Maternal Near Miss: A Case Report

Abstract

The term “Maternal Near Miss” (MNM) refer to women who have escaped death either by chance or due to good health care after experiencing severe life threatening complication during pregnancy, labour and within six weeks after termination of pregnancy. A “Near Miss” event in a 3rd gravid at 42 weeks with intrauterine death having intractable Post Partum Haemorrhage (PPH) with severe maternal morbidity is reported here. Delay means death holds true for such emergency situation. The aim of the report is to stress the need of patients education, importance of emergency transportation and availability of multi-disciplinary tools and adequate blood transfusion at all level of health care system. Severe Acute Maternal Morbidity (SAMM) is a complement for maternal mortality and also to evaluate the quality of obstetric care in that particular institution.

Key word: Near miss; Post Partum Haemorrhage (PPH); Maternal mortality; Maternal morbidity; Maternal Death (MD); Pre Eclamptic Toxemia (PET).

INTRODUCTION

The object of Millennium Development Goals (MDGs) to improve maternal death by target 75% has not met with. Pregnant women health status is not reflected by mortality indication alone.

The concept of SAMM (Severe Acute Maternal Morbidity) is opt for the present health providing system. Near miss case review are one of the number of audit approach currently being used and evaluated with an interest in reducing higher rate of maternal mortality and to develop an understanding of the barrier as well as facilities surround the obstetric near miss cases.

The prevalence of near miss cases estimated to be 5.6 to 7.5/1000 hospital based delivery and overall maternal near miss mortality ratio 9:1. Near miss case definition was based on validated specific criteria comprising of five diagnostic feature:- haemorrhage, hypertensive disorder of pregnancy, dystocia, sepsis and anemia.

Near miss approach for maternal health 2011 defined criteria for poor resource setting based on near miss management ICU, need for transfusion, near miss clinical criteria [PET, PPH] and organ dysfunction. Review of near miss cases has the potential to highlight the deficiency and as well as the positive elements in the provision of obstetric service in any health system.

SAMM concept is superior over maternal death in drawing attention to surviving womens reproductive health and lives, and is equally applicable both in developed and developing countries.

Maternal near miss incidence ratio, maternal near miss: mortality ratio (MNM:MD) mortality index are the near miss indices. High MNM:MD and low mortality index indicate better quality of health care.

Maternal near miss cases are investigated over maternal death as:-

1. Near miss are more common than maternal death.
On 4th POD she suddenly developed acute respiratory distress and a diagnosis of peripartum cardiomyopathy was made (ECHO-EF36%, moderately severe left ventricular dysfunction ) and was treated by cardiologist. On 7th POD she develop acute psychosis. On 10th POD she had fever with loose motion (12 times/day, occult blood test +ve) and diagnosis of puerperal sepsis with multorgan disease was made by medical board. Her wound was healthy but she had mild to moderate p/v bleeding.

She developed jaundice on 12th POD (Billirubin 3mg, ALT-1430mIU/dl, Albumin 2.6gm%, PT-patient:control 21:13) and treated accordingly. She suffered from low grade fever(100-101F) and dysuria for about six weeks and treated with antibiotics for 2months. She also had weakness of limbs from 2nd weeks and was unable to walk without support (obstetric palsy) and was improved with physiotherapy. She was discharged on 29th POD with the advise to continue antibiotics and physiotherapy for 1 month.

She was under supervision of obstetrician and gynecologist and recovered completely within 3 months.

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Discusson

Obstetric emergency occur suddenly and unexpectedly endangering the life of mother and represent the quality of obstetric care. Present case is a classic example of maternal near miss. It illustrated importance of proper patient education, need for transportation, surgical and transfusion facility at community health centre, district and tertiary level to save maternal lives. Reducing maternal mortality is millenium development goal. To reach the goal countries need an accurate picture of the cause and level of maternal death. The prospective of routinely using the accurate information for surveillance of near miss cases, implementing preventive measure, timely intervention to avoid maternal death is promising.

PPH is still the most direct cause of maternal death (31% in B.D) in the world. Though most have some predisposing factor yet even without any factor unexpected deterioration in maternal condition that needs immediate attention, hospitalization, institutional active measure to control bleeding by medical, mechanical, nonsurgical and surgical intervention. Most of the maternal mortality occur within first 24hr following delivery. Effective treatment of PPH needs simultaneous multidisciplinary intervention.

Health care provider needs to begin immediate resuscitative effort, evaluate the cause of haemorrhage and take help of other care provider if required early referral to ICU.

Maternal near miss cases should be transferred to ICU with defined specific consensus of intensive care as lack of planning of intensive care may delay the implementation of necessary measure.

In our patient delay in referral and surgical intervention resulted in serious morbidity leading to near miss situation. Avoiding delay in treatment could have a significant impact on survival.

Death with in 12hrs arrival in facilities indicate road block in seeking care or referral.

Data on cases of life threatening condition can be used to foster a culture of early identification of complication and better preparedness for acute morbidity even a remote rural area.

The knowledge about WHO near miss approach has to be spread to all the staff in health system-medical, paramedics, nonmedical and lower cadre to identify the problem and to help the patient in need. Apart from the maternal death maternal morbidity should be considered for disease analysis and to be revealed to future generation so that the quality of care will be improved.

Conclusion

Severe acute maternal morbidity or near miss is a predictor to improve quality of Obstetric care. Near miss are analysed to clarify the epidemiologic spectrum rapidly at hospital level and to prioritise the needs in maternal health care. Monitoring of near miss morbidity in conjunction with mortality surveillance could help to identify effective preventive measure for potentially life threatening morbidity. Severe maternal outcome can potentially be reduced by fostering the evidence based interventions for life threatening complications, improving referral systems and optimizing the use of critical care.

Disclosure

All the authors declared no competing interest.
REFERENCES


