

ASSOCIATION OF UNSAFE ABORTIONS WITH COMPLICATONS

DR. RAFIA NASEEM

MBBS

BAHAWAL VICTORIA HOSPITAL, BAHAWALPUR, PAKISTAN.

DR. NOREEN FATIMA

MBBS

BAHAWAL VICTORIA HOSPITAL, BAHAWALPUR, PAKISTAN.

DR. NAZISH ASHRAF

MBBS

BAHAWAL VICTORIA HOSPITAL, BAHAWALPUR, PAKISTAN.

Abstract;

Background; Unsafe abortion is a persistent, preventable pandemic. 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. This study was conducted in our local population of southern Punjab to ascertain magnitude of the problem in terms different maternal complications after unsafe abortions. **Objective:** To determine the frequency of complications of unsafe abortions at a tertiary care hospital. **Material and Methods;** All the study cases (n=169) who met inclusion criteria of my study were taken from Department of Gynecology and Obstetrics, Bahawal Victoria Hospital, Bahawalpur, Pakistan from June 2015 to June 2016 in this descriptive cross – sectional study . Once registered, these study case had undergone required investigations like blood tests (TLC count to determine sepsis and serum urea and creatinine levels to ascertain ARF). These blood tests were performed by a trained pathologist. These patients were also arranged for X – Ray chest (PA view) to diagnose perforation and complications such sepsis, hemorrhage, ARF and perforations were noted in the proforma by the researcher. Data was analyzed by using SPSS Version 20. **Results;** Mean age of our study cases was 29.39 ± 4.12 years (with minimum age of our study cases was 24 years while maximum age was 37 years) and majority of our study cases i.e. 93 (55 %) belonged to age group 20 – 30 years of age. Of these 169 study cases, 104 (61.5%) were from rural areas, 113 (66.9%) were poor, 141 (83.4%) were illiterate, 111 (65.7%) spouses were illiterate and most of them i.e. 112 (66.3%) belonged to joint family system. Mean body mass index of our study cases was 24.78 ± 3.24 kg/m² and obesity was present in 27 (16 %) patients. Hemorrhage was noted in 94 (55.6%), sepsis in 74 (43.8%), acute renal failure in 39 (23.1%) and perforations in 19 (11.2%) of our study cases. **Conclusion;** Our study results indicate that unsafe abortion is a major cause of maternal morbidity with hemorrhage was commonest complication followed by septicemia, mostly because the procedure was performed by untrained health care providers under unhygienic conditions. Majority of the patients had multiple complications. There is urgent need to improve quality of services offered by family planning programs and provision of safe abortion services

to decrease significant morbidity among targeted population. This will improve their quality of life and also provide relief to health authorities in terms of more investments due to prolonged hospitalizations.

Keywords; Unsafe abortion, hemorrhage, sepsis.

Introduction:

The National Centre for Health Statistics defines an "abortion" as "[a] fetus or embryo removed or expelled from the uterus during the first half of gestation - 20 weeks or less, or in the absence of accurate dating criteria, born weighing < 500 g"¹. The 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'. Worldwide, 22 million unsafe abortions are done each year, which contributes substantially to the global burden of maternal mortality and morbidity, the majority (98 %) of these occur in developing countries and Asia as the most highly populated region in the world, records a high rate of unsafe abortions². The rate of induced abortion in Asia is 28 per 1,000 women aged 15–44 and around a third of these women (10.8 million) have unsafe abortions annually⁴. These rates are highest in South Central Asia (65% of abortions are unsafe)³, while in East Asia, almost all abortions are safe. Studies show that two out of five Asian women with an unmet need for safe abortion are under 25 years of age.

Research in Pakistan and South Asia more generally indicates that couples who experience mistimed or unwanted pregnancies are likely to resort to induced abortion⁴ and the low social status of women and the preference for sons determine a high rate of sex-selective abortion or, more specifically, female feticide, in South Asian countries⁵. Health professionals surveyed in a national study stated that the majority of women seeking abortions had been using a method of birth control at the time of the unwanted pregnancy, implying that contraceptive methods had been incorrectly or inconsistently used. The majority of couples who sought an abortion had four or more children⁶.

