



# Induced Abortion: Results from Two Rural Areas of Bangladesh

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## Abstract

This study analyses the results of in-depth interviews of 143 women who came to a rural hospital in Bangladesh either for induced abortion or for the management of complications of abortion, their care-seeking behaviour, reasons for abortion and contraceptive use. The study was carried out during June 1996-March 1997. The reasons for abortion, care-seeking behaviour, and the contraceptive use of these women were studied. More than three-quarters of the women chose to have abortion since they did not want any more children, or because their last child was too young. Seventy-three percent had at least one male child. About four-fifths of the women were not using any contraceptives at the time of conception, and more than half had undergone repeat abortions. However, 66 percent had used a modern method at some stage in their reproductive life. Eight percent of the women had the abortion in the second trimester of pregnancy. Nearly half of the abortions were potentially unsafe, being induced by the untrained personnel or by the women themselves. Forty-eight percent of the women had come to the health facility for the treatment of abortion-related complications, of which haemorrhage and sepsis were most common. Severe complications, like uterine perforation, occurred in one woman. In another case, the woman developed severe infection and died. Results of the study suggest that better services for abortion clients, post-abortion contraceptive counselling, and awareness-raising efforts about the complications of unsafe abortion are essential for better health of women in rural Bangladesh.

## Introduction

It is estimated that about half a million women die each year due to pregnancy-related complications, 99 percent of them in developing countries [1]. One of the five major causes of death of women of reproductive age in many parts of the developing world is complications due to abortion. Estimates show that abortion-related deaths account for about 23 percent of all maternal deaths in the world [2]. One of every 400 women who undergo an unsafe abortion dies [3]. Fourteen percent of all maternal deaths in South Asia can be attributed to unsafe abortions.

It is estimated that 40-60 million induced abortions are performed each year worldwide [3]. Roachat reported that 25.8 percent of all pregnancy-related deaths were due to induced abortion [4]. In Bangladesh, about 8,000 women die each year due to abortion-related complications [5]. Results of a study of abortion-related hospital admissions [6] showed that a sizeable proportion of the admissions in the obstetrics wards of the respective hospitals was abortion-related. Results of a similar study reported that 84 percent of all abortion-related hospital admissions were due to incomplete abortion [7]. In another study conducted by Obaidullah and Khan it was reported that 83 percent of the induced abortions were performed by the untrained traditional practitioners, or village "dais", by indigenous methods [8]. A recent study in two rural areas in Bangladesh found that 3 percent of the total pregnancies were intentionally aborted, whereas 6 percent resulted in spontaneous abortion [9]. However, given the fact that the people have always been sensitive about abortion due to the social taboos associated, and that the majority of abortions are clandestine, the prevalence of induced abortion is greatly underestimated.

Bangladesh, with a population of 120 million, is one of the most densely populated countries of the world. The literacy rate is only 48.6 percent for adults, and 39.4 percent for women [10]. The maternal mortality ratio is 4.5 per 1,000 live-births. Among all married women of reproductive age, the contraceptive prevalence rate is 49 percent, and the total fertility rate is 3.1 [11]. However, the Bangladesh Family Planning Programme still faces problems, like low method continuation rate, method failure due to

reliance on temporary methods, and high unmet need for contraceptives, leading to the increased number of abortions. The existing laws in Bangladesh, derived from the Penal Code of India, 1860, prohibit abortion, except to save the life of a woman [12]. The existing health infrastructure of the Government of Bangladesh has been providing menstrual regulation (MR) services since 1978. These services are available in almost every village of the country. The Health and Family Welfare Centres (H&FWC) are the maternal and child health and family planning (MCH-FP) service units at the union level, and the rural hospitals or Thana Health Complexes (THC) at the subdistrict level are the static facilities which provide these services [13]. MR is usually done within 6-10 weeks of amenorrhoea, without pregnancy confirmation, and is widely provided in both the public and private sectors. In rural Bangladesh, the people still depend on traditional methods of pregnancy termination, which are often performed by the untrained personnel under unhygienic conditions [9]. These clandestine abortions lead not only to death, but also to appalling morbidity. These include perforation of the uterus and sterility; a woman may linger on the verge of death for several days as a result of septic abortion [14]. Women with abortion-related complications usually seek hospital care only as a last resort, and after a considerable suffering [6].

Lack of adequate health-care services and trained personnel for the management of complications of abortion lead to compromised reproductive function, infertility, or even death [15]. The high incidence of abortion is one of the clearest indications of the unmet need for family planning services worldwide [16]. The International Conference on Population and Development (ICPD), 1994 [1] has emphasized that the highest priority should be given to the prevention of unwanted pregnancies, and that all-out efforts should be made to eliminate the need for abortion.

