

# A Need for Maternal Health Literacy to Promote Maternal and Neonatal Health: A Review

Priyanka Tripathi<sup>1</sup>, Dr. Neetu Singh<sup>2</sup>

<sup>1</sup>Research Scholar, <sup>2</sup>Supervisor,  
Babasaheb Bhimrao Ambedkar University, Lucknow.

Corresponding Author: Priyanka Tripathi

## ABSTRACT

According to UNICEF report Millennium Development Goal 5 (MDG 5) had set the targets of reducing maternal mortality by 75% and achieving universal access to reproductive health by 2015 for improving the maternal health. But, so far progress in reducing maternal mortality in developing countries and providing family planning services has been too slow to meet the targets. Susan Renkert and Don Nutbeam defined “the cognitive and social skills that determine the motivation and ability of women to gain access to, understand, and use information in ways that promote and maintain their health and that of their children. Specifically, it investigates the feasibility of using the concept of health literacy to guide the content and process of antenatal classes.” Thus it is the felt need to enhance the maternal health literacy to promote maternal and neonatal health. Low coverage of life-saving preventive health interventions, unsatisfactorily access of health services, stemming from unhealthful social norms, attitudes and practices, and lack of knowledge among mothers, their family groups and healthcare providers in both the public and private sector contribute to maternal, newborn and child mortality and morbidity in India.

**Keyword:** Health literacy, maternal health and neonatal health.

## INTRODUCTION

Poor health status does not affect the women only but the family as well as the society also. There is a significant association between maternal health and neonatal health. For improving the maternal health, Millennium Development Goal 5 targeting a reduction in maternal mortality by 75% and achieving universal access to reproductive health by 2015 by increasing the usage of skilled birth attendants, family planning and contraception. But, reducing maternal mortality in developing countries is so far and providing family planning services has been too slow to meet the targets. The current decline of maternal deaths is only half of what is necessary to achieve this goal [Engel J. et al, 2014].

There has been strong commitment from the Ministry of health and government at large to address preventable causes of maternal morbidity and mortality but there is still generally low turn up for health services in rural areas as expectant mothers prefer receiving care from traditional birth attendants other than health facilities and often mix conventional medicine with local herbs. Many women choose not to go to health facilities because they do not understand why they are being subjected to tests or why certain medication is important in saving their lives and that of the baby. This is so because most women in rural areas are illiterate and therefore rely on ancient family practices, rumors, myths and misconceptions associated to pregnancy and

child birth. Even where women endeavor to visit health facilities for antenatal care, health providers ignore communicating certain information that is important in advising them accordingly on the dangers of prolonged labor and what signs to look out for in order to identify complications that may in one way or another cause obstruction in delivery of the baby which may endanger the mother's life. People who has high health literacy level can apply health care services on the time, understand their health conditions and implement suggestions well due to rightly understand to doctor [Taş & Akış, 2016]. A woman's health literacy is an important element in her ability to engage in health promotion and prevention activities both for herself and her children. An inadequate understanding of health care information will lead to less informed decisions for women, so this condition cause to decrease satisfaction of health care outcomes for herself and her family [Shieh, & Halstead, 2009]. Newborn deaths result from a combination of medical causes, social factors, and health system failures that vary by context and culture. In most settings, newborn health is closely associated with maternal health [Belsey, 1992]. Many maternal and neonatal deaths may be reduced by recognizing the maternal health complication very soon, taking decision at right time by providing medical health care at right time. Determining and increasing the level of maternal health literacy enables them to reach at the right time, at right place when they have pregnancy and after delivering a baby. For this reason, "maternal health literacy" is an important issue that needs to be addressed in terms of mother and baby's health. There are some socio-economic factors that affect the maternal health literacy. There is a felt need to provide health information to the mothers for betterment of health of children and themselves too. Aim of this review is to emphasize the need to promote maternal health literacy level for promoting the maternal and neonatal health.