The risks of unsafe abortion run along a continuum⁷ ranging from severe morbidity (hemorrhage, sepsis, organ failure) to no complications. Although abortion is getting safer worldwide, evidence indicates a higher rate of hospitalization due to unsafe abortion complications. Globally, unsafe abortions account for between 8% and 18% of maternal deaths, and millions more women suffer nonfatal health consequences of unsafe abortion every year. In East Africa alone, an estimated 613,000 women were hospitalized for complications from induced abortion in 2005, or 10 per 1,000 women of reproductive age. Many more women suffer complications but do not access care: worldwide, an estimated one third of the 8.5 million women with abortion complications are not treated in facilities⁸.

In a study conducted in Thailand, Srinil S1 reported 66.6% cases with hemorrhage requiring blood transfusions and 22.2% cases with acute renal failure.⁹ In another study conducted in Nigeria, Abiodun OMI reported that sepsis was the commonest complication in the patients (79.2%) while uterine perforation was present in 12.5% of the women. The case fatality rate was 16.6% and unsafe abortion accounted for 30.8% of all maternal mortality during the period¹⁰.

Health risks associated with unsafe abortion are well established, especially in countries like Pakistan where legal and safe abortion services are generally unavailable. Gazdar, Khan, and Qureshi (2012) found that the majority of postabortion complications in Pakistan arose when abortions were sought from untrained midwives or administered by the women themselves¹¹. In the developing world, including Pakistan, morbidity and mortality associated with unsafe abortion exert an enormous health, financial, and social burden on women and on the health care system as a whole. Lack of appropriate postabortion care can lead to lifelong morbidity, contribute to maternal mortality, and adversely affect the health of future children².

Although studies on this topic have been conducted in Pakistan but due to social stigma and legal restrictions associated with abortion the data on magnitude of this problem is scarce and no such study has been conducted in our population.

Material and Methods:

Patients aged 20-40 years irrespective of parity having history of abortion by untrained/unskilled person, abortions either by medical or surgical methods and duration of presentation since abortion < 2 weeks were

included in our study while patients with medical disorders like CRF (on lab report creatinine > 5mg/dl), anaemia (on lab report with Hb levels < 10 g/dl). All the study cases (n=169) who met inclusion criteria of my study were taken from Department of Gynecology and Obstetrics, Bahawal Victoria Hospital, Bahawalpur, Pakistan from June 2015 to June 2016 in this descriptive cross – sectional study . Once registered, these study case had undergone required investigations like blood tests (TLC count to determine sepsis and serum urea and creatinine levels to ascertain ARF). These blood tests were performed by a trained pathologist. These patients were also arranged for X – Ray chest (PA view) to diagnose perforation and complications such sepsis, hemorrhage, ARF and perforations were noted in the proforma by the researcher. Data was analyzed by using SPSS Version 20.

Results;

Our study comprised of a total of 169 study cases presenting with unsafe abortion meeting inclusion criteria of our study. Mean age of our study cases was 29.39 ± 4.12 years (with minimum age of our study cases was 24 years while maximum age was 37 years). Our study results have indicated that majority of our study cases i.e. 93 (55 %) belonged to age group 20 – 30 years of age. Of these 169 study cases, 104 (61.5%) were from rural areas, 113 (66.9%) were poor, 141 (83.4%) were illiterate, 111 (65.7%) spouses were illiterate and most of them i.e. 112 (66.3%) belonged to joint family system. Mean height of our study cases was 148.34 ± 11.21 centimeters while mean weight of our study cases was 54.37 ± 4.97 kilograms. Mean body mass index of our study cases was 24.78 ± 3.24 kg/m² and obesity was present in 27 (16 %) patients. Mean parity of our study cases was 4.37 ± 1.82 , mean gravidity was 5.65 ± 2.01 , mean gestational age was 8.79 ± 2.32 weeks, mean duration of marriage was 7.13 ± 3.67 years and mean duration since abortion was 10.18 ± 3.47 days.

Hemorrhage was noted in 94 (55.6%), sepsis in 74 (43.8%), acute renal failure in 39 (23.1%) and perforations in 19 (11.2%) of our study cases.

