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Factors behind failure of unsupervised self induced medical abortion: A Study from North India

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Abstract

Introduction: Unsafe abortions contribute to 8% of maternal mortality. Easy availability and rampant use of medical methods of abortion lead to upsurge in self induced abortion related complications. Present study was conducted to assess the profile, knowledge, attitude and reasons of preference of self induced abortion in women visiting our centre after complication or failure of medical abortion. We also tried to evaluate the burden of different complications and factors behind failure of self induced medical abortion.

Material and Methods: It was a prospective mixed methods study performed in the department of obstetrics and gynaecology at a tertiary care centre. These women were interviewed by two doctors with the help of pre structured questionainare and their diagnosis, course of management and duration of stay in the hospital was noted down from hospital records.

Results: We recruited 216 women visiting our facility after some complication of self induced medical abortion. 92 women used Mifepristone and misoprostol regimen and rest used misoprostol. 165 women have purchased drugs over the counter from pharmacists. Major source of information is husband or friends. Most of the patients [n= 87.9%] consider it low risk.97% patients follow incorrect drug schedule and misoprostol was taken by oral route only. Ruptured ectopic pregnancy, anaemia, Sepsis, Incomplete abortion, Missed abortion and continuation of pregnancy was observed in 1.8%, 69.44%, 8.3%, 68.5 %, 9.7% and 23.14%.

Conclusion: Neglect of eligibility criteria and faulty drug regimens are the most common reasons for failure on self induced medical abortions. Low perceived risk and reluctance to hospital visit and interventions are most common reasons of preference of self induced abortions.

Keywords: Self induced medical abortion, Failure, Factors responsible for failure, Complications.

1. Introduction

India does have one of the most liberal policies regarding medical termination of pregnancy. Most of the government hospitals are providing surgical as well as OPD based supervised medical abortions free of cost. Ironically despite of all these efforts self induced medical abortion is the commonest way adopted by women in India. Unsafe abortions account for 8% of maternal mortality [1,2]. Reported number of abortion in 2012 was 6, 20,472 and two third of these abortions performed outside the authorized health facility. In every two hours one woman dies of abortion related complication and many more carry legacy of complications for their lifetime [3].

Drugs are usually procured from uncertified private providers such as traditional birth attendants, nurse, midwives, pharmacists or quacks without any counselling. Process is most of the times unsupervised. Resulting from free availability and rampant use of medical methods of abortion, most tertiary care centres are witnessing an upsurge in self induced abortion related complications. Self induced medical abortion may not only result in potentially life threatening consequences but is also a setback for

national policy for population stabilisation. In lack of proper counselling and motivation even successful self induced medical abortion is seldom followed by reliable and consistent contraceptive use.Failure of medical abortion is a well known complication [4]. Failure of medical abortion is defined as a situation when a surgical procedure is needed to be performed to complete the abortion for any reason, including incomplete abortion, continuing (viable) pregnancy, hemorrhage, or patient request [5,6].

Providers of medical abortion should be emphasized the importance of counseling women about the risk of failure and other complications. Present study was conducted in urban area of Delhi where authorized abortion services are available in fairly good number. In spite of that our tertiary care centre is dealing with high number of unsafe abortion related complications (either self induced or provided by some unqualified person). In light of this observation present study was planned to assess the profile, knowledge, attitude and reasons of preference of self induced abortion in women consulting our centre after complication or failure of medical abortion. We also tried to evaluate the burden of different complications and factors behind failure of self induced medical abortion.

2. Material and Methods

It was a prospective mixed methods study performed in the department of obstetrics and gynaecology at a tertiary care centre at Delhi. The research protocol was approved by the relevant Institutional Review Board or Ethics Committee before the study began. It involved**:** women visiting our hospital for some complaint after self administered medical abortion.

2.1 Inclusion criteria:

1**)** Self administered abortion; 2) Abortion by medical means; 3) Without supervision of a authorised medical personnel.

2.2 Exclusion criteria:

1) Spontaneous abortions; 2) Home based Medical abortion supervised by a Doctor; 3) Complications of abortion performed in other medical facility.; 4) Missed abortion without any interference.

