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Socio-Demographic Characteristics as a Possible Influence for Abortion in Bangladesh

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Abstract	Original Research Article

Introduction: Abortion in Bangladesh is illegal under most situations, but menstrual regulation is often used as a substitute. Abortion can be legally performed by a physician in a hospital if it is necessary to save the life of the mother. A person, who performs an abortion under any other circumstances, including a woman who self-aborts, can be punished by a fine and imprisonment under law in many countries, including Bangladesh. While there are some countries that allow legal abortion, the ratio of such countries are quite low. Despite the risk of punishment, Bangladesh still sees an absurd number of abortions, both legal and illegal, per year. The present study was conducted to understand if any socio-demographic factors influence such decision-making process. The aim of the study was to assess the socio- demographic characteristics that may influence abortion among pregnant women. ***Methods:*** This cross-sectional descriptive study was conducted at the Department of Gynecology, Gonoshasthaya Nagar Hospital, Dhaka, Bangladesh during the period of January 2018 to December 2018. Informed consent taken from all the study participants. SPSS software used for data analysis. ***Result:*** Most of the respondents (43.75%) were below 25 years of age and (15.0%) were above 35 years of age. Respondents' education status was primary level (33.8%) and SSC level (35.0%). Among the 107 married participants, husband's education was upto primary level in 45.79%, SSC in 33.64%, HSC in 4.67% and degree and above in 14.95%. Respondent's monthly family incomes were 10% below 3000 Taka and 20% above 14000 Taka. 33.13% were unmarried, 51.25% were married and 15.62% were divorced. Among the 107 who were married, 79.44% were under 18 years of age at the time of marriage, 10.28% were between the age of 18-25 years, and the remaining 11 were over 25 years of age at time of marriage. Majority of abortions occurred in 1st trimester. About 75% of the abortions happened within <13 weeks of pregnancy, while the remaining 24.4% had an abortion after 13 weeks of pregnancy. 36.25% of the participants had no previous children, while majority (55%) had over 3 children. Mean age of the last child among those who had children was 3.25 years. Among the participants, 83.75% had incomplete abortion, while only 5% had complete abortion. 38.13% of the abortion cases were spontaneous abortions, while the majority 61.87% was induced abortions. For the majority (41.25%) of the participants, primary cause of abortion was not willing to have any more children. 21.25% of the participants were heavy workers 10% had malnutrition, and 27.50% were forced into abortion by family or relatives. ***Conclusion:*** The study showed that for both induced and spontaneous abortion, socio-demographic factors like mother's age, marital status, family income, education level and existing number of children all play an important role.
Keywords: Abortion, Pregnancy, Cause, Child.

INTRODUCTION

The word "abortion" refers to ending a pregnancy (expulsion or extraction of the embryo or fetus) before 20 weeks or when the fetus weighs less than 500 grams.[1] Induced abortion and spontaneous abortion are the two primary forms of abortion. A pregnancy that ends before the 20th week (139 days) of gestation is referred to as spontaneous. It suggests that the placenta or membranes may be expelled partially or completely. Even if situations with a live birth or stillbirth of a child weighing less than 500g are covered by the criteria, there could not be a fetus present. Complete abortion refers to the expulsion of all fetuses before the 20th week of pregnancy, whereas incomplete abortion is the expulsion of some but not all fetuses during the same period. Abortion happens early (before to 12 weeks) and late (between 12 and 20 weeks) [1]. Intrauterine bleeding that occurs before to the 20th week of pregnancy, with or without uterine

