Maternal Mortality: Sharing Experience from Banke District

Acharya S¹ and Shanta A²

¹College of Nursing, Lumbini Medical College, Palpa, Nepal, ²Plan International Nepal, Nepalgunj, Banke, Nepal Corresponding author: Shusma Acharya, Lecturer, College of Nursing, Lumbini Medical College, Palpa, Nepal

ABSTRACT

Maternal mortality is a global burden, with more than 500,000 women during each year due to pregnancy and childbirth related complications.¹ Globally, 60-80% of maternal deaths are due to obstetric complications, these are hemorrhage, sepsis (infection), obstructed labour and hypertensive disorder of pregnancy and complications of unsafe abortion.² **OBJECTIVE**: To identify the causes of maternal mortality in Banke District. **MATERIALS AND METHODS**: The study was conducted in Banke district. Descriptive cross-sectional study was adopted, during a period of one year from July 2011 to June 2012 at Banke District in Western Region of Nepal. Non probability purposive sampling method was used for collecting the data. Both primary and secondary sources of data were taken for the study. **RESULTS**: The maximum number of maternal deaths was from Madheshi and Muslim community, most of them were illiterate. The main cause of maternal death was post partum hemorrhage. **CONCLUSION**: Nepal achieved an impressive reduction in maternal mortality between 2001 and 2006, but maternal deaths still remains high. The trends of death from snake bite, suicide, epilepsy and physical assault are the new causes.

Keywords: infection, Maternal mortality, post partum hemorrhage.

INTRODUCTION

Pregnancy and child birth is considered as a physiological process, but it is associated with certain risks to the life of both mother and newborn baby. At least 160 million women become pregnant every year around the world. Out of them 15% women develop serious complications.

Reducing high maternal mortality is a priority agenda of the national and international community, as evidenced by great interest in the Millennium Development Goal (MDG5).³ Nevertheless attaining Millennium Development Goal-5 still remains a challenge to the world. Many countries are unlikely to attain many MDGs including that of maternal health, even though maternal health care has received particular attention from the developing countries of African and Asian region.

Maternal mortality in Nepal has drastically came down to 229 per hundred thousand live births.⁴ In 1998, government of Nepal formulated the national reproductive health strategy with safe motherhood program to address reproductive health issues and developed national maternity guidelines, standards of midwifery practice, safe motherhood clinical protocol and management guideline. Fifteen year safe motherhood plan of action was developed in 2002. The long-term goal of the plan envisaged establishment of basic emergency obstetric care and comprehensive emergency obstetric care services in all district and skilled attendance at birth including increased access to emergency fund and transportation.⁵ In spite of these entire programs, the burden is still high.

Direct causes of maternal death accounts for 71%. Majority of maternal deaths occurred at home i.e 67.4%, 11.4% on the way and 21.2% in the health facility.^{5,6}

METHODS

A cross sectional descriptive study was used to conduct the study. Non probability, purposive sampling method was used to collect the information. There were total 22 mothers expired due to different causes in different Village Development Committee. In Banke total 34 VDC namely Bajapur, Behari, Kachanpur, Manikapur, Shamshergunj, Sitapur, Radhapur, Bankatuwa, Basudevpur, Bhawanipur, Binouna, Fattepur, Ganapur, Hirminiya, Holiya, Udarapur, Paraspur, Puraini, Rajahina, Indrapur, Jaispur, Kamdi, Karkado, Katkuinjya, kohalpur, laxmanpur, Matehiya, Nepalgunj, Narainapurpur, Naubasta, Raniyapur, Saigaun and Sonpur. Data were collected through pre-tested interview schedule after taking of written permission of concerned authorities (District Health Office, Banke). Data were tabulate through Excel spreadsheet and analyzed by using simple analysis methods.

RESULTS

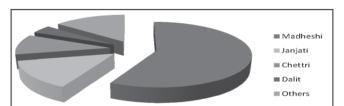
During one year study period from July 2011 to June 2012, there were total of 9705 deliveries during one year study period. 85.82% was hospital delivery. 14.18% was home delivery⁷. The number of female population in reproductive age group was 94793. There were 22 maternal deaths on 34 Village Development Committee. The percentage of maternal mortality was very low when we take total number of delivery in Banke i.e 0.226%.

The highest maternal deaths were reported from Mathehiya Village Development Committee (VDC). This VDC is situated in the east across Rapti River and about 20 km from Nepalgunj city. There is one sub-health post and no birthing centre. Most of the time health workers were not available due to remoteness. Among 22 maternal deaths 57% were form Madheshi and Muslim community.

