

Universal Particulars towards Maternal Health Circumstance

Sushil Sharma*

ABSTRACT

Maternal health is a crucial health problem in developing countries, especially in low resource settings, rural and poor communities. The main aim of this paper is to critically evaluate and explore the situation of maternal health care in Nepal. After reviewing the literature, I found that there are several direct and indirect causes as well as affecting factors in regarding maternal death in developing and least developed countries. In developing countries, women have been facing different problems during pregnancy and delivery period. Knowledge of maternal health and assessable health facilities are most essential in rural areas to save mothers from preventable maternal death.

Keywords: Caring, health service, maternal health, pregnancy, preventable cause

Introduction

Maternal health is the health of women during pregnancy, childbirth, and post-partum period, which incorporates the health care dimension of family planning, conception, prenatal and postnatal care. Maternal health has been major concern of global community which is very essential for addressing the reproductive health of woman.

If the mothers are unable to get proper maternal health service, death may occurs. Maternal death refers to the death of a woman during her pregnancy or within 42 days of termination of pregnancy. Mostly maternal death occurs in developing countries in comparison to the developed countries (WHO, 2012). Approximately 830 women die per day worldwide of pregnancy related causes, which could have been prevented. Remarkably, 99 percent of maternal deaths occur in developing countries, mostly in low resource settings, rural areas, poor communities, etc (ibid). Mostly, three elements are essential to maternal health promotion prenatal care, natal care and postnatal care (Bhusal, et al., 2015). So, I discuss here some of the crucial issues about the prevention and promotion of the maternal health.

Prenatal period is the process in which an embryo and later foetus develops during gestation. This period starts from fertilization, the first stage in embryogenesis which continues in fetal development until birth. It is recommended that expectant mothers need to receive at least four antenatal visits, in which a health worker can check ill signs of health such as underweight, infections etc so to avoid these risks. Routine examine of the foetus is the most important task. Similarly, they can also develop a birth plan laying out how to reach care and what to do

* PhD Scholar, Graduate School of Education, TU, Lecturer, Prithivi Naraya Campus, Pokhara
Email: sushilsharma111@yahoo.com

in case of an emergency (Hurt, et al., 2005). Poor prenatal care has negative impact on prenatal development. Likewise, poverty, lack of education, less awareness, smoking, alcoholism, etc are the causes of low birth defect. Adequate nutrition is needed. Especially iron and iodine are essential for pregnant mothers and healthy foetus. Mothers who gain less than 20 pounds during pregnancy are at increased risk for having a preterm or low birth weight infant (Ehrenberg, 2000 & WHO, 2003). Mother's ages of 18 and 35 have a healthier environment for a foetus (as cited in Santrock, 2013). Maternal drug use occurs when drugs ingested by the pregnant woman are metabolized in the placenta and then transmitted to the foetus and greater risk of birth defects (Wendell, 2013). Consumption of alcohol and tobacco by pregnant mothers lead to disruptions of the foetus's brain development, interferes with the foetus's cell development (Mattson, 2010 & Espy, 2011 & Ruckinger, 2010).

If a mother is infected with diseases, the placenta cannot filter out pathogens. Viruses such as rubella, chicken pox and mumps are associated with increased risk of miscarriage, low birth weight, and prematurity, physical malformations and intellectual disabilities would occur (Diav, 2011 and Jones, 2003). Low birth weight increases an infant's risk and cognitive and language deficits. It also results in a shortened gestational period and can lead to prenatal complications (Waldorf, 2013). Stress during pregnancy may impact the development of the embryo. Reilly (2017) stated that stress can come from many forms of life as events, exposure to environment, toxin in pregnancy lead to higher rates of miscarriage, sterility, and birth defect (Caserta, 2013 & Proietti, 2013).

Natal period consists of caring the new-born at the time of birth not only the mothers. In pregnancies, if the mother is infected with the virus, 25 percent of babies delivered through an infected birth canal become brain damaged, and 1/3 will die (Nigro, 2011). In the last few weeks before delivery, the health worker assists the woman and her family to decide the place of delivery and make the necessary preparations for safe delivery. Santrock (2013) stated some warning signals or risk factors, likewise, age less than 18 years or more than 35 years for first pregnancy, height less than 145 cm, weight less than 40 kg. or more than 70 kg, history of severe bleeding in the last pregnancy and during labour or postnatal period repeated abortions, twin pregnancy, last baby weight 2.5 kg or less or above 3.5 kg etc. also determine the health of a new born baby. Regular uterine contractions which eventually cause the expulsion of the fetus and the placenta is required to monitor regularly.

