Outcome and complications of self-administration of over-the-counter abortion pills: an observational study in a tertiary care hospital of a medical college in New Delhi

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ABSTRACT

Background: Due to unrestricted free availability of abortion pills, despite of national policies, guidelines and medical termination of pregnancy (MTP) act, unsafe abortions by self-administration of these drugs for termination of unwanted pregnancies without prescription are becoming common in our country, leading to associated morbidity and mortality.

Methods: A prospective Observational study was done at Guru Teg Bahadur hospital, university college of medical sciences, New Delhi, from November 2019 to April 2020, in the department of gynecology and obstetrics, on women visiting the outpatient department and casualty department with the history of self-administration of medical termination pills without prescription. This study was done to study the outcome and complications occurring due to self-administration of over-the-counter abortion pills that are freely available in the market. 95 women were included in study and data was collected regarding age, education level, parity, presenting complaints, complications and their management. Descriptive analysis of the collected data was done.

Results: In this study 95 women were included 71.6% took pills before 8 weeks of gestation, 1% took in second trimester. 46.3% landed up in incomplete abortion and 33.68% needed surgical evacuation, 8.42% had ectopic out, 2.1% had scar site pregnancy and 7.36% needed laparotomy, 1.05% had rupture uterus followed by abortion pill intake while 1.05% suffered from acute kidney injury (AKI). There was no ICU admission nor any mortality.

Conclusions: There is urgent need of strict legislation to curtail this bad practice and free availability of over-the-counter abortion pills which leads to unexpected morbidity and mortality, such drugs should be given only by health care providers under supervision, there is need of community level awareness so as to impart knowledge regarding this problem.

Keywords: Abortion pills, Over the counter, Self-administration

INTRODUCTION

Abortion is willful termination of the pregnancy before the period of viability. Excluding few instances, in most of the cases it is an outcome of an unwanted pregnancy.1 One of the most prevalent tragedies for womankind is the problem of unwanted pregnancies and unsafe abortions. Each year about 42 million induced abortions are estimated to be performed worldwide, out of these about 20 million are unsafe.2

Medical abortions play a crucial role in providing access to safe, effective and acceptable abortion care. Medical abortion with mifepristone and misoprostol is safe when consumed under medical supervision with success rate of 92 to 97%, they are approved by US FDA and are in WHO essential drug list.3,4 Mifepristone is anti-progesterone and binds to progesterone receptors, Misoprostol is PGE 1 analogue and acts by cervical softening, dilatation and enhance uterine contractions and also aids in expelling products of conception.5,6
Termination of pregnancy in India is legalized under the MTP Act since 1971. Earlier, surgical methods were used however, with the introduction of various drugs, termination can also be done with medications and is legalized under the amended MTP act 2002, it is recommended up to 63 days of gestation.\textsuperscript{7,8} Clear guidelines have been formulated by organizations like WHO and in India by FOGISI regarding the use of abortion pills. The MTP act of India permits that abortion pills be prescribed by only registered medical practitioners and not by non-allopathic doctors or by pharmacists. WHO recommends that person or facility prescribing abortion pills should have a backup health care facility in case of failed or incomplete abortion.\textsuperscript{9} In spite of such clear guidelines and recommendations, self-administration, unplanned and unwanted abortions are common despite medical advancement and wide availability of contraceptive methods.\textsuperscript{10}

This study was done at Guru Teg Bahadur hospital, New Delhi, from November 2019 to April 2020, to assess the magnitude of the problem due to unsupervised intake of abortion pills, leading to complications like severe anemia, sepsis, shock, ectopic pregnancies, uterine rupture, hemorrhagic shock and maternal mortality.

METHODS

A prospective observational study was done at Guru Teg Bahadur hospital, university college of medical sciences, New Delhi, from November 2019 to April 2020, in the department of gynecology and obstetrics. The women visiting the OPD and casualty department during this period, with the history of self-administration of medical termination pills without prescription were included in the study. By self-administration we mean that these pregnant women did not have any medical consultation with a registered medical practitioner and took abortion pills which were purchased from the pharmacy without any prescription either by self or by some close relative.

Women who presented with history of any surgical procedure after MTP pill intake or consumed pills after a medical practitioner’s advice were not included in our study.

The aim of the study was to study outcome and complications occurred due to self-administration of over-the-counter abortion pills that are freely available in the market.

So, a total of 95 women were included in study and data was collected regarding their age, literacy status, awareness about contraception, occupation, socio-economic status, marital status, parity, presenting complaints, complications and their management. Descriptive analysis of the collected data was done.

RESULTS

A total 95 cases were studied, following data were obtained.

The 34.7% of the women were in age group of 20-25 years of age, while 4.2% women were below 19 years of age. Most of the women belonged to middle class socio-economic status. 35.8% women were illiterate. 96.8% women were married and most of the women were housewives i.e., 78.9% indicating lack of knowledge to visit a medical practitioner for abortion. 90.52% had awareness about different contraceptives available.

There were 8.42% primigravida and 89.47% third gravida or more indicating that MTP pills were consumed to get rid of unwanted pregnancy (Table 1).

<table>
<thead>
<tr>
<th>Parity</th>
<th>Frequency (%)</th>
</tr>
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<tbody>
<tr>
<td>Primigravida</td>
<td>8 (8.4)</td>
</tr>
<tr>
<td>G2</td>
<td>2 (2.1)</td>
</tr>
<tr>
<td>G3 or more</td>
<td>85 (89.5)</td>
</tr>
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</table>

The findings showed that 68 (71.57%) consumed pills up to 8 weeks, maximum POG of self-intake was 18 weeks which was followed by failed abortion (Table 2).

