

## SEPTIC INDUCED ABORTION— THE PREVALENCE, LOGICS AND COMPLICATIONS

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*This study was conducted at Jinnah Hospital, Lahore during the period of one year from January 2003 to December 2003. The purpose of the study was: to determine the prevalence of the problem in gynaecological patients, to identify the reasons for seeking abortion, and lastly to assess the range of complications. Out of 6036 gynaecological patients, 102 (1.69%) were presented with a septic induced abortion. Among these, 68 patients (66.6%) had more than 3 children, 10 women (9.8%) were unmarried, 12 patients (11.76%) had contraceptive failure, whereas 22 women (21.57%) were totally unaware of the contraceptive measures. Fifteen patients (14.7%) were cured by medical treatment, 63 (61.7%) required evacuation and curettage for retained product of conception, whereas 24 patients (23.5%) required laparotomy and one necessitated hysterectomy for irreparable damage for the uterus. The common reason was found to be the lack of adequate contraceptive awareness.*

### INTRODUCTION

Septic induced abortion is a recognized cause of maternal mortality and morbidity in developing countries. Maternal mortality is a sensitive index of judging standards of obstetrical care, health, socio-economic status, as well as child / maternal health care level of a country.

It is estimated that 585000 women (1 per minute) die every year, as a result of pregnancy and child birth<sup>1</sup>. Complications of illegal abortion account for a large number of deaths in developing countries (population report 1980). An estimated 150,000 – 200,000 women all over the world die every year following illicit abortion<sup>2</sup>. Exact figures of illegally induced abortion are not available from Pakistan as most of the abortions are conducted by untrained medical persons or traditional birth attendants at informal abortion clinics. The exact magnitude of the problem is difficult to estimate because only patients with serious problems after induced abortion reach the hospital for management. Sepsis after illegally performed abortion occurs mostly when inadequate surgical evacuation is during the first trimester that by an untrained birth attendant, in the absence of proper sterilization<sup>3,4</sup>. Such mishandled cases mostly end up in sepsis, perforation of uterus and intestines, renal failure and disseminated intravascular coagulation. Infection is usually confined to uterine cavity, but it may also spread to other pelvic organs and to general circulation. <sup>5</sup>So a wide range of presentations are encountered in the gynaeco-

logical clinics and emergency. This study was aimed at determining the prevalence of the problem, to know the reasons for requesting abortion, to assess the range of complications with which the women were presented.

### MATERIAL AND METHODS

This study was conducted at Jinnah Hospital Lahore, from January 2003 to December 2003. The study comprised of patients presenting with septic induced abortion in out patient department and emergency. All women with the process of abortion having pyrexia are considered a case of septic abortion. Therefore the patients presented with signs and symptoms ranging from pyrexia, pain in abdomen, vaginal bleeding to acute abdomen and shock after induced septic abortion. The patients presenting with pyrexia but no evidence of retained products of conception clinically and on ultrasonography were managed medically as out patients.

Other patients diagnosed having retained products of conception, or with more severe symptoms, were admitted. Detailed history was taken to know the reasons for requesting abortion and to assess the knowledge of the patient regarding the use of contraceptive method.

Patients were thoroughly examined including general, systemic and pelvic examination. All base line investigations were performed including high vaginal / cervical swab, for culture and sensitivity.

Ultrasonography was done for retained products of conception, for evidence of uterine perforation, free fluid in peritoneal cavity and for any foreign body. In cases presenting with signs and symptoms of peritonitis, an X-ray abdomen, in an erect position was taken and surgical opinion was also sought.

After the admission, supportive management was initiated, injectible antibiotics were started after taking high vaginal swab for culture and sensitivity. Specific treatment was started according to the investigations and clinical presentation. In case of intestinal or large bowel injury, end to end anastomosis or colostomy had to be performed in collaboration with the surgeon.

## RESULTS

During the study period, 6036 women presented with gynaecological problems, out of these 102 (1.69%) came with the diagnosis of induced septic abortion. Results were analyzed on the basis of age, parity, reason for abortion, clinical presentation and management done. It was noticed that 21 (20.59%) patients were under the age of 25, fifty (49.02%) were greater than the age of 35 and 31 women were between 26 – 35 years (Table 1). As regards parity, 15 (14.70%) patients were nullipara, 29 (28.4%) had 1-3 children and 68 (66.6%) patients had more than three children (Table 2).

**Table 1:** Ages Group ( $n = 12$ ) in 102 cases.

Age (yrs)	No. of Patients	%
15 – 25	21	20.59
26 – 35	31	30.39
> 35	50	49.02

**Table 2:** Parity in 102 cases.

Parity	No. of Patients	%
Nullipara	15	14.70
1 – 3	29	28.43
> 3	68	66.66

While analyzing the reasons for seeking abortion, it was found that abortion was requested by 10 (9.8%) unmarried women, while 39 (38.23%) patients were those who completed their family

and did not have the desire for another baby. Fourteen (13.72%) women gave the reason that their last born was too small. Regarding contraception, 12 (11.76%) patients had contraceptive failure, while 22 (21.57%) women were unaware of contraception. Marital disharmony was the reason in 5 (4.9%) women (Table 3).

