

# Conditions of Maternal Mortality Rate in India: Unmet Needs to Take Immediate Action for Increasing Ratio's

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## Abstract

*India's public health care system is in crisis. This reflected in the prevalent high maternal and child mortality rates, high disease burden, poor and inequitable access to health care services, and high financial cost to households, often impoverishing many.*

*In India, maternal mortality ratios (MMR) have improved over the last decade, most of the larger states still have three-digit MMRs. In India alone, approximately every 10 to 15 minutes mothers have died due to the causes as sepsis and haemorrhage, insufficient preventable with appropriate care and high-risk pregnancy and child bearing time. By the way, India has been starting the decreasing ratio of MMR with 4.5 percent annually. If we have achieved the millennium development goal now than the ratio should be at 5.5 percent annually.*

*Dr Lale Say of WHO has said about MMR that, the major challenges faced by India home. He said that, for every maternal death in India, 20 more women suffer from lifelong health impairments that result from complications during their pregnancies. Most of these deaths are among women in the 15-29 age groups, at the prime of their reproductive lives. The most tragic aspect of these deaths is that about 90 percent of them are avoidable if women receive the right kind of interventions is providing continual medical care and education to pregnant women throughout the entirety of their pregnancy.*

*Although India has progressed rapidly on the socioeconomic front progress in the improvement of maternal health has been slow. Review of safe motherhood efforts in India shows that, despite major initiatives taken by the government in the last 10 years, till recently, nearly half of all deliveries take place at home, and the coverage of antenatal care services are low. The MMR remains at around 300-450. The challenges are how to make safe motherhood strategies in the future more successful.*

*The present study aims to understand the causes of MMR in a special context to Indian Society. The government has taken some important action to save maternity by some popular programs like MCH, RCH-I, RCH-II and Janani Suraksha Yojana. In certain rural regions, Anganwadi & Asha Bahuyen are playing a key role to reduce the morbidity of pregnant women. But the present condition of MMR has not shown the satisfied data. So, there is "Unmet need to reduce maternal mortality rate in India" by more effective plan and its forceful implementation by the government action. The conclusion of this paper is based on empirical data analysis and other secondary sources.*

**Keywords:** Unmet needs, pregnancy and child birth, maternal deaths, millennium development goal, Literacy and social issues, postpartum haemorrhage, antenatal care services, safe motherhood.

## 1. Introduction

India has made phenomenal economic gains in the last three decades but is still on the task to improve the health status of its population on similar terms. The public health challenges are enormous, the highest number of maternal and infant death worldwide and accounts for one fifth of all global maternal mortalities. Large inequalities exist in maternal mortalities. Large inequalities exist in maternal health status across Indian states, including significant gaps between weakly and deprived groups and rural urban differentials. Bharti et al (2002) have conducted a study in rural north-24

Parganas to estimates of MMR and its related causes to ascertain the epidemiological factors which were associated with maternal deaths.

The maternal mortality ratio (MMR) is defined as the number of maternal death during a given period per 100,000 live births. According to Registrar General of India, India's MMR was 167 in 2010-12 out of 100000 live births. The complications during pregnancy and at the time of birth increase the maternal deaths and some of the cases to cause the death of women his disability of reproductive age. Inferior quality of infrastructure, weaknesses of public health facilities are also the main factors for low inadequate obstetric care.

When we observe the latest report of RGI and SRS, India has been showing the good signed to decline ratio of MMR from 212 per 100,000 live births in the year of 2007-09. But still, now the data has been decreasing at 167 in the period 2011-13. The rate of MMR has declined between the periods of 2007-09 to 2011-12 at 5.7 percent. According to the WHO report 2013, India is the only country in the entire world were as found the highest number of maternal deaths. Only India in the entire world here is approximately 17 percent or nearly 50,000 women have died out of 2.89 lakh women due to the complications of pregnancy or at the time of child birth. According to the UN report, second largest maternal deaths are found in Nigeria due to the same circumstances. In country, approximately 40,000 maternal deaths are occurring in 2.89 lakh women. On another side China, this is the largest population of the country. Whereas, China shows the contradiction to along with 59,00 maternal deaths in 2013 mainly due to its 'One Child Policy'. United Nation stated that although India taking the very good effort to curbing the maternal mortality rate (MMR). It has reached 65 percent since 1990. While the UN says that if India wants to achieve the goal of millennium development so it must put the MMR up to 75 percent till 2015.

According to the WHO report-2012, In India, maternal mortality ratios (MMR) have improved over the last decade, most of the larger states still have three-digit MMRs. In India alone, approximately every 10 to 15 minutes mothers have died due to the causes as sepsis and haemorrhage, insufficient preventable with appropriate care and high-risk pregnancy and child bearing time. By the way, India has been starting the decreasing ratio of MMR with 4.5 percent annually. If we have achieved the millennium development goal now than the ratio should be at 5.5 percent annually.

