Original Article

A Retrospective Analysis of Postpartum Complications in Patients Admitted to Fatima Memorial Hospital Lahore

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Objective: To evaluate postpartum complications and their outcome in patients admitted to Fatima memorial Hospital, lahore and to find out avoidable causes.

Material and Methods: This descriptive study was conducted in the Department of Obstetrics and Gynaecology, Fatima Memorial Hospital ,Lahore from December,2012 to December,2013. A total of 100 patients who were admitted through gynaecology outpatients department or emergency with postpartum complaints following delivery at home or hospital vaginally or through caesarean section were included in the study.

Results: Mean age of the patients was 26.70 + 4.85 years. Out of 100 patients, 50 patients had no complication. Out of remaining 50, 19 had postpartum haemorrhage while 18 had postpartum eclampsia. Seven had puerperal sepsis, 2 patients with thromboembolic disease, one with postpartum depression, 2 with urinary tract infection and one with breast disease.

Conclusions: PPH is major cause of maternal morbidity and mortality followed by postpartum eclampsia. Maternal mortality and severe morbidity may be reduced by regular prenatal care.

Keywords: Postpartum complications, Maternal morbidity, Maternal mortality, Eclampsia.

Introduction

Women of reproductive age are always at risk due to child bearing. It may be during pregnancy, labour or even after delivery of baby. Postpartum period is the time immediately women deliver her baby. It lasts approximately up to 6 weeks or until reproductive organs return to normal size. The most serous complications mental disorders and breast infection can cause much morbidity.[1] The maternal mortality rate in developing countries is established 440/100,000 live births and 50-71% of deaths happen during childbirth and 50 to71% in postpartum period.[2] The most important cause of maternal death is excessive bleeding. Postpartum bleeding can kill a healthy women with in 2 hours.[3]

Postpartum hemorrhage is defined as blood loss more than 500 ml in vaginal delivery and 1000ml in caesarean delivery. Incidence of PPH has been 3% of estimated 4-6% of all pregnancies. PPH is divided into primary (early) or secondary (late). The main caused of primary PPH are uterine atony which accounts for 90% cases, genital tract trauma, partially retained placenta ,placenta previa and accreta.[4] The second most common direct cause is infection responsible for late postpartum death. It is major source of maternal mortality on one hand and morbidity on the other. Any infection following delivery is classified as postpartum or puerperal infection.[5] Endometritis is most common source of postpartum infection hemolytic streptococcus is major causes of sepsis. Overall postpartum infection is estimated to occur in 1-8%of all deliveries. Maternal death rates associated with infection rang from 4-8% or approximately 0.6 maternal death per 100,000 liver birth.[6] Post surgical wound infection. Perinatal cellulitus. Mastitis. Respiratory complication, retaind product of conception. Eclampsia, another cause of maternal death is most common during antepartum period, but 20-25% of eclampsia occurs in postpartum period.[7]

Haemostatic problem in pregnancy resulting from hypercoagulant status is thrombosis. Venous thromboembolism is one of the most serious complications. Thromboembolic disease is said to be six times more common during pregnancy then in nonpregnant state and within the pregnancy, the risk is minimum in first trimester and greatest in the puerperium, especially when baby is delivered by caesarean section. In developed world, the incidence of deep venous thrombosis (DVT) lies between 0.05-1.8% and its twice as common as pulmonary embolism.[8] The puerperium is frequency associated with psychological morbidity with 1.0-15% of women experiencing anxiety or depression. Babyblues are very common affecting 30% to 75% new mothers. Postpartum depression occurs in 13% of women. Mastitis is a bacterial infection that can develop in one or both breasts. It is most common in

women who have recently give birth, especially those who are breast feeding.[9] The commonest urinary complication in puerperium is infection but urinary retention or in continence may also cause problems. Signs of serious complications include; chills, nausea , vomiting, chest pain, fever of 100.4F, increasing tenderness in lower abdomen, red hot painful breasts, redness or drainage from the episotomy or caesarean incision, excessive blood loss such as soaking more then 1pad every hour for 2-3 hours, vaginal discharge that has strong unpleasant odor, burning micturation, severe headache, severe depression.[10] This study was carried to evaluate postpartum complications and their outcome in patients admitted to Fatima memorial hospital and to find out avoidable causes.

