

Original Article

Social-demographic characteristics of Induced abortion patients in a tertiary care hospital of Dhaka Bangladesh

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ABSTRACT

Introduction: Abortion is a major social and public health concern. Complications from unsafe abortions are one of the primary causes of maternal death in Bangladesh. It's a major health issue. According to the World Health Organization, 14 percent of maternal fatalities are preventable which occur every year in South Asian nations, including Bangladesh, are caused by abortion. However, there is a lack of up-to-date and reliable information on induced abortion distribution and its determinant factors in the country. This study was intended to assess induced abortion and associated factors in a tertiary care center in Bangladesh. **Aim of the study:** The aim of the study was to observe the social and demographical characteristics of induced abortion patients admitted to a tertiary care hospital in Bangladesh. **Methods:** This prospective observational

study was conducted at the Department of Obstetrics and Gynaecology, Dhaka Medical College Hospital, Bangladesh. The study duration was 6 months, from May 2007 to October 2007. A total of 80 cases were randomly selected from all induced abortion cases admitted in different maternity units of Dhaka Medical College Hospital (DMCH). **Result:** 50% of the participants were between the age of 21-30 years, all except 12.5% of the participants were multipara, a majority (46.25%) had 6-12 weeks of pregnancy before termination. The most common clinical presentation was amenorrhea and pervaginal bleeding, followed by pain in the abdomen. The majority of the participants (58.75%) were housewives, and 93.75% were from a low socio-economic class. 85% were from urban areas, and 60% were illiterate. **Conclusion:** The prevalence of induced abortion was extremely high among women of low social class with little to no education, and most of them were housewives or day laborers. Early abortion resulted in fewer complications, whereas late abortion resulted in a higher risk of complications. Amenorrhea, pervaginal bleeding, and abdominal pain were the most common complications among the admitted participants.

Keywords: Pregnancy, Abortion, Literacy, Induced

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INTRODUCTION

Abortion is a frequent health intervention that is widely defined as the termination of a pregnancy by the removal or ejection of an embryo or fetus. Globally, distinct regulations exist in various nations governing the legality of abortion as well as the timeframe of abortion^[1]. Abortion is defined in English law as the termination of a pregnancy before 24 gestational weeks, or before the fetus becomes viable^[2]. But in some countries due to differences in medical facilities and resuscitation technology, the abortion term can be extended or shortened. For example, in Bangladesh, the abortion term can be considered up to the 28th week of pregnancy. The global prevalence of abortion is high, with 29% of all pregnancies and 61% of all unintended pregnancies ending in induced abortion^[3]. Although abortion is a safe method when followed by the proper guidelines, due to many social and religious reasons, 45% of all abortions become unsafe globally. An overwhelming 97% of such unsafe abortions occur in the developing world^[4]. The incidence of induced abortion might be even higher in countries with strict religious and social biases against pregnancy termination, as it can lead to the under-reporting of abortion cases. Especially in developing countries, many patients go to quack doctors or untrained personnel for inducing abortion, due to the legality of abortion or the high cost. In poor areas, unsafe abortion is a recurrent but avoidable epidemic. In Bangladesh, abortion is a social and demographic event as well as a medical one. Despite the fact that non-therapeutic abortion is technically prohibited in Bangladesh, it is routinely done in both urban and rural regions. However, this results in an exceptionally high incidence of maternal mortality each year as a result of an abortion done by unqualified

practitioners. Some safer methods of abortion include the use of medicine, manual vacuum aspiration, etc. It has been observed that the earlier the pregnancy is terminated, the safer the available methods are^[5]. Both traditional and non-traditional abortions might result in problems such as fever, pelvic infection, peritonitis, hollow viscous perforation, and so forth. These difficulties have an impact not only on the women and their families but also on medical institutions and the national health budget. We can considerably reduce maternal morbidity and death due to abortion by raising public awareness, offering female health education, and giving contraceptive information, therefore preventing undesired pregnancies. Abortion induction may be required owing to a variety of causes, including an aberrant conceptus, cervical incompetence, immunological variables, maternal illnesses, and even trauma. These conditions can lead to induced abortion, however, the issue is fraught with the dispute. Abortion is routinely conducted under unsanitary settings by an inexperienced person in nations where abortion is outlawed. They insert sticks or twigs into the uterus, posing a substantial danger of uterine perforation, severe bleeding, and infection. Due to a shortage of competent medical personnel and expensive medical sector expenditures, this practice is most widely utilized in poor nations^{[6]-[8]}. The decision of terminating pregnancy can also be influenced by social and economical constraints, education level, number of existing children, financial situations, etc. The present study was conducted with induced abortion patients who were admitted into the hospital due to various complications after abortion to observe the socio-demographic characteristics of the patients.

