

Maternal Mortality and Induced Abortion

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ABSTRACT

Objective: To find out the maternal mortality ratio in cases of induced abortion.

Study design: Descriptive study.

Place and duration: This study was carried out in Gynaecology Deptt Lady Aitcheson Hospital, from 1st November, 2010 to 30th April 2011.

Patients and methods: The study was conducted six months from 1st November 2010 to 30th April 2011 in Gynaecology Deptt Lady Aitcheson Hospital. A total of 60 patients presented with the history of induced abortion were included in the study. Special proforma was designed to collect the data.

Conclusion: In conclusion, septic unsafe abortion is associated with high ratio of maternal mortalities as it is a preventable condition high degree of commitment of all health personnel for prevention of unsafe abortions is needed.

Key words: Maternal mortality, induced abortion.

INTRODUCTION

WHO has coined a new term “unsafe abortion” characterized by the lack or inadequacy of skills of the providers, hazardous techniques and unhygienic facilities¹. According to WHO, abortions related complications are responsible for around 14% of about half million maternal loss that occur each year, 99% of them in developing countries².

The most common abortion complications are incomplete abortion, sepsis, hemorrhage, perforation of uterus and intra-abdominal injury, if left untreated or immediate management would not be done then can lead to death. Of the estimated 600,000 annual pregnancy related death world wide, about 13% (or 78,000) are related to complications of unsafe abortion.

Mortality due to unsafe abortion is highest in Africa an estimated 680 deaths per 100,000 procedures³. 95% and 99% of all abortions performed in Africa and Latin America are illegal and thus often unsafe. In 1998, 30 unsafe abortions for each 1000 women in Latin America and the Caribbean were performed while the world average is 13% each 1000 and 1 out of 8 deaths related with pregnancy in this region are due to this practice.

Every year some 36.53 million unwanted pregnancies are terminated either legally or clandestinely by unsafe abortion throughout the world. The exact number is not known, as statistics an unsafe abortion are not always reliable due to underreporting even in countries where the practice is permitted and widely accepted, 2nd as there is no

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adequate method to estimate the number of clandestine abortions.

It is estimated that 30-50% of all women undergo at least one unsafe abortion during their lifetime⁴. Deaths related to clandestine abortions represent about one fourth to one-third of the estimated 500,000 maternal deaths that occur each year throughout the world, the vast majority is in developing countries.

Deaths related to unsafe abortion in developing regions are estimated as high as 100 deaths per 100,000 abortions in Latin America, 400 deaths per 100,000 abortions in Africa. In developing countries, complications of unsafe abortions in women cause between 50,000 to 100,000 deaths annually⁵.

PATIENTS AND METHODS

The study was carried out in Gynaecology Department Lady Aitcheson Hospital, Lahore, from 1st November 2010 to 30th April 2011. A total of 60 patients including emergency cases presented with the history of unsafe abortion were included in the study, through history was taken, general physical examination was done to detect signs of anemia, pyrexia, hypotension or shock. Per abdominal and bimanual pelvic examination was performed to detect local signs of incomplete abortion, pelvic sepsis.

All patients were fully investigated including base line investigations, coagulations profile, fibrinogen degradation products and renal function tests where indicated. All patients had abdominal and pelvic ultrasound done.

Patients were treated to achieve hemodynamic stability, correction of anemia, antibiotic cover for control of infections, usually a broad spectrum

antibiotic in combination with metronidazole. Strict vital signs monitoring was done during this period. Medical and surgical units were involved accordingly. Evacuation of uterus was done under general anaesthesia. In severely complicated and emergency cases with injury to genital tract and uterine perforation, laparotomy was performed and repair or hysterectomy done as needed. Surgeon's help was sought when gut involved. Post operative care was given and patients watched closely.

RESULTS

According to result of this study total number of admission in labour room was 1300 out of which 650 were gynaecological patients among them 60 patients of induced abortion 76.66% belong to rural area and 23.33% patients from urban area. Overall rate of induced abortion was 8.61%.

Gestational age was <12 weeks in 50%, in which mortality ratio 15%, 13-18 week in 23%, 19-22 week in 16% and 22-24 weeks in 6% of the cases in which mortality ratio was 85%.

Method of induction used in decreasing number of order was ERPC 50%, IUCD 23%, pharmaceutical agents 16% and herbals in 10%. Induced abortion done by Dai in 50%, lady health visitor in 23%, general practitioner and backdoor clinician in 13% of each.

Mode of presentation was irregular vaginal bleeding (20%), fever (23.32%), vaginal discharge, abdominal pain & bowel complaints (16.67%) respectively, oliguria/anuria (6.67%). Clinical findings were correlated with ultrasound and found to be normal in 33%, free fluid in cul-de-sac in 40%, pelvic mass in 40% and uterine perforation in 23%. The results are tabulated further in details.