**Table 3:** Reason for Abortion ( $n = 102$ ).

Reasons	No. of Patients	%
Unmarried	10	9.80
Family Complete	39	38.235
Small Last Born	14	13.72
Failure of Contraception	12	11.76
Contraceptive Unawareness	22	21.57

**Table 4:** Clinical Presentation ( $n = 102$ ).

Presentation	No. of Patients	%
Vaginal Bleeding	38	37.25
Purulent Discharge	58	56.86
Acute Abdomen	24	23.53
Shock	13	12.75
Anuria	7	6.86

Clinical presentation was variable, 92 (90.19%) patients presented with fever, it was accompanied by vaginal bleeding in 38 (37.25%) patients. Purulent vaginal discharge was present in 58 (56.86%). Twenty four (23.5%) patients presented with acute abdomen whereas 13 (12.7%) came in a state of shock, 7 patients developed anuria and were referred to the urology department (Table 4).

**Table 5:** Management ( $n = 102$ ).

Method	No. of Patients	%
Medical	15	14.70
D & C	63	61.76
Laparotomy	24	23.52

**Table 6: Intraoperative Findings (n = 24)**

Finding	No. of Patients	%
Uterine Perforation only	11	45.83
UP+ Intestinal Injury	S-5 L-2	20.83 8.33
UP+ Pus in abdomen	5	20.83
UP+ Foreign body	1	4.167

UP = Uterine Perforation.

**Table 7: Procedures (n = 24).**

Procedure	No. of Patients	%
Repair of perforation	11	45.83
Resection & anastomosis	2	8.83
Repair of small gut	3	12.5
Colostomy	2	8.33

Analysis of the management results showed that medical treatment was carried out in 15 (14.7%) patients, whereas 63 (61.76%) necessitated evacuation of the uterus for retained products of conception. Laparotomy was done in 24 (23.52%) women for persistent peritonitis or any evidence of perforation of uterus and/or gut injury (Table 5). One patient required hysterectomy for irreparable damage. Intra operative findings in these 24 laparotomies showed uterine perforation alone in 11 (45.83%) cases. Small gut injury in 5 (20.83%) cases, large gut injury in 2 (8.33%) cases. 5 (20.83%) patients had pus in abdomen. Foreign body was found in 1 patient. Uterine perforation was repaired in 11 (45.83%) cases, whereas in 54.17% cases the perforation was already sealed (Table 6). Resection of small gut and anastomosis was performed in 2 (8.83%) cases, and repair alone was done in 3 (12.5%) cases, while colostomy had to be done in 2 (8.83%) cases (Table 7). Out of these 102 patients, 12 (11.76%) died due to septicaemia.

## DISCUSSION

Abortion is not legal in our religion and in Pakistan, in addition there is a social and cultural resentment against it. Therefore unplanned pregnancies are managed by termination in a confi-

dential manner. Therefore to do so people fall prey to unqualified and inexperienced people who perform such illegal procedures under substandard unhygienic places. This secretive nature and the fear of revealing it is the main cause of delayed arrival of these patients in the hospital with advanced complications of induced abortions such as septicaemia and shock.

In our study, 98.8 % of the induced abortions were during the 1<sup>st</sup> trimester of pregnancy which was in contrast to the observation made by Zafar et.al<sup>6</sup> where 94% of therapeutic abortions were in the 2<sup>nd</sup> trimester. This reflects in our study the urgency to get rid of the situation and a demand of larger sums of money by established clinics for doing such an unlawful act, which compels these women to go to substandard un-hygienic places with untrained unqualified staff.

Emphasis on the use of contraception is the main factor responsible for reduction in the number of unplanned pregnancies in high risk groups (teenagers, elderly women of high parity), which are 61.75% of the patients in our study. Therefore for our population, contraception is the best preventive care offered to reduce the incidence of septic abortion and its resulting mortality and morbidity.

Contraceptive prevalence rate in Pakistan is only 17.8%<sup>7</sup>. In the present study it was also noticed that those who were practicing contraception, faced contraceptive failure (33.3%) because of lack of proper knowledge of contraceptive methods, this further emphasises the role of proper contraceptive counselling to patients after delivery to obtain good results. More than 200,000 women die each year due to unsafe abortion<sup>8</sup>. In our study the mortality was 11.76% and the major cause was, septicaemia and its complications.

In developed countries, as abortion is legal, there, people do not fall prey to untrained personnel, and those who seek abortion have easy access to proper clinics. Moreover, the problem of sepsis has also been overcome by improvement in health care facilities, education and training of women.

Therefore educational campaigns on pregnancy prevention not only for fertile females but also for senior male and female members of the family for facilitating contraception rather than an antagonistic approach against family planning should be prorogated. Besides easy access to reliable contraceptive measures, proper training and continuing education for awareness on abortion and its complications might help to reduce the magnitude of this problem though to a little extent. Regular inspection and monitoring of reg-

istered clinics to ensure (minimal illegal practices and) standard hygienic conditions for those who seek advise for therapeutic abortions is necessary.

### CONCLUSION

Maternal mortality from septic induced abortion is preventable by adequate knowledge, adequate provision and utilization of contraception and this needs mass education.

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Septic abortion, an infected abortion complicated by fever, endometritis, and parametritis,<sup>1</sup> remains one of the most serious threats to women's health worldwide. Although morbidity and mortality from septic abortion are infrequent in countries in which induced abortion is legal, suffering and death from this process are widespread in many developing countries in which abortion is either illegal or inaccessible. Septic abortion is a paradigm of preventive medicine, relating to all levels of prevention — primary, secondary, and tertiary.<sup>2</sup> In the past, obstetricians/gynecologists were often the e