

MATERNAL MORTALITY AND MORBIDITY DUE TO INDUCED ABORTION IN HYDERABAD

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ABSTRACT

OBJECTIVES: To determine the maternal mortality and morbidity due to induced abortion in our set up.

STUDY DESIGN: Descriptive case series.

SETTING: Department of Obstetrics and Gynaecology (Unit-III) Liaquat University Hospital Hyderabad, Sindh from July 2001 to July 2004.

PATIENTS AND METHODS: Medical records of patients with complications of termination of pregnancy were analyzed retrospectively. All patients with history of induced abortion who presented within 40 days of termination of unwanted pregnancy were included in study. Patients with habitual or spontaneous abortion or who were admitted after 40 days of induced abortion were excluded.

RESULTS: During study period, total admissions in this unit were 3015. Among these, 498 patients presented with different types of abortion. Of these 498 patients, 32(6.42%) presented with history of complication of induced abortion and were included in study. Among these cases, 21(65.6%) patients were in age group 20-40 years; 9(28.12%) below 20 years and 2 (6.25%) above 40 years. Nine (28.12%) patients were primigravidae, 4(12.5%) multipara while 19 (59.37%) were grand multipara. Twenty-four (75%) patients were admitted with sepsis, 5(15.62%) with visceral injury and 3(9.37%) with haemorrhage. Ten (31.25%) patients underwent hysterectomy due to septic perforated uterus while 7(21.87%) patients expired due to complications of induced abortion.

CONCLUSION: Induced abortion for termination of unwanted pregnancy is a major cause of maternal morbidity and mortality in our set up.

KEY WORDS: Maternal mortality. Maternal morbidity. Termination of pregnancy. Induced abortion.

INTRODUCTION

Maternal mortality and morbidity reflect the quality of health care provided to women. Global statistics of maternal mortality estimates more than 600,000 deaths every year¹ and over 99% of these deaths occur in developing countries which account for about 85% of world births.² There are 16 episodes of illness for every maternal death.³ Women experience more than 50 million health problems annually. Major causes of maternal morbidity and mortality are sepsis, haemorrhage, genital tract trauma, thrombo-embolism and hypertensive disorders of pregnancy. According to World Health Organization estimates, on average 10-20 million women risk their lives annually by subjecting themselves to termination of pregnancy. Abortion is legalized in developed countries. Medical termination in first trimester is legal in India while menstrual regulation in Bangladesh.⁴ In Pakistan, although the contraceptive prevalence rate has increased from 9% to 24%⁵, yet majority of women is unaware of different contraceptive methods available and induction of abortion is prohibited by law except to save the life of

mother. Under the circumstances, many women facing problem of an unwanted pregnancy do resort to induced abortion usually by an unskilled person resulting in serious complications. Different hospital based studies show that maternal mortality due to induced abortion in Pakistan ranges between 10-11% of all maternal deaths.⁶ The aim of this study was to find out maternal mortality as well as morbidity related to induced abortion for termination of unwanted pregnancy in our set up.

PATIENTS AND METHODS

This descriptive study was carried out from 15th July 2001 to 14th July 2004 at department of Obstetrics and Gynaecology (Unit III), Liaquat University Hospital, Hyderabad - Sindh. All patients with gestational age less than 22 weeks, with history of induced abortion carried out by skilled or unskilled persons admitted in unit during study period were included. The case records of all patients who either died or developed complications within 40 days of induced abortion for

unwanted pregnancy during study period were scrutinized. The variables analyzed were age, parity, status of abortionist, type of complication (organ failure, surgical procedure required) and cause of death. Patients with history of habitual or spontaneous abortion or who were admitted after 40 days of induced abortion or who died or suffered illness due to incidental causes were excluded from study. Causes of deaths were based on clinical findings and investigations because post mortem examination was not allowed by relatives. Data were entered into SPSS version 10.0 and analyzed.

RESULTS

Total 32 patients were included in study, out of which, 65.6% were in age group of 20-40 years with grand multipara comprising of 59.37% (Table I). There were 71.87% married cases while 28.12% unmarried. Most of the abortions were carried out by lady doctors (Table II). Among these, 75% cases were admitted with sepsis, 15.62% with visceral injuries and 9.37% with haemorrhage (Table III). In 29 (90.63%) patients, termination was carried out in private clinics. Twenty-seven (84.37%) patients needed surgery (Table IV). Seven (21.87%) patients died and the main cause of deaths was sepsis in about 75% cases (Figure I).

