



ORIGINAL ARTICLE

Forensic Analysis of Abortion Trends: A Study of Gestational Data

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Abstract

Background: Abortion is a public health issue. **Objective:** This study was aimed to assess the pattern of abortion among women in Dhaka city, focusing on demographics, reasons for seeking abortion, and the treatment methods utilized. **Methodology:** This cross-sectional study was conducted from January to March 2024, focusing on 38 women who experienced abortion at a tertiary hospital in Dhaka to assess the pattern of abortion. Utilising a convenient non-probability sampling technique, data were collected through face-to-face interviews using a pretested and modified questionnaire designed to meet the study's objectives. Descriptive statistics were calculated to analyze the data. **Results:** The findings revealed that 31.6% of women completed their Secondary School Certificate and 23.7% had no formal education and 71.1% identified as housewives. Gravida status showed diversity in reproductive experiences, with 34.2% having three pregnancies. Alarming, 63.2% categorised their pregnancies as unwanted. Only 21.1% reported using contraception. Treatment methods predominantly included Dilation and Curettage (50%). **Conclusion:** In conclusion, this study underscores the urgent need for enhanced reproductive health education and resources to empower individuals to make informed decisions and reduce unwanted pregnancies. [*Journal of Current and Advance Medical Research, January 2024;11(1):3-7*]

Keywords: Abortion; educational qualifications; treatment

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Introduction

Abortion is a significant public health issue that intersects with various socio-economic, educational, and demographic factors. As societies evolve, understanding the underlying patterns of abortion can help inform policies and educational programs aimed at reducing unwanted pregnancies and improving reproductive health outcomes¹. Recent studies indicate that younger women are

disproportionately affected by unintended pregnancies, often leading to the need for abortion services². This demographic trend highlights the importance of targeted interventions that address younger women's specific needs and circumstances.

Education is crucial in shaping an individual's awareness and understanding of reproductive health options. Research has demonstrated a strong correlation between educational attainment and access to reproductive health services, as higher

education levels are often associated with better knowledge of contraceptive methods and family planning resources³. In contrast, lower educational attainment can limit women's ability to make informed reproductive choices, contributing to higher rates of unwanted pregnancies.

Socio-economic factors also influence access to abortion services. A significant portion of women seeking abortions may be economically disadvantaged, as evidenced by the high percentage of participants in this study who identified as housewives⁴. This demographic representation underscores the necessity of understanding how household responsibilities can affect reproductive health decisions and access to care.

Additionally, the gravida status of individuals—indicating the number of pregnancies they have experienced—provides valuable insights into their reproductive journeys. Research shows that women with multiple pregnancies may face unique challenges and require tailored support systems⁵.

By identifying the key factors influencing abortion decisions, we can better understand the complexities surrounding reproductive health and advocate for comprehensive education and resources that empower women to make informed choices about their bodies and futures. This study was aimed to assess the pattern of abortion in Dhaka city.

Methodology

Study Settings and Population: This was a cross-sectional descriptive study conducted from January 2024 to March 2024. The research was done on 38 women who experienced abortion in a tertiary hospital in Dhaka. The sampling technique of this study was a convenient type of non-probability sampling.

Study Procedure: The interviewer collected data and administered the pretested questionnaire. A questionnaire was made according to the study's objectives before the data collection. Then the questionnaire was pretested, modified, corrected and edited. The data collection was a face-to-face interview. The people under the study were asked for their permission before interviewing.

Statistical Analysis: Only descriptive statistics were computed. Statistical analyses were performed with SPSS software, versions 22.0 (IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp.).

Results

The mean age of respondents was 27.95 ± 7.2 , ranging from 16 to 43 years (Figure I).

