

## Mothers Still Die

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### ABSTRACT

**Background:** Life of a mother should be the top priority but unfortunately in our country it has been increasingly ignored. All pregnant women are at risk of obstetrical complications and most of these occur during labour and delivery that lead to maternal death. It is impossible to follow safe motherhood without with out properly assessing maternal mortality.

**Objectives:** To evaluate causes and avoidable factors responsible for maternal mortality in a tertiary care hospital.

**Design:** Prospective observational study

**Setting:** Department of Obstetrics & Gynaecology, Jinnah Hospital /Allama Iqbal Medical College, Lahore.

**Methods:** This study was conducted from Feb, 2008 to Jan, 2009. Patients were admitted through emergency department and obstetrics & gynaecology out patient department. Patient's demographic record including age, parity, education, socio-economic status along with antenatal care record and level of care were noted. Causative factors leading to maternal death and contributing factors evaluated. All this information was collected from patient's records.

**Results:** Nine maternal deaths were recorded during study period. The major causative factors were haemorrhage 4(44.4), sepsis 3(33.3), anaesthetic complications 1(11.1%) and amniotic fluid embolism 1(11.1%). Maternal mortality rate was 203 per 100,000 live births. The age range was between 20–37 years. Education, antenatal booking and socio-economic status were poor.

**Conclusion:** Obstetrical haemorrhage and sepsis are still major causes of maternal deaths. Most maternal deaths were preventable. The provision of skilled care and timely management of complications can lower maternal mortality rate.

**Key Words:** Maternal mortality, obstetrical complications, preventive measures.

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### INTRODUCTION

Pregnancy is not a disease and pregnancy related mortality is almost always preventable. It is estimated that about 500,000 mothers die annually in the world or 1500 maternal deaths per day or about one death per minute<sup>1</sup>. The majority of maternal deaths occurring in the world occur in developing countries (99%). There is a marked difference in maternal mortality rate between rich and poor countries (mortality risk 1 in 4000-10,000 and 1 in15-50) respectively<sup>2</sup>. The status of maternal health is poor in Pakistan. An estimated 30,000 women die each year due to pregnancy related causes. Recent estimates (WHO & UNICEF) place the ratio around 320/100,000 live births but in reality it may be higher because of under registration of deaths in country and absence of post-mortem examination<sup>3</sup>. The major causes of maternal mortality are haemorrhage, sepsis, hypertensive disorders, obstructed labour.

thromboembolism and abortions<sup>4</sup>. All of these causes are mostly preventable through proper understanding, diagnosis and management of labour complications. To reduce complications during pregnancy and labour it is essential to strengthen primary health care infrastructure. Provision of antenatal and intrapartum health care in the community by trained health personnel form the backbone of any such efforts. The purpose of this study was to analyse causes of maternal deaths and to identify preventable factors leading to maternal mortality.

### MATERIAL AND METHODS

This study was carried out in obstetrics & gynaecology unit II of Jinnah Hospital/Allama Iqbal medical college Lahore, from Feb, 2008 to Jan, 2009. This is a prospective observational study. The nature of admissions is mostly emergency and referred from other hospitals in critical condition. Later record of patients' age, parity, education, socio-economic status, antenatal care and level of care were analysed. Patients with medical and gynaecological causes and those beyond 42 days post partum were

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excluded from study. The data was collected from patient's records and maternal mortality statistics of the year.

## RESULTS

A total of 4435 deliveries took place during the study period and there were 9 maternal deaths with maternal mortality rate of 203 per 100,000 live births.

Table-1: Distribution of Maternal Deaths in relation to age

Age group	n=	%age
20-25 years	2	22.2
26-31 years	5	56.5
32-37years	2	22.2

Ages ranged from 20 to 37 years. Most of the maternal deaths (56.5%) occurred in age group 26-31years (Table-1).

Table-2: Distribution of Maternal Deaths according to parity

Parity	n=	%age
Primigravidae	0	0
Gravida 2	2	22.2
Gravida 3	2	22.2
Gravida4	2	22.2
Gravida 5	0	0
Gravida 6	3	33.3

Overall the highest maternal mortality was found in paras >5 which accounted for 33.03%of maternal deaths (Table-2).

Analysis of literacy status was done in relation to maternal mortality and it was found that 100% of them were uneducated.

Table-3: antenatal care status in relation to maternal mortality

Antenatal care Status	n=	%age
Booked	2	22.2
Unbooked	7	77.7

Antenatal care status was observed in relationship with maternal mortality. Majority of patients were unbooked (Table-3:)

Table-4: Socio-economic status in relation to maternal mortality

Socio-economic status	n=	%age
Higher class	0	0
Upper middle class	0	0
Lower middle class	1	11.1
Poor class	8	88.8

Socio-economic status revealed poverty as a major contributing factor in increasing maternal mortality (Table-4).

Table-5: Causes of Maternal Death

Cause	n=	%age
Haemorrhage	4	44.4
Sepsis	3	33.3
Anaesthetic complications	1	11.1
Amniotic fluid embolism	1	11.1

Evaluation of causes of maternal mortality revealed haemorrhage the major cause of death (Table-5)

## DISCUSSION

In our study, haemorrhage mainly postpartum was the leading cause of maternal deaths and sepsis followed closely. This situation here is comparable to the triennium 1952-54 in England and Wales<sup>(5, 6)</sup>. Placenta accrete, uterine rupture, atony and massive postpartum haemorrhage after a home delivery led to deaths in our series. The poorest class had the maximum number of deaths (88.8%).Deaths in unbooked cases were a lot more common than the booked ones. Looking at the parity table, it is clear that 33.3% of maternal deaths occurred in sixth gravidae. The surprising fact which emerged from the study was that mostly women in the age group 21-31 years had highest number of deaths that is 56.5%, although one would have thought mortality would be higher in older age group due to added health problems like hypertension and diabetes.

## CONCLUSION

Pakistan has an alarmingly high maternal mortality rate and it is estimated that every thirty minutes one Pakistani woman loses her life due to reproductive health complication. An international comparison further highlights the fact that a developing country like India, despite its large population, has less MMR than that of Pakistan. The only countries in the world having MMR more than that of Pakistan are African countries with average MMR of 540/100000 live birth. Even in a developed country like United Kingdom, substandard care was the most common factor accounting for 65% deaths from haemorrhage and ectopic pregnancy<sup>7</sup>. The MDG monitor shows the maternal mortality figure for Pakistan at 320 maternal deaths per 100,000 births reflecting that with only six years to meet our global pledge, a lot of work needs to be done. Most of the maternal deaths are preventable. The failure to prevent is an impediment to the universal realization of human rights and could constitute a violation of human rights, including women's right to health, life, education, dignity and access to information and appropriate health care. Substantial investment in midwifery training, free care, intensive family planning services and

implementation, engagement of health care providers and policy makers is the challenge set during the meeting of the fifth MDG to reduce maternal mortality by 75% by the year 2015<sup>8</sup>.

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