Material and Methods

This descriptive study was conducted in the department of Obstetrics and Gynecology, Fatima memorial Hospital, lahore from December 2012 to December 2013. A total of 100 patients who were admitted through Gynecology outpatients department or emergency with postpartum complaints following delivery at home or hospital vaginally or through caesarean section were included in the study.

Results

Table-1: Distribution of cases according to Mode of delivery.

No. Of Delivery	No of Cases	Percentage
Spontaneous us vaginal delivery	52	52
LSCS	36	36
Foreceps	12	12

Table-3: Mode of admission.

Admission mode	No of Cases	Percentage
OPD	44	44.0
Emergency	56	56.0

Table-4: Presenting symptoms.

Symptoms	No of Cases	Percentage
Vaginal bleeding	34	34.0
Fever	07	07.0
Chest pain	04	04.0
Abdominal pain	28	28.0
Vaginal discharge	08	08.0
Depression	02	0.2.0
Headache with fite	15	15.0
Other scomplications	02	02.0

Table-5: Parity of Patients.

Place of Deliver	No of Cases	Percentage
Home	40	40.0
Private clinic/maternity home	10	10.0
Hospital, delivery	50	50.0

Discussion

Antenatal care can prevent maternal morbidity and mortality in many women. During the study it was observed that most of the patients who has postpartum complications were delivered at home (25%) most of them were non-booked (76%) and presented to emergency.In Pakistan that is developing country with population118.8 million, about 4million births are attended by trained persons and only 5-10% deliveries take place in hospital. About 25000 females die of causes related to pregnancy and child birth every year. Commonest causes of maternal death are hemorrhage, infection, eclampsia and obstructed labour.[11] In present study of 100 patients admitted with postpartum complications, 50 had no complications on examination. Out of 50 which had complications, postpartum hemorrhage was detected in 19 (19%), eclampsia in 18 (18%), infection in 7 (7%), thromboembolic disease in 2 (2%) each. A similar study conducted at Mayo Hospital, Lahore to evaluate postpartum complications and their outcome showed that out of the 64 patients, septicemia was detected in 26 (49.5%), renal failure in 9 (12%), disseminated intravascular coagulation in 6 (10%), Jaundice in 6 (10%), eclampsia/fits in 8 (12%), tuberculous in 4 (6%), tetanus in 3 (5%), postpartum cardiomyophaty in 2 (3%) and stroke in 1 (1.5%) patients.[12] In spite of marked improvements in management early PPH remains a significant contributor of maternal morbidity and mortality both in developing countries and in the hospitals. The exact incidence is 10-19% of pregnancies with the actual number in the range of 2.4%.[13] Eclampsia was other leading cause which led to maternal mortality or morbidity during this study. It was found in 18% of patients.[14] Davidson et al reported the antepartum 38% or intrapartum 18% pathophysiology is tought to involve cerebral vasospasm leading to ischemia and cerebral edema.[15]

Septicimia another cause occurred in 7 patients. Prolonged obstructed labour repeatd vaginal examination with septic measures. Instrumental delivery or manual removel of placenta can lead to infection andhas also been rported in another study carried out in obstetrical ward.[16]In the puerperium alkaline lochia reduces acidity of vagina to such an extent that saprophytic organism do not flourish after third day pureperal saprophytes may be found in utreus, the examination becoming more frequent and more marked pureperium advances. Infection is conveyed from outside during labour or during early pureperium, TBAs should be familiarized with aspetic techniques and should know to refer high risk patients to hospitals.[17]Most of the women in Pakistan do not realize the significance of antenatal care and therefore seek no advice and have no treatment during pregnancy induced hypertension, multiple pregnancies and abnormal placentation. The tradional birth attendants in Pakistan are untrained and some times unaware of the problems encountered during pregnancy and labour. So they bring the patient in hospital very late and usually in serious condition. Illiteracy, poor nutrition, improper referral system and lack of transport are all contributory factors to high maternal mortality.[18] According to Gordon, anaemia must be corrected during pregnancy because anaemic patient tolerates hemorrhage badly. Hemoglobin estimation should be made in very expectant mother early in pregnancy nd give very women a good course of iron for at least six weeks during pregnancy.[19]

Conclusion

It is concluded from the study that maternal mortality and severe morbidity rates are lowest among women receiving regular prenatal care who are managed by experienced physicians in tertiary centres. So, antenatal care should be promoted at every level.

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