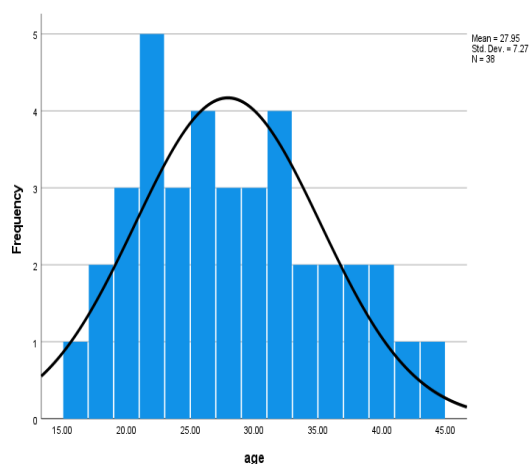


Figure I: Age of Respondents

About one-third of the respondents (31.6%) were educated up to the SSC Level (Figure II).

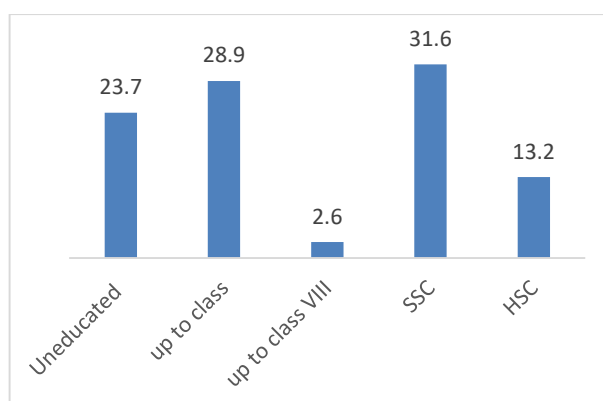


Figure II: Educational Background of Respondents

The majority of respondents were housewives (71.1%) (Figure III).

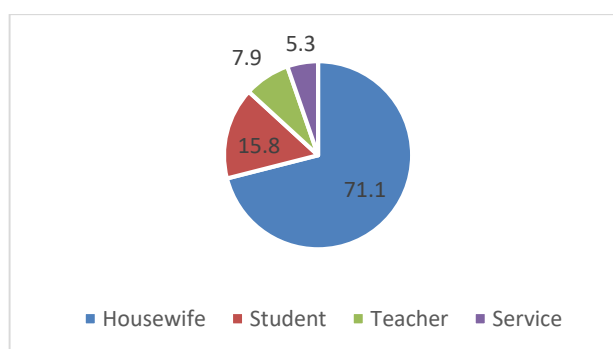


Figure III: Occupational Status of Respondents

More than one-third of respondents (34.2%) reported having had three pregnancies, 15.8% had one, and 10.5% had five (Figure IV).

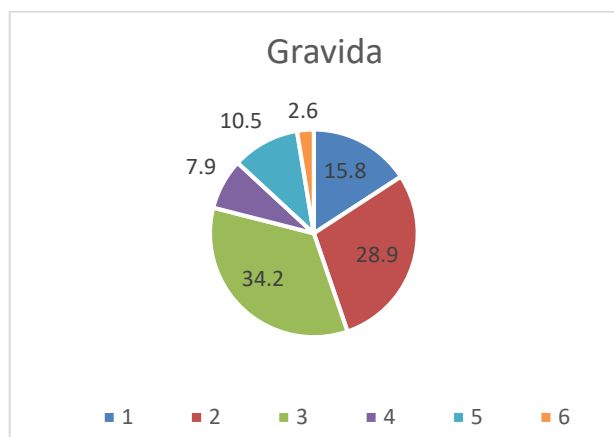


Figure IV: Gravida Status of Respondents

Regarding family planning methods, only 21.1% of participants reported using any method of contraception (Figure V).

