Peripartum Safety: Time to Act

Alby Johnson[1], Sasi Vaithilingan[2]

[1]Research Scholar, Department of Obstetrics & Gynecological Nursing, Vinayaka Mission's Research Foundation (DU), Salem, Tamilnadu, India, [2]Professor, Department of Child Health Nursing, Vice Principal Vinayaka Mission's College of Nursing, Puducherry, Vinayaka Mission's Research Foundation (DU), Salem, Tamilnadu, India

Abstract

Peripartum safety refers to the safe care of women throughout the antenatal, intranatal, and postnatal periods. Approximately 15% of all childbearing women are likely to develop life-threatening complications. India and Nigeria accounted for one-third of global maternal deaths at the country level. Recognizing the need, the United States has initiated a Maternal safety Bundle. On a par with, The Government of India introduced various programs to reduce maternal deaths. Though the country made most of its progress, MMR state performances are varied in their extremes and failed to achieve the targeted goal. High maternal mortality is associated with medical, socio-economic, and health care system problems are evidenced. The shortfall of skilled health care providers in India hampers progress towards achieving universal health coverage. The current situation calls for more sensitization and sustainable efforts for integration and institutionalization of health system monitoring to achieve the target of Sustainable Developmental Goals. Studies need to germinate to tackle the health care insufficiencies of pregnant women and enhance the quality of care.

Keywords: *Peripartum Safety, Maternal Safety,Maternal Mortality.*

Introduction

Peripartum safety refers to the safe care of women throughout antenatal, intranatal, and postnatal periods. Safety challenges like, medication errors, interventional modifications, misdiagnosis, and emotional harm evidenced to cause maternal mortality and morbidity throughout peripartum period[1]. World Health Organization defines maternal mortality as the death of a woman during gestation or within 42 days of childbirth that involves all deaths irrespective of the duration, any event associated with pregnancy, childbirth or conditions worsened by pregnancy, and deaths related to the management of pregnancy but not from unexpected or accidental situations [2].Maternal Mortality Rate (MMR) is a crucial communal health indicator, as it gives a comprehensive view of the maternal health condition of a country as well as the quality of the health care system involved . The health outcome of pregnant women lies in the hands of health care providers[4]. One of the interventions for preventing maternal mortality and morbidity is skilled assistance throughout pregnancy and childbirth, which is possible only in the institutional deliveries.

Incidence of Maternal Mortality: World Health Organization estimates that 2,95,000 maternal deaths occurred globally in 2017, of pregnancy-related causes, and 99% of cases reported in developing countries. The problem of maternal mortality and morbidity rates in the United States highlighted over the past fiveyears, and it is the only developed nation where MMR (approximately 700/year) has increased since the 1990s[5,6]. In the country level, India 12% and Nigeria 23%accounted for one-third (35%) of global maternal deaths[2]. Even though maternal mortality is a matter of concern, as many women do not die of causes related to pregnancy but suffer severe morbidities[7]. Global incidence of Maternal Mortality shown in Figure 1.

