE TO MEDICAL ABORTION PRIOR TO RX	POSITIVE ASPECTS POST-RX	NEGATIVE ASPECTS POST-RX	WOULD USE AGAIN
Rosen, et al., 1979	PG vaginal suppository	30(R)*	a) prior to first appointment with M.D. b) after treatment, prior to discharge c) 2 weeks later	More favorable to medical than surgical abortion	•better than expected •easier than expected •more harmless than expected	Higher scores on pain and bleeding than surgical patients	Not reported
Rosen, et al., 1984	PG vaginal suppository (hospital) PG vaginal suppository (home)	18(R)* 17(R)*	a) prior to first appointment with M.D. b) 2 weeks later, prior to follow-up exam	Preferred by 15% of sample Preferred by 65% of sample •medical abortion more natural •some felt safer in hospital •home more comfortable •home more private •possibility of partner support at home	Generally met positive expectations	Pain/bleeding led some to prefer surgical	64% of those who had medical abortion
Hill, 1989	Mifepristone & PG vaginal suppository	100(C/L)*	a) 7 days post-treatment b) 14 days post-treatment c) 28 days post-treatment	64% of those offered method agreed to try it	95% complete abortion	Over one half required analgesia after PG	88%: yes 3%: unsure 9%: no ·3% due to failure ·6% due to pain
Tang, 1991	Mifepristone & PG vaginal suppository	23(C/S)*	a) before treatment b) 8 days post-treatment c) 15 days post-treatment d) 43 days post-treatment	<u>Acceptors</u>: less trauma 38% more natural 22% felt M.D. preferred 13%	<u>Day 8</u>: relieved 30% natural 21% safe 14%	<u>Day 8</u>: doubt complete abortion 9% inconvenient visits 4%	•Yes: 91% •No: 9% •96% would recommen

				fear pain in surgery 11% Refusers: not as effective 38% long process/many visits 28% surgery convenient/quick 18% want to do abortion quickly 16%	convenient 9%	sad, saw abortion 4% Day 43: bled too long 11%	d to friends
Urquhart and Templeton, 1991	Mifepristone & PG vaginal suppository	54(C/L)*	a) 2 days before treatment b) 1 week after treatment c) 4 weeks after treatment	Not reported	Liked: •awareness of process •more in control •avoiding anesthesia •more discreet	More negative assessment if: •younger •nulliparous •needed more analgesic •saw products of conception	•Yes: 75% •Previous abortion experience (n=13), 77% prefer medical

*R = Random Assignment
C/L = Choice to be in study of one method
C/S = Personal choice among methods in study
C/U = Personal choice among usual clinical services

Table 2 (Continued)

AUTHOR/ DATE	TYPE OF MEDICAL ABORTION	NUMBER AND ASSIGN-MENT OF PATIENTS	INTERVIEWS	ATTITUDES PRIOR TO RX	POSITIVE ASPECTS POST-RX	NEGATIVE ASPECTS POST-RX	WOULD USE AGAIN
Legarth, et al., 1991	Mifepristone	25(R)*	1 week after treatment	Not applicable	Rated acceptable by patients classified as "uncomplicated" cases	20% of "uncomplicated" cases reported side affects—all mild	All four patients with previous abortion preferred medical method
Holmgren , 1992	Mifepristone & PG vaginal suppository	45(C/L)*	2 weeks after treatment	Not applicable	<u>Week 2</u> •positive assessment 87% •expressed relief 40%	<u>Week 2</u> •bleeding heavier than menses 65% •"much pain" 44%	•yes: 81% •most women would choose method used this time for next time
Bachelot, 1992	Mifepristone & PG, I.M.	251(C/U)*	a) day of treat-ment prior to selection of method b) 2 weeks after treatment	<u>Acceptors</u>: less trauma 67% less dangerous 29% less risk future pregnancy 27% <u>Refusers</u>: less trauma 53% less failure 36% less dangerous 29% less risk future pregnancy 16% <u>Acceptors valued</u>: •newness •efficacy •lack of invasiveness •possibility of verifying expulsion •naturalness of process	•63% wanted to see what had been expelled •large majority satisfied	•12% some dissatisfaction (increased with compli- cations or failures) •women felt need for rest/ sleep after procedure •some found method not so quick and easy as expected	
Grimes,	Mifepristone	16(C/L)*	4 weeks post-	•believed in efficacy	•liked privacy	Some had side effects	•generally yes

et al., 1992	(or placebo)		treatment	•preferred medical to surgical	•liked non-invasive technique	of pain, nausea but these were similar in placebo group	•3 with previous abortion preferred medical method
Thong, et al., 1992	Mifepristone & PG vaginal suppository Mifepristone & oral PG	94 not reported 86 not reported	At time of dis-charge after PG visit	•not reported •majority came requesting medical method	•majority preferred sitting-room treatment •60% of oral PG group needed no analgesia •99% were satisfied	•more pain in vaginal suppository group •more analgesia in vaginal suppository group	•95% would recommend to friend •11 women with prior surgery abortion (n=41) were satisfied

*R = Random assignment
C/L = Choice to be in study of one method
C/S = Personal choice among methods in study
C/U = Personal choice among usual clinical services

Table 2 (Continued)

AUTHOR/ DATE	TYPE OF MEDICAL ABORTION	NUMBER AND ASSIGN-MENT OF PATIENTS	INTERVIEWS	ATTITUDES PRIOR TO RX	POSITIVE ASPECTS POST-RX	NEGATIVE ASPECTS POST-RX	WOULD USE AGAIN
Tang, et al., 1993	Mifepristone & PG vaginal suppository	99(C/S)*	a) before treatment b) 8 days post-treatment c) 15 days post-treatment d) 43 days post-treatment	Acceptors: fear of surgery 81% convenient for work 41% less injury to body 21% fear of general anesthesia 11% Refusers: surgery quick 82% too many visits/long procedure 69% worry over efficacy/side effects 11%	Day 8: relieved/felt good 28% convenient/safe 20% avoided surgery 12%	Day 8: painful 11% Day 43: too time consuming 11% bleeding too long 10%	•yes: 85% •no: 11% •unsure: 4% 70% of those with prior surgical abortion felt medical was better
Henshaw, et al., 1993	Mifepristone & PG vaginal suppository	73 choice 99 randomized	a) at the time of choice (?) b) 2 weeks after treatment	Agreed to random assign (54%) Chose medical (20%) fear surgery/anesthesia 59% "more natural" 21% surgery "too fast" 21% want to be conscious 8% Chose vacuum aspiration (26%) medical abortion "too slow"	More positive ratings among those who chose the procedure than those assigned to it	More painful than surgery both among those who chose and who were assigned to it	Would use same method again: Chose medical: 95% Chose surgical: 90% Assigned surg.: 87% Assigned med.: 74%

				40% wanted to be unconscious 39% fear adverse effects of medical abortion 23% lived further from clinic			

*R = Random assignment
C/L = Choice to be in study of one method
C/S = Personal choice among methods in study
C/U = Personal choice among usual clinical services

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