OBJECTIVE**GENERAL OBJECTIVE**

- To observe social characteristics of induced abortion patients

SPECIFIC OBJECTIVES

- To observe the education level of induced abortion patients.

METHODS

This prospective observational study was conducted at the Department of Obstetrics and Gynaecology, Dhaka Medical College Hospital, Bangladesh. The study duration was 6 months, from May 2007 to October 2007. A total of 80 cases were randomly selected from all induced abortion cases admitted in different maternity units of DMCH. After taking detailed history with special attention to menstrual history and type of induction a careful examination was done in all cases. Informed written consent was obtained from each participant, and the anonymity of the participants was ensured. Ethical approval was obtained from the ethical review committee of the study hospital. All necessary investigations were done in all cases. The cases were managed according to the clinical situation and complications were noted. All necessary pieces of information were noted in a preformed data collection sheet. Finally, the results were analyzed and presented in different tables.

Inclusion Criteria

- Age 15 and above
- Patients who had given consent to participate in the study.
- Induced Abortion cases

Exclusion Criteria

- Spontaneous abortion or miscarriage cases.
- Medical termination of pregnancy & MR cases
- Exclude those affected with other chronic diseases etc.

RESULT

50% of the participants were between the age of 21-30 years, all except 12.5% of the participants were multipara, a majority (46.25%) had 6-12 weeks of pregnancy before termination. The most common clinical presentation was amenorrhea and pervaginal bleeding, followed by pain in the abdomen. The majority of the participants (58.75%) were housewives, and 93.75% were from low socio-economic classes. 85% were from urban areas, and 60% were illiterate.

Table 1: Age distribution of the participants (n=80)

Age group (In Years)	No. of patients	Percentage
15-20	13	16.25%
21-30	40	50%
31-40	27	33.75%

Among the participants, half (50%) were from the age group of 21-30 years, while 33.75% were between the age of 31-40 years, and only 16.25% of the participants were from the youngest age group of 15-20 years.

Table 2: Parity distribution of patients (n=80)

Parity	No. of cases	Percentage
0	10	12.5
1	5	6.25
2	35	43.75
3	20	25

4	10	12.5
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43.75% of the participants had 2 previous full-term birth, and only 12.5% had no previous childbirth. The remaining participants all had at least 1 previous full-term birth.

Table 3: Occupation of the patient (n=80)

Occupation of the patients	Number of patients	Percentage
Housewife	47	58.75
Service holder	7	8.75
Day laborers	26	32.50

Among the participants, 58.75% were housewives, and 32.50% were day laborers. The remaining 8.75% of the participants were service holders.

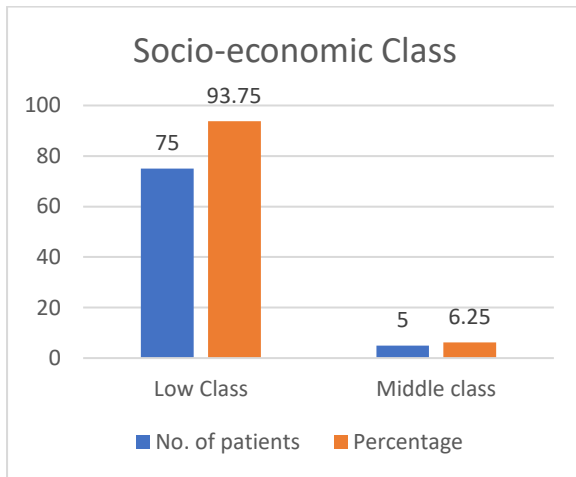


Figure 1: Distribution of participants according to socio-economic condition (n=80)

Only about 6.25% of the participants of the present study were from middle-class society. The remaining 93.75% of the participants were of low socio-economic class.

