Socio-Demographic & Obstetric Profile of Women Undergoing Pre-Hospital Induced Abortion Admitted at a Tertiary Care Centre

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Abstract
Introduction: Induced abortion significantly contribute to maternal morbidity in developing countries. Illegal abortions are frequently performed in India with disastrous results even today in spite of liberal Medical Termination of Pregnancy Act.

Objectives: Current study was carried out to know the socio-demographic & Obstetric profile of women undergoing pre-hospital induced abortion.

Methodology: Current cross sectional study was carried out in Department of Obstetrics and Gynaecology, Regional Institute of Medical Sciences, Imphal, Manipur over a period of 1 year. 369 women who were fulfilling the working definition of induced abortion were enrolled for the study.

Results: In the current study the mean age of the participants was 27.3±5.13 years. Majority of women belonged to para 2 (45%). Maximum abortion were carried out in first trimester(94.1%). Maximum participants were illiterate (45.5%) and belonged to lower socioeconomic class(59.9%) with rural background (79.1%). Short birth spacing(42.8%) was the commonest indication for the abortion. Bleeding PV was the commonest complain at presentation. Majority of patients used oral Mifepristone and Misoprostol combipack for induction of abortion (40.9%).

Conclusion: Practice of unsafe abortion emphasises the need of increasing the awareness and accessibility of contraceptives, so that the maternal morbidity associated with unsafe abortion practices can be reduced.

Keywords: Induced abortion, Bleeding PV, maternal morbidity.

Introduction
The term induced abortion is defined as the medical or surgical termination of pregnancy before the time of viability. Although abortion has been legalized for more than four decades in India, still a major proportion of abortions are conducted by untrained persons at unauthorised place. These practices of unsafe abortion continues to be a major contributor to maternal mortality and morbidity in the country, accounting for 15-20% of maternal deaths.¹ A systematic analysis of worldwide data estimates that
approximately 8% of all maternal deaths are attributable to unsafe abortion and related complications. Unsafe abortion is defined by WHO as “a procedure for terminating an unwanted pregnancy either by persons lacking the necessary skills or in an environment lacking minimal medical standards or both”. The most common reason for terminating the pregnancy includes, unplanned pregnancy, pregnancy due to contraceptive failure, previous child too young and other indications like fetal anomaly, rape, unmarried status and medical illness causing serious injury to the health of the mother. Commonest complication of induced abortion especially medical abortion is heavy bleeding due to retained products of conception. Incomplete and missed abortions are particularly prone to sepsis because of retention of nonviable product of conception, which are good culture media for microorganisms. The application of a public health approach based on primary, secondary and tertiary prevention can reduce morbidity and mortality associated with unsafe abortion in developing countries. Even today the illegal induced abortions are being conducted in the country.

The current study was conducted with the following aims & objectives:

1. To determine the socio-demographic profile of women admitted with pre-hospital induced abortion
2. To determine their obstetric profile & the method used for induced abortion.

Methodology

This cross-sectional study was conducted in RIMS, Imphal over a period of one & half years, after obtaining approval of the ethical committee of the Institution. Written consent was also obtained from the patients. Working definition of induced abortion was kept as “cases of deliberate interruption of pregnancy terminated before 20 weeks of gestation performed by pregnant woman herself outside the recognised medical system”. A total of 369 women who were admitted in septic ward of the institution and were fulfilling the working definition of induced abortion were enrolled for the study. Women who refused for consent were excluded from the study cohort.

Study variables

Patients were assessed using study variables like age, parity, locality, socioeconomic status, educational level, religion, period of gestation, clinical presentation, haemoglobin, mode of induction and indication for induction.

Statistical Analysis: Descriptive and inferential statistical analysis has been carried out in the present study. Results on continuous measurements are presented on Mean ± SD (Min-Max) and results on categorical measurements are presented in Number (%). Significance is assessed at 5 % level of significance.