<table>
<thead>
<tr>
<th>Gestational age at the time of pill intake</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early pregnancy up to 8 weeks</td>
<td>68 (71.6)</td>
</tr>
<tr>
<td>&lt;8-10</td>
<td>20 (21.1)</td>
</tr>
<tr>
<td>&lt;10-12</td>
<td>06 (6.3)</td>
</tr>
<tr>
<td>12-18</td>
<td>01 (1)</td>
</tr>
</tbody>
</table>

5.26% women presented with shock and majority of the women presented with either excessive bleeding per vaginum or irregular bleeding or spotting per vaginum. 2.10% women presented with other complaints such as fever or weakness. Patients who presented with profuse bleeding were managed immediately by surgical evacuation, while those with minimal bleeding per vaginum and minimal retained products of conception were given tablet misoprostol (Figure 1).

Most of the women had incomplete Abortion (46.31%), 8.42% had Ectopic pregnancy, 2.10% had scar site pregnancy and 1.05% had ruptured uterus as shown in the Figure 2.

Surgical evacuation was needed in 33.68% cases while 12.63% needed blood transfusion with surgical evacuation. 31.57% patients did not need any intervention i.e., neither surgical nor medical (Table 3).

**Figure 1: Distribution according to the presenting complaints of the participants.**

**Figure 2: Distribution according to the outcome of self-administration of abortion pills.**

**Figure 3: Distribution according to the complications occurred after self-administration of abortion pills.**

**Table 3: Distribution according to the management of complication.**

<table>
<thead>
<tr>
<th>Management of complications</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical (misoprostol)</td>
<td>17 (17.89)</td>
</tr>
<tr>
<td>No intervention</td>
<td>30 (31.57)</td>
</tr>
<tr>
<td>Surgical evacuation</td>
<td>20 (21.05)</td>
</tr>
<tr>
<td>Surgical evacuation with blood transfusion</td>
<td>12 (12.63)</td>
</tr>
<tr>
<td>Laparotomies</td>
<td>07 (7.36)</td>
</tr>
<tr>
<td>Medical management of tubal ectopic</td>
<td>02 (2.10)</td>
</tr>
<tr>
<td>Medical management of scar pregnancy</td>
<td>01 (1.05)</td>
</tr>
<tr>
<td>MTP</td>
<td>05 (8.42)</td>
</tr>
<tr>
<td>Dialysis with sepsis</td>
<td>01 (1.05)</td>
</tr>
</tbody>
</table>

**Table 4: Distribution of participants according to their awareness about contraception.**

<table>
<thead>
<tr>
<th>Contraception awareness</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>86 (90.52)</td>
</tr>
<tr>
<td>No</td>
<td>09 (9.47)</td>
</tr>
</tbody>
</table>

**DISCUSSION**

Widespread misuse of MTP pills which are freely available over the counter has become a threat to women of reproductive age group. In India, MTP act was passed
in 1971 to prevent unsafe abortions with the aim of reducing maternal mortality and morbidity due to unsafe abortions.\textsuperscript{11}

As number of patients in present study were 95 over a time period of 6 months, Bajwa et al included 260 patients over a time of 2 years as compared to Thacker et al studied 37 women in one year.\textsuperscript{12,13} Maximum number of patients belonged to 20-25 years of age and 91.57% were second or third gravidas, 90.52% were aware of contraceptive measures but didn’t use any of the available options regularly. In present study 58.94% of cases had bleeding or spotting per vagina as chief complaint, Thacker et al reported 89.1% patients presenting with bleeding per vagina and 75.6% cases needed instrumental evacuation, while in present study 33.68% cases needed instrumental evacuation.

The 3.20% were unmarried and reason of not visiting to a doctor could be fear of social dishonor. Patients who consumed MTP pills after 12 weeks of gestation was only 1%. Studies indicate that complications of second trimester is high with increased risk of surgical evacuation and infection and prolonged hospital stay we found that 10.52% were failed and 46.31% were incomplete, 7.36% landed up in laparotomies.\textsuperscript{14} Chances of failed abortion is 1% followed by medical abortion and chances of teratogenesis like moebius syndrome due to misoprostol, such pregnancies should be terminated.\textsuperscript{15}

Present study had 8.42% ectopic pregnancies, Thacker et al had 5.4% while Bajwa et al 1.15% ectopic pregnancies.\textsuperscript{12,13} 2.10% were scar site pregnancies and 1.05% had rupture uterus. Chances of scar site rupture in post cesarean section following first trimester medical abortion is non-existent but risk of rupture is 0.28% in second trimester.\textsuperscript{16} In present study 5.26% patients had reversible hemorrhagic shock, Thacker et al reported 5.4% such cases with shock.\textsuperscript{13} We found society is finding over-the-counter MTP very safe and convenient due to lack of awareness of contraceptive options and correct approach for termination of unwanted pregnancy.

CONCLUSION

There is urgent need of strict legislation to curtail this bad practice and free availability of over-the-counter abortion pills which leads to unexpected morbidity and mortality, such drugs should be given only by health care providers under supervision.

There is need of community level awareness so as to impart knowledge regarding this problem.

Health education must be given to the society regarding the need for medical counselling and supervision during an abortion and the risks of self-medication. Also, creating awareness regarding contraception to reduce unwanted pregnancy.

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

REFERENCES


