# Practice of unsafe abortion in Pakistan: Characteristics and outcome

Hazooran Lakhan, Shoaib-un-Nisa Soomro, Kousar Abro, Shahneela Moosa, Faizan Shaukat

Department of Gynecology, Ghulam Muhammad Mahar Medical College, Sukkur and Jinnah Post Graduate Medical Center, Karachi, Pakistan

**Objective:** To determine the mode of unsafe abortion and complications associated with it.

**Methodology:** This study was conducted in gynecology unit of Ghulam Muhammad Mahar Medical College, Sukkur from July to December 2019. During the study period, 30 women were referred to our unit with recent history of unsafe abortion.

**Results:** Out of 30 women, 8 (26.6%) were unmarried. Age ranged from 13 to 30. Mean gestational age at the time of abortion was  $14 \pm 4$ 

weeks. The most common complications were uterine perforation (36.7%), septicemia (36.7%) and renal failure (26.7%). Seven (23.3%) needed an intensive care unit and three (10.0%) died.

**Conclusion:** Mortality and complications are very common in women with unsafe abortion due to women seeking services from untrained professionals, who perform abortion in unsafe environment.

**Keywords:** Unsafe abortion, complication, untrained professionals, uterine perforation.

## INTRODUCTION

WHO defined unsafe abortion as procedure to terminate an unintended pregnancy performed by person without technical expertise or in an environment that does not fulfill the minimum medical standard or both. WHO reported that 97% of all global abortions between 2010 and 2014 were done in low-income countries. Haddad and Nour reported that 55% of all abortions in developing countries are unsafe. Reasons for unsafe abortion, including but not limited to, are unwanted pregnancies, poverty, lack of availability and accessibility to contraception and contraceptive failure. WHO noted that every eighth minute, a women in developing nations dies because of complication from unsafe abortion.

A Pakistani study reported that frequency of unsafe abortion was 1.35% and the case fatality rate was 34.9%. Due to various complications such as hemorrhage, infection and perforation an estimated five million women from less developed countries are hospitalized every year because of unsafe abortion. There is extremely limited data available regarding the unsafe abortion in Pakistan. In this study, we aimed to determine the mode of unsafe abortion and complications associated with it.

## **METHODOLOGY**

This case series was conducted in gynecology unit of Ghulam Muhammad Mahar Medical College, Sukkur from July to December 2019. Inclusion criteria were women who were referred to gynecology unit with recent history (less than one week) of unsafe abortion. Participants who refused to give consent were excluded from study.

During the study period, 42 women were referred to us. Patients age, marital status, previous history of abortion, and mode of abortion, location in which abortion was performed and service provider for abortion were noted in a self-structured questionnaire. Treatment and their outcome were noted in questionnaire.

**Statistical Analysis:** Data were analyzed on SPSS version 17.

### **RESULTS**

Out of 30 women, 8 (26.6%) were unmarried. Mean age was  $23 \pm 5$  years (range 13 - 30). Mean gestational age at the time of abortion was  $14 \pm 4$  weeks. Fifteen (50%) women had history of previous abortion with 5 (16.7%) history of unsafe abortion. Twelve (40%) women had surgical procedure for abortion, Lady health worker (33.3%) was the most common service provider for abortion, followed by midwife (30%) and16 (53.3%) had their abortion in clinic (Table 1).

For management, 24 (80%) women were given blood transfusion, 23 (76.7%) were given antibiotics, 14 (46.7%) underwent laparotomy and 11 (36.7%) had uterine repair (Table 2).

The most common complications were uterine perforation (36.7%), septicemia (36.7%) and renal failure (26.7%). Seven (23.3%) needed intensive care unit and three (10.0%) died (Table 3).

Table 1: Characteristics with frequency.

Characteristic	Frequency (%)	
Procedure for Abortion		
Surgical	12 (40%)	
Medical	9 (30%)	
Both	9 (30%)	
Service Provider		
Lady Health Worker	10 (33.3%)	
Midwife	9 (30%)	
Non-Health care professional (Dai)	8 (26.7%)	
Nurse	3 (10.0%)	
Location		
Doctor Clinic	16 (53.3%)	
Home	14 (46.7%)	

**Table 2: Interventions.** 

Intervention	Frequency (%)
Blood Transfusion	24 (80.0%)
Antibiotics	23 (76.7%)
Laparotomy	14 (46.7%)
Uterine Repair	11 (36.7%)
Bowel Repair	9 (30.0%)
Hysterectomy	3 (10.0%)