### Maternal health literacy

In 2001 Renkert S. & Nutbeam D. defined that "The cognitive and social skills that determine the motivation and ability of women to gain access to, understand, and use information in the direction that promotes and maintains their health and their children's health. Specifically, it investigates the feasibility of using the concept of health literacy to guide the content and process of antenatal classes." Kickbusch I.S [2001] further described maternal health literacy as the capability of the mothers having knowledge about complications associated with pregnancy and managing it by specific actions by adopting healthy lifestyles and required nutrients intake during the pregnancy. Maternal health literacy is a skill to diagnose the dangerous symptoms of the pregnancy period, the method of a healthy life and the suitable nutrition in pregnancy period. Literacy or educational levels help them to understand when to start antenatal clinics, attend nutritional classes for health education, health talks and immunization programmes organized for them by the midwives and nurses. Also, literacy levels of the pregnant women helps them to understand danger signs in pregnancy, take adequate care of themselves and adhere to the advice given to them by the midwives and nurses during the antenatal clinics, which help them to experience healthy and safe pregnancy [Mojoyinola, 2011]. These definitions present maternal health literacy as a set of *individual's social and cognitive skill* that allow the mother to access and practice new information on maternal health such as healthy habits, nutrition, health check-ups, immunizations as well as health complications during pregnancy and solutions of the complications to promote and maintain health of her and her baby. The maternal health literacy also improves the knowledge and awareness among mothers so that they might recognize the complications and risk factors of pregnancy and their management and built capacity to

take right decision on right time for better health of mother and baby.

### **Causes of maternal and neonatal death**

According to WHO report every day, approximately 830 women die from preventable causes related to pregnancy and childbirth. The major complications that account for nearly 75% of all maternal deaths are: severe bleeding (mostly bleeding after childbirth), infections (usually after childbirth), high blood pressure during pregnancy (pre-eclampsia and eclampsia), complications from delivery and unsafe abortion. The remainder are caused by or associated with diseases such as malaria, and AIDS during pregnancy (Maternal mortality, 2018). In India the five most common direct causes of pregnancy-related mortality are hemorrhage (38%), sepsis (11%), unsafe abortion (8%), hypertensive disorders (5%) and obstructed labor (5%) (Registrar, General, India and Centre for Global Health Research, 2006). Many neonatal and child health indicators from birth to under the age of 5 still lag in India. Nearly 30 percent of all global newborn births occur in India, with 53 percent of all under-five deaths occurring in the first 28 days of life. Forty-eight percent of children under age 5 are stunted, and 44 percent are underweight. [Requejo K, et al. 2012].

### **Low level of maternal health literacy**

Maternal health literacy level is significantly associated with the neonatal health and the mother self. Newborn care is strongly influenced by women's social and health status and by home care and practices for mother and newborn, as well as by maternal and newborn care services (Rodolfo et al. 2000). Most of the maternal deaths in developing countries are preventable by adopting proper health care, having adequate nutrition and the presence of a skilled birth attendant during delivery and emergency obstetric care. Lack of adequate knowledge amongst mothers regarding nutrition, breast-feeding and parenting is another area of concern [Harishankar et al, 2004]. Notably, less than 1 percent of women in rural UP are aware of

the lactational amenorrhea method (LAM), and 73 percent of women with a child less than 6 months and 53 percent of women with a child more than 6 months were exposed to the risk of unwanted pregnancy [Goel et al, 2010]. A research conducted by Anita Gupta et al, 2010 in an urbanized village in east Delhi to study the utilization of antenatal care and delivery care among women and identify some of the demographic and socioeconomic factors that affect utilization of antenatal care and delivery care. Results showed that 51% of the study subjects had institutional deliveries while 49% had home deliveries. Women married early were more likely to have home deliveries than women married after 18 years. Institutional deliveries increased with the education of the women and their husband. However family income, as well as duration of stay in the area had no influence on the place of delivery. In this study 57.8% deliveries were assisted by doctor or nurse while 33.3% of the deliveries were by Dai and 8.8% by relatives and others. According to NFHS report, 2015-16 the proportion of women who received the recommended four or more ANC visits is 51% and the proportion of women who received ANC in the first trimester is 59%. Gender inequality places the female child at a disadvantage compared to males and causes them to suffer more because they are last to eat and considered less important [Mukherjee A., 2010].

### **Association between Socio-economic factors and maternal health literacy**

Women with higher education, higher income and with a longer duration of stay were more likely to have more than 3 antenatal visits. Education is a strong predictor of use of maternal health care services. Studies from India and other developing countries have reiterated this [Gupta A. et al, 2010]. According to census report, though the Indian literacy rate has grown up tremendously in last two decades especially among females from 64.83% in 2001 to 74.04% in 2011. But female literacy is lower (65.46%) than male literacy