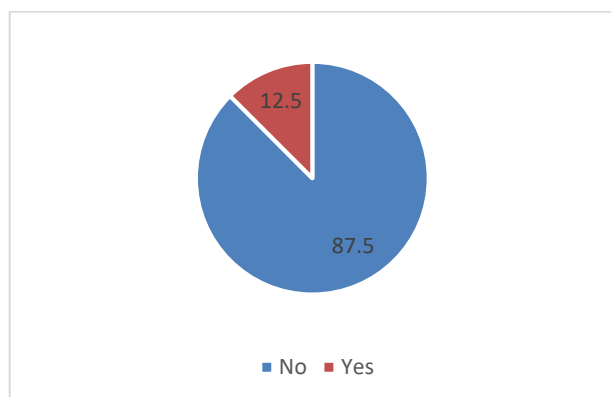


Figure V: Family Planning Methods Used by Respondents

The majority of the pregnancies (63.2%) were found unwanted (Figure VI).

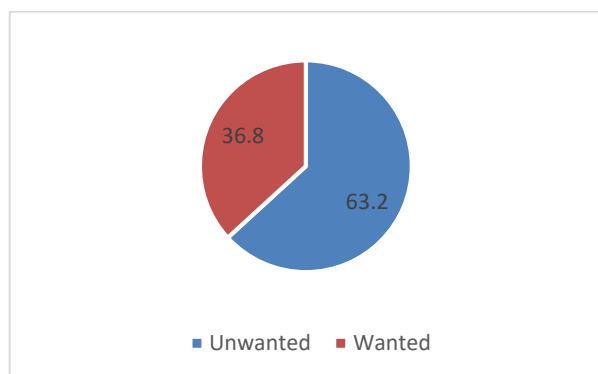


Figure VI: Wanted vs. Unwanted Pregnancies

More than one-third of respondents (34.2%) reported about induced abortion (VII).

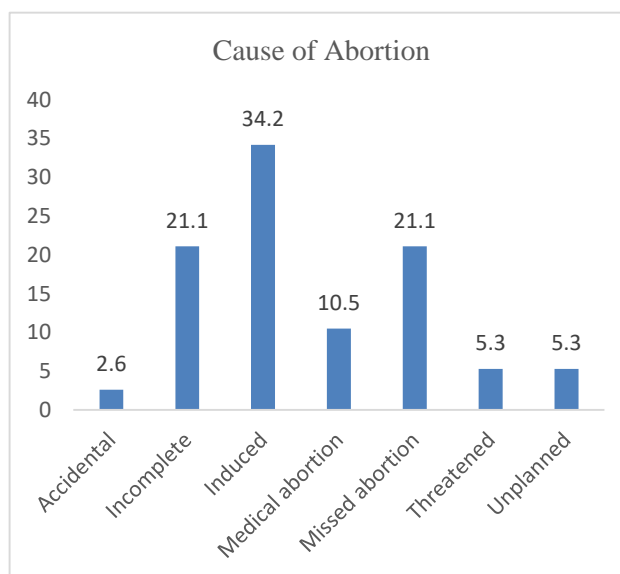


Figure VII: Causes of Abortion

Half of the respondents (50%) received Dilation and Curettage (D&C) (Figure VIII).

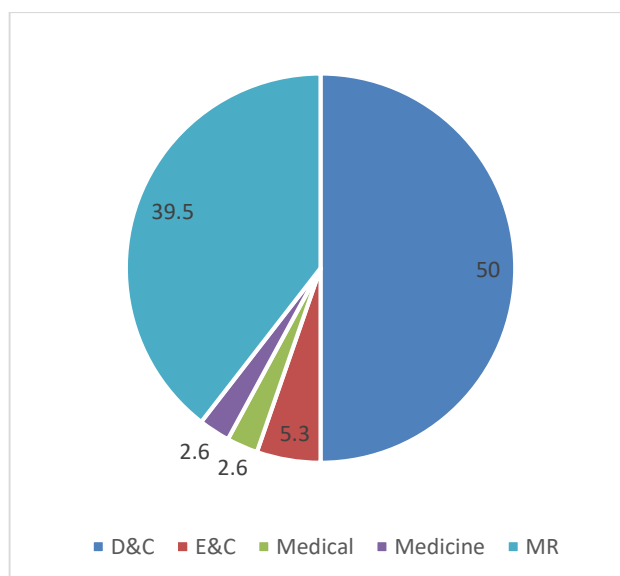


Figure VIII: Treatment of Respondents

The mean number of weeks for abortion was approximately 8.84 weeks, with a standard deviation of about 3.06 weeks.

