ORIGINAL ARTICLE

SEPTIC/UNSAFE ABORTION: A PREVENTABLE TRAGEDY

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Background: Unsafe abortion is one of the greatest neglected problems of health care in developing countries like Pakistan. In countries where abortions are restricted women have to resort to clandestine interventions to have an unwanted pregnancy terminated. The study was conducted to find out the prevalence of septic induced abortion and the associated morbidity and mortality and to highlight the measures to reduce it. **Methods:** This cross-sectional descriptive study was carried out in Obs/Gyn B Unit, Ayub Teaching Hospital, Abbottabad from January 2007 to December 2011. During this period all the patients presenting with pyrexia lower abdominal pain, vaginal bleeding, acute abdomen, septic or hypovolaemic shock after undergoing some sort of intervention for abortion outside the hospital were included. After thorough history, examination and detailed investigations including high vaginal and endocervical swabs for culture and sensitivity and pelvic ultrasound supportive management was given followed by antibiotics, surgical evacuation of uterus/ major laparotomy in collaboration with surgeon as required. Patients with DIC or multiple system involvement were managed in High Dependency Unit (HDU) by multidisciplinary team. **Results:** During the study period out of a total 6,906 admissions 968 presented with spontaneous abortion. There were 110 cases (11.36%) of unsafe abortion, 56.4% presented with vaginal discharge, 34.5% with vaginal bleeding, 21.8% with acute abdomen, while 18.9% in shock and 6.8% with DIC. Forty-nine percent patients used termination as a method of contraception. Mortality rate was 16.36%, leading cause being septicaemia. **Conclusion:** Death and severe morbidity from unsafe abortions and its complications is avoidable through health education, effective contraception, early informed recognition and management of the problem once it occurs.

Keywords: Abortion, unsafe, septic, DIC, Prevention

INTRODUCTION

Septic abortion or unsafe, abortion is associated with infection and complicated by fever, endometritis, and parametritis or an unsafe abortion is the termination of the unwanted pregnancy by persons lacking the necessary skills, or in an environment lacking minimal medical standards. It is one of the most serious threats to the health of women throughout the world.[1–3] Morbidity and mortality from septic abortion is widespread but is more common in many developing countries like Pakistan where abortion is considered either illegal or services are inaccessible.[4,5] The risk of death is highest from postabortion sepsis especially in young nulliparous women and those who undergo procedures that do not directly evacuate uterine contents.

With more advanced gestation, there is a higher risk of uterine perforation and retained tissue. A delay in treatment allows infection to progress to bacteraemia, pelvic abscess, septic pelvic thrombophlebitis, disseminated intravascular coagulopathy, septic shock, renal failure, and death.[6–10] The exact figures of septic induced abortion are difficult to determine because all the patients do not attend the hospital. Only those ending up in some serious problem seek hospital advice.

This study was aimed to find out the prevalence of septic induced abortion and associated morbidity and mortality, and to highlight the measures to reduce it.

MATERIAL AND METHODS

This cross-sectional descriptive study was conducted at Obs/Gyn Unit of Ayub Teaching Hospital from 2007 to 2011. The study included all women with pyrexia, pain in abdomen, vaginal bleeding, acute abdomen, septic and hypovolaemic shock after having some sort of intervention for abortion outside the hospital. A thorough history was taken and sociodemographic data were collected to see the reasons of abortion, the method used, and prior knowledge of contraception.

A thorough general, systemic and pelvic examination was performed. Baseline investigations including ultrasound for retained products of conception and high vaginal/cervical swab, for culture and sensitivity were also sent. In cases of acute abdomen X-ray abdomen in erect posture were taken to rule out gut perforation. Supportive management was done as indicated including analgesics, antipyretics and antibiotics which later were reviewed according to C/S report. Patients were managed conservatively if there was no evidence of retained products in the uterus. Those with incomplete abortion were managed with evacuation and curettage. Patients with pelvic collection or with evidence of bowl injury underwent laparotomy; surgeons were always involved in the repair of intestinal injury. Patients with renal failure and DIC were

managed by multi-disciplinary team including heamatologists, nephrologists and physicians.

RESULTS

During the study period, 6,906 cases of gynaecology attended the Unit. Out of these, 968 (14.02%) patients presented with spontaneous and unsafe abortion. There were 110 (11.36%) cases of unsafe abortion who were admitted with complication after undergoing some sort of intervention outside the hospital. Majority (49%) of the patients who presented with unsafe abortion were grand multigravida and were in the age range of 20–40 years (Table-1).

