

Maternal Outcome in Unsafe Termination of Pregnancy - A Tertiary Care Hospital Experience

¹FARZANA LATIF, ²NUZHAT PERVEEN KHAWAJA, ³MISHKAT SHAUKAT, ⁴ASMA SAEED

¹Associate Professor, ²Professor, ^{3,4}PGR, Department of Obst. & Gynecology PGMI/AMC/LGH, Lahore.

Corresponding author: Dr. Farzana Latif, Associate Professor Obst. Gynecology PGMI/AMC/LGH, Lahore. Email: farzanahammad1@gmail.com

ABSTRACT

Background: World Health Organization (WHO) defines unsafe abortion as a procedure for terminating an unintended pregnancy either by individuals without the necessary skills or in an environment that does not conform to minimum medical standards, or both. Unsafe abortion has been attributed to 4.7 to 13.2% of maternal deaths each year and about 7 million women are reportedly admitted to the hospitals following unsafe abortion every year in the developing countries. This study aims to analyze the most frequently occurring complications and maternal outcomes due to unsafe termination of pregnancy (abortions and miscarriage) in patients presented at a tertiary care setting.

Patients and Methods: A total of 30 patients admitted with complications due to unsafe termination of pregnancy were evaluated. The study was conducted at the emergency of Obstetrics and Gynecology department, General Hospital, Lahore from November 2016 till November 2017. Data was collected prospectively from patients through a performa containing basic demographic and unsafe abortion-related questions after their informed consent.

Results: Mean age of the patients was 30.6±6.46 years while gestational age was 8.3±2.74 weeks. Almost all patients, 29 (96.7%) out of 30 were married. A majority (73%) of women had high parity. More than 90% women had also the history of previous abortions; however, only 5 (16.7%) had the history of unsafe abortions out of total sample. Dai's were the most preferred service provider for this type of abortion and used home environment for abortions. Retained products of conception (RPOC), uterine perforation, endometritis, and septicemia were most common complications. All patients had received the antibiotics while 28 (93.3%) patients received the blood transfusion. Only 2 (6%) patients had received hysterectomy treatment for complications of unsafe abortion. Three patients (10%) maternal deaths were also recorded.

Conclusion: This study concludes that unskilled service providers are still common abortionists in the community. Likewise, considerable maternal deaths are still waiting to deal with. Government institution and community awareness integrated model can reduce this problem and its impact on the health care system and women health as well.

Keywords: Unsafe abortion, termination of pregnancy, maternal outcomes, complications

INTRODUCTION

World Health Organization (WHO) defines unsafe abortion as a procedure for terminating an unintended pregnancy either by individuals without the necessary skills or in an environment that does not conform to minimum medical standards, or both.¹ Unsafe abortion has been attributed to 4.7 to 13.2% of maternal deaths each year and about 7 million women are reportedly admitted to the hospitals following unsafe abortion every year in the developing countries.^{1,2} Unsafe abortion has been a leading cause of global maternal death and injury in many parts of the world and continuously adding a considerable stake in the health problems by considering its multi-layered influence.³ Morbidity and mortality due to unsafe abortions

remains a challenge for developing nations. It is estimated that around 25 million unsafe abortions are carried out each year worldwide and more than 95% happen in developing regions of the world.⁴ A realistic assessment portrayed that due to severe complications of these unsafe methods, around 7 million women are admitted in the hospitals each year explicitly in developing countries and also cause maternal mortality ranges between 4.7%-13.2% annually.^{3,5,6} Numerous factors have been implicated in unwanted pregnancies. Most of the married women adopt this option to make a reasonable space between pregnancies or limit the family size. Some seek termination on medical grounds or because of non-affordability due to low

socioeconomic profile. Abortion is still considered as a social taboo in many developing countries of the world and compels pregnant women to opt for concealed options in the community.⁷ Generally, the providers for unsafe termination of pregnancy (abortions/miscarriages) are midwives, nurses, lady health visitors (LHV) and Dai's. An important point of envisioning is that Post Abortion Care management and training is given only to doctors and not to this group of service providers who are actually involved in majority of abortions.⁸ Therefore, these unskilled and untrained persons cannot provide satisfactory services and frequently ends with severe maternal complications; hemorrhages, sepsis, visceral injuries, uterine perforations, long-term infertility, psychological disorders etc. This whole situation leads towards substantial surge in maternal morbidity and mortality in the countries.⁸⁻¹⁰ Largely, these women with potentially fatal complications are referred and admitted in hospitals and other healthcare units having better options of care. This study is focused on the frequency of maternal complications and outcomes of unsafe termination of pregnancy so that policies and management system can be devised accordingly in tertiary care hospitals.