**TABLE I:
AGE AND PARITY STATUS OF STUDY SUBJECTS
(n=32)**

Variable	Number of Patients	Percentage
Age in years		
< 20	09	28.12%
20-40	21	65.6%
> 40	02	6.25%
Parity		
0	09	28.12%
2-4	04	12.5%
> 5	19	59.37%

**TABLE II:
STATUS OF ABORTIONIST**

Status	Number of Patients	Percentage
Lady Doctor	19	59.37%
Lady Health Visitor	10	31.25%
Traditional Birth Attendant	03	9.37%

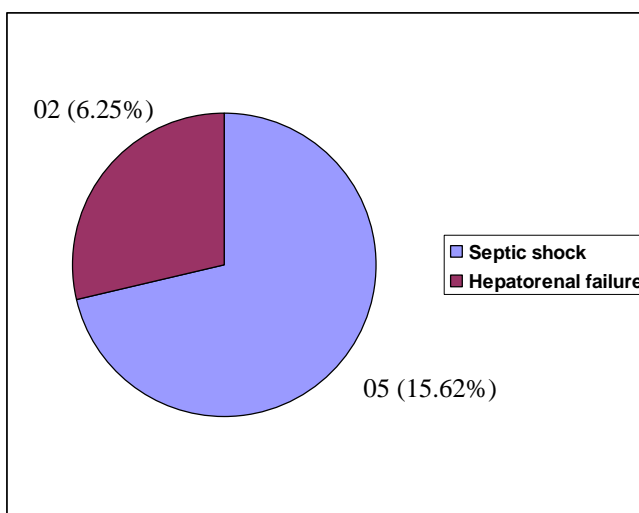
**TABLE III:
TYPE OF COMPLICATION (n=32)**

Complication	Number of Patients	Percentage
Sepsis	24	75%
Visceral injuries	05	15.62%
- Uterine perforation	03	9.37%
- Combine uterine + gut perforation	02	6.25%
Haemorrhage	03	9.37%

**TABLE IV:
DISTRIBUTION OF MANAGEMENT OPTIONS IN STUDY SUBJECTS**

Management Option	Number of Patients	Percentage
SURGERY	27	84.37%
a) Laparotomy	19	59.37%
- Hysterectomy	10	31.25%
- Hysterectomy along with gut surgery	02	6.25%
- Drainage of pus and peritoneal toilet	07	21.87%
b) Colpotomy	03	9.37%
c) Evacuation of uterus	05	15.62%
d) CONSERVATIVE	05	15.62%

**FIGURE I:
CAUSATIVE FACTORS FOR DEATHS**



DISCUSSION

Maternal mortality and morbidity are one of most neglected problems of health care in developing coun-

tries, where these are 100 times higher than developed countries. Each year, 46 million women around the world undergo abortions. Twenty-six million women who undergo abortion do so in countries with liberal abortion laws. Remaining 20 million undergo abortion in countries where abortion is either restricted or illegal.⁷ According to a World Health Organizations' study in year 2000, one in ten pregnancies ended in unsafe abortion.⁸ Everyday, 55000 unsafe abortions take place, 95% of them in developing countries.⁹ In developing countries, complications of unsafe abortions cause between 50,000 and 100,000 women's death annually. The proportion of maternal mortality due to abortion related complications range from 8% in Western Asia to 26% in South America, with world wide range of 13%.⁸ Besides, maternal deaths, unsafe abortion can cause serious and long-term damage to women's health. Between 10-50% women who undergo unsafe abortion, need medical care for complications.⁹ In Pakistan, there is little information available on the rates of abortion including induced abortion. In this society contraception is also scarcely practiced and abortion is illegal, so back street abortions are very common. Frequency of unsafe abortion in current study is 6.42% while it is reported as 3.06%, 3.08% and 2.34% respectively in other studies from different parts of Pakistan.¹⁰ Meanwhile, it is 2.6% in Latin America¹¹. In present study, majority (65.6%) of patients was in age group 20-40 years, that is comparable to findings of a study from Karachi, Pakistan.¹² In current study, 28.12% women were primigravidae and 59.37% were grand multigravidae, while Saeed AG from Islamabad, Pakistan has reported 11.55% patients as primigravidae and 57.8% multigravidae.¹¹ Increased number of multiparae in this study may be due to fact that majority of multigravidae seek advice for termination of unwanted pregnancy but are refused by trained persons and hence, ultimately handled by unskilled workers resulting in death or significant morbidity. In current study, 90.63% of unsafe abortions were done in private clinics, which is in contrast to a study conducted in Rural India where 46% of unsafe abortions were done in private clinics.¹³ This is also a fact that majority of private clinics lack properly trained staff and facilities. Most of abortions were performed without anaesthesia. In current study, sepsis was main complication of induced abortion which is in contrast to study carried out by Saeed AG where haemorrhage was the leading complication. Majority of patients (84.38%) in current study required surgical inter-

vention that is comparable with study by Lassey in which 85.7% patients required surgical intervention.¹⁴ In our study maternal mortality was 21.87% which is significantly higher than published data from different hospitals in Pakistan as well as other parts of world such as 10% in Jinnah Postgraduate Medical Centre Karachi¹², 11.53% in Gynaecological Department of Federal Government Services Hospital Islamabad¹⁰, 0.05% in United States of America⁸ and 2.5% in Ghana.¹⁴ This may also be related to the fact that Liaquat University Hospital is a major tertiary care hospital where patients are received in moribund condition from almost all remote areas of Sindh province as well as from all private hospitals of City of Hyderabad. Therefore, government should formulate the policy to help out those women who seek advice for termination of unwanted pregnancy and should catch hold of abortionists and make them accountable for the complications resulting from unsafe abortion. Proper counseling of women coming for antenatal care and delivery in hospitals regarding contraception shall also be done.

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