Table No. 1 Stratification of complications with regards to age. (n = 169)

Complications		Age (In Years)		P-value
		20-30	31-40	
Hemorrhage (n=169)	Yes (n=94)	57	37	0.120
	No (n=75)	36	39	
Sepsis (n=169)	Yes (n= 74)	65	09	0.000
	No (n= 95)	28	67	
Acute renal failure (n=169)	Yes (n= 39)	00	39	0.000
	No (n= 130)	93	37	
Perforations (n=169)	Yes (n= 19)	00	19	0.000
	No (n=150)	93	57	

Table No. 2

Stratification of complications with regards to duration since abortion.

(n = 169)

Complications		Duration since abortion		P-value
		Up to 1 week	1-2 weeks	
Hemorrhage (n=169)	Yes (n=94)	28	66	0.017
	No (n=75)	36	39	
Sepsis (n=169)	Yes (n= 74)	28	46	1.00
	No (n= 95)	36	59	
Acute renal failure (n=169)	Yes (n= 39)	18	21	0.260
	No (n= 130)	46	84	
Perforations (n=169)	Yes (n= 19)	10	09	0.209
	No (n=150)	54	96	

Discussion;

Every year, about 19-20 million abortions are done by individuals without the requisite skills, or in environments below minimum medical standards, or both. Nearly all unsafe abortions (97%) are in developing countries. An estimated 68 000 women die as a result, and millions more have complications, many permanent. Important causes of death include haemorrhage, infection, and poisoning¹².

Our study comprised of a total of 169 study cases presenting with unsafe abortion meeting inclusion criteria of our study. Mean age of our study cases was 29.39 ± 4.12 years (with minimum age of our study cases was 24 years while maximum age was 37 years). Our study results have indicated that majority of our study cases i.e. 93 (55 %) belonged to age group 20 – 30 years of age. Shah et al¹³ from Karachi also reported similar age range in women presenting with unsafe abortions and reported mean age as 28 ± 6.89 years which is close to our study results. Shaikh et al¹⁴ from Larkana, Sindh reported unsafe abortions in patients having mean ages 33.5 ± 4.1 years which is close to our findings. Rashid et al¹⁵ from Lahore reported 29 years mean age which is close to our findings.

Unsafe abortions have been associated with lack of access to healthcare facilities and being more common in poor, illiterate and underprivileged populations subsets. Similarly in our study, 104 (61.5%) were from rural areas, 113 (66.9%) were poor, 141 (83.4%) were illiterate, 111 (65.7%) spouses were illiterate and most of them

i.e. 112 (66.3%) belonged to joint family system. A study conducted by Shah et al¹³ from Karachi has also reported 63 % women presenting with unsafe abortions were illiterate and majority of them belonged to poor socioeconomic status. These findings of Shah et al¹³ are similar to that of our study results. Shaikh et al¹⁴ from Larkana, Sindh reported 96 % women presenting with unsafe abortion were illiterate and 80 % belonged to poor families. These findings of Shaikh et al¹⁴ from Larkana are similar to that of our study results.

Mean height of our study cases was 148.34 ± 11.21 centimeters while mean weight of our study cases was 54.37 ± 4.97 kilograms. Mean body mass index of our study cases was 24.78 ± 3.24 kg/m² and obesity was present in 27 (16 %) patients.

Mean parity of our study cases was 4.37 ± 1.82 , mean gravidity was 5.65 ± 2.01 , mean gestational age was 8.79 ± 2.32 weeks, mean duration of marriage was 7.13 ± 3.67 years and mean duration since abortion was 10.18 ± 3.47 days. Shah et al¹³ from Karachi also reported majority of the patients were grand multi – para within first trimester of gestation which is in compliance with that of our study results. Siddique et al¹⁶ also reported similar findings.

Hemorrhage was noted in 94 (55.6%), sepsis in 74 (43.8%), acute renal failure in 39 (23.1%) and perforations in 19 (11.2%) of our study cases. In a study conducted in Thailand, Srinil reported 66.6% cases with hemorrhage requiring blood transfusions and 22.2% cases with acute renal failure.⁹ In another study conducted in Nigeria, Abiodun OM1 reported that sepsis was the commonest complication in the patients (79.2%) while uterine perforation was present in 12.5% of the women. The case fatality rate was 16.6% and unsafe abortion accounted for 30.8% of all maternal mortality during the period¹⁰. Shah et al¹³ from Karachi also reported sepsis in 79 % patients while perforation in 30 % showing compliance with that of our study results. Shaikh et al¹⁴ from Larkana, Sindh reported 58.3 % hemorrhage which is close to our findings. Rashid et al¹⁵ from Lahore reported around 70 % patients required blood transfusions due to excessive blood loss in these patients. Laghzaoui et al¹⁷ also reported 55.7 % hemorrhage which is close to our study results