Table 4: Distribution of participants according to education status (n=80)

Level of Education	No. of patients	Percentage
Illiterate	48	60
Somewhat Literate	12	15
Primary level	17	21.25
High school level	3	3.75

Over half (60%) of the participants of the present study were illiterate, while 15% were somewhat literate and were able to write down their names but did not receive any proper education. 21.25% of the women had studied up to primary levels, while 3.75% of the participants received education up to high school level.

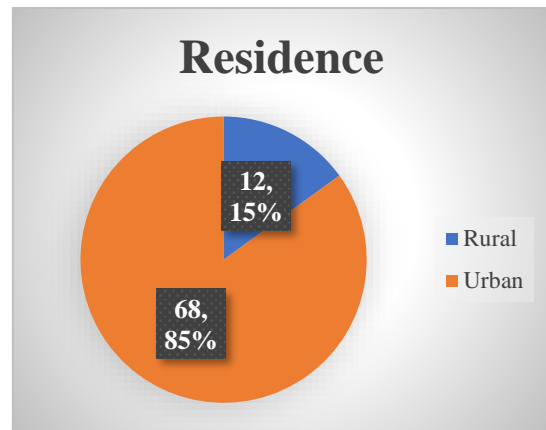


Figure 2: Distribution of cases by residence (n=80)

85% of the present study participants were from urban areas, while only 15% were from rural areas.

Table 5: Distribution of cases by a clinical presentation on admission (n=80)

Clinical presentation	No. of patients	Percentage
Amenorrhea and pervaginal bleeding	38	47.5

Pain in the abdomen	17	21.25
Shock	8	10
Fever	10	12.5
Abdominal distention	5	6.25
Oliguria	2	2.5

47.5 percent of the individuals experienced amenorrhea and pervaginal hemorrhage at the time of admission, 21.25 percent had abdominal pain, 12.5 percent had a fever, 10% had a shock, 6.25 percent had abdominal distention, and 2.5 percent had oliguria.

Table 6: Interval between onset of abortion and admission to Hospital. (n=80)

Time interval	No. of cases	Percentage
≤1 Day	16	20
2-5 Days	19	23.75
6-10 Days	24	30
10 Days-1 Month	21	26.25

The majority of the participants (30%) were admitted to the hospital 6-10 days after the abortion began, 26.25 percent were admitted between 10 days and 1 month after the abortion began, and 23.75 percent were admitted between 2 and 5 days after the abortion began. Within 24 hours following the start of the abortion, the remaining 20% were admitted to the hospital.

Table 7: Treatment offered during Hospital stay (n=80)

Treatment		No. of cases	Percentage
Conservative treatment	Resuscitation with antibiotic	11	13.75
Surgery	Dilatation, evacuation and curettage	58	72.5
Laparotomy	Drainage of Pus	3	3.75
	Repair of Uterus	4	5
	Repair of gut	1	1.25
	Total abdominal hysterectomy	3	3.75

72.5 percent of the participants were offered dilatation, evacuation, and curettage (D&C), 13.75 percent were provided conservative therapies, and the remaining 13.75 percent were offered laparotomy during their hospital stay. The uterine repair was the most popular laparotomy procedure among them (5 percent).

Table 8: Distribution of patients based on Hospital Stay (n=80)

Hospital stay	No. of cases	Percentage
1-2 Days	35	43.75
3-5 Days	21	26.25
6-14 Days	15	18.75
More than 2 weeks	9	11.25

The majority of the participants (43.75%) had very short hospital stays

(1-2 days). 26.25% had a hospital stay of 3-5 days, 18.75% had a hospital stay of 6-14 days, and the remaining 11.25% had a hospital stay of over 2 weeks.

