Demographic Profile, Causes and Methods of Induced Abortion in a
Tertiary Care Hospital, Dhaka, Bangladesh

Elora Yasmin1*, Qumrun Nessa Ahmed2, Rifat Sultan3, Saima Yeasmin Eva4, Salma Rouf5, Lima Shampa4

1Assistant Professor, Department of Obstetrics and Gynecology, Green Life Medical College, Dhaka, Bangladesh
2Associate Professor, Department of Obstetrics and Gynecology, Green Life Medical College, Dhaka, Bangladesh
3Registrar, Department of Obstetrics and Gynecology, Green Life Medical College, Dhaka, Bangladesh
4Professor, Department of Obstetrics and Gynecology, Green Life Medical College, Dhaka, Bangladesh

Abstract

Introduction: Induced abortions are those terminated by deliberate action undertaken to terminate a pregnancy. Information on the incidence of induced abortion is crucial for identifying policy and programmatic needs aimed at reducing unintended pregnancy. Because unsafe abortion is a cause of maternal morbidity and mortality, measures of its incidence are also important. This study aimed to analyze the sociodemographic characteristics of induced abortion.

Methods: A descriptive cross-sectional study was conducted at the Department of Obstetrics and Gynaecology, Dhaka Medical College Hospital, Dhaka, Bangladesh. The sample was composed of 50 women who underwent induced abortion in this hospital, between January 2022 and January 2023. A simple random sampling technique was used in this study. Data were collected using a data collection sheet, processed, and analyzed by SPSS, version 22. Data were presented in tables and pie charts. The study was approved by the Ethics Committee of Dhaka Medical College Hospital.

Informed written consent was taken from the respondents. Result: In this study, most of the patients (25, 50%) were in the 25-30 years age group, followed by (18, 36%) 31-35 years age group, and (7, 14%) the rest were in >35 years age group. Most people (30, 60%) resided in the urban areas and most of them (35, 70%) had a monthly income of <15000 BDT, followed by (10, 20%) 15000-20000 BDT. Respondents were mostly (25, 50%) uneducated, some of them (15, 30%) passed secondary school, and (10, 20%) higher secondary school. Most of the patients (18, 36%) in this study used the barrier method for contraception, followed by (16, 32%) withdrawal method. Regarding the cause of induced abortion, unplanned pregnancy was the prominent cause (16, 32%), followed by, inadequate income (12, 24%), and contraception failure (12, 24%). Conclusion: This study concluded that most of the patients aged between 25 to 30 years and most of them resided in urban areas having a low monthly income, and poor education level. Some prominent causes of induced abortion were unplanned pregnancy, inadequate income, and contraceptive failure.

Keywords: Induced Abortion, Unplanned pregnancy, Contraception, Socio-demographic Profile.

INTRODUCTION

Induced abortion is one of the greatest human rights of our time. The need for scientific and objective information on the matter is therefore imperative. The distinction between safe and unsafe abortion is crucial because each has different public-health implications. Safe abortion has few health consequences, whereas unsafe abortions are a threat to women's health and survival [1]. A study highlights the many personal, social, economic, and health factors that inform a woman's decision to have an abortion. Socioeconomic concerns or limiting childbearing were the most frequently cited reasons in most of the countries in their study [2]. In many countries, socioeconomic concerns were still ranked highly as a reason for abortion, emphasizing the widespread influence of financial circumstances in women's reproductive decision-making [3]. It is estimated that about 20 million unsafe abortions occur each year with consequent complications or irreversible sequelae, contributing to increased maternal morbidity and mortality worldwide.
The treatment for complications related to unsafe abortion hospitalizes five million women every year. Among the main complications related to unsafe abortion are: hemorrhage, infection, sepsis, and genital trauma. The restrictive laws about abortion in most developing countries lead women to use unsafe practices of abortion, competing for a larger occurrence of infections and genital trauma. The reasons for abortions are varied and include socioeconomic concerns, family-building preferences, religious factors, service availability, the legal status of abortion, unwanted pregnancies, and risk to maternal or fetal health. However, the major underlying causes are unawareness or lack of access to contraceptives.