contractions, without the evacuation of the fetus's products of conception, and without cervix dilating, is referred to as threatened abortion [2]. An inevitable abortion is when the cervix continues to enlarge continuously and gradually before the 20th completed week without the ejection of the fetus's products of conception. Although spontaneous abortion often takes place 1-3 weeks after the embryo or fetus dies, in a missed abortion, the embryo or fetus dies in the uterus before the 20th week of gestation is complete, but the pregnancy-related products are kept [3]. Millions of women have undesired pregnancies each year; some of these pregnancies are brought to term, while others are aborted artificially. From the year 2000 to 2022, the abortion rates of Bangladesh has continued to rise and fall, with the highest abortion rate of 8.18% occurring in 2012, after which the abortion rate started to slowly decline, with an estimated abortion rate of 4.33% last recorded in 2018 [4]. In many nations, induced abortion is prohibited by law. Pregnancy termination is permitted in certain societies for ethical and societal reasons. Even in states where induced abortion is permitted, there may occasionally be a lack of services or an uneven distribution of those that are available. Or, a lady could not be aware of their availability. Women still try to end undesired pregnancies despite restricted laws and inadequate services [5]. Women risk their lives and health by going to unlicensed facilities or unqualified practitioners. High rates of unsafe abortion are correlated with restrictive laws. However, legal laws have a greater impact on maternal fatalities than on abortions [6]. It is estimated that 40–60 million induced abortions are done annually across the world due to insufficient or nonexistent record-keeping mechanisms. Every year, hundreds of thousands of these women have illegal abortions that result in needless deaths or terrible side effects like sepsis and sterility. According to reports, each year in Bangladesh, complications from abortion kill at least 7800 women [7]. Sociodemographic characteristics have been linked to abortion rates in emerging nations, according to earlier studies. For instance, it has been observed that factors such as the women's age at the time of the survey, marital status, level of education, work status, and total number of children are all strongly linked to a higher chance of miscarriage [8-12]. However, only a small number of research in Bangladesh focused on the risk factors connected to abortions in a few particular areas. Therefore, the current study was carried out to provide more information on this subject.

OBJECTIVE
General Objective
- To observe the socio-demographic characteristics of abortion cases in Bangladesh.

METHODS
This descriptive cross-sectional study was conducted at the Department of Gynecology, Gonoshasthaya Nagar Hospital, Dhaka, Bangladesh during the period of January 2018 to December 2018. A total of 160 women of reproductive age were selected from those who had visited the hospital for abortion or post-abortion complications within the study period. Informed written consent was obtained from each participant after ensuring complete anonymity and option to opt out of the study at any given time, and ethical approval was also obtained from the ethical review committee of the study hospital. All necessary data was collected by a pre-prepared questionnaire, and analysis was done using SPSS V.25

Inclusion Criteria
- Women of Reproductive age.
- History of abortion in the last 6 months.
- Patients who had given consent to participate in the study.

Exclusion Criteria
- Women who had abortion over 6 months ago.
- Unable to answer the criteria question.
- Exclude those affected with other chronic diseases etc.

RESULTS

Table 1: Social characteristics of the participants [N=160]

Characteristics	Frequency	Percent
Age		
<25	70	43.75%
25-29	34	21.25%
30-34	32	20.00%
>35	24	15.00%
Mean± SD = 26.28 ± 3.29		
Marital Status		
Unmarried	53	33.13
Married	82	51.25
Divorced	25	15.62
Education		
Primary	54	33.75%
SSC	56	35.00%
HSC	38	23.75%
Degree & above	12	7.50%
Husband's education (n=107)		
Primary	49	45.79%
SSC	36	33.64%
HSC	5	4.67%
Degree & above	16	14.95%
Age at marriage (n=107)		
<18	85	79.44%
18-25	11	10.28%
>25	11	10.28%

Mean± SD	16.75 ±2.75, Range = 11-34	
Monthly family income		
<3000	16	10.00%
3000-8000	54	33.75%
8001-14000	58	36.25%
>14000	32	20.00%

Most of the respondents (43.75%) were below 25 years of age and (15.0%) were above 35 years of age. Respondents education status was primary level (33.8%) and SSC level (35.0%). Among the 107 married participants, husband's education was upto primary level in 45.79%, SSC in 33.64%, HSC in 4.67% and degree and above in 14.95%. Respondent's monthly family incomes were 10% below 3000 Taka and 20% above 14000 Taka. 33.13% were unmarried, 51.25% were married and 15.62% were divorced. Among the 107 who were married, 79.44% were under 18 years of age at the time of marriage, 10.28% were between the age of 18-25 years, and the remaining 11 were over 25 years of age at time of marriage.

Table 2: Distribution of patients according pregnancy related information (n=160)

Criteria	Number	Percentage
Duration in weeks		
<13 weeks	119	74.38%
13-28 weeks	39	24.38%
Number of existing children		
Nil	58	36.25%
1-2	14	8.75%
>3	88	55.00%
Age of last child (n=102)		
1-5	65	40.63%
6-10	29	18.13%
>10	8	5.00%
Mean± SD	3.25 ± 4.18	

Majority of abortions occurred in 1st trimester. About 75% of the abortions happened within <13 weeks of pregnancy, while the remaining 24.4% had an abortion after 13 weeks of pregnancy. 36.25% of the participants had no previous children, while majority (55%) had over 3 children. Mean age of the last child among those who had children was 3.25 years.