The present study was undertaken to assess the characteristics of women who have had induced abortion, reasons for their abortion, complications that developed, and their care-seeking and contraceptive behaviour.



## Methodology

All women who came to the rural hospital, the THC, either for abortion services or for the management of complications of abortion, in two rural subdistricts, Mirsarai and Abhoynagar, of Bangladesh during June 1996-March 1997 were interviewed for this study. The Operations Research Project (formerly known as Rural MCH-FP Extension Project) of the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) conducts operations research in these two subdistricts.

The population of Mirsarai rely primarily on farming and small business for their livelihood. The literacy rate (45 percent for males and 29 percent for females) is higher than that of the national average (1991 Population Census). The contraceptive prevalence rate (CPR) in Mirsarai is 38.4 percent. In Abhoynagar a sizeable portion of the population work in mills and factories. The male literacy rate in 1991 was 46.7 percent, which was slightly higher than the national rate at that time [17]. The CPR in Abhoynagar is about 57 percent [18].

The interviews were conducted by the Project's female research assistants. They were trained prior to the survey. Privacy and confidentiality were maintained throughout the interviews. Two interviews were conducted for each of the 143 women. The first interview was taken within 48 hours of receiving services at the THC. This included background information about the women, reasons for their abortion, the decision-maker for abortion, their care-seeking behaviour and about complications in cases where the women had the abortion done elsewhere. The women were again interviewed in their homes three months later. During the second interview, information on complications that may have occurred was collected as well. Also, details about the management of these complications and the women's current contraceptive use were noted. Only 81 women were available for the follow-up interviews.

For the purpose of this paper, 'induced abortion' was defined as any pregnancy terminated intentionally by deliberate action within 28 weeks of gestation. The termination could be performed by any means, medical or non-medical.

## Results

Of the 143 women, 50 came to the THC for abortion services, while 38 had the abortions induced elsewhere and came to the THC for the management of complications. About half of these women had an abortion previous to the present one, some had more than three abortions. The mean age of the women was 28.3 years ( $\pm 6.1$ ). All the women in the study, except two, were currently married. Of them, one was separated, one was widowed, and two were unmarried. Seven percent of the husbands were working abroad or outside the study area at the time of abortion. The mean years of schooling of the women was 3.4. Almost half had no schooling, while one quarter had schooling for five years or less, and the rest had schooling for over five years (Table 1). Nearly one-fifth of the women were involved in small business, like making handicraft, selling home-made pickles and vegetables, day labour, etc. Nearly half the husbands of the women in the study had schooling of six years or more, while one third had no schooling. Their mean years of schooling was 5.2. More than half the husbands were either day labourers or involved in business, like selling fish and vegetables in the market, fruit-vending, working as barbers or having small roadside tea shops, etc.

Abortion was more common in women aged over 25 years, and most had more than two children. Seventy-three percent of the women had at least one male child. The mean period of gestation at the time of abortion was 8.5 weeks ( $\pm 3.3$ ), and the range was 2-24 weeks. Eight percent of the abortions took place in the second trimester of pregnancy.

One-tenth of the women were primiparae, and 11 percent had children aged less than one year (Table 1). The incidence of induced abortion was highest among the women whose youngest child was aged over five years.

**Table 1.** Percentage distribution of women having abortion by their socio-demographic characteristics (n = 143)

Characteristic of women	Percentage
<b>Age (years)</b>	
< 20	7
20-24	19
25-29	30
30-34	22
35 and above	22
<b>Education (years)</b>	
No education	47
1-5	25
6-10	24
11 and above	4
<b>Occupation</b>	
Housewife	82
Small business	10
Day labour	4
Service	3
Student	1
<b>Parity</b>	
Primi parae	10
1-2	34
3-4	30
5 and above	26
<b>Husbands' education (years)</b>	
No education	34
1-5	21
6-10	35
11 and above	10

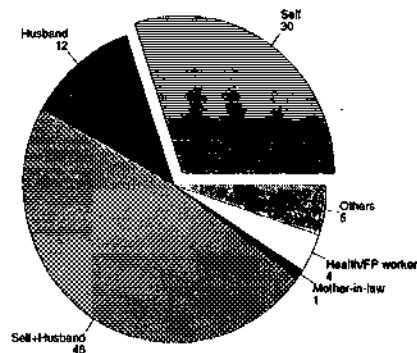
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**Table 1: (Cont'd...)**