Table-I: Area distribution

Area Distribution	=n	%age
Rural Area	46	76.66
Urban Area	14	23.33
Total Patients	60	100

Table-II: Duration of pregnancy/maternal mortality ratio

Gestational Age	=n	%age	n= died	MMR
12 or < 12 wks	30	50	4	15%
13-18 wks	16	23.33	2	15%
19-22 wks	10	16.66	2	20%
22-24 wks	4	6.66	2	50%
Total Patients	60	100	10	100%

Table-III: Method of induction

Method of Induction	=n	%age
Herbals	6	10
Pharmaceutical agents	10	16.66
IUCD	14	23.33
ERPC	30	50
Total Patients	60	100

Table-IV: Abortion services

Abortion services by	=n	%age
Dai	30	50
Lady Health Visitor	14	23.33
General Practitioner	8	13.33
Backdoor Clinician	8	13.33
Total Patients	60	100

Table-V: Presenting complaint

Presenting Complaints	=n	%age
Irregular vaginal bleeding	12	20.00
Fever	14	23.32
Vaginal Discharge	10	16.67
Abdominal Pain	10	16.67
Bowel complaints (vomiting,diarrhea)	10	16.67
Oliguria anuria	4	06.67
Total Patients	60	100

DISCUSSION

In developing countries, like Pakistan, induced abortion is generally undocumented, often ignored and frequently dangerous procedure obtained by millions of women due to religious prohibition. Prevention of unwanted pregnancies must always be given highest priority and every attempt should be made to eliminate the need for abortion. Women who have unwanted pregnancies should have ready access to reliable information and compassionate counseling. In all cases women should have access to quality services for the management of complication arising from abortion.

Almost all patients who presented with full blown picture of septic unsafe abortions were handled by untrained, unqualified personnel like traditional birth attendants, or lady health visitors. These personnel use the herbals and IUCD as method of abortion. The choice of abortion method and abortion services by woman are the major determinant of abortion related problems and complications.

In our study, method of abortion used in frequency of ERPC by 50% of patients IUCD by 23%, pharmaceutical agent by 16% and herbals by 10% of the total patients. Most of the patients denied any

history of intervention because they have no record regarding induced abortion. Abortion is illegal in our country so the providers conceal their activities; when they encounter complications most of the time they refer the patients to the government hospital without any case history needed for the optimal management.

The adverse consequences of the poor technique or the use of contaminated and unsuitable instrument include damage to the reproductive organs, hemorrhage sepsis, septic shock and death. Induced abortion under certain conditions and circumstances could be fatal. In our study the abortion is induced by the dais in 50% cases, lady health visitor (LHV) in 23%, and general practitioner in 13% and backdoor clinician in 13% of the cases. Similar results are given by Lassay AT⁶ in this study where 58% of the abortion is carried out by non-professional outside the health institute as given by Firdous⁷.

In setting where abortion services are not freely available, abortion is best viewed as a process rather than event. Women commonly try several means to end their unwanted pregnancies, first attempting to abort themselves, then using method supplied by various practitioners until something finally works or they give up. Each successive step adds to the cost and dangers, and each failure mean next attempt will occur later in pregnancy⁸.

The commonest complication in our study was post abortion sepsis (30%) followed by hemorrhage (26%), and gut injury (23%). Same results are given by Khanum Z⁹ and Asma Gul¹⁰. Rate of post abortion sepsis is very high because of restrictive legal status, abortion are induced by dais at home with unsterilized instrument and unhygienic condition. In our study there were 10 deaths out of 60 patients all though mortality and morbidity attributable to unsafe abortions, are difficult to assess and estimates have to be based primarily on hospital records available, Death certificates and community based surveys, all three approaches have obvious weakness. Hospital records are not always efficiently kept and may be inaccurate or the clinical finding and causes of death may be falsified in order to protect people, if the social and legal climate is against the abortion. Moreover hospitals receive patients with complications and it is impossible therefore to calculate from this source how many women experience complications and perhaps die without ever receiving medical care¹¹. Death certificates are also unsatisfactory as a source of information as many deaths in developing countries are not registered at all and abortion is unlikely to be specified as the cases of death where this could lead to the involvement with police and judicial system.

CONCLUSION

We conclude that unsafe abortion is associated with fetal condition that leads to death and now-a-days maternal mortality ratio increases due to unhygienic and unsafe methods provided by raw practitioners. Family planning services should be made available to all and different counseling strategies should be adapted according to circumstances. As it is a preventable condition high degree of commitment of all health personnel for prevention of unsafe abortions is needed. Women need to be educated as causes of unsafe abortion are rooted in a complex set of socio demographic circumstances.