**Table 3: Complications.** 

Complication	Frequency (%)
Uterine Perforation	11 (36.7%)
Septicemia	11 (36.7%)
Renal Failure	8 (26.7%)
Bowel Injury	7 (23.3%)
Intensive Care Unit Admission	7 (23.3%)
Anemia	6 (20.0%)
Endometritis	6 (20.0%)
Disseminated intravascular coagulation	3 (10.0%)
Death	3 (10.0%)

#### DISCUSSION

Mortality in our study was 10%, similar to countries all around the globe. A Pakistani study reported a mortality of 5% and 10.5%. Globally, unsafe abortions account for 13% of total maternal mortality. There is strong association between illegal abortions and deadly infections. Deaths due to septic abortions were reported to be 17% of the overall maternal deaths in 1935, 15% in 1940, and 10% in 1945, which correspond to the mortality rate shown in our study.

The determinants of unsafe abortion include restrictive abortion legislation, lack of female empowerment, poor social support, inadequate contraceptive services and poor health-service infrastructure. Pregnancy outside of a marriage constitutes a very small number seeking termination of pregnancy. In our study, 26.6% of women were unmarried. This was comparable to a study from 2011 from Pakistan, where 27% women were unmarried. Yogi et al from Nepal reported unsafe abortion to be 16%, which is similar to our finding of 16.7%. In the same of the same of

In our study, most common service provider was lady health worker (33.3%), followed by midwife (30%) and dai (26.7%). Similar results were found in another study from.<sup>17</sup> Termination of pregnancy by untrained providers often end up with complications or long term sequelae like infertility with its psychological effects and maternal morbidity and mortality.<sup>11,18</sup> Medical facilities should be well-resourced, and well-trained healthcare providers should be made available to deal with the complications effectively.<sup>19</sup>

We found that 40% women had abortion via surgical method, 30% via medical and in 30%, both techniques were used. Misoprostol and mifepristone have been shown to be effective for medical abortion up to 9 weeks of gestation and successful complete abortion rate dropped to ~60%. Most surgical abortion was done via dilation and curette (DnC), which is an obsolete method for abortion. <sup>21</sup>

In our study, the most common complication was uterine perforation, followed by septicemia. Shah et al also reported same; however, incidence of septicemia was higher in their study compared to ours (79% vs. 36.7%).<sup>4</sup> Majority of the women with complications after abortion need to be managed surgically.<sup>7,8,17,22,23</sup> Uterine perforation can lead injury to intestines which calls for immediate surgical intervention.<sup>17</sup>

Abortion is considered taboo in our society; hence there is a possibility that most women don't seek help even after developing complications. Supreme Court recommended "A woman's right to obtain an abortion by her own choice within the first 120 days of pregnancy should be unambiguously declared an

absolute legal right". This remains a recommendation till date.<sup>24</sup> Efforts should be done to educate and aware women about safe practices for abortion. Religious scholars, health care professionals and governments should work together to reduce maternal mortality and complications associated with unsafe abortion.

## **CONCLUSION**

Unsafe abortion was associated with high mortality rate and various complications such as septicemia, uterine perforation, renal injury and bowel injury. It is important that health care bodies should work on safe abortion policies.

#### **Author Contributions:**

Conception and design: Hazooran Lakhan, Shoaib-un-Nisa Soomro. Collection and assembly of data: Kousar Abro, Shahneela Moosa, Faizan Shaukat.

Analysis and interpretation of data: Hazooran Lakhan, Shoaib-un-Nisa Soomro.

Drafting of the article: Hazooran Lakhan, Shoaib-un-Nisa Soomro. Critical revision of article for important intellectual content: Shoaib-un-Nisa Soomro.

Statistical expertise: Hazooran Lakhan, Shahneela Moosa.

Final approval and guarantor of the article: Shoaib-un-Nisa Soomro.

Corresponding author email: Shoaib-un-Nisa Soomro:

drshoaibunisasoomro@gmail.com
Conflict of Interest: None declared.

Rec. Date: Feb20, 2021 Revision Rec. Date: Jun19, 2021 Accept Date:

Dec 3, 2021.