Women were recruited from Gynaecology emergency, Gynaecology OPD and family planning OPD after information about the study and written consent for participation in the study. These women were interviewed by two doctors with the help of pre structured questionainare. Initial questions were asked regarding demographic profile of participant .In next section of interview there were questions assessing knowledge and attitude towards abortion and contraception in general, reasons for termination of pregnancy, reasons for not seeking safe abortion services. Questions were also asked for Course of events following intake, outcome, complications and management outside our facility. Patients were managed according to departmental protocol and their course of management and duration of stay in the hospital was noted down from hospital record. At the time of discharge patients were counselled regarding safe abortion services and options of contraception.

2.3 Statistics

Results were compiled simply in numbers and percentages.

3. Results

A total of 225 patients were recruited in a span of 6 months out of which 9 patients left against medical advice so they were drop out of study. So results were based on observations of 216 patients. Average age of patients was 28.8 years. Average Height was 5 feet 1 inch and average weight was 55.5 kg. 69.9% [n=151] were recruited from gynaecology emergency room and rest from OPD. Religion wise distribution was Hindu-58.7%, Muslims-30.09%, Sikh-5% and rest were Christian and others. 52.7% [n= 113] were illiterate,18.5%[n=40]% passed primary, 17.5% [n=38] studied till secondary and 11.5 % [n=25] were graduate. 62.03% [n= 134] women belong rural background and rest were urban. 70% [n=151] belonged to low socioeconomic status and rest were middle class. 88% [n=190] of women were home makers and rest were doing some job as well as taking care of household. 8.7 % [n=19] were continuing education. Table 1 describes parity.

Table 1: Parity of patients

S. No.	Order of pregnancy	Number	Percentage
1	First pregnancy	9	4.16
2	Second pregnancy	20	9.25
3	Third pregnancy	120	55.55
4	Fourth pregnancy or more	67	31.01

All the participants who were recruited in present study had first trimester abortion only and mean age of gestation was 9.2 weeks. 44.44 % [n=96] had POG 9-12 weeks.18.9% [n=41] women had previous one delivery by caesarean section. 21.29% [n=46] women had history of a previous abortion either spontaneous or induced. 36 women [17.12%] had tried self induced medical abortion previously and had positive reinforcement from previous experience. 19.4% [n=42] women reported inconsistent use of some form of contraception. Contraceptive used was predominantly condom. We have not encountered any failure of OCP's or IUCD. Source of information about abortifacient drug were their Husbands in 12.5% [n=27] women. Major source of information were friends and relatives in 63.8% women [n=138]. 165 women have purchased drugs over the counter from pharmacists. 51

women contacted unauthorized persons like nurses, quacks, or ANM'S and procured drugs from them. Reasons for termination of pregnancy were variable. 14.8% wanted to continue education, 12.5% were unable to continue job and 15.74% women wanted spacing between children as their previous child was very young. 56.94% women had already completed their family and it was an unwanted pregnancy for them.

Table 2: Reasons for preference of self induced abortion over safe abortion services

S. no.	Reasons	Number	%
1	Husband insistent	50	23.14
2	Unable to come to hospital	78	36.11
3	No family support to look after children	46	21.29
4	Fear of instrumentation	21	9.7
5	Unwilling for simultaneous ligation or IUCD	21	9.7

156 [72.22%] women were aware of safe abortion services and the fact that it is being provided free of cost from authorized centres. Table 2 describes the reasons of preference of self induced abortion over safe abortion services .If we consider the perceived risk of self induced medical abortion, 1.8% [n=4] perceive high risk, 10.8%[n=22] average and acceptable risk and 87.9% [n=190] consider it as low risk. Only 1.8% [n=4] accepted that they knew about the complication before intake. 60 [27.7%] women knew about emergency contraceptive and that it could used to prevent pregnancy in case of conceptive failure. Out of 216 women 92[42.59%] gave history suggestive of intake of mifepristone with misoprostol and 124 [57.4 %] used only misoprostol. 100 % of women had oral route of administration. Drug Schedule was incorrect in 97.2% [n=210] either in terms of doses or interval between two administrations. 41 [18.9%] repeated the regimen when there was no bleeding after first administration.59 [27.3%] women came directly to our centre, 73 [33.79%] were referred from some other centre after D&C or medical management. 61 [28.24%] visited two centres and rest 23[10.6%] has visited as high as 3 centres before finally coming to our hospital. Table 3 describes the complaints for which patients visited our hospital.