This process can be divided into four distinct stages: First stage lasts from the beginning of the strong contractions until the opening of the birth passage i.e. dilatation of cervix. WHO (2010) also focuses the new blade or a pair of scissors should be boiled for 15 minutes and kept in the boiled, covered bowl will be necessary during the first stage. Second stage starts from the dilatation of cervix and ends with the delivery of the baby. In this period continuous encouragement, sips of water to prevent dry lips and mouth should be provided to the mother. In this time the mother should not push hard. Rather she should allow the head to come out slowly. This will help in preventing the tearing of the opening of the birth passage, prevent infection. When the head comes out, the midwife should never pull it but support it.

Third stage lasts from the delivery of the baby till the delivery of the placenta. The third stage is the delivery of the placenta and is the shortest stage. The time it takes to deliver placenta can range from 5 to 30 minutes. In this stage, breastfeeding to baby as soon as she is ready can stimulate a contraction and help placenta separate from womb. Active management of the third stage of labour reduces the relative risk of postpartum haemorrhage (Prendiville, et al., 2000). Fourth stage consists of one hour after delivery. The fourth stage of labour is the first hour following the full expulsion of the placenta. It is a time to rest, eat and drink for the mother and for the baby to be fed, checked, weighed and measured. Normally the first stage in a woman delivering should not last more than 12-14 hours, the second stage 4-6 hours and the third stage 30 to 45 minutes (WHO, 2003).

Postnatal is the period beginning immediately after the birth of a child and extending for about six weeks. It is the time after birth a time in which the mother's body including hormone levels and womb size return to pre pregnancy conditions. It is the time period after delivery of placenta till 6 weeks, during which the genital organs revert to the almost normal or near normal state both anatomically and physiologically. Care the baby and mother must be provided with immediately after delivery. During the postnatal period, a number of physiological and psychological changes take place in the mother's body (WHO, 2010).

Care during postnatal period, breasts are developed and prepared during pregnancy for lactation. The baby should be put to breast within one hour after delivery and should be fed on demand. Adequate rest and sleep are very important for the mother and the baby. It is important that the mother is provided frequent intervals of rest to catch up with the lost sleep. The mother should be encouraged to get up within six to twelve hours after the delivery. The diet of a delivered woman should be nutritious to promote good lactation and to keep her healthy (ibid). The main purpose of the study is to identify the global scenario of maternal health.

Methods

This study is based on secondary data with descriptive type of research design. Here, I have discussed on the maternal health condition in references to the world population data sheet 2016 and 2018. World population data sheet is an internationally representative survey which aims to provide reliable and current data on maternal health. Furthermore, the study has been planned to identify available authentic sources.

Results and Discussion

This study helps us to see whether the results are over focused in one area, which is why writing up our research as we go along can be a helpful process. For each theme or area, I shall discuss how the results helped to answer the objectives, and whether the results are consistent with the expectations and the literature.

Global Opportunity towards Maternal Health

The development and implementation of proven, cost-effective interventions has led to significant improvements in maternal and newborn health over the past decades. There is an opportunity to promote this progress by better targeting and addressing the root causes of poor maternal and newborn health through both known and new packages of interventions. Given increasing competition for finite donor resources, the pathway to impact also requires influencing and supporting country priorities and domestic health financing, including by working more intentionally through national, regional and global levels to accelerate the adoption, adaptation and scale up of intervention packages. There are several factors which need to be considered to improve maternal health in developing countries like Nepal through improving health service utilization, empowering women in society, involving male in maternal health and making service affordable. In promoting maternal health situation Nepal has proved a landmark progress; however, a big leap is yet to be taken ahead. With the global partnership Nepal has also corrected and amended the national policies in line with global standards. Here, some of the major indicators are presented with comparison globally.

Table I

Global maternal health indicator

	IMR/2018	TFR/2018	CPR/2018	MMR/2016
World	32	2.5	62	216
Africas	51	4.6	35	490
Americas	14	2	74	52
Europe	4	1.6	70	13
Oceania	20	2.3	58	86
Asia	28	2.2	65	122
South Asia	40	2.4	54	176
Nepal	32	2.3	53	258

Source: World Population Data Sheet, 2016 & 2018

Table I signifies that some maternal health indicators like infant mortality rate, total fertility rate, contraceptives prevalence rate and maternal mortality rate of Africas, Asias, South Asias as well as Nepal have been in problematic condition in comparison to Europe and Americas. Specially, developing countries like Nepal face such challenge of maternal health such as, lack of awareness about maternal health services, underutilization of maternal health services, social disparities in maternal health, political instability, low socio economic status of women, teenage marriage and early pregnancy, unavailability and affordability of quality care, superstition and indigenous practice, mal distribution of human resources for health, unsafe abortion and superstition and indigenous practice.