Table-2 shows the reason for abortion. Forty-nine percent patients chose termination as a means to limit their family while 18.9% were ignorant about the use of contraceptives.

Table-3 shows the clinical presentation of the patients. Majority of the patients presented with overlapping symptoms of purulent vaginal discharge (56.4%) and vaginal bleeding (34.5%). Acute abdomen was the presenting symptoms in 21.8% while 18.9% patients came in shock. Nine percent patients had haematometra while 6.4% develop Disseminated Intravascular Coagulation (DIC).

Table-4 shows management of the patients. Majority (57.3%) of patients had incomplete abortion and required repeat Evacuation and Curettage. There were 20.9% patients who were managed medically with antibiotic and blood transfusion, while 21.8% patients required laparotomy, 7% required repair of uterine perforation, 4% needed bowl surgery, 4% had drainage of pelvic abscess, and 3% cases needed total abdominal hysterectomy with bilateral salpingo-oophorectomy.

There were 55 maternal deaths during the study period; out of these, 9 (16.36%) patients died due to unsafe abortion. Causes of these maternal deaths are shown in Table-5.

Table-1: Parity and ages of the patients

	Number	Percentage
Parity		
Primegravida	10	9.0
Multigravida	46	41.8
Grandmultigravida	54	49
Age		
<20 years	20	18
20 to 30 years	44	40
31 to 40 years	46	41.8

Table-2: Reason for abortion (n=110)

Reasons	Number	Percentage
Unwanted pregnancy	10	9
Family Complete	54	49
Reluctant to use contraception	14	12.7
Failure of contraception	12	10.9
Contraceptive Unawareness	20	18.9

Table-3: Clinical Presentation (n=110)

Presentation	Number	Percentage
Vaginal Bleeding	38	34.5
Purulent Discharge	62	56.4
Acute Abdomen	24	21.8
Shock	20	18.9
DIC	07	6.4
Haematometra	10	09

Table-4: Management (n=110)

Methods	Number	Percentage
Medical	23	20.9
D & C	63	57.3
Laparotomy	24	21.8
Repair of uterine perforation.	10	.07
Bowl surgery	5	0.04
Drainage of pelvic abscess	5	0.04
TAH+BSO	4	0.03

Table-5: Mortality (n=9)

Reason	Number	Percentage
Septic shock	4	44.4
Renal failure	3	33.3
DIC	2	22.2

DISCUSSION

Unsafe abortion remains a primary cause of maternal mortality in the developing world, mostly as a result of illegal abortions. According to the WHO, about 68,000 women die each year due to complications from unsafe abortions with sepsis as the main cause of death. Worldwide, some 20–30 million legal abortions are performed each year, with another 10–20 million abortions performed illegally. Illegal abortions are unsafe and account for 13% of all deaths of women because of serious complications.[11] A hospital based survey of 30 private and public hospitals in Pakistan showed that 11% of maternal deaths were attributed to induced abortions.[4] In our study the mortality rate was 16.37%. The leading cause of death was septicaemia and its complications like endotoxic shock, renal failure and DIC. The reasons for abortion in our study were:

- Complete family
- Less birth spacing
- Contraceptive failure
- Myths and cons regarding use of contraception
- Unwanted pregnancy
- Poverty
- Lack of nearby medical facilities even for legal abortions like missed or incomplete
- Unethical practices on the part of health care givers

In developed countries mortality from abortion has been drastically reduced from 1940 to 1976 due to effective contraception and legalisation of abortion. The high morbidity and mortality associated with unsafe abortion in our society can be reduced by:

Primary prevention: Provision of effective and acceptable contraception, provision of safe and nearby

abortion services for legal abortion, and appropriate management of abortion.

Secondary prevention: It entails prompt diagnosis and effective treatment of endometritis. Keep high level of suspicion for septic abortion if a woman of reproductive age presents with vaginal bleeding, lower abdominal pain and fever. Eradicate the infection, empty the uterus, and perform laparotomy/total abdominal hysterectomy for suspected uterine clostridial sepsis if needed.

Tertiary prevention: Eradication of severe sepsis, supportive care for CVS and other organs involved in High Dependency Unit.

CONCLUSION

Serious complications and death from unsafe abortions are almost entirely avoidable. This can be achieved by proper health education, effective contraception, and regular inspection and monitoring of the registered clinics for minimal sterilisation standards, and early and prompt recognition and management of the problem once it occurs.

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