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Original Research Article

# A profile of abortion in a tertiary care centre: An observational study

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ABSTRACT

**Background:** The recent years have seen rise in unintended pregnancy which includes unwanted and mistimed pregnancy. Despite the conducive environment of legal abortion in India through MTP Act, many women resort to unsafe methods of abortion. In India, estimated abortions in 2015 were 15.6 million. The overall rate of abortion was estimated to be 4.8%, among which 67.1% of abortions were classified to be unsafe. Thus, the aim of the study is to analyze the demographic profile of patients, reason for seeking abortion and evaluation of significant adverse outcome and management.

**Materials and Methods:** This was a hospital-based observation study carried out in the department of OBG in MMC&RI, Mysuru during the period January 2019 to December 2020. 100 women seeking MTP and 100 women presenting to hospital for help following the consumption of over the counter pills were included in the study.

**Results**: 100 women with self-consumption of pills presented to hospital with complaints of heavy bleeding (35%), spotting PV (22%) and pain abdomen (15%). Most were married, belonging to lower socioeconomic status with age of 21-25 years (42%), followed by 26 – 30 years (22%). In 100 women seeking MTP, congenital fetal anomalies (51%) was the main indication, followed by contraception failure (36%). In comparison to the women seeking abortion services under medical supervision, the complication rates were higher in unsupervised group. This included retained products of conception (25%), moderate anemia (12%), severe anemia (7%), shock (3%), sepsis (4%) requiring surgical evacuation (51%), medical management (46%), anemia correction (17%), ICU admission (7%) and emergency laparotomy (3%).

**Conclusion:** The cornerstone is motivation and encouragement of women to adapt family planning services to reduce unintended pregnancy. For women needing these services, accessibility and comprehensive education regarding unsafe abortion is needed. Legislation and strict policy is required for the use of MTP pills, so as to reduce the sales without prescription.



## 1. Introduction

Induced abortion is described as surgical or medical termination of a live fetus that has not reached viability. Induced abortions are safe if they are done with a method recommended by WHO that is appropriate to the pregnancy duration and if the person providing or supporting the abortion is trained. Abortions can be induced using tablets (medical abortion) or can be done as a simple outpatient procedure (surgical abortion). The World Health Organization (WHO) defines unsafe abortion as a procedure for terminating a pregnancy performed by persons lacking the necessary skills or in an environment not in conformity with minimal medical standards, or both.[1]

Globally, 25.1 million abortions each year between 2010 – 14 were unsafe, with 24.3 million of these occurring in developing countries.[2] Thus, the proportion of unsafe abortions was significantly higher in developing countries

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than developed countries.

Each year between 4.7% – 13.2% of maternal deaths can be attributed to unsafe abortion.[3] Moreover, as deaths resulting from unsafe abortion have decreased in recent years, the focus is shifting towards adverse outcomes associated with abortion.[4] It is estimated that seven million women were treated for complications from unsafe pregnancy termination in 2012.[5]

In India, estimated abortions in 2015 were 15.6 million.[6] The abortion rate was 47 per 1000 women aged 15 – 49 yr. As per population- based study the overall rate of abortion was estimated to be 4.8%, among which 67.1% of abortions were classified to be unsafe.[7]

Since the introduction of MTP act 1971, abortions are legalized in India. Under which abortion services are provided to the woman for various indications. Despite this, many women retort to abortion without any medical supervision and result in serious consequences. Moreover, lack of knowledge, poverty, non-accessibility and liberal use of over counter pills have added to the burden of unsafe abortions.

The menace of unsafe abortion is increasing globally attributing to significant maternal mortality and morbidity. The burden of unsafe abortion not only has negative impact on physical and mental health of women, it also affects health care system.

Thus, the aim of the study is to analyze the demographic profile of patients, reason for seeking abortion and evaluation of significant adverse outcome and management.