Characteristic of women	Percentage
<b>Husbands' occupation</b>	
Works abroad/outside the thana	7
Business	26
Day labour	27
Service	8
Farmer/landowner	19
Others	13
<b>Age of the last child (years)</b>	
Primi	10
<1	11
1-2	22
2-3	13
3-4	12
4-5	8
5 and above	24

### Decision for abortion

In almost half of the cases of induced abortion (48%), the husband and wife jointly decided to terminate the pregnancy. The woman alone was the decision-maker for having the abortion in 30 percent of the cases (Fig. 1), while the husband decided in 12 percent of the cases. The health or family planning worker was the decision-maker in four percent of the cases, and the mother-in-law played a minor role in the whole process.



**Fig.1.** Percentage distribution of persons who made the decision for abortion

## Reasons for abortion

The majority (70%) of the women chose to have the abortion because they did not want any more children (Table 2). Thirteen percent said that the abortion was done to further space their pregnancies. Four percent stated contraceptive failure to be the reason for their unwanted pregnancy. One woman said that she went for abortion since her mother-in-law did not want her to continue the pregnancy. Seven women mentioned poor relationship with their husbands as the reason for abortion, one husband having left the woman when she was six weeks pregnant. The pattern of reasons given was similar for those who had repeat abortions. Some women gave multiple reasons for abortion, so that the total of the percentages add up to more than 100.

**Table 2.** Percentage distribution of women who had induced abortion, according to their reasons for abortion (n = 143)

Reason for abortion	Percentage
Does not want more children	70
Medical reasons for abortion	10
Contraceptive failure	4
Social problems	3
Last child being too young	13
Too poor	15
Poor relationship between husband and wife	5
Mother-in-law does not support the pregnancy/others	3

### Care-seeking behaviour before coming to the THC

Twenty percent of the women in the study went to a homeopath, *kabiraj* (herbal practitioner), or religious healer initially (Table 3), 13 percent went to a nurse or trained paramedic, and 12 percent went to the village doctor before coming to the THC. Eighty-five women (59%) went to some provider in the community before coming to the THC. Nearly three-quarters of the women did not go to a second provider. Eight percent sought the services of the nurse or paramedic, and 11 percent went to the village doctor, homeopath, *kabiraj*, or religious healer for the second time. Most women did not go to a third provider. One woman induced the abortion herself with some abortifacient roots given to her by a *kabiraj*.

**Table 3.** Percentage distribution of women by their care-seeking behaviour before coming to the THC (n = 143)

Type of provider	First visit	Second visit	Third visit
UTBA/neighbour/relative	4	1	-
TTBA	3	2	-
Village doctor	12	8	1
Homeopath/ <i>kabiraj</i> /religious healer	20	3	1
MBBS doctor	2	3	-
Nurse/paramedic	13	8	3
FWA	5	1	-
None	41	74	95

Regarding the services by the providers in the village, 64 percent were given oral medication; a foreign body was inserted locally to induce abortion in 21 percent of the cases; and MR was done for 16 percent of them. MR was also attempted in 11 percent of the women, while 20 percent were referred to a higher facility (Table 4). Fifteen percent of the women were given advice on the method of abortion, while 11 percent received holy water from the religious healer. Advice included, tying jute bindings around the lower abdomen and eating certain herbs and vegetables which would have an abortifacient effect. Advice for ultrasonogram, blood and urine tests was also given. Some women were given multiple services, so that the percentage adds up to over 100.

**Table 4.** Percentage distribution of the types of services by different service providers (n = 85)

Type of service	Percentage
Oral medication	64
Injection/saline	5
Foreign body applied locally	21
Attempted MR/abortion	11
MR/abortion done	16
Advice given	15
Holy water	11
Referred	20

### **Complications of abortion**

About 48 percent of the 143 women, who came to the THC, had some abortion-related complications, while the remaining 52 percent actually came for abortion services. Of those who had complications, more than

two-thirds had haemorrhage, while another two-thirds complained of lower abdominal pain. A little more than one-third had fever, and more than one-fifth developed foul smelling discharge (Table 5). Dilatation and curettage was the most common treatment given for the complications. One woman who had lower abdominal pain after an induced abortion had a repeat MR as treatment. Four women were referred to a higher facility from the THC for better management of the complications.