Conclusion;

Our study results indicate that unsafe abortion is a major cause of maternal morbidity with hemorrhage was commonest complication followed by septicemia, mostly because the procedure was performed by untrained health care providers under unhygienic conditions. Majority of the patients had multiple complications. There is urgent need to improve quality of services offered by family planning programs and provision of safe abortion services to decrease significant morbidity among targeted population. This will improve their quality of life and also provide relief to health authorities in terms of more investments due to prolonged hospitalizations.

References

1. Cunningham FG, Leveno KJ, Bloom SL, Hauth JC, Rouse DJ, Spong CY, eds. "1. Overview of Obstetrics". Williams Obstetrics (23 ed.). McGraw-Hill Medical ISBN. (2010);vol.978-0-07(149701)5.
2. World Health Organization (2003) Safe Abortion: Technical and Policy Guidance for Health Systems, page 12.
3. Sedgh G, Singh S, Henshaw SK. Induced abortion: incidence and trends worldwide from 1995 to 2008. *Lancet*. 2012;379(9816):625–32.
4. Kamran, Iram, Arif S, Vassos K. "Concordance and discordance of couples in a rural Pakistani village: Perspectives on contraception and abortion—a qualitative study," *Global Public Health*. 2011;6(1):38–51.
5. Abrejo FG, Shaikh BT, Rizvi N. And they kill me, only because I am a girl'...a review of sex-selective abortions in South Asia. *Eur J Contracept Reproductive Health Care*. 2009;14(1):10-6.

6. Gul R, Shah Z, Fikree F, Faizunnisa A, Mueenuddin L. Abortion and post-abortion complications in Pakistan: Report from health care professionals and health facilities. Islamabad, Pakistan: Population Council. 2003.
7. Ganatra B, Tuncalp O, Johnston HB, Johnson BR, Gulmezoglu AM, Temmerman M. From concept to measurement: operationalizing WHO's definition of unsafe abortion. *Bull World Health Organ.* 2014;92(3):155.
8. Kassebaum NJ, Bertozzi-Villa A, Coggeshall MS, Shackelford KA, teiner C, Heuton KR. Global, regional, and national levels and causes of maternal mortality during 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet.* 2014;13:980–1004.
9. Srinil S. Factors associated with severe complications in unsafe abortion. *J Med Assoc Thai.* 2011;94(4):408-14.
10. Abiodun OM1, Balogun OR, Adeleke NA, Farinloye EO. Complications of unsafe abortion in South West Nigeria: a review of 96 cases. *Afr J Med Med Sci.* 2013;42(1):111-5.
11. Gazdar, Haris, Khan A, and Qureshi S. Causes and implications of induced abortion in Pakistan, A social and economic analysis." Research report. Karachi, Pakistan: Collective for Social Science Research. (2012).
12. Pallitto CC¹, García-Moreno C, Jansen HA, Heise L, Ellsberg M, Watts C, et al. Intimate partner violence, abortion, and unintended pregnancy: results from the WHO Multi-country Study on Women's Health and Domestic Violence. *Int J Gynaecol Obstet.* 2013;120:3-9.
13. 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(6):582-6.
14. Shaikh SN, Memon NY, Abro AA, Soomro S, Shaikh RP, Baloch R. Frequency and maternal morbidity associated with complicated cases of unsafe abortion among patients presented at tertiary care hospital, Larkana, Pakistan. *Rawal Med J.* 2014;39(3):303-6.
15. Rashid M, Tariq R. Unsafe abortion : unnecessary maternal morbidity and mortality. *Biomedica.* 2010;26(2):114-7.
16. Siddique S, Hafeez M. Demographic and clinical profile of patients with complicated unsafe Abortion *J Coll Physicians Surg Pak.* 2007;17(4):203-6.
17. Laghzaoui O¹. Inventory of unsafe abortions: retrospective study of 451 cases treated in Moulay Ismail Military Hospital of instruction, Meknes, Morocco. *Pan Afr Med J.* 2016 May 25;24:83. doi: 10.11604/pamj.2016.24.83.8624.