PATIENTS AND METHODS

The current study was conducted at the emergency of Obstetrics and Gynecology department, General Hospital, Lahore. This prospective collection of data on a purpose built proforma was carried over one year period from November 2016 till November 2017 for consecutive patients admitted with complications following unsafe termination of pregnancy (including abortions and miscarriages). Basic information; age, marital status, parity, previous abortions, previous history of unsafe abortions, the unsafe abortion provider, complications due to this procedures and treatment in tertiary care hospital was asked and mentioned in the questionnaire. This collected data was analyzed using Statistical Package for Social Sciences (SPSS) version 22. Patient age and gestational age were the quantitative variables of study and presented in the form of mean and standard deviation. Qualitative variables included previous marital status, previous history of unsafe abortions, person and the procedure adopted for termination, place where termination was carried out.

RESULTS

Mean age of patients was 30.6 ± 6.4 years and the mean gestational age was 8.3 ± 2.7 months. Table 1 summarizes the distribution of various qualitative parameters analyzed in the study. Twenty-nine (97%) patients were married and 22 (73%) were para 3 or more. Twenty-five (83%) patients claimed that they never opted for unsafe abortions before current event. Dais were involved in 50% cases and 16 (53.3%) cases were performed at home under unhygienic conditions.

Figure 1 depicts frequency of various complications observed in these patients. Retained products of conceptions (RPOC) with related complications was the most common finding observed in 19 (63.3%) patients followed by peritonitis due to uterine perforation in 16 (53.3%) cases. Sixteen (53.3%) patients underwent therapeutic dilatation and curettage (D&C), 14 (46.6%) underwent laparotomy with uterine repair, 9 (30%) had additional repair or resection of associated bowel injury, whereas emergency hysterectomy was required in 2 (6.6%) patients. Figure 2 shows various treatment measures adopted in the management of these patients. Ten (33.3%) patients died due to irreversible complications following unsafe termination despite hospital treatment. Most of these patients consulted the hospitals late following unsafe termination of their pregnancy.

DISCUSSION

Unsafe abortions and abortionists are constantly endangering the health care system in developing nations like Pakistan.¹¹ Average age of patients was around 30 years showed that women were young adults while undergone the unsafe abortion. A previous study also showed that majority of abortions is performed under the age of 30 years.¹² On the other side, average gestational age showed that women opted for unsafe abortion in the first trimester which is similar to a previous report in which 88% abortions were performed in the first trimester.¹³ In current study, 73% women had more than 3 parity and more than 90% women are married. Literature has also shown that married women having high parity, less education, low economic conditions, less awareness of family planning methods are more inclined to terminate the unintended pregnancy.^{8,14} All patients have reported that their unsafe abortions performed through surgical methods.

Table 1: Frequency distribution of qualitative parameters (N=30)

Characteristics	Frequency (%)
<i>Marital status</i>	
Unmarried	1 (3.3)
Married	29 (96.7)
<i>Parity</i>	
0-2	8 (26.6)
3-4	11 (36.7)
5+	11 (36.7)
<i>Previous abortions</i>	
1-2	28 (93.3)
3+	2 (6.7)
<i>Previous history of unsafe abortions</i>	
Yes	5 (16.7)
No	25 (83.3)
<i>Procedure adopted for current unsafe abortion</i>	
Medical	0 (0)
Surgical D&C	28 (93.3)
Both	2 (6.7)
<i>Unsafe abortion service provider</i>	
Dai	15 (50)
LHV	6 (20)
LHW	0 (0)
Midwife	1 (3.3)
Nurse	8 (26.7)
<i>Place where unsafe abortion was performed</i>	
Clinic	14 (46.7)
Home	16 (53.3)

There was not a single case who reported that only medical procedure was adopted for the termination of unintended pregnancy. In current study majority of the unsafe abortions were performed by Dais in the first trimester. In the literature, it was also seen that in the community, women usually consult Dais for abortions.¹⁶ Most of these unsafe abortions were performed at home. It showed that Dais and other service providers did not know the minimal standards about the environment and skills for safe abortions. The recommended surgical procedure for evacuating the uterus requires an operating room, anesthetist and sometime blood transfusion.¹⁷ Furthermore, even in the presence of experts this procedure sometimes would create a problematic situation. The procedure in

non-hospital unhygienic setting by untrained and unskilled personnel results in high morbidity and mortality, even when the patients eventually report to the hospital. Unsafe abortions usually include; usage of high-dose medicines like birth control or antimalarial pills, insertion of sharp instruments into the uterus, flushing of the vagina through bleach, physical abuse etc. All these methods are highly damaging for the subjects ending up with severe complications.¹⁸ A previous study reported that septicemia (79%), uterine perforation (30.2%) and hemorrhage (20.9%) were the most common complications in unsafe abortions.¹⁹ Another study observed that incomplete abortions or pregnancy is the most common complication in abortions when the

