Complications and Management of Unsafe Abortion

Abida Sajid, Samia Malik

Abstract

Objective: To determine the frequency of unsafe abortion and its morbidity and mortality in patients presenting at Lady Aitchison Hospital Lahore (KEMU Lahore).

Study Design: Descriptive study.

Place and Duration of study: Department of Obstetrics and Gynecology, Lady Aitchison Hospital Lahore, from 1st January 2006 to 31st December 2010.

Patients and Methods: All patients with history of induced abortion were admitted. The particulars related to each case like age, marital status, parity, reason for requesting abortion, place and expertise of person carrying out the procedure and outcome were recorded. Once patient arrived in our unit detailed examination was done and relevant investigations sent. After primary resuscitation and optimization, the patients were managed according to their complications in collaboration with general surgical department.

Results: 120 mostly young ladies with age range of 17 to 47 years and mean age of 30.76 years, presented with complications of induced abortion. 110 patients were married and 10 were single mothers. 30 patients (25%) were nullipara and remaining 90 (75%) were having 5 or more children. Only 14 out of 120 patients were booked cases, who underwent elective therapeutic medical termination of pregnancy (for foetal congenital anomalies in 10 cases and maternal grade III cardiac disease in 4 cases) They had no complication. 106 patients presented with induced and unsafe abortion. They were referred cases, and had multiple complications. 4 patients were brought dead and two patients died during pre-operative resuscitation. 3 patients died post operative due to septicemia. Out of remaining 100 patients, 12 (10%) were managed conservatively, 50 (50%) had re-evacuation and 38 (38%) underwent exploratory laparotomy. Ileal perforation was found in 11 cases. These were treated by primary repair and resection and anastomosis (4 cases each) and ileostomy in 3 cases. Sigmoid perforation was found in 5 cases and managed by distal end colostomy. Repair of uterine perforation only was done in 11 cases. Hysterectomy was performed in 11 patients. In 34 patients peritoneal toilet was also done. Overall mortality was 9.6% (10).

Conclusions: Our study shows high morbidity and mortality associated with induced unsafe abortion in the form of prolonged hospital stay, multiple blood transfusions, laparotomies, hysterectomies that compromises the future fertility of young patients.

Key words: Abortion, Induced abortion, unsafe abortion. Complications

Introduction
Abortion is defined as expulsion or extraction of a fetus (embryo) weighing less than 500 gm at or before 24 weeks of pregnancy (WHO). Induced abortion is defined as the elective termination of pregnancy at or before 28 weeks of pregnancy by medical or surgical means. It is most common gynecological procedure. It is associated with few complications when performed in safe conditions and skilled hands.\textsuperscript{1,2} WHO defines unsafe abortion as a procedure for terminating an unintended pregnancy carried out either by a person lacking the necessary skill or in an environment that does not conform to minimal medical standards or both.\textsuperscript{1,3}

The induced abortion seems to have a significant effect on maternal morbidity and mortality in the developing countries which has caused reemergence of interest in abortion research in this part of the world.\textsuperscript{4}

Like other developing countries illegally induced abortion is one of the major cause of maternal mortality and morbidity in Pakistan.\textsuperscript{5}

The number of induced abortion declined worldwide between 1995 and 2003 46 millions to 42 millions. About 15\% to 20\% of pregnancies worldwide end in abortion\textsuperscript{6} for every 1000 women of child bearing age (15 – 44) 29 had IA in 2003 verses 35 in 1995.\textsuperscript{6}

Women likelihood of having abortion is similar whether she lives in a developed or developing region.\textsuperscript{6} The people of Pakistan are now trying to keep small family size because of evident social and economical problems.

Poverty child labour lack of knowledge, misconception about contraception, lack of resources, early marriages, multiparity, illegitimate pregnancy and consulting untrained and unskilled birth attendants are major background factors leading patients to resort unsafe, illegally induced abortions in Pakistan. The methods used for illegal abortion are usually dangerous and done by untrained and unskilled personnel. An estimate of 40 – 50\% of all pregnancies are unintended and resulting in higher number of induced abortion per year. This study was conducted to find the causes, modes of induced abortions and morbidity and mortality resulting out of it.

Patients and Methods
it is a Descriptive study and carried out in department of Obstetrics and Gynaecology, Lady Aitchison Hospital, Lahore from 1\textsuperscript{st} January 2006 to 31\textsuperscript{st} December 2010. All patients with history of induced abortion were admitted. The particulars related to each case like age, marital status, parity, reason for requesting abortion, place and expertise of person carrying out the procedure and outcome were recorded. Once patient arrived in our unit detailed examination was done and relevant investigations sent. After primary resuscitation and optimization, the patients were managed according to their complications in collaboration with general surgical department.

Results
The total number of gynaecological admission during 5 – years were 8270. The total number of abortion were 2442. The overall frequency of abortion was 30.33\%. Their age ranged from 17 – 47 year, mean age being 30.7 years. Most of the patients were married and only 10 were single. Thirty (25\%) were nullipara and 70 (50\%) had 5 or more children.