(82.14%).Evidences show that women who are better educated tend to have healthier children. Education would also improve the opportunities of the employment for women which results in improving their status, contributing to family savings, reducing poverty and contributing to economic growth. All of these invests bring significant benefits and effects not only for women but also their children, families, communities and their country. A study conducted in Nigeria found that generally poor knowledge about safe motherhood practices among female respondents within selected rural communities in Northern Nigeria. Knowledge of safe pregnancy practices among women belong to rural communities is strongly associated with attendance at ANC visits, being employed or acquiring some level of education. Increasing knowledge about safe motherhood practices should translate into safer pregnancy outcomes and subsequently lead to lower maternal mortality across the developing world [Okereke et al., 2013]. Moreover, women, husbands and mothers-in-law are not aware of the importance of postnatal check-ups for the mother and newborn within 7 days of delivery and have poor knowledge of postnatal danger signs that signal the need for medical care among mothers and newborns [Varma D.S.et al. 2010]. According to WHO report in high-income countries, virtually all women have at least four antenatal care visits, are attended by a skilled health worker during childbirth and receive postpartum care. In 2015, only 40% of all pregnant women in low-income countries had the recommended antenatal care visits. Other factors that prevent women from receiving or seeking care during pregnancy and childbirth are: poverty, distance, lack of information, inadequate services, cultural practices [Maternal mortality, 2018]

#### **Impact of interventions on maternal health literacy**

Low coverage of life-saving preventive health interventions—stemming from unhealthful social norms, attitudes and

practices, and lack of knowledge among key population groups and healthcare providers in both the public and private sector – contribute to maternal, newborn and child mortality and morbidity in India. Specifically, lack of family planning leading to suboptimal birth spacing and to young maternal age at first pregnancy; lack of routine antenatal care or skilled attendance at delivery, including poor hygiene practices; lack of early and exclusive breastfeeding, newborn thermal care and clean cord care; poor infant and young child feeding practices; and poor demand for preventive child health measures, such as immunizations, all result in avertable morbidity and death [Gary L. et al, 2010].There are so many examples that reveal the success of interventions on health literacy. One of them, a community based longitudinal intervention study was carried out in Haryana, India to determine the impact of supervised care on survival of low birth weight babies. In study there was a significant decline in neonatal mortality rate in low birth weight babies. The death of babies, decline in post neonatal period was more pronounced. Amongst the causes of death those related to feeding problem and birth asphyxia decreased and those related to sepsis also declined. Knowledge of mother was significantly improved in intervention areas than in control areas. Practices related to keeping the baby warm, feeding colostrum, and clean deliveries were adopted in the intervention area. The experience in the study was utilized in community-based research on birth asphyxia management and further intensification of conducting clean delivery [Hossain & Ross 2001; WHO 2002].In India, the government started paying for prenatal and delivery care to ensure access, and saw success in reducing maternal mortality, so much so that India is cited as the major reason for decreasing global rates of maternal mortality ["Maternal Deaths Decline Sharply Across the Globe",13 April 2010].

#### **Low exposure to media**

Interpersonal communication channels must take the lead role in behavior change while massmedia could provide a supportive role in disseminating knowledge and bringing about the desired behavioral and social change [Ganju D.et al, 2010].The majority of rural women inUP (58 %) have no exposure to any media and the percentage with access to any media varies from a mere 9 percent to 87 percent depending on the woman's background characteristics like caste, class, education and village size. Similarly, the perspectives of senior program managers from the media (press, radio, and TV)and advertising agencies on the proposed BCC strategy highlight the challenges in partnering with them in this effort [Ramakrishnan N. &Arora V. 2010]. The article on emerging information and communications technologies (ICTs)and their possible role provides leads on how mobile technology could be leveraged to communicate with families and improve the functioning of frontline health workers [Garai A. & Ganesan R., 2010]. The formative study repeatedly underscores equity issues; that the poor, scheduled castes, scheduled tribes and non-literate segments of the population receive neither adequate information nor health services [Darmstadt G. L. & Tarigopula U. K, 2010].

## CONCLUSION

We can therefore only improve access to and delivery of maternal health services in rural areas through Health literacy amongst health providers, women and girls of reproductive age, men, cultural and religious heads etc. There is need for appropriate interventions to address the existing barriers between rural mothers and the formal health care system. This should include health literacy for both men and women in rural communities and health providers on a human rights based approach to service delivery such that we reduce mother's seeking care in more traditional environments. As poor maternal health is both an indicator and a cause of extreme

poverty so it becomes very important to decrease the rates of maternal mortality and morbidity in developing countries. Despite sincere effort the utilization of maternal health services are far from satisfactory. So it becomes necessary to promote the utilization of maternal health care services for improving the reproductive health of women and reducing the maternal and child mortality.

## Acknowledgement:

Authors are very thankful to all the authors whose paper they used to write their review paper.