## 2. Materials and Methods

This was a hospital based observational study which was conducted on patients admitted to Cheluvamba hospital, Department of OBG, attached to MMC&RI, Mysuru from January 2019 to December 2020. 100 women with gestational age < 20 weeks admitted to hospital with complaints that can be attributed to abortions such as severe vaginal bleeding, lower abdominal pain, fever, incomplete miscarriage with history of consumption of over the counter MTP pills and 100 pregnant women up to 20 weeks of gestation seeking MTP were included in the study. After obtaining informed consent, data was collected using a piloted proforma. Each case was thoroughly evaluated on the basis of age, marital status, residence, education, socio-economic status, parity, presenting complaints, gestational age at the time of admission and the reason for termination of pregnancy. After a thorough review of examination, investigation and treatment records, the details of the outcome including maternal morbidity and mortality are recorded and discussed. Data was entered into Microsoft excel data sheet and was analyzed using SPSS 22 version software. Qualitative data was represented in the form of Frequencies and proportions.

## 3. Results

During the study period, 200 cases of induced abortions were taken into account. Out of which 100 cases underwent MTP under supervision and 100 cases were unsupervised where women had taken over the counter pill and presented with various complaints. Bleeding per vagina was the most common presentation, 35% had heavy bleeding and 22% had spotting PV, followed by pain abdomen (15%). Few women were referred to our centre with scan report showing retained products of conception (Table 1). Unintended pregnancy was the main reason for abortion in this group.

**Table 1:** Distribution of subjects according to presenting complaints in unsupervised group

| Presenting complaints | Number (total =100) |
|---|---|
| Heavy bleeding | 35 |
| Spotting PV | 22 |
| Pain abdomen | 15 |
| Referred with scan report | 20 |
| Fever | 8 |

On the other hand, the various reasons among the MTP seekers are listed below. The main indication for seeking MTP was congenital fetal anomalies accounting for 51%.

A significant percent of women was found to seek MTP on basis of contraception failure, on further investigating the method of contraception used, majority of women followed natural methods of contraception (abstinence or withdrawal method).

**Table 2:** Distribution of subjects according to indication for MTP

| | Number (total =100) |
|---|---|
| Danger to maternal health | 5 |
| Congenital anomalies of fetus | 51 |
| Social cause | 8 |
| Failure of contraception | 36 |

In our study, majority of women belonged to age group 21 – 25 years, followed by 26 – 30 years age group, showing that the need for abortion services is prevalent in younger women. Women who have the accessibility seek abortion from the medical care whereas as others resort to over the counter drugs. As show in our study, about 45% women belonged to lower socioeconomic class and 19% belonged to lower middle class suggesting that lack of accessibility or the lack of knowledge as the reason for seeking over the counter pills. Majority were second gravida (39%), followed by primigravida (33%).

In the supervised group, majority belonged to age of 21 – 25 years, married women belonging to upper middle or upper lower class. 37% were primigravida, followed by third gravida (30%). (Table 3)

Majority was first trimester abortion in our study (Table 4). However, the use of MTP pills for medical

**Table 3:** Distribution of subjects according to sociodemographic factors

| | Unsupervised (n =100) | Supervised (MTP) (n=100) |
|---|---|---|
| **Age** | | |
| <20yrs | 20 | 23 |
| 21 – 25yrs | 42 | 43 |
| 26 – 30yrs | 26 | 23 |
| >30yrs | 12 | 11 |
| **Socioeconomic Status** | | |
| Lower | 45 | 21 |
| Lower middle | 19 | 23 |
| Upper lower | 17 | 27 |
| Upper middle | 19 | 29 |
| **Marital Status** | | |
| Married | 99 | 89 |
| Unmarried | 1 | 11 |
| **Parity** | | |
| Primi | 33 | 37 |
| G2 | 39 | 23 |
| G3 | 19 | 30 |
| >G4 | 9 | 10 |

**Table 4:** Distribution of subjects according to gestational age

| Gestational age | Unsupervised (n =100) | Supervised (MTP) (n=100) |
|---|---|---|
| <14 Weeks | 83 | 75 |
| 14 – 20 weeks | 17 | 25 |

abortion is limited up to 9 weeks (63 days). Beyond this gestational age, the use of MTP pills will result in incomplete abortion and other complications. Thus, gestational age appropriate method for termination of pregnancy under medical supervision will have better outcome.

