

## Study On The Causes Of Maternal Mortality In Tertiary Care Civil Hospital Of Shaheed Benazirabad Over The Period Of Two Years.

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### ABSTRACT

#### Objective:

Objective to identify the causes of maternal mortality in shaheed benazirabad

#### Material and Methods

Methodology the retrospective descriptive study This retrospective cross sectional study carried out in subjects who were admitted in public sector tertiary care hospital of Shaheed benazirabad over the period of two years (1st Jan 2018 to 1st Jan 2020) in department of Obstetrics and Gynecology Unit-I PUMHS based on the medical records.

#### Results and Conclusions

From year 2018 to 2019 100 cases studied from which 75 were direct maternal deaths and 25 indirect maternal deaths .the major causes were eclampsia , sepsis ,antepartum and postpartum hemorrhage . While indirect maternal death happened mostly due to anemia. These causes are preventable and can be managed further

**Key words:** Maternal Mortality, Eclampsia , Sepsis, Antepartum, Postpartum Hemorrhage

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### INTRODUCTION

According to WHO In the year 2015, approximately 5,500,000 babies were born or around 14,900 every day in Pakistan<sup>1,2</sup>. The 5 years ago in 2015 the maternal mortality rate of Pakistan was 276/ 10000 live births however maternal mortality ratio in Pakistan is 178/10000 live births, depicting a considerable fall in the maternal death<sup>3</sup>. But, the number, when compared to developed countries is still high.It has been observed that majority of deaths have been due to poor socioeconomic status of mothers. Massive obstetrical Hemorrhage<sup>1</sup>, maternal infections, Eclampsia, and obstructed labour are the four major causes of mortality in underdeveloped countries, comprising 80 percent of deaths<sup>4</sup>. While anemia, HIV and malaria are the indirect causes. Maternal mortality is being acted upon by multiple predisposing factors such as poverty, lack of hygiene, unable to access

health care and illiteracy, mother being unable to take care of herself. Most of its causes are preventable. Another common phenomenon observed is” 3 delays” that is failure to avail health care, failure to reach in time at healthcare facility and a significant delay in seeking treatment<sup>4</sup>. Therefore, it is of utmost importance to recognize these causes. WHO has presented the list of sustainable goals to be achieved by the people and authorities. SDG3 sets the target to reduce MMR less than 70 per 10000 births by 2030<sup>2,5,6</sup>. Such a goal can only be achieved if the causes are rectified and eliminated that can only be done by the recognition.

### MATERIALS AND METHODS

This retrospective cross sectional study carried out in subjects who were admitted in public sector tertiary care hospital of

Shaheed benazirabad over the the period of two years (1st Jan 2018 to 1st Jan 2020) in department of Obstetrics and Gynecology Unit-I PUMHS based on the medical records.

## RESULTS

The total number of deliveries were 8371 out of which 100 were maternal deaths. And the total number of direct maternal death were 75 and number of indirect maternal deaths were 25. Eclampsia, postpartum hemorrhage, antepartum hemorrhage and sepsis were leading causes of direct maternal deaths. Anemia remained the major cause of indirect maternal death followed by cardiac arrest. all of the cases are classified in table no 1 and 2.

Booking status: out of 100 maternal deaths 80cases (82%) were unbooked and referred belonging to rural areas. 19 (18%) subjects cases were getting antenatal care in private setup. All of these cases were emergency admissions. These cases are classified in Table 4. Time interval between admission to death: majority of these deaths happened with in first 24 hours of admission i.e. 90 of these cases underwent mortality within 24 hours. 10 cases ended up in mortality with in 3 days of admission Table 3.

**Table 1 Causes of Direct Maternal Death**  
N= 75

Cause	Numbers	Percentage
Antepartum hemorrhage	13	17%
Postpartum hemorrhage	20	25%
Eclampsia	21	26%
Uterine rupture	3	4%
Prolong labor	4	5%
Sepsis	15	19%
Unsafe Abortion	3	4%

**Table 2 Causes of Indirect Maternal Death**  
N= 25

Causes	Numbers	Percentage
Anesthetics complication	2	8%
Heat stroke	1	4%
Hepatitis	1	4%
Diabetic ketoacidosis	1	4%
Anemia	15	60%
Cardiac arrest	4	16%
Malaria	1	4%

**Table 3 Registration Status**

Un-booked and Referred	80
Booked	20

**Table 4 Time Frame**

Death with in first 24 hours	90
Death with in 3 days	10

## DISCUSSION

This hospital based study descriptive study was an attempt to analyze the causes of maternal mortality direct maternal deaths. Figure 1 shows that the foremost important to mention 25% cases of postpartum hemorrhage could have been prevented if proper resuscitation was available and resuscitative measures should also be present while transporting patients to prevent co morbidity. again this led to significant delay in seeking treatment 17 % cases of Antepartum hemorrhage can be prevented by receiving antenatal care so the significance of booking status should be emphasized also mention by sheikh al et<sup>7</sup>.