REFERENCES

1. Gallo MF, Gebreselassie H, Victorino MT, Dgedge M, Jamisse L, Bique C, An assessment of abortion services in public health facilities in Mozambique: women's and prover's perspective. *Reprod Health Matters* 2004; 12(24 Suppl): 218-26.
2. World Health Organization (WHO), *Abortion: A Tabulation of Available Data on the Frequency and Mortality of Unsafe Abortion*, Geneva, 1999.
3. Creinin MD, Jerald H. Success rates and estimation of gestational age for medical abortion vary with transvaginal ultrasonographic criteria. *Am J Obstet Gynaecol* 1999; 180:35-41.
4. Henshaw SK, Unintended pregnancy in the United States, *Family Planning Perspective*, 1998, 30-24-29 and 46.
5. Jones RK, Darroch JE and Henshaw SK, Patterns in the socioeconomic characteristics of women obtaining abortion in 2000-2001, *Perspectives on Sexual and Reproductive Health*, 2002, 34:-226-235.
6. Lasey AT, Complications of induced abortion. *East Afr Med J* 2001; 72:774-7.
7. Mumtaz F. Maternal Mortality in Induced Abortion *J Coll Physicians Surg Pak* May 1999; 9:215-6.
8. Rehan N. Attitudes of health care providers to induced Abortion in Pakistan. *J Pak Med Assoc* 2003; 53:293-6.
9. Z Khanu, SM Mirza. Induced Abortion and its complications *Ann K E M Coll* 2000;6-4:367-8.
10. Gul A. Maternal Morbidity and Mortality Associated with Criminally Induced Abortion (CIA) – A 10 years review at Lahore General Hospital Lahore. *Ann K E M Coll* 2001; 7:64-6.
11. Ali Ihsan Bozkurt, Birgul Ozcirpici, Servet Ozgur, Saime Sahinoz Induced abortion and effecting factors of ever married women in the Southeast Anatolian Project Region. Turkey; a cross sectional study. *BMC Public Health*. 2004; 4: 65.
12. Henshaw SK, Abortion incidence and services in the United States, 1995-1996. *Fam Plann Perspect* 1998; 30: 263-70,287.
13. Koonin LM. Abortion reporting in the era of medical procedure: why is it important? *J Am med Womens Assoc* 2000; 55(3 Supp): 203-4.

14. Kruse B. Advanced practice clinicians and medical abortion: increasing access to care. *J Am Med Womens Assoc* 2000; 55 (3 Suppl): 167-8.
15. Paul M, Lichtenberg ES, Borgatta L. *A Clinician's Guide to Medical and Surgical Abortion*. New York, NY Churchill Livingstone; 1999.
16. Zhou W, Sorensen HT, Olsen J. Induced abortion and subsequent pregnancy duration. *Obstet Gynaecol* 1999; 94: 948-53.
17. Lazovich D, Thompson JA, Mink PJ. Induced abortion and breast cancer risk. *Epidemiology* 2000; 11:76-80.
18. Major B, Gramzow RH. Abortion as stigma: cognitive and emotional implications of concealment. *J Pers Soc Psychol* 1999 77: 835-45.
19. Cogle JR, Reardon DC, Coleman PK. Depression associated with abortion and childbirth: a long-term analysis of the NLSY cohort. *Med Sci Monit* 2003; 9:CR 105-112.
20. Ikechebelu JI, Okoli CC. Morbidity and mortality following induced abortion in Nnewi, Nigeria. *Trop Doct* 2003;33:170-172.
21. Tullberg BS, Lummaa VV. Induced abortion ratio in modern Sweden falls with age, but rises again before menopause. *Evol Hum Behv* 2001;22 1-10.
22. Singh K, Ratnam SS. The influence of abortion legislation on maternal mortality. *Int J Gynaecol Obstet* 1998; 63 Suppl 1: S123-9.
23. Aiyer AN, Ruiz G, Steinman A, Ho GY. Influence of Physician attitudes on willingness to perform abortion. *Obstet Gynaecol* 1999; 93(4): 565-80.
24. Thaver I H, Lalji N. Seeking HELP for Abortion: Problems in accessibility and quality in family planning services *J Coll Physicians Surg Pak* Jan 1999;9:8-10.
25. Fikree FF, "The Emerging Problem of Induced Abortions in Squatter Settlements of Karachi, Pakistan. "Seminar on Socio-Cultural and Political Aspects of Abortion from an Antihropological Perspective, trivandrum, India, 1999.