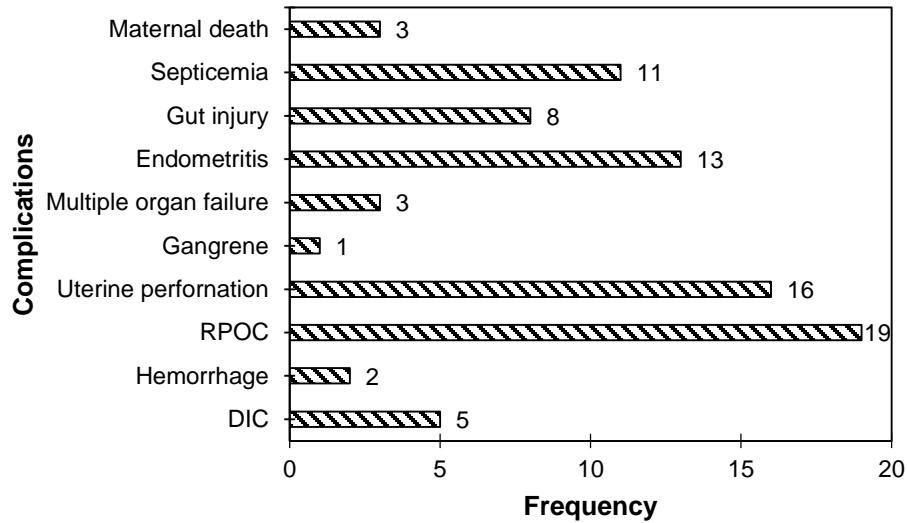


Figure 1: Complications due to unsafe abortions

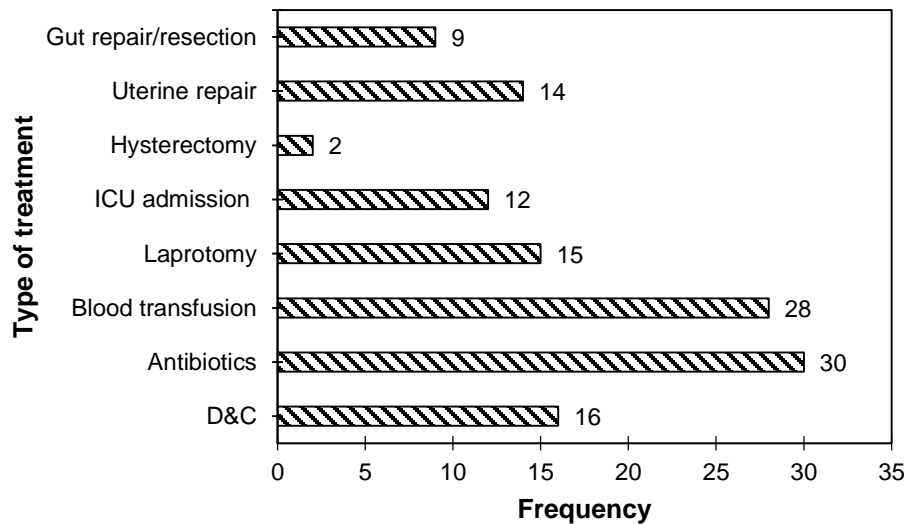


Figure 2: Treatment measures for complications of unsafe termination of pregnancy

pregnancy is not completely expelled from the uterus and some parts of this process remain inside usually called RPOC.^{20,21} Current study results have also highlighted that RPOC, uterine perforations, endometritis and septicemia were very much prevalent complications in the unsafe abortion patients like previous studies.

Previous reports from Pakistan observed that 10-12% maternal deaths occur due to complications of abortions and miscarriages.^{8,22,23} Maternal outcomes in women undergone through

unsafe abortions may be discharge from hospital after significant postoperative morbidity and prolonged stay or death of the patient. This study observed 33.3% maternal mortality which is comparable to that reported in the literature.¹⁹⁻²³ Most of these deaths are due to patients developing multiple organ failures in later stages while being treated in the hospitals. It means organ failure is an important symptom and complication for doctors while deciding about the critical condition of patients. One previous study reported

that three reasons; hemorrhage, sepsis due to childbirth and unsafe abortion accounted almost half of maternal deaths in the world and excessive bleeding, severe infection and organ damage are the main causes of deaths in patients with complications of unsafe abortions.²⁴ Management is directed to the complications resulting from unsafe termination. Antibiotics and blood transfusion include the most frequently used management armamentarium given to patients in this study. It mainly depends on the severity of diseases and loss of blood. In the presence of infections and its related complications, early intravenous administration of broad-spectrum antibiotics providing both aerobic and anaerobic coverage is important, severe blood loss necessitates early consideration for blood transfusion. Large studies from Africa and Kenya emphasized early use of broad-spectrum antibiotics and blood transfusion based on the patient condition at presentation.^{25,26}

CONCLUSION

This study highlights that majority of pregnant women still choose unsafe termination of pregnancy by untrained and nonskilled community helpers. This leads to the occurrence of severe complications and eventual multiple organ failures leading sometime to fatal maternal outcome. Government hospitals take the brunt of these complications by providing management facilities to these patients. Increased awareness using print and electronic media is recommended to avoid unskilled service providers.

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