As show in Table 5, 25% women had incomplete abortion with retained products of conception, followed by anemia, 12% had moderate anemia and 7% had severe anemia. 3% presented with hypovolemic shock requiring resuscitation. 3% women had ectopic pregnancy, as these women did not have any medical consultation prior to consumption of pills.

**Table 5:** Distribution of subjects according to complications

| Complications | Unsupervised (n =100) | Supervised (MTP) (n=100) |
|---|---|---|
| Moderate anemia | 12 | 3 |
| Severe anemia | 7 | 0 |
| Shock | 3 | 0 |
| Sepsis | 4 | 0 |
| ARF | 1 | 0 |
| RPOC | 25 | 5 |
| Ectopic pregnancy | 3 | 0 |

In our study, most women (51%) underwent surgical evacuation with MVA, followed by medical management with misoprostol (46%). 3% women had emergency laparotomy for ectopic pregnancy whereas 17% required anemia correction and 7% required ICU admission.

In supervised group, 66% had medical abortion and 33% had surgical abortion.

**Table 6:** Distribution of subjects according to management

| | Unsupervised (n =100) | Supervised (MTP) (n=100) |
|---|---|---|
| Medical | 46 | 66 |
| MVA | 51 | 33 |
| Laparotomy | 3 | 0 |
| Hysterotomy | 0 | 1 |
| Anemia correction | 17 | 3 |
| ICU management | 7 | 0 |

Most women in unsupervised group required longer duration of hospital stay when compared to women in supervised group. This was mainly attributed to complications mentioned above which needed longer treatments.

## 4. Discussion

About 15% of all conceptions end in abortion. Out of these, 80% are in 1st trimester.[8] This includes both intended and unintended pregnancies. Majority of induced abortion are unintended pregnancies. In our study, out of 200 induced abortion, 144 were unintended pregnancy accounting for 72%.

In our study 100 women had purchased the abortion medication without prescription or medical consultation. Most of the women were married, below the age 30 years, seeking first trimester abortion. This suggest that the tendency is more prevalent among the younger age group. Targeting this age group and educating them regarding safe abortion practices are beneficial. Also, the prevalence is high among the lower socioeconomic class, highlighting the fact that ignorance, lack of awareness, social stigma and accessibility have a role to play. Medical abortion is safe and recommended up to 9 weeks, beyond this gestation, the chances of incomplete abortion and associated complications increase. Thus, these women presented to hospital with complaints of heavy bleeding per vagina (35%), spotting PV (22%), followed by pain abdomen (15%).

On other hand, 100 women had opted for medical termination of pregnancy for various reasons. Most were married, primigravida of young age highlighting the unmet need for contraception for couples. Despite the prime reason for seeking MTP was congenital fetal anomalies accounting for 51% in our study, a significant percent of women

was found to seek MTP on basis of contraception failure (36%). This highlights the fact for proper counselling and education of the couple for continuous and correct use of contraception.

MTP services offered to women under medical supervision are associated with lesser morbidity in comparison to women without supervision. As noted in our study, the women in unsupervised group have presented with various complications like retained products of conception (25%), moderate anemia (12%), severe anemia (7%), shock (3%), sepsis (4%) which initiated the need for surgical evacuation, anemia correction and ICU admission. These complications not only affect the physical and mental health of the women, it also adds to the burden of health care system. Also, the duration for hospital stay was prolonged which adds to the financial strain to the women's life.

## 5. Conclusion

Unintended pregnancy is a problem faced by all women. However, effective use of MTP and abortion care services can reduce the associated morbidity in comparison to the use of self-administration of pills without medical consultation. Some cases may go unnoticed but many do present with complications like incomplete abortion, retained productions of conception, severe anemia, sepsis, shock. These complications can be reduced by seeking prior medical advice. The key step in prevention is comprehensive education of women in reproductive age regarding unsafe abortion and accessibility to these services for woman needing it. Also, legislation and strict policy is required for the use of MTP pills, so as to reduce the sales without prescription. Finally, the cornerstone is the motivation and encouragement of women to opt for family planning services including emergency contraception so as to prevent the unintended pregnancy and thereby reducing the burden of unsafe abortion.

## 6. Ethical Approval

The study was approved from the institutional ethical committee.

## 7. Source of Funding

None.

## 8. Conflict of Interest

None declared.

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