The total number of induced abortions was 120 referred cases were 106 (88\%)while booked cases were 14 (12\%). These 14 patients medical termination of pregnancy for fetal congenital anomalies in 10 (8.4\%) and maternal cardiac disease in 4 (3.3\%) cases. These 14 patients had no complication.

Out of 120 patients with induced abortion 106 (88.3\%) had some surgical intervention and were referred to Lady Aitchison with complications.

The clinical presentation was given in table 1. Ten (10.2\%) patients were managed conservatively by bro-

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<th>Table 1: Induced Abortion referred cases. N + 52.</th>
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<tr>
<td>Morbidity and Mortality</td>
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<td>Retained Products of Conception</td>
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<tr>
<td>Uterine perforation</td>
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<td>Blood Transfusion</td>
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ad spectrum antibiotics and blood transfusions. Fifty patients (50%) had their uterus evacuated for retained product of conceptions. In (38) 38% patients exploratory laparotomy was done and general surgeon was involved. 11 (10%) Patients had ileal perforation. Four of these were treated by primary repair. In four cases ileal resection and anastomosis was done. Ileostomy was done in three cases. Sigmoid colon was found perforated in 5 patients and managed by colostomy. Twelve patients had pelvic abscess/peritonitis so drainage and peritoneal toilet done. Eleven patients each underwent uterine repair and hysterectomy. The mean hospital stay was 7 – 14 days. Ten patients died. Two mothers brought dead with intestine hanging out of vagina, the other 3 with intestine visible at the vagina were brought in septicemic state one died before any intervention, two died of sepsis 30 hours after colostomy. One pt had laparotomy could not come out from anaesthesia and kept on ventilator, died after 24 hours Two patients were died due to hemorrhagic and because septic shock.

### Discussion

Every year about five Lac women die because of complications of pregnancy and child birth and 99% occur in the developing countries. Illegally induced abortion is one of the five major causes of these deaths.8 Most of the pregnancies are unplanned, unwanted, or illegitimate and hence illegal termination of such pregnancies is resorted to. They seek help from friends or go to traditional healers or ubiquitous women or buy and take the abortifacient. This may be successful or may result in major complications, like hemorrhage, infection / sepsis, incomplete expulsion, perforation, organ failure, chronic pelvic inflammatory disease, infertility maternal psychological trauma and long term tragic sequela or even death of the patient.9

The overall abortion rate declined, but the proportion of unsafe abortion has increased from 44% to 47%.10 Worldwide 48% of all abortions are unsafe. More than 95% of abortions in Africa and Latin America, and 60% of abortions in Asia (excluding Far East) are performed in unsafe circumstances. The mean age of women was 30.7 years matching with a study carried out in Pakistan and India.11,12 In a study from Nigeria it has been observed that induced abortion has been rising among young students less than 25 years of age.13 The trend for induced abortion is rising in women between 20 – 24 years in Norway and Brazil.14 In our study the sufferers are older women in contrast to western studies where majority are teenage girls. 92% of our patients are married and multipara.15,16 This correlates with many studies in the Pakistan and Kenya where as western studies show mostly premarital pregnancies and single mothers.15-17

The commonest complication at presentation was incomplete abortion (52%) which is almost same (42.8%) as reported in a study in west of Pretoria.18 The second common complication was blood loss that require blood transfusion in 60 (50%) cases and massive haemorrhage in 26%. This is also common in legal termination of pregnancy 1.5 – 8.5 / 1000. Infection and sepsis is the third common finding in 38 patients requiring broad spectrum antibiotics and had prolong hospital stay. The most serious complication is uterine perforation, cervical and vaginal tear with or without intestinal involvement. In our series we had 42.5% of uterine perforations. These perforations were either alone in 20 (19%) cases or associated with ileal injury in 11 (10%) cases and sigmoid injury in (5%) cases, this matches with other studies.11,16-19

The most tragic result of unsafe abortion is death. We had 10 (9.4%) mortality as compared to 7.5% in a study carried at Peshawar and 2.2% in a study16,19,20 at USA. The MMR due to septic induced abortion in rural India was 41.9% in Ludhiana, a city of Northern India.21-23 Studies from most of the African countries indicate 50% mortality rate of mothers due to abortion and its sequelae and it is 1.2% in USA in the year 1992. Illegally induced abortion are responsible for 35% maternal mortality in Nigeria and sepsis is the commonest cause of death.22,23 Sex education has neither increased the contraception rate nor decreased the incidence of TOP. The reasons why women do not use contraceptives, are concerns about possible health risks and various side effects.24 In spite of contraceptive awareness, TOP is still advance.17,24

### Conclusion

The study shows that morbidity and mortality of induced abortion is 88% and 9.4% respectively. The patients had Laparotomy colostomy, hysterectomy with prolonged hospital stay and the obstetric future of the
patients was compromised. Therefore we recommend use of effective contraceptive methods to help reduction of unwanted pregnancy.

Reference

5. Zaidi S, Mastoor, Fatima H. Parveen. Maternal deaths in induced abortions. In proceeding of workshop on maternal and perinatal health at Peshawar, Pakistan in 1993; under the auspices of AOFOG.