## REFERENCES

- Belsey M., "Global overview of newborn health", Summary of oral report to Director-General of WHO at 89<sup>th</sup> of WHO Executive board: 1992.
- Darmstadt G.L., Tarigopula U.K., Behavior change communication as an intervention to improve family health outcomes; Vol. 56 (Special Issue).
- D.S.Varma, M.E.Khan, A. Hazra, Increasing postnatal care of mothers and newborns including follow-up cord care and thermal care in rural Uttar Pradesh, Journal of family welfare; 2010: 56.
- Ekechi Okereke, Susan Aradeon, Adekunle Akerele, Mustapha Tanko, Ibrahim Yisa and Benson Obonyo, Knowledge of safe motherhood among women in rural communities in northern Nigeria: implications for maternal mortality reduction, Reproductive Health, licensee BioMed Central Ltd; 2013: DOI: 10.1186/174247551057, © Okereke et al.
- Engel J., Glennie J., Adhikari S. R., Sanju Wagle Bhattarai, Prasai D. P. and Samuels F., Nepal's Story, Understanding improvements in maternal health, 2014.
- Ganju D, Bhatnagar I, Hazra A., Jain S., Khan M.E., Reach if media and interpersonal communication in rural Uttar Pradesh, Journal of family welfare; 2010: vol. 56.
- Garai A., Ganesan R, Role of information and communication technologies in accelerating the adoption of healthy behaviors, Journal of family welfare, 2010; vol. 56.

- Goel S., Bhatnagar I., Khan M.E., Hazra A., “Increasing postpartum contraception in rural Uttar Pradesh”, *The Journal of family welfare*, 2010; 56 (special issue): 57- 64.
- Gupta A. et al, Determinants of utilization pattern of antenatal and delivery services”, *Indian J. Prev. Soc. Med*, 2010; Vol. 4: No.3 & 4, page no. 244.
- Harishankar, S. Dwivedi, S.B. Dabral, D.K. Walia, Nutritional status of children under 6 years of age, *Indian J.Prev.Soc.Med*, 2004; vol 35:156–62.
- Hossain J, Ross S. R., “Promotion of birth planning to increase use of EmOC Services”, Atlanta, CARE: 2001, (Unpublished)
- Kickbusch I.S., Health literacy: Addressing the Health and Education Divide, *Health Promotion International*, 2001; 16 (5): 289-297.
- Maternal Deaths Decline Sharply Across the Globe, *New York Times*, 2010.
- Mojinyinola J. K., “Influence of Maternal Health Literacy on Healthy Pregnancy and Pregnancy Outcomes of Women Attending Public Hospitals in Ibadan”, Oyo State, Nigeria, *African Research Review*, 2011; 5(3): Page no. 28-39.
- Mukherjee A., Food insecurities faced by women and girl children, CAPSAESCAP Paper, (2010) p. 11.
- National Family Health Survey (NFHS4); 2015-1; available at <http://rchiips.org/nfhs/NFHS-4Reports/India.pdf> retrieved on 10/4/2019.
- Ramakrishnan N., and Arora V., Media perspectives on partnerships to address family health in northern India, *Journal of family welfare*; 2010.
- Registrar, General, India and Centre for Global Health Research, Maternal Mortality in India, 1997-2003: Trends, Causes and Risk Factors, New Delhi: Registrar General, India, (2006), p. 1-40.
- Renkert S., Nutbeam D., “Opportunities to improve maternal health literacy through antenatal education: an exploratory study”, *Health Promot Int.*, 2001; 16(4): 381-8.
- Requejo K., Bryce K., Victoria C., Countdown to 2015: Maternal, newborn and child survival, Building a Future for Women and Children: the 2012 report. Washington DC: World Health Organization and UNICEF; 2012: p10.
- Rodolfo P., Walls S., “The effect of poverty, social inequality, and maternal education on infant mortality in Nicaragua 1988-1993”, *American Journal of Public Health*; 2000: page no 64-69.
- Shieh C, Halstead J. A., Understanding the impact of health literacy on women's health, *Journal of Obstetric, Gynecologic, & Neonatal Nursing*; 2009; 38(5) , 601-612.
- Taş T. A., Akış N., OkuryazarlığıS, *STED*, 2016;25(3):119-124.
- “United Nations Millennium Development Goals and Beyond 2015”, Goal 5 Fact Sheet. Retrieved on April 5, 2014 from <http://www.un.org/millenniumgoals/maternal.html>
- World Health Organization, Trends in maternal mortality: 1990 to 2010. WHO, UNICEF, UNFPA and The World Bank estimates, (2012).
- WHO, “Maternal mortality”; 2018, available at <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality>, retrieved on 11/4/2019.

How to cite this article: Tripathi P, Singh N. A need for maternal health literacy to promote maternal and neonatal health: a review. *Int J Health Sci Res.* 2019; 9(8):467-472.

\*\*\*\*\*