Table 3: Complaints

S. No.	Complaints	Number	%
1.	Failure to bleed	50	23.14
2.	Excessive or prolonged bleeding p/v	160	74.07
3.	Fever or purulent discharge	18	8.3
4.	Missed abortion on USG	21	9.7
5.	Excessive pain abdomen	166	76.8

Table 4: Diagnosis of the patients

S.No.	Diagnosis	Number	%
1	continuation of pregnancy	50	23.14
2	Missed abortion	21	9.7
3	Incomplete abortion	148	68.5
4	Sepsis	18	8.3
5	Anaemia	150	69.44
6	Ruptured ectopic pregnancy	2	1.8

Table 4 describes the final diagnosis of the patients. One of these patient expired due to sepsis and multiorgan dysfunction as a result of D&C done by a quack for incomplete abortion. 5 more women required care in high dependency unit due to severe anemia. One woman became critical due to severe anemia superimposed on pre exising cardiac condition. 148 women required blood transfusion and antibiotics. Therapeutic curettage was done in 169 women. One woman underwent laparotomy for perforation & sepsis. She underwent D&C by a quack for failed medical abortion. Admission was required in 76.8% [n=166] cases. Mean time of hospital stay was 3.5 day. 80% of patients did not adopt any form of contraception at the time of discharge. 76.4% were unfit for IUCD and tubectomy at the time of hospital stay due to anemia and sepsis so they were counseled. 3 patients underwent tubectomy and one had IUCD inserted. All the patients were counseled about safe abortion services so that information could be disseminated.

4. Discussion

In proper supervised setting Medical abortion has failure rate as low as 29-47 per 1000 women in gestation less than 49 days [7]. According to studies from USA regimen is less effective in used for gestational age between 49 days to 63 days [8] In present study no association was found with age, height and weight of patients. As far as parity is concerned most of our patients had 2-3 live issues. This is consistent with desired family size of most of the Indians. These are the women who have completed their family and seek abortion. These women should be targeted to adopt a long acting or permanent method of family planning. We found that most important reason for failure of medical abortion in all these cases is higher gestational age and faulty drug regimen. According to U.S. Study performed on 2015 women chances of continuation of pregnancy increases by 9 times at gestational age higher than 49 days [9]. Half of these women have used only misoprostol in favour of more potent Mifepristone plus misoprostol regimen. Even misoprostol was used in varied suboptimal schedules. Route of administration was oral intake instead of sublingual or vaginal. According to literature about Mifepristone plus Misoprostol regimen,

failure rate of oral misoprostol is as high as 64 per thousand women as compared to 21 per thousand women in case of vaginal route [10]. In Mifepristone and misoprostol combination gap of 48 hours was not taken care of and misoprostol was taken immediately after four hours of mifepristone by most of the patients. Large number of patients had misoprostol orally that too in divided doses. None of the patients repeated the dose if vomited immediately. Bottom line is unsupervised nature and lack of proper counseling. Another surprising observation of our study lies in "the reason of preference of self induced abortion over safe abortion services". ¾ th of the women were well aware of the fact that safe abortion services are being provided free of cost. In spite of this the decision was taken because of low perceived risk of self induced abortion. It is the ignorance about eligibility criteria and complications of self induced abortion which need to be dealt with. Over the counter availability of abortifacient drugs is equally to be blamed. Another important observation was unwillingness of women for hospital admission and instrumentation. We recommend that OPD based medical abortion from authorized outlets should be more advertised. Mass media approach for informing the availability of information about safe abortion services and overcoming myths about IUCD and permanent methods should be adopted by policy makers. Every woman seeking abortion should be informed and offered appropriate method of contraception.

5. Conclusion

Neglect of eligibility criteria and faulty drug regimens are the most common reasons for failure on self induced medical abortions. Low perceived risk and reluctance to hospital visit and interventions are most common reasons of preference of self induced abortions. Policy makers should emphasize on increasing awareness regarding supervised medical abortion.

Conflict of interests

Authors declare no conflict of interests.

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