Although abortions done in appropriate health facilities are relatively free of complications, unsafe abortions contribute significantly to mortality and morbidity, affecting subsequent fertility and causing psychological distress. Women with better socioeconomic standing typically choose safer medical procedures in private clinics; in contrast, impoverished women find it more difficult to get the assistance and knowledge offered by the public health network and also have less negotiating leverage with their intimate partners. When women are exposed to unhygienic conditions, the high hospitalization rate linked to abortion becomes a reality. Most of the complications of induced abortions are brought on by the fact that most abortions (68%) are performed in the second and late first trimesters, and just 20% are performed early in the first three months. Moreover, low contraception usage based on rigid cultural beliefs and scarcely accessible abortion services were the root causes of extensive unsafe abortions. The urban slum population is documented to have higher rates of unmet needs for family planning, and hence higher vulnerability to induced abortion practices. Despite induced abortion being a major cause of maternal morbidity and mortality in Bangladesh, up-to-date information on its socio-demography is not readily available. So, this study aimed to assess the socio-demographic characteristics of induced abortion.

**OBJECTIVE**

**General Objective**
- To assess the socio-demographic characteristics, causes and methods of induced abortion.

**Specific Objectives**
- To know the methods of contraception used by the patients.
- To know the causes of induced abortion.
- To know the previous history of induced abortion.

**METHODS**

A descriptive cross-sectional study was conducted at the Department of Obstetrics and Gynaecology, Dhaka Medical College Hospital, Dhaka, Bangladesh. The sample was composed of 50 women who underwent induced abortion in this hospital, between January 2022 and January 2023. A simple random sampling technique was used in this study. Data were collected using a data collection sheet, processed, and analyzed by SPSS version 22. Data were presented in tables and pie charts. The study was approved by the Ethics Committee of Dhaka Medical College Hospital.

Informed written consent was taken from the respondents and the data were used only for this study purpose.

**Inclusion Criteria**
- Women who underwent induced abortion.
- Patients who had given consent to participate in the study.

**Exclusion Criteria**
- Women with gestational trophoblastic disease.
- Women with ectopic pregnancy.
- Patients who did not give consent to participate in the study.

**RESULTS**

**Table 1: Age distribution of the study subjects (N=50)**

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-30</td>
<td>25</td>
<td>50.0</td>
</tr>
<tr>
<td>31-35</td>
<td>18</td>
<td>36.0</td>
</tr>
<tr>
<td>&gt;35</td>
<td>07</td>
<td>14.0</td>
</tr>
</tbody>
</table>

In this study, most of the patients (25, 50%) were in 25-30 years age group, followed by (18, 36%) 31-35 years age group, and (7, 14%) the rest were in >35 years age group (Table 1).

**Table 2: Sociodemographic profile of the respondents, (N=50)**

<table>
<thead>
<tr>
<th>Sociodemographic profile</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>30</td>
<td>60.0</td>
</tr>
<tr>
<td>Rural</td>
<td>20</td>
<td>40.0</td>
</tr>
<tr>
<td>Monthly income (BDT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;15000</td>
<td>35</td>
<td>70.0</td>
</tr>
<tr>
<td>15000-20000</td>
<td>10</td>
<td>20.0</td>
</tr>
<tr>
<td>&gt;20000</td>
<td>5</td>
<td>10.0</td>
</tr>
</tbody>
</table>

This study showed that most people (30, 60%) resided in the urban areas and most of them (35, 70%) had a monthly income of <15000 BDT, followed by (10, 20%) 15000-20000 BDT (Table 2).

**Table 3: Level of education of the subjects, (N=50)**

<table>
<thead>
<tr>
<th>Level of education</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uneducated</td>
<td>25</td>
<td>50.0</td>
</tr>
<tr>
<td>Passed secondary school</td>
<td>15</td>
<td>30.0</td>
</tr>
<tr>
<td>Passed higher secondary school</td>
<td>10</td>
<td>20.0</td>
</tr>
</tbody>
</table>
In this study, respondents were mostly (25, 50%) uneducated, some of them (15, 30%) passed secondary school, and (10, 20%) higher secondary school (Table 3).

Table 4: Methods of contraception among the study subjects, (N=50)

<table>
<thead>
<tr>
<th>Method</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCP</td>
<td>9</td>
<td>18.0</td>
</tr>
<tr>
<td>Barrier method</td>
<td>18</td>
<td>36.0</td>
</tr>
<tr>
<td>Withdrawal method</td>
<td>16</td>
<td>32.0</td>
</tr>
<tr>
<td>Periodic abstinence</td>
<td>7</td>
<td>14.0</td>
</tr>
</tbody>
</table>

Most of the patients (18, 36%) in this study used the barrier method for contraception, followed by (16, 32%) withdrawal method (Table 4).