DISCUSSION

Abortion is a regular medical procedure. It is safe when performed using a WHO-recommended method, at the proper time in the pregnancy, and by someone with the relevant abilities. When persons with unwanted pregnancies experience hurdles to safe, quick, inexpensive, geographically accessible, respectful, and non-discriminatory abortion, they frequently turn to unsafe abortion. According to global estimates from 2010 to 2014, 45 percent of all induced abortions are dangerous. Developing nations are responsible for 97 percent of all unsafe abortions.^[4] More than half of all unsafe abortions take place in Asia, with the majority taking place in South and Central Asia. In Latin America and Africa, the majority of abortions (about three out of four) are unsafe. Nearly half of all abortions in Africa take place in the least safe conditions.^[9] These unsafe abortions might be related to various factors like financial status, social status, education levels, etc. The present study was conducted with the aim of observing such factors. The study was conducted with 80 women who had undergone induced abortion recently and were admitted to the hospital due to resulting complications. According to the findings of the current study, about half of the patients were between the ages of 21 and 30, with the majority (43.75 percent) being moms with two children. Only 12.5 percent of the individuals had never been pregnant or given birth before. Similar findings have been seen in other research, with induced abortions being more common in the multipara woman population^{[10],[11]}. This might be impacted by the intention to keep the family brief, as well as government-

sponsored population control instruction. The majority of the participants of our study were housewives, while day laborers had the second-highest frequency at 32.5%. The remaining 8.75% of the participants were service holders. This high prevalence of housewives and day laborers among the admitted participants is not uncommon and can be seen in other studies of developing countries^[12]. An overwhelming portion (93.75%) of the participants of the present study were from low socioeconomic classes, and the remaining were from middle-class families. Financial constraints are one of the main reasons for pregnancy termination in developing countries, as suggested by another study^[13]. The illiteracy rate was extremely high among the study participants, with 60% being completely illiterate and 15% being somewhat literate while receiving no conventional education. These findings, were, however, contradictory to other previously established studies, where it was observed that literate women had a higher chance of having induced abortion^{[14],[15]}. This discrepancy could be explained by our study hospital being tertiary care and being more accessible to people of the lower class, along with the tendency of visiting private hospitals for more personalized care among the families of higher economic class. 85% of the participants of the present study were from urban areas, while only 15% were from rural areas. This could also be explained by the location of the study hospital, as it is located in the capital, and people from rural areas do not need to come here unless referred to by their local healthcare. The most common clinical symptoms were amenorrhea and pervaginal hemorrhage, followed by pain in the lower abdomen. Approximately 30% of patients were hospitalized between 6-10 days of the

abortion. Within 2-5 days after the abortion, 23.75 percent of the patients arrive. Only 20% of women went to the hospital within one day of having an abortion. Patients who terminated their pregnancy between 6 and 12 weeks were 46.25 percent, 38.75 percent between 13 and 16 weeks were 38.75 percent, and 15 percent beyond 16 weeks were 15 percent. Complications after an induced abortion are largely determined by gestational age. This high rate of delayed abortion was most likely attributable to a late pregnancy diagnosis induced by a delay in deciding due to religious fear or a lack of understanding about the availability of such services. Delaying the termination of pregnancy increases the difficulty of the procedure as well as the risk of complications [16],[17]. The management of 72.5 percent of the patients was straightforward. The majority of patients (43.75 percent) were able to be discharged within 1-2 days. They went through DE& C and were released the next day. After resuscitation, induced abortion patients with shock (10% of total patients) recovered quickly as well. Only 8.75% of patients suffered an iatrogenic perforation, which was treated with uterine repair and total abdominal hysterectomy. One of the patients had gut damage, which was treated with a gut repair. 3.75 percent of patients were treated with a laparotomy and pus drainage. The treatment of septic abortion was not easy. Peritonitis was found in 6.25 percent of patients, while renal failure was present in 2.5 percent. They need intensive care unit supervision and endured a lot throughout their stay in the hospital. However, with appropriate family planning facilities and proper counseling, it is a preventable disorder.

Limitations of The Study

The study was conducted in a single hospital with a small sample size. So, the results may not represent the whole community.

CONCLUSION

The prevalence of induced abortion was extremely high among women of low social class with little to no education, and most of them were housewives or day laborers. Early abortion resulted in fewer complications, whereas late abortion resulted in a higher risk of complications. Amenorrhea, pervaginal bleeding, and abdominal pain were the most common complications among the admitted participants.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

RECOMMENDATION

Further community based study including a large number of patients needs to be undertaken in the future. Different social group of patient should be taken as a sample both in urban and rural area.

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