**Table 5.** Percentage distribution of women by treatment of complications following abortion (n = 143)

Type of complication	Measures taken to manage complications							No. of women
	Oral medicine	Injection	Saline MR	D&C	Blood transfusion	Referred		
Fever	31	42	39	-	31	12	8	26
Haemorrhage	42	48	48	-	58	16	7	31
Smelling discharge	38	38	38	-	75	-	-	8
Abdominal pain	42	48	36	3	68	13	-	37
Irregular bleeding	-	50	50	-	-	-	-	2



## Contraceptive use

Almost four-fifths of the women were not using any contraceptive at the time of conception. However, 59 women (67%) had used some modern method of contraception at some stage of their reproductive life. The most common method used was the pill (73%).

Contraceptive use increased after abortion and rose to 84 percent on follow-up. Thirteen percent of the women had been on oral pills at the time of conception. They stated that their pregnancies resulted from the irregular use of pills. The pill use increased by more than three-folds and was 43 percent after abortion. There was a similar increase in the use of the different methods of contraception after abortion, with a fall in the percentage of women who were using traditional methods (Fig. 2).

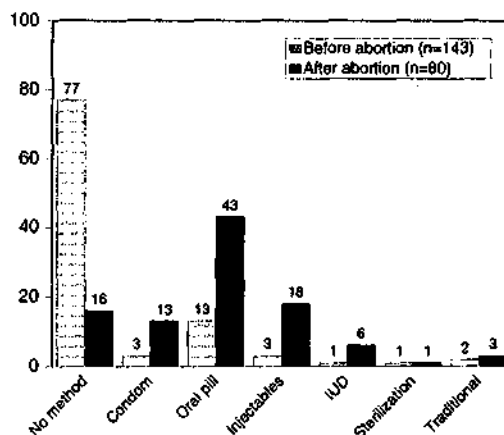


Fig. 2. Percentage distribution of family planning methods used before and after abortion

## Effect of abortion at 3 months follow-up

On follow-up, almost half the women had no physical problems three months after their visit to the THC (Fig. 3). Twenty-one percent of the women complained of anaemia, weakness, and dizziness, while 28 percent suffered from lower abdominal pain. Other problems included backache and vaginal discharge. One woman died of severe infection before the follow-up interview.

One 33-year old married woman had perforation of the uterus following MR done by a paramedic in the village. She was referred to the district hospital when she came to the THC with severe bleeding, and she finally needed to have a hysterectomy. Another married young woman aged 20 years used some roots for inducing abortion. This was followed by abdominal pain, fever, and bleeding. After several days she was brought to the THC in a state of shock. She was referred to the district hospital where she died two days later.

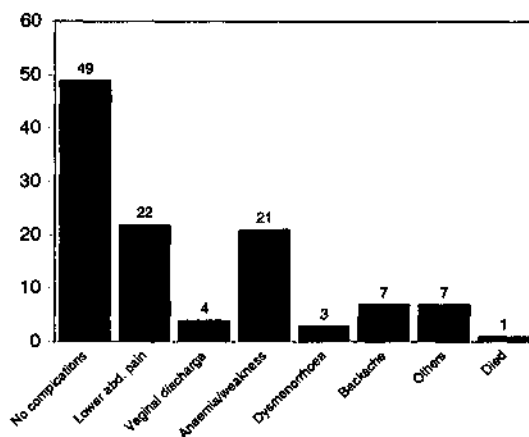


Fig. 3. Percentage distribution of women with complications of abortion at 3 months follow-up

## Discussion

The present study was aimed at determining the care-seeking and contraceptive behaviour of rural women in Bangladesh who have had induced abortions. The abortion-related complications and their management were also studied.

More than three-quarters of the women chose to have an abortion, since they did not want any more children or because their last child was too young. Also, the majority of these women had two or more children, and 73 percent had at least one male child. These women were resorting to abortion as a means of fertility control once their desired family size was achieved. Previous studies have found that women who have induced abortions have an average of three living children, and at least one of them is a son [19-20]. It is important to note that 77 percent of the women were not using any contraceptive at the time of conception. However, 67 percent

had used a modern method at some stage of their reproductive life, and the most common method used was the pill, followed by condom. Thus, these women may have stopped using contraceptives due to side-effects or these could be cases of method failure. In a recent study based on data from Matlab, Bangladesh [21], it was shown that contraceptive failure is a major problem for users of all temporary methods, except injectables and IUDs. It was estimated that about 25 percent of births in Bangladesh reflect contraceptive failure.

It is interesting to note that in this study none of the women, except for one woman whose husband had a vasectomy, used a permanent method. The declining use of permanent contraceptive methods is a major concern in the Bangladesh family planning programme and is due, among other things, to cultural resistance and internal conflicts between medical and non-medical personnel of the government health system [22].