Table 5: Causes of induced abortion, (N=50)

<table>
<thead>
<tr>
<th>Cause</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unplanned pregnancy</td>
<td>16</td>
<td>32.0</td>
</tr>
<tr>
<td>Inadequate income</td>
<td>12</td>
<td>24.0</td>
</tr>
<tr>
<td>Family complete</td>
<td>10</td>
<td>20.0</td>
</tr>
<tr>
<td>Contraception failure</td>
<td>12</td>
<td>24.0</td>
</tr>
</tbody>
</table>

Regarding the cause of induced abortion, unplanned pregnancy was the prominent cause (16, 32%), followed by, inadequate income (12, 24%), and contraception failure (12, 24%) (Table 5).

20% of the patients gave a positive previous history of induced abortion (Figure 1).

DISCUSSION

In this study, most of the patients (25, 50%) were in 25-30 years age group, followed by (18, 36%) 31-35 years age group, and (7, 14%) the rest were in >35 years age group. In a study by Oluwaseun R et al., 168 representing 45.41% of the respondents were between the age categories of 30 - 39 years, 122 (32.97%) of the respondents were between the ages of 20 and 29 which were similar to the present study [10]. This study showed that most people (30, 60%) resided in the urban areas and most of them (35, 70%) had a monthly income of <15000 BDT, followed by (10, 20%) 15000-20000 BDT. In a study by Bell SO et al., women aged 15–19, women who had never attended school, and the poorest women were significantly more likely to have had the most unsafe abortions [12]. Women were mostly from the metropolitan area and Recife concordant with the study to focus on abortion demographically in Brazil which also showed a predominance of women from the urban zone. Generally, women who live in large urban centers have greater access to abortion methods, abortion clinics as well as health services [13, 14]. In this study, respondents were mostly (25, 50%) uneducated, some of them (15, 30%) passed secondary school, and (10, 20%) higher secondary school. Mote CV et al., showed in their study that, women with basic education (OR = 0.31, 95% CI: 0.18-0.54) and uneducated women (OR = 0.24, 95% CI: 0.07-0.70) were significantly less likely to have had an abortion. Women who were married (OR = 1.83, 95% CI: 1.10-3.04), peri-urban residents (OR = 1.88, 95% CI: 0.95-3.94), and women with formal employment (OR = 2.22, 95% CI: 0.86-5.45) were more likely to have had an abortion [15]. Most of the patients (18, 36%) in this study used the barrier method for contraception, followed by (16, 32%) withdrawal method. Regarding the cause of induced abortion, unplanned pregnancy was the prominent cause (16, 32%), followed by, inadequate income (12, 24%), and contraception failure (12, 24%). Maina BW et al., stated that being separated or divorced or widowed, having no education, having an unwanted pregnancy, having 1–2 prior births, and using traditional methods of contraception were associated with a higher likelihood of induced abortion [16]. According to Ranji A et al., among the 2705 participants, 17% had experienced at least 1 illegal induced abortion.
Education level, family income, religion, ethnicity, number of children, and age at marriage are associated with having an induced abortion [17]. 20% of the patients gave a positive previous history of induced abortion in this study. Most of the women in this study had no previous abortion and this also occurred in another study at the same service between 2008 and 2010 according to another study conducted by Ferreira ALCG et al., [18].

**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**

This study concluded that most of the patients aged between 25 to 30 years and most of them resided in urban areas having a low monthly income, and poor education level. Some prominent causes of induced abortion were unplanned pregnancy, inadequate income, and contraceptive failure.

**Funding:** No funding sources

**Conflict of interest:** None declared

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

**RECOMMENDATION**

Induced abortion responds to sociodemographic patterns, in which the characteristics of each country are essential. Data on abortion incidence and trends are needed to monitor progress toward the improvement of maternal health and access to family planning. Strong contraceptive services, improved postabortion care services, and improved implementation of the Constitutional Court decision and provision of legal abortions might play some role in preventing unsafely induced abortion. Further studies should be conducted involving a large sample size and multiple centers to get robust data in this context.

**REFERENCES**