Table 3: Distribution of patients according to the type of abortion (n=160)

Abortion Type	Number	Percentage
Incomplete	134	83.75%
Complete	8	5.00%
Missed	14	8.75%
Septic	3	1.88%
Inevitable	1	0.63%

Among the participants, 83.75% had incomplete abortion, while only 5% had complete abortion.

Table 4: Distribution of patients according to nature of abortion (n=150)

Abortion Nature	Number	Percentage
Spontaneous	61	38.13%
Induced	99	61.87%

38.13% of the abortion cases were spontaneous abortions, while the majority 61.87% was induced abortions.

Table 5: Distribution of patients according to mode of treatment (n=160)

Cause of Abortion	Number	Percentage
By force	44	27.50%
Heavy works	34	21.25%
Malnutrition	16	10.00%
More children	66	41.25%

For the majority (41.25%) of the participants, primary cause of abortion was not willing to have any more children. 21.25% of the participants were heavy workers 10% had malnutrition, and 27.50% were forced into abortion by family or relatives.

DISCUSSION
In Bangladesh, most women who seek menstrual regulation (early abortion) from clinics of the Bangladesh Women's Health Coalition are married. On average, they are 25-29 years old and have two living children. Their economic and educational levels are generally slightly higher than the average for the country [13]. The present study was conducted to observe the possible connection between such socio-demographic factors and the decision making process of abortion. In the present study, almost half the participants, (43.75%) were under the age of 25 years. 21.25% were between the age of 25-29 years, while another 20% were between the age of 30-34 years. It was observed that the incidence of abortion continued to decrease with increasing age. These findings were supported by other similar studies, leading to the conclusion that higher percentage of abortion occurs among the women of younger age, especially among those under 18 years of age [14, 15]. The mean age of the participants in our study was 26.29 years, which was similar to a study of Haque *et al.,* [16]. Among the participants, almost half (51.25%) were married, while 33.13% were unmarried and the remaining were divorces. Here, a large portion of participants had premarital sex, either consensual or non-consensual before becoming pregnant. Pre-marital sex is severely looked down upon in Bangladesh, in some cases going as far as being banished from the families. This might be a primary cause for abortion in many cases. Similarly, another factor to consider would be forceful

non-consensual sex, which can lead to damage in the reproductive organs, leading to women being unable to conceive normally [17, 18]. Majority of the respondents had received education no further than SSC levels, while only 7.50% had received education till degree and above levels. Similar education levels were also observed among the husbands of those who were currently or previously married. Lock of proper education can often lead to not using proper contraceptives, leading to unplanned pregnancies, and in turn, abortion [19]. Almost 80% of the women were married before the age of 18 years, while the remaining were married after 18 years of age. Monthly family income of the participants was low in all cases, where only 20% had a monthly income of over 14,000. Low family income might have greatly influenced the decision making process of the participants, as having a child can put great burden on the family expenses. Majority of the abortions occurred during the 1st trimester, while 24.4% of the participants had an abortion after 13 weeks of pregnancy. 36.25% of the participants had no previous children, while majority (55%) had over 3 children. This high number of existing children had greatly influenced the decision of abortion, as more children means more mouths to feed, which becomes a tall order for majority of the families of the present study. Among the participants, 61.87% had induced abortion, while the remaining 61 had spontaneous abortion. This high prevalence of induced abortion cases might have been influenced by the young age of participants, as well as number of existing children. Among the participants, the primary cause given at time of data collection was not willing to have any more children, which was true for 41.25% of the participants. 27.50% of the abortions were done by force, either by family, or other relatives. This high number of forced abortion might have been a combined result of lack of proper education, premarital conceiving, as well as family income. 21.25% of the participants were heavy workers, becoming a cause to their abortion, while the remaining participants were suffering from malnutrition, so the abortion was caused to not risk the health of mother.

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 study showed that for both induced and spontaneous abortion, socio-demographic factors like mother's age, marital status, family income, education level and existing number of children all play an important role.

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Conflict of Interest: None declared.

Ethical Approval: The study was approved by the Institutional Ethics Committee.

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