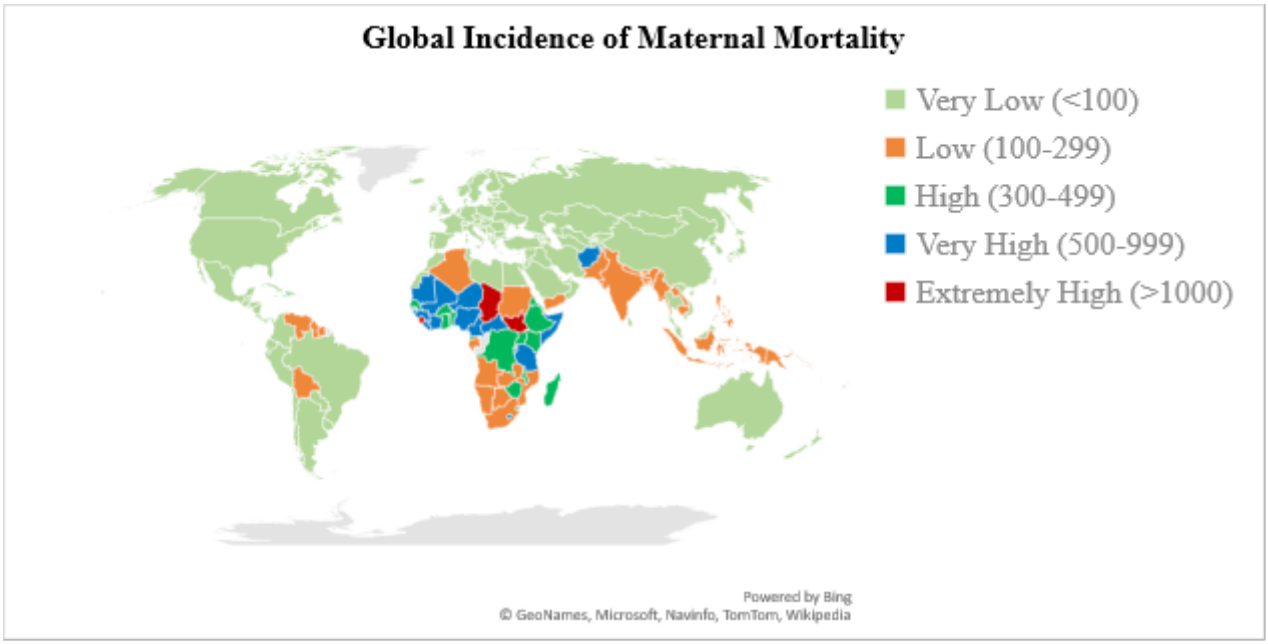

Figure 1: Global Incidence of Maternal Mortality. Source: WHO, UNICEF, UNPF and The World Bank, Trends in Maternal Mortality: 2000 to 2017 WHO Geneva, 2019

United Nation's Millennium Developmental goal (MDG) 5 targeted to reduce MMR by approximately 75% in 2015[8]. The target was not stricken, and India was nowhere near MDG. The graph below shows the MMR of India from 1997- 2013 (Figure 2).

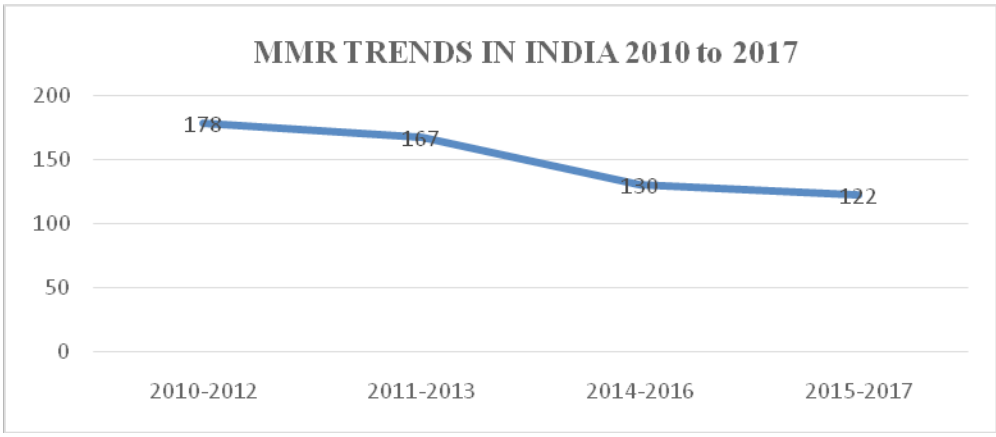

Figure. 2: MMR Trends in India 2010 to 2017. Source: Sample Registration System, Registrar General of India

Hence, the United Nations extended the goals of MDGs by introducing Sustainable Developmental goals (SDG) 2016-2030. SDG 3 includes a reduction in maternal mortality < 70 per 1,00,000 live births in each country by 2030. However, only16 countries (Angola, Belarus, Cambodia, Estonia, Iran, Kazakhstan, Lao People's Democratic Republic, Mongolia, Nepal, Poland, Romania, Russian Federation, Rwanda, Tajikistan, Timor-Leste, and Turkmenistan) were able to achieve the reduction based on the new point estimates for MMR reduction 2000 to 2017[8].

Causes of Maternal Mortality: Evidence shows that obstetric hemorrhage is the leading cause of maternal death in Africa and Asia. Whereas, in Latin America and the Caribbean, hypertensive disorders are the highest

cause for perinatal death[9]. Venous thromboembolism is the persisting cause for maternal mortality even in countries with good maternity resources[10]. Overall, the causes of maternal deaths identified are shown in Figure 3.