Results

During the study period total 1126 abortion cases were admitted in septic ward of Department of Obstetrics & Gynecology, RIMS Imphal. Out of these 1126, a total of 369 patients were enrolled in the study who were admitted with the history of pre-hospital induced abortion.

In the current study the mean age of the participants was 27.3± 5.13 years. Maximum number of women were in the age group of 20-30 years (60.20%). 30.90% & 8.90% women belonged to age group of 30-40 years & below 20 years respectively. Majority of women belonged to para 2 (45%) while only 5.10 % belonged to zero parity.2.7 % women were belonging to para 5 or more. 347 women (94.1%) had abortion in first trimester while only 22 women (5.9%) had it in second trimester. Majority of patients belonged to rural background (79.1%).According to modified Prasad’s classification, 59.9 % women belonged to lower socioeconomic class (IV and V),33.9% belonged to middle social class (class III) & 6.2% belonged to upper social class (I&II).Almost half of the women were illiterate(45.5%), 15.5 % had primary education, 24.4% had education up to matriculate while 14.6 % women were graduate. Majority of patients belonged to Hindu
community (38.2%) followed by Muslim & Christian (28.5% & 19.2% respectively).
Commonest indication for induction was short birth spacing (42.8%) followed by contraceptive failure (35.2%). Family pressure (15.98%) and social issues (extra marital relations, widow 3.25%) and unmarried accounted for 2.71%, respectively. The common clinical features at presentation were bleeding per vaginam (72.1%; 266/369), abdominal pain (39.6%; 146/369) bleeding & shock (11.7%; 43/369) and foul smelling discharge (10.3%; 38/369) respectively. Majority of patients used oral Mifepristone and Misoprostol combipack which is cheap, which accounted to 151 (40.9%), followed by Misoprostol oral tablet (39%), Misoprostol oral and PV (11.9%). 30 (8.1%) patients adopted methods including herbal preparations supplied by quacks, insertion of stick etc.
Antibiotic and fluid therapy was the most common medical management received by majority of patients 349 (94.6%). 38.5% of patients needed blood transfusion and 89.9% had to take uterotonics tab. Misoprostol for 5-7 days on discharge.

### Table 1: Socio-demographic profile

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number</th>
<th>Percentage</th>
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<td>Age</td>
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<tr>
<td>Below 20 years</td>
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<td>20-25</td>
<td>110</td>
<td>29.8</td>
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<td>26-30</td>
<td>112</td>
<td>30.4</td>
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<td>30-35</td>
<td>94</td>
<td>25.5</td>
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<tr>
<td>36-40</td>
<td>20</td>
<td>5.4</td>
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<td>Above 40 years</td>
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<td>Locality</td>
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<td>Rural</td>
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<td>Urban</td>
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<td>Social class</td>
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<tr>
<td>Middle</td>
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<tr>
<td>High class</td>
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<td>6.2</td>
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<td>Education status</td>
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<tr>
<td>Illiterate</td>
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<td>45.5</td>
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<tr>
<td>Primary</td>
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<td>15.5</td>
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<tr>
<td>Matriculate</td>
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<td>24.4</td>
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<tr>
<td>Graduate</td>
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<tr>
<td>Religion</td>
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<td>Christian</td>
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<td>19.2</td>
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<tr>
<td>Hindu</td>
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<td>38.2</td>
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<td>Muslim</td>
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<td>28.5</td>
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<td>Others</td>
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### Table 2: Obstetric profile of Patients