In the context of Nepal, maternal health is a national health priority and improving maternal health. It is given major focus on national development plan of Nepal. The trend of women dying every year in Nepal has been significantly reduced by motivating to achieve the target of second long term health plan i.e. MMR 250 per 100,000 live births by 2017 from 830 per 100,000 live births in 1991 and looks set to drop the millennium development goal (MDG 5) target of 134/ 100 thousands live birth by 2015. This is well known truth that the ladder of progress in maternal health is increasing day by day (WHO, 2017).

Global Facts of Maternal Health

Nearly 830 women die every day due to complications during pregnancy and childbirth. In developing countries, conditions related to pregnancy and childbirth constitutes the second leading causes of death among women of reproductive age. Women die in pregnancy and childbirth for 5 main reasons: These are: severe bleeding, infections, unsafe abortion, hypertensive disorders, and medical complications like cardiac disease, diabetes, or HIV/AIDS complicating or complicated on pregnancy, more than 135 million women give birth per year. About 20 million of them are estimated to experience pregnancy related illness. The list of morbidities is long and diverse, and includes fever, anaemia, fistula, incontinence, infertility and depression. Women who suffer from fistula are often stigmatized and ostracized by their husbands, families and communities. About 16 million girls aged between 15 and 19 give birth each year. They account for more than 10 percent of all births. In the developing world, about 90 percent of the births to adolescents occur in marriage. In low- and middle-income countries, complications from pregnancy and childbirth are the leading cause of death among girls of 15-19. According to WHO (2017) maternal health mirrors the gap between the rich and the poor less than 1 percent of maternal deaths occur in high income countries. The maternal mortality ratio in developing countries is 239/100000 live births versus 12/100000 in developed countries. Similarly, maternal mortality is higher in rural areas and among poorer and less educated communities.

Most of deaths can be prevented through skilled care at childbirth and access to emergency obstetric care. In Sub Saharan Africa, where maternal mortality ratios are the highest, less than 50 percent of women are attended by a trained midwife, nurse or doctor during childbirth. Women and girls living in fragile states or those in humanitarian crises face some of the highest risks because health systems are often broken in these situations, exposing the most vulnerable. Many women have not visited skilled health professional during pregnancy due to lack of proper knowledge and awareness. Although a large proportion of women see skilled health personnel at least once during their pregnancy, only about half receive the recommended minimum of at least 4 visits during the pregnancy (ibid).

Women who do not receive the necessary check-ups miss the opportunity to detect problems and receive appropriate care and treatment. This also includes immunization and prevention of mother to child transmission of HIV/AIDS. About 22 million abortions continue to be performed unsafely each year. Almost every one of these deaths and complications could have been prevented through sexuality education, contraceptive use, and the provision of safe, legal

induced abortion, and care for complications of unsafe abortions (Caserta, 2013). Reducing the maternal mortality ratio has been slow: Since 1990 the global maternal mortality ratio has declined by only 2.3 percent instead of the 5.5 percent needed to achieve MDG 5 but in some countries, accelerated rates of decline were observed after 2000. This means that with continued efforts, it is possible to end preventable maternal mortality and reach the new SDG. SDG 3 strives to reduce the global maternal mortality ratio to less than 70 per lakh live births by 2030; with no country having a maternal mortality rate twice the global average. The lack of skilled care is the main obstacle to better health for mother (ibid).

Complications Occurs during Pregnancy

Some women have health problems before they become pregnant that could lead to complications. Whether a complication is common or rare, there are ways to manage problems that come up during pregnancy. Sometimes pregnancy problems arise even in healthy women. Some prenatal tests during pregnancy can prevent from these problems or stop them early. Mainly miscarriage, ectopic pregnancy, incompetent cervix, placental abruption, placenta previa, amniotic fluid, preeclampsia, eclampsia, premature baby or preterm labour, venous thrombosis and foetal alcohol syndrome are seems as a major complication during pregnancy (Bhusal, Bhattarai & Bhaskar, 2015).The main causes are complications due to prematurity, complications during delivery, and infection. Quality of care also remains a challenge.

Conclusion

The birth of a child is a crucial time in the life of women. Mostly in developing countries, conceiving and delivering child is risky. Less attention and lack of clinical attention of labour during childbirth has been the central cause of unsafe motherhood but this tendency is changing nowadays. The growing knowledge on how to initiate, regulate or monitor the physiological process of labour and childbirth has a large impact on it. Likewise, growing understanding on these regards has positive impact on child birth and labour management. In line with this universal particular of maternal health address not only the clinical requirements for a safe labour and childbirth but also meet the psychological and emotional needs of women. It seeks to ensure that women give birth in an environment that is safe from a healthy perspective.