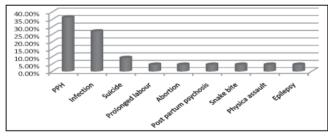
Majority of 36.36% deaths occurred due to postpartum hemorrhage and 27% died due to infection. The causes of maternal deaths were changing in new context. Death from snake bite, suicide, epilepsy and physical assault were reported new trends of maternal deaths.

DISCUSSION

In Nepal, the social status of women varies among different ethnic group. All the 22 maternal deaths in this study indicates that women today have access to health facility. Among 22 mothers, 57% were belonged madheshi and Muslim, 14% from Janjati, 10% Chhetri, 4% Dalit and remaining 14% from others and Newar 1%.



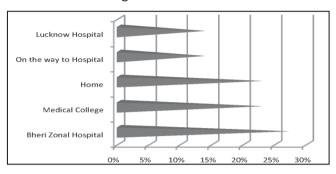
In the study, 36.36% maternal death occurred due to postpartum hemorrhage, 27% due to infection, 4.54% due to prolonged labor and abortion and rest due to indirect causes(not related to pregnancy). This findings is consistent with findings of maternal mortality and morbidity study 2009 which showed that maternal death due to hemorrhage 24%, abortion 7%, obstructed labor 6%, puerperal sepsis 5%.8



Current study findings is also consistent with study conducted in 1998, 47% maternal death was due to postpartum hemorrhage, 16% due to obstructed labour, 12% due to sepsis.⁹

The study indicated that majority of maternal death among 22 death was mainly in hospital i.e. 63.58%, 22.72% maternal death was in home and 13.63% death was on the way to hospital. Similar study done by Family Health Division Nepal showed that Maternal death in health facility was 41%, at home 40%, way of health facility 7%, way from facility to facility 5%, transit from

facility to home 2% and in pharmacy 1%.¹⁰ Similarly, another report by *Shrestha et al* showed 67% women die at home, 11.4% on the way to health services, 14.4% in the hospital, 4.5% in private clinics and 2.3% at Primary Health Care Centre.⁹ Another study was carried out on Nobel Medical college showed similar results.¹¹



CONCLUSION

Nepal achieved an impressive reduction in maternal mortality between 2001 and 2006. Provision of safe motherhood services even though maternal death remain high in this country. Quality and quick services would be helpful in avoiding maternal mortality in many situations. Otherwise expending a huge amount of money for maternal health service will be not meaningful.

REFERENCES

- WHO (2001). Managing Complication in Pregnancy and Childbirth.whq/ibdoc.who.int/hq/2000/WHO_ RHR 00.7.pdf.
- 2. WHO (2008). A Framework for Implementing the Reproductive Health Strategy in the south-East Asia Region. WHO. Regional Office for South-East Asia. New Delhi.
- 3. Bhandari TR, Dangal G. Maternal Mortality: Paradigm Shift in Nepal. *Nepal J Obstet Gynaecol* 2012; 7(2): 3-8.
- Ministry of Health and Population (MoHP) [Nepal], New ERA, and ICF International Inc.Nepal Demographic and Health Survey 2011. Kathmandu, Nepal: Ministry of Health and Population, New ERA, and ICF International, Calverton, Maryland; 2012.
- 5. Safe motherhood in Nepal [Online].[cited 2013 november 30].Available from from: URL:htpp://www.safemotherhood.org.np/pages/default.php?function=more content&secid=74&con id=44.
- 6. Family Health Division, (1998). Maternal Mortality and Morbidity Study. Kathmandu: 1998.
- 7. DPHO [District Public Health Office] 2012. Annual Report 2011/2012. Banke.
- 8. Ministry of Health and Population (MoHP) [Nepal], New ERA, and ICF International Inc. Nepal Demographic and Health Survey 2006. Kathmandu, Nepal: Ministry of Health and Population, New ERA, and ICF International, Calverton, Maryland; 2007.
- Family Health Division, USAID, DFID, SSMP, New ERA, Chrepa, (2009). Nepal Maternal Mortality and Morbidity Study. Summary preliminary findings. 2008/2009. Kathmandu
- 10. Shrestha RD. Reproductive Health National and International Perspective. (1st Edition). New Dhulikhel Printing Press, Dhulikhel, Nepal 2008.
- 11. Ghimire S. Maternal Mortality: Paradigm Shift in Nepal. *Nepal J Obstet Gynaecol* 2012; 7(2): 33-5.