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<td>19</td>
<td>139</td>
<td>166</td>
<td>23</td>
<td>12</td>
<td>6</td>
<td>4</td>
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<td></td>
<td>5.1</td>
<td>37.8</td>
<td>45.0</td>
<td>6.2</td>
<td>3.2</td>
<td>1.6</td>
<td>1.1</td>
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<td>Period of Gestation</td>
<td>6-8 weeks</td>
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<td>57.5</td>
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<tr>
<td></td>
<td>9-12 weeks</td>
<td>135</td>
<td>36.6</td>
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<tr>
<td></td>
<td>13-20 weeks</td>
<td>22</td>
<td>5.9</td>
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<td>Indication for Induction</td>
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<td>35.2</td>
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<td></td>
<td>Unmarried</td>
<td>10</td>
<td>2.71</td>
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<td>Divorced and widow</td>
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<td>Family pressure</td>
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<td></td>
<td>Short birth spacing</td>
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<td>Clinical presentation</td>
<td>Bleeding PV</td>
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<td>72.1</td>
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<td>39.56</td>
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<td></td>
<td>Bleeding &amp; Shock</td>
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<td>11.65</td>
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<td>Foul smelling discharge</td>
<td>38</td>
<td>10.29</td>
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<tr>
<td>Mode of Induction</td>
<td>Misoprostol oral</td>
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<td>39.0</td>
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<tr>
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<td>Misoprostol oral and PV</td>
<td>44</td>
<td>11.9</td>
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<tr>
<td></td>
<td>Mifepristone and Misoprostol</td>
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<td>40.9</td>
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<td></td>
<td>Herbal preparations supplied by quacks</td>
<td>30</td>
<td>8.1</td>
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</table>

### Discussion

In the current study the mean age of the participants was 27.3± 5.13 years where maximum belonged to age group of 20-30 years which was found slightly lower than mean age of 29.2±3.5 years as reported by Bahadur et al². Similar results were found in the study conducted by Shivakumar and Vishvanath where majority of the abortions were among the women of 20–29 years of age³. Majority of women (57%) belonged to para 2 or above revealing the fact that in spite of the complete family, these women became pregnant and soughted improper way for terminating the pregnancy. Above observation warrants the need to spread the knowledge and accessibility of various contraceptive methods to the eligible couples. Similar results were observed In the
study on fertility indicators done by Puwar et al\textsuperscript{4} where 21.35% of women had two children while 43.67% had more than two children. Similar to the results observed by Bahadur et al\textsuperscript{2}, in the current study the majority of participant were belonging to rural background which again emphasises to strengthen the availability and accessibility of contraceptives in rural areas. Proportion of Hindu women seeking induced abortion was more as compared to other communities. This can be explained by the fact of the relatively higher Hindu population in my study area. Similar observation was noted in a study done by NirmalaJagat\textsuperscript{5}.Maximum number of women belonged to lower socio economic class (59.9%), these results are correlating to the observations made by Bahadur\textsuperscript{2} and Shivkumar\textsuperscript{3}.

The proportion of illiterate and primary educated was higher in women undergoing induced abortion as compared to women with matriculate and higher education. This might be due to use of appropriate contraceptive methods by highly educated women to space or avoid their pregnancies. The result of the present study revealed that bleeding PV was the commonest clinical presentation constituting 72% followed by abdominal pain 39.6%, which were slightly more than the figure of 30.1% and 28.9% as reported by Ikeako et al\textsuperscript{6}. This could be attributed to incomplete abortion and trauma to genital tract. Around 94% of induced abortions were performed during the first trimester. This observation is consistent with the results observed by Ikeako et al\textsuperscript{6} where nearly 70% of abortion were found to be in first trimester. In the current study the commonest indication for abortion was short birth spacing (42.8%) followed by contraceptive failure (35.2%). Similar results were observed by Sandhya et al\textsuperscript{7}. In current study majority of patients who tried induced abortion used oral Mifepristone and Misoprostol combipack (40.9%) followed by oral Misoprostol (39%) which was consistent with the results of study done by Wildschut H et al\textsuperscript{8}.

Conclusion

Inspite of legalisation of abortion services in India, still the practice of unsafe abortion is prevailing. Illiterate women with lower socioeconomic status are more vulnerable to the unwanted pregnancies. These unwanted pregnancies which were getting terminated reveal the unmet need of contraception. Prevention of unwanted pregnancy is the key to prevent unsafe abortion. Elimination of unwanted pregnancy can be done by providing information and improving access to modern contraception which will substantially reduce the morbidity and mortality associated with unsafe abortion.

References

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