Results of the present study show that nearly half of the abortions were potentially unsafe, being induced by the untrained personnel or the woman herself. The government-employed paramedic is supposed to provide MR services in the community free of charge. In spite of this, the majority of the women in the villages depend on the services of the village doctor, herbal practitioner, homeopath, and religious healers. These village practitioners are conveniently located in the community, and the women feel more familiar with them. A few mothers consulted up to three persons for their abortion or abortion-related complications before they finally went to a health facility. However, about 15 percent of the women chose the medically trained people in the community as their first provider. Unfortunately, even these women had to go to the THC for the management of complications, which developed after abortion. Some of them, however, were referred to the THC by the providers themselves. This reflects the unavailability, as well as the poor quality of services in some rural areas of Bangladesh. Thus, most women did not use the government services and resorted to unsafe abortion, with the result that 51 percent developed complications and finally went to the rural hospital for management; the major complications were haemorrhage and sepsis. Infection, haemorrhage, and incomplete abortion are common problems and may be further complicated by trauma to the reproductive system and toxic reactions to

chemical drugs or herbs used for abortion [15]. Haemorrhage and complications of induced abortion accounted for almost 40 percent of the maternal deaths in Matlab in 1976 and 1985 [23]. One maternal death had occurred due to complications of abortion among the women in the present study. That more than 50 percent of the women came to the hospital with complications, calls for urgent attention to strengthen awareness-raising efforts in the community about safe abortion, and the dangers of unsafe abortion. Health education for the grassroots workers also needs to be enhanced to enable them to convey the appropriate messages to the community, such as 'conceive to avoid becoming pregnant and reduce the need for abortion in the case of unwanted pregnancies' [9].

That eight percent of the women had the abortion in the second trimester of pregnancy raises concern. It was also alarming to note that almost 50 percent of the women in this study had repeat abortions. Some of them even had more than three abortions. This emphasizes the importance of post-abortion contraceptive counselling, which most health-care personnel or facilities in Bangladesh do not provide. Ross and Frankenberg [24] demonstrated that the contraceptive use increases after abortion. Women who have unwanted pregnancies should have ready access to reliable information and compassionate counselling [1], so that they can accept a contraceptive and prevent another unwanted pregnancy. Thus, there is a need for well-trained personnel who would understand the reproductive health-care needs of women.

The present study has also recorded increased contraceptive use in the post-abortion period. However, most of these were pills and injectables. Thus, more emphasis for permanent methods needs to be given. Since most women had the abortion to limit the number of children, it may be worthwhile to gear up activities to encourage them to adopt a long-term or permanent method of contraception.

Almost half the women in the study had no education. It is apparent that the incidence of induced abortion was more common among the uneducated women, and this is consistent with findings of a similar study [9]. Also, the women in the study were the decision-makers to induce the abortion in about 30 percent of the cases. Another encouraging finding of

this study is that about 48 percent of the decisions for induced abortion were made jointly by the husband and wife. The mother-in-law, previously the key figure in the family, played a very negligible role in the process of decision-making in this study. This suggests that women are becoming more conscious about their family size, and are themselves making choices for their reproductive life.

The present study has shown that the incidence of induced abortion was highest among the women whose youngest child was aged five years or over. In 11 percent of the cases, the child was aged less than one year. These findings have important implications and call for strengthening the postpartum contraceptive services. Emphasis may also be given to exclusive breastfeeding for the first six months of life.

One of the women in this study was on injectable contraceptives and did not know that amenorrhoea is a common side-effect of this method. So, when she missed her periods, she thought she was pregnant. The health-care provider also misdiagnosed her to be pregnant, and an unnecessary MR was done, which led to severe complications. Thus, there is the possibility that many women in the study who were on injectable contraceptives could have been amenorrhoeic but not pregnant. There is, therefore, a need to strengthen the technical competence of the grassroots workers, so that they can screen women properly before suggesting any measures, like MR for such side-effects of contraceptives as amenorrhoea.

This study suggests that the accessibility and availability of reproductive health and family planning services need to be further improved in the rural areas of Bangladesh. This should include better services for abortion clients and compassionate post-abortion contraceptive counselling. It is important to motivate the woman after an abortion to choose an appropriate method of family planning, thereby reducing the risk of another unwanted pregnancy. Efforts should be made to raise community awareness regarding the consequences of unsafe abortion. One of such efforts should include strengthening health education for the grassroots workers to disseminate the correct message in the community.

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