Figure 3: Global Causes of Maternal Deaths. Source: WHO analysis of causes of maternal death: a systematic review: Lancet Global Health 2014

The Ministry of Health and Family Welfare (MOHFW) report claims that sepsis, unsafe abortions, post-partum hemorrhage, anemia, and malaria are leading causes of maternal deaths in India. The emerging evidence underlines the causes of maternal mortality and morbidity in the United States were cardiovascular diseases (>33%), non-cardiovascular diseases (14.3%), infection (12.5%), and obstetric hemorrhage (11.2%)[6].

Strategies for Peripartum Safety: Recognizing the need to overcome the burden of MMR and to identify the potentially preventable causes for perinatal mortality and morbidity,the United States has initiated Maternal Safety Bundles[5]. This includes early identification and prevention of mental health disorders (depression and anxiety), venous thromboembolism (VTE),opioid use disorder (OUD), obstetric hemorrhage, basiccare in postpartum, prevention of retained vaginal sponge after birth, reducing the peripartum disparities and primary cesarean section, and hypertensive disorders in pregnancy. The main domains of safety bundles consist of 4Rs that are readiness, recognition and prevention, response, and reporting/system learning. Every phase of the domain comprises of key points for woman, health care provider and birthing facility as pertinent [1].

Readiness: Readiness gives an alert about what necessary to be arranged for every maternal event. This comprises of items such as training for staff, risk assessment, quick access to medication and types of equipment, in-situ drills, adoption and development and ratification of condition-specific protocol and engagement of departments outside the maternity unit[11].

Recognition: This includes distinguish the unique risks and needs of every patient by applying a standardized tool, developing systems for maternal warning signs, and match treatment response to each women's stage of recovery[11].

Response: The health care provider/team on a maternity setting should universally implement the unit's protocol in response to an impending maternal event and obtain follow-up care subsequent to discharge navigation[11].

Reporting/system learning: Maternal care involved staff should conduct a formal and non-judgmental debrief as soon as possible to identify those actions that contributed to the outcome[11]

In India, the Government committed to reduce deaths associated with pregnancy and childbearing by launching the National Health Mission (NHM). The main objective of this initiative is to strengthen the health systems, manage diseases, and promote Reproductive-Maternal-Neonatal-Child Health(RMNCH) in urban and rural settings. RMNCH and Adolescent Health (RMNCH+A) is one of the major components of NHM to reduce MMR to 100 per 1,00,000 live births by 2017[12,13]. Additionally, NHM works towards accomplishing India's global health commitment under SGD[3].

Besides, the nation has other initiatives and schemes such asJanani Suraksha Yojana(JSY)Janani Shishu Suraksha Karyakram (JSSK), Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA), LaQshya,Comprehensive Abortion Care Services etc. Reports evidenced that regional variations exist in the coverage and implementation of JSY and many women had incomplete knowledge regarding the various schemes of JSSK and there is need to increase awareness[14,15]. A study found low level of utilization of antenatal services under PMSMA in rural areas[16].

Another review claims that there is a lack of trained workers and skilled providers, which causes a missed opportunity to help women to prevent from subsequent unintended pregnancy and possible abortion due to inadequate contraceptive services at the point of abortion care[17].

The country made most of its progress but, MMR state performances vary in their extremes. Maternal mortality in Empowered Action Group(EAG) states of India (Assam, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh, Uttarakhand) exceeds the national average, and there is a long way to reach the target set out by the SDGs[18].

Inaccessibility to contraceptives, less populace expenditure on healthcare, lack of infrastructures, limited utility of drugs, and trained medical personnel are other contributing factors of maternal death[3].

High maternal mortality can be associated with medical, socio-economic, and health care system problems. Concurrently, maternal health indicator discrepancy is increasing over time. Rural inhabitants, the less educated, and the poorest receives lower health care access and coverage that deteriorates the health outcome. The shortfall of skilled health care providers in India hampers progress towards achieving universal health coverage and maternal health targets. Studies shows that health-care infrastructure in rural areas were irregularly distributed, and health care facilities have an acute shortage of doctors and nurses[3,19].

Keeping in view about the above facts, more sensitization and sustainable efforts are required for the integration and institutionalization of health system monitoring to achieve the target of sustainable developmental goals. Further studies need to germinate to tackle the health care insufficiencies of pregnant women and enhance the quality of care in rural and urban settings.

Conclusion

Given the situation of maternal health in Indian states, improvement in the performance of maternal health-related activities is very crucial. The betterment is required in all stages of peripartum health care by strengthening through skilled health care providers and quality maternity care are some of the strategies that are required in India. As the execution of this strategy, the standard protocol is necessary for all aspects of maternity health care.

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