Discussion

Demographics of Participants

Age Distribution: The participants' age distribution suggests that younger women frequently find

themselves in situations that lead to the need for abortion services. Such findings align with broader trends indicating that younger demographics often experience higher rates of unintended pregnancies¹.

Educational Background: Education levels among participants varied significantly. Notably, 31.6% had completed their Secondary School Certificate (SSC), while 23.7% had no formal education. This suggests a correlation between educational attainment and awareness of reproductive health options, emphasising the importance of education in making informed choices².

Occupational Status: A substantial portion of participants (71.1%) identified as housewives, with students making up 15.8% of the cohort. This demographic representation underscores the influence of socioeconomic factors on individuals' access to and understanding of abortion services³. The predominance of housewives also suggests that reproductive health decisions are often intertwined with household responsibilities.

Gravida Status: Gravida status, which indicates the number of times an individual has been pregnant, varied among the participants. Notably, 34.2% reported having had three pregnancies, while 15.8% had one, and 10.5% had five. This variation highlights the diverse reproductive experiences within the cohort and raises questions about the support systems available for those with multiple pregnancies⁴.

Reasons for Seeking Abortion

Family Planning and Contraceptive Awareness: Despite the pressing need for effective family planning, only 21.1% participants reported using any method of contraception. This gap in contraceptive knowledge and access underscores the necessity for comprehensive sexual education programs that address effective family planning resources⁵. Ensuring that individuals have access to contraceptive methods is crucial for reducing unwanted pregnancies.

Wanted vs. Unwanted Pregnancies: The data reveals that a significant majority (63.2%) of participants categorized their pregnancies as unwanted. This statistic highlights an urgent need for improved family planning resources and education to empower individuals to make informed reproductive choices⁶. The prevalence of unwanted pregnancies underscores systemic gaps in access to contraception and reproductive health education⁷.

Causes of Abortion: Participants cited various reasons for seeking abortion:

1. Induced Abortion: 34.2%
2. Incomplete Abortion: 21.1%
3. Missed Abortion: 21.1%.

These findings underline the necessity of understanding the circumstances that lead to abortion, which can inform better healthcare practices and policies⁸. The high percentage of induced abortions suggests a proactive approach among participants in managing their reproductive health.

Treatment Methods Utilized: The analysis of treatment methods revealed a diverse range of options:

1. Dilation and Curettage (D&C): 50%
2. Medical Abortion: 2.6%
3. Medical Management (MR): 39.5%

D&C emerged as the most common treatment method, indicating a preference for surgical intervention within this cohort. However, the low percentage of medical abortions raises concerns about potential barriers to accessing non-surgical options, which may include availability, knowledge, or socio-cultural factors⁹.

Conclusion

This analysis of abortion-seeking individuals provides crucial insights into the demographics, motivations, and treatment options associated with abortion. The findings suggest an urgent need for enhanced education and resources related to reproductive health. By addressing these gaps, we can empower individuals to make informed decisions about their bodies and futures, ultimately reducing the incidence of unwanted pregnancies and improving overall health outcomes. Continued research and dialogue around these issues are essential to guarantee all individuals access to safe and effective reproductive healthcare.

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None

Conflict of Interest

The authors have no conflicts of interest to disclose

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prepared the manuscript from protocol preparation upto report writing. Jabin N, Karim KA, Ferdows JA have revised the manuscript. All authors involved from protocol preparation up to manuscript writing & revision.

Data Availability

Any inquiries regarding supporting data availability of this study should be directed to the corresponding author and are available from the corresponding author on reasonable request.

Ethics Approval and Consent to Participate

Ethical approval for the study was obtained from the Institutional Review Board. As this was a prospective study the written informed consent was obtained from all study participants. All methods were performed in accordance with the relevant guidelines and regulations.

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