References

- Bhusal, C., Bhattarai, S., Bhaskar, R. K. (2015). Maternal health in Nepal progress, challenges and opportunities. *International Journal of Medical and Health Research* ISSN: 2454-9142. www.medicalsjournals.com,volume 1; issue 3; October 2015; page no. 68-73.
- Caserta, D. (2013). "Heavy metals and placental fetal-maternal barrier: A mini review on the major concerns". *European Review for Medical and Pharmacological Sciences*. 17: 2198–2206 via PubMed.
- Diav, C.O. (2011). "Prenatal exposures associated with neuro developmental delay and disabilities". *Developmental Disabilities*. 17: 71–84 via PubMed.
- Ehrenberg, H. (2003). "Low maternal weight, failure to thrive in pregnancy, and adverse pregnancy outcomes". *American Journal of Obstetrics and Gynecology*. 189: 1726–1730 via PubMed
- Espy, K. (2011). "Prenatal tobacco exposure: Developmental outcomes in the neonatal period". *Developmental Psychology*. 47: 153–169 – via EBSCO.
- Hurt, H., Brodsky, N.L., Roth, H., Malmud, E., Giannetta, J. M. (2005). "School performance of children with gestational cocaine exposure". *Neurotoxicology and Teratology*. 27 (2): 203–11. doi:10.1016/j.ntt.2004.10.006. PMID 15734271)
- Jones, J. (2003). "Congenital toxoplasmosis". *American Family Physician*. 67: 2131–2137 via PubMed.
- Maternal health in Nepal: progress, challenges and opportunities. Available from: file:///C:/Users/De/Desktop/(PDF)%20Maternal%20health%20in%20Nepal_%20progress,%20challenges%20and%20opportunities..html [accessed Sep 08 2018].
- Mattson, S. (2010). "Toward a neurobehavioral profile of fetal alcohol spectrum disorders". *Alcoholism: Clinical and Experimental Research*. 34: 1640–1650 – via PubMed.
- Nigro, G., Mazzocco, M., Mattia E., Renzo, G. C., Carta G., & Anceschi, M. M. (August 2011). "Role of the infections in recurrent spontaneous abortion". *The Journal of maternal-fetal & neonatal medicine: the Official journal of the European association of perinatal medicine, The Federation of Asia and Oceania Perinatal Societies, the International Society of Perinatal Obstetricians*. 24 (8): 983 9. doi:10.3109/14767058.2010.547963. PMID 21261443.
- Population reference bureau. (2016). *World population data sheet*. Washington DC: Population reference bureau.
- .(2018).*World population data sheet*. Washington DC: Population Reference Bureau.
- Prendiville, W. J. P., Elbourne, D., McDonald, S. J. (2000). Active versus expectant management in the third stage of labour. *Cochrane Database of Syst Rev*. 2000, CD000007-3
- Proietti, E. (2013). "Air pollution during pregnancy and neonatal outcome: A review". *Journal of Aerosol Medicine and Pulmonary Drug Delivery*. 26: 9–23.

- Reilly, N. (2017). "Stress, depression and anxiety during pregnancy: How does it impact on children and how can we intervene early?". *International Journal of Birth & Parent Education*. 5 (1): 9-12.
- Ruckinger, S. (2010). "Growth in utero and body mass index at age 5 years in children of smoking and non-smoking mothers". *Early Human Development*. 86: 773–777
- Santrock, J. W. (2013). *Life-Span development (14th edition)*. New York, NY: McGraw Hill. pp. 82–83. ISBN 978-0-07-131868-6.
- Sustainable development goals (SDGs). (2015). <https://sites.google.com/site/myagenda21org/the-post-2015-sustainable-development-goals>
- Waldorf, K. M. A. (2013). "Influence of infection during pregnancy on fetal development". *Reproduction*. 146: 151–162 – via PubMed.
- Wendell, A.D. (2013). [doi:10.1097/GRF.0b013e31827feeb9 "Overview and epidemiology of substance abuse in pregnancy"] Check |url= value (help). *Clinical Obstetrics & Gynecology*. 56: 91–96 – via Google Scholar.
- World Health Organization. (2003). Integrated management of pregnancy and child birth: pregnancy, childbirth, postpartum and new born care. *A guide for essential practice*, World Health Organization.
- .(2010). Technical consultation on postpartum and postnatal care. Geneva: Department of Making Pregnancy Safer, World Health Organisation.
- .(2012). 'Accountability for maternal, newborn and child survival: An Update on progress in priority countries. Geneva: World Health Organization.
- .(2017). Maternal mortality http://www.who.int/gho/maternal_mortality-retrieved Sept., 13, 2017, World Health Organization.