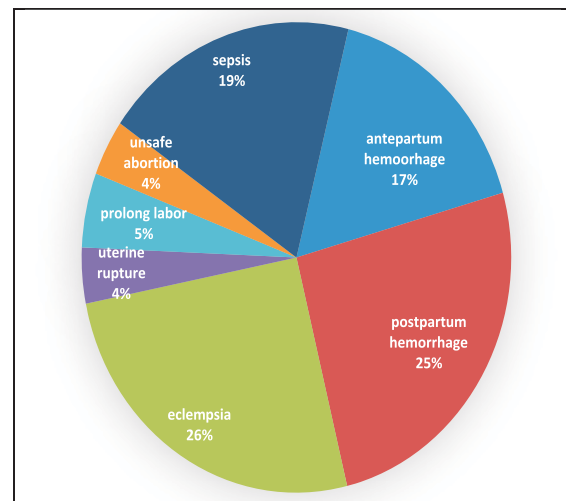


Figure 1. Causes of Direct Maternal Death

It also involves mass education of active participation in antenatal visits on the other hand a better protocol is required so every woman could have access to clinics. Alarming number of cases 26 % of eclampsia questions our ability if we as health care providers are doing enough to aware woman of rural areas. awareness of prodromal symptoms can prevent as well as trained midwives which could provide initial resuscitative measures like clearing air way breathing and maintaining intravenous line

and monitoring urine output. eclampsia affects multiple organs prompt treatment is required<sup>8,9</sup>. eclampsia box comprising of intravenous line and magnesium sulphate can prevent its recurrence while transporting the patient. Whereas 19% cases ended up with sepsis arrived in hospital with deteriorating symptoms.

The figure 1 shows there were 4 % cases of unsafe termination of pregnancy. cases presented with retained products of conception with foul smelling discharge. these malpractices needs to be curbed also better policies and communication. Similarly there were 4% cases of uterine rupture which were found in in multipara had cesarean section done before who took trial of labor in unreported centres.

The figure 2 shows the reported cases because of indirect maternal death. it is notable that there were total 25 cases for indirect maternal death from which the large number death 60% cases were due to anemia. The followed by 16 % cases of cardiac arrest and 8% cases were due to anesthetic complication. The rest of causes of indirect maternal death has 4% cases which includes malaria, hepatitis , heat stroke and diabetic ketoacidosis .

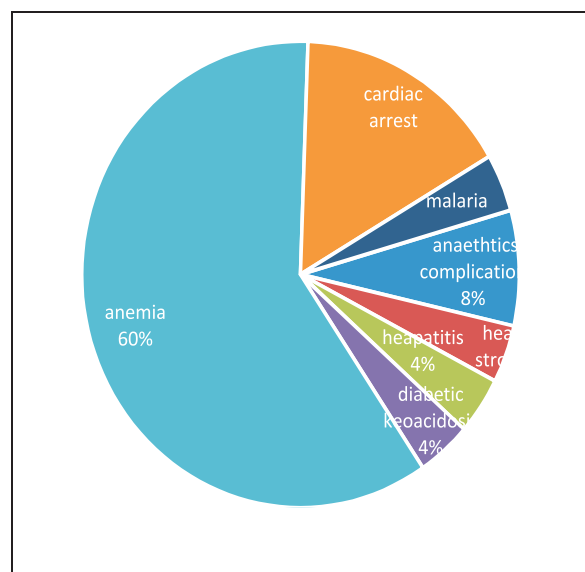


Figure 2: Causes of Indirect Maternal Death

The significance of earliest intervention cannot be undermined. Early intensive protocol in primary health care setup can prevent<sup>6,10</sup>. It is also noticed that booked patients had better access to health care facilities table 4. it should be alarming factor that 90 % of these death occurred within 24 hours . That also sparks the concern of logistics as every minute counts. if these woman were provided emergency care

during their transport to hospital results could have been different. it signifies the trained paramedical staff should be present in ambulance. or atleast primary medical facility should phone call prior so the labour room staff could be well prepared (table3 ) .

## CONCLUSIONS

Healthcare is a basic human right of a woman. Maternal death is tragic event which leaves young offspring in vulnerable state . the general commitment by health care providers and policy makers can change the picture of maternal mortality in overall Pakistan

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