#### REFERENCES

- Ganatra B, Tunçalp Ö, Johnston HB, Johnson BR Jr, Gülmezoglu AM, Temmerman M: From concept to measurement: operationalizing WHO's definition of unsafe abortion. Bull World Health Organ. 2014; 92: 155-9.
- 2. Haddad LB, Nour NM: Unsafe abortion: unnecessary maternal mortality. Rev Obstet Gynecol. 2009; 2: 122-6.
- 3. Ahsan A, Jafarey SN. Unsafe abortion: global picture and situation in Pakistan. J Pak Med Assoc. 2008; 58: 660-1.
- 4. Shah N, Hossain N, Noonari M, Khan NH. Maternal mortality and morbidity of unsafe abortion in a university teaching hospital of Karachi, Pakistan. J Pak Med Assoc. 2011; 61: 582-6.
- Singh S. Hospital admissions resulting from unsafe abortion: estimates from 13 developing countries. Lancet, 2006; 368: 1887-92.
- Sedgh G. Abortion in Ghana. Issues Brief (Alan Guttmacher Inst). 2010: 1-4.
- Safe Abortion: Technical and Policy Guidance for Health Systems. 2nd ed. Geneva: World Health Organization, 2012.
- 8. Richards A, Lachman E, Pitsoe SB, Moodley J. The incidence of major abdominal surgery after septic abortion--an indicator of complications due to illegal abortion. S Afr Med J. 1985; 68: 799-800.
- 9. Diallo FD, Traoré M, Diakité S, Perrotin F, Dembélé F, Diarra I, et al. Complications des avortements provoqués

- illégaux à Bamako (Mali) de décembre 1997 à novembre 1998. Cahiers d'études et de recherches francophones/Santé. 2000: 10: 243-7.
- 10. Ravolamanana Ralisata L, Rabenjamina FR, Razafintsalama DL, Rakotonandrianina E, Randrianjafisamindrakotroka NS. Les péritonites et pelvipéritonites post-abortum au CHU d'Androva Mahajanga: à propos de 28 cas [Post-abortum peritonitis pelviperitonitis at the Androva Mahajanga University Hospital: 23 cases]. J Gynecol Obstet Biol Reprod. 2001; 30: 282-7.
- 11. Lassey AT. Complications of induced abortions and their preventions in Ghana. East Afr Med J. 1995; 72: 774-7.
- 12. US department of commerce. Bureau of Foreign and Domestic Commerce. Statistical abstract of the United States 1931. http://ocrscanworld.com/wp-content/archives/census/1901-1950/1931-01.pdf. Published 1931.
- US Department of Commerce. Bureau of the Census. Statistical abstract of the United States 1941. http://ocrscanworld.com/wp-content/archives/census/1901-1950/1941-01.pdf Published 1942.
- 14. Bureau of the Census. Statistical abstract of the United States 1951. http://www2. census.gov/prod2/statcomp/documents/195 1-02.pdf. Published 1951.
- 15. Grimes DA, Benson J, Singh S, Romero M, Ganatra B. Unsafe Abortion: The Preventable Pandemic. The Lancet, 2006; 368 (9550): 1908.
- Yogi A, Parakash KC, Neupane S. Prevalence and factors associated with abortion and unsafe abortion in Nepal: a nationwide cross-sectional study. BMC Pregnancy Childbirth, 2018; 18: 376.
- 17. Forna F, Gülmezoglu AM. Surgical procedures to evacuate incomplete miscarriage. Cochrane database of systematic reviews, 2001.
- Siddique S, Hafeez M: Demographic and clinical profile of patients with complicated unsafe abortion. J Coll Physicians Surg Pak. 2007; 17: 203-6.
- Jafarey SN. Maternal Mortality in Pakistan- An Overview of Maternal and Perinatal Health in Pakistan. Proceedings of Asian and Oceanic Federation of Obstetrics and Gynaecology Workshop, Karachi, 1991. Karachi: TWEL Publisher, 1992.
- 20. Korejo R, Noorani KJ, Bhutta S. Sociocultural determinants of induced abortion. J Coll Physicians Surg Pak. 2003; 13: 260-2.
- 21. Fawcus SR: Maternal mortality and unsafe abortion. Best Pract Res Clin Obstet Gynaecol. 2008; 22: 533-48.
- 22. Ngai SW, Tang OS, Chan YM, Ho PC. Vaginal misoprostol alone for medical abortion up to 9 weeks of gestation: efficacy and acceptability. Hum Reprod. 2000; 15: 1159-62.
- 23. Megafu U. Bowel injury in septic abortion: the need for more aggressive management. Int J Gynaecol Obstet. 1980; 17: 450-3.
- 24. Tietze C. Abortion as a cause of death. Am J Public Health Nations Health, 1948; 38: 1434-41.