## **2. Why India drawing world attention?**

India is drawing world attention, not only because of its population explosion but also for emerging health profile and profound political, economic and social transformations. Since independence during last sixty-four years, many urban and growth-oriented developmental programs have been implemented, nearly 716 million rural people (72% of the total population) half of which are below poverty line (BPL) continue to fight a hopeless and constantly losing the battle for survival and health. The policies implemented so far, which concentrate only on the growth of the economy, not on equity and equality, have widened the gap between urban and rural and haves and have-not. Nearly 70% of all deaths and 92% of deaths from communicable diseases occur among the poorest 20% of the population.

## **3. The global picture of MMR**

Today's status of maternal mortality and health issue shows a far greater disparity between developed and developing countries (See Table-2). As per 1993 statistics, the maternal mortality in developed country is 30% per 100000 live births as compared to 450/100000 live births in developing countries. South eastern Asia is 420/1 lakh as compared to southern Asia (650/1 lakh) maternal mortality in India is not a chance event. It has its origins in many interwind factors, starting with the social status, position of women, greatly affected by the economic resource and infrastructure of the country, and immediately dependent on accessibility and availability of skills, materials, and facilities for family planning and maternity care.

#### 4. Measurements OF MMR

The four measures of maternal death are:

1. Maternal Mortality Ratio (MMR),
2. Maternal Mortality Rate,
3. Lifetime risk of maternal death, and
4. The proportion of maternal deaths among deaths of women of reproductive years (PM).

#### 5. Causes of MMR in India:

Pregnancy and child birth is a journey, not just of one woman or her family, but where all of us as a nation have a role to play. Every mistake could affect the differences between life and death. Some major causes explain the complex factors can be affected the broader context of people's line, including their economic circumstances, education, employment, social and gender relationships and the traditional and legal structures with in which they live. The biggest burden of maternal deaths falls on marginalized communities and the poor, and the rural populations.

The **First causes** related to the malnutrition among the women's. Approximately 90 percent women take inadequate nutrition, according to WHO report-2015 that most prosperous states in India rural women were underweight and more than half were anaemic in 2005-06. Ignorance of folic acid iron tablets during pregnancy and only 4 percent of an expectant mother took deworming drug during pregnancy. These causes are an early mistake and primary misstep of the maternal deaths. The **Second causes** are related to lack of transportation. They are the responsible for the maternal death. Most of the mother dies at home or on the way to the hospital because of without any preparation for child bearing time and other complications. Lack of ambulances at a time of needs is one of the major causes of maternal deaths in rural regions of India. WHO again stated that 70 percent patient is facing these emergencies mainly in rural areas in India and 40 percent of deaths have occurred at home because they had not planned to controlled sepsis and excess bleeding. The **Third causes** are related to the miss-behaviour of health workers and his carelessness. If we admit the mother at a need time to the hospitals but there is no guarantee to save her life. Because the carelessness of health workers of government hospital, poor medical facilities, lack of trained professionals, sufficient number of doctors, lack of medicines and other crucial needs like blood is not provided properly. NFHS-II report stated that only less than 30 percent community health Centre provides the availability of obstetrician and only less the 10 percent an anaesthetist. All these factors lead to a critical situation when shifting of a patient to another hospital to get the right treatment.

Another most common and serious causes of maternal deaths are post-partum bleeding (15%), unsafe abortions and its complication (15%), a hypertensive disorder during pregnancy (10%), postpartum infections are in 8% and obstructed labour has 6%. Blood clots (8%) and pre-existing condition (28%) are the other important and crucial causes of maternal death. Indirect causes like malaria, anaemia, HIV/AIDS and cardiovascular disease have also increased the complication during pregnancy and at the time of birth.

#### 6. Step to reduce MMR in India:

Now the question arises that how can prevent these causes of maternal death. We have discussed some critical issues and solution for the prevention of MMR. The death rate for women giving birth plummeted in the twentieth century. For elements are essential to maternal death prevention, according to UNFPA-

1. Prenatal care- It is recommended that expectant mothers receive at least for an antenatal visit to check and monitor the health of mother and foetus.
2. Skilled birth attendance with emergency back-ups such as doctors, nurses, and midwives who have the skills to manage normal deliveries and recognize the onset of complications.

3. To avoid the major causes of maternal deaths by the obstetric care. Like haemorrhage, unsafe abortion, sepsis, hypertensives disorder and obstructed labour.
4. Post-natal care which is the 6 weeks following delivery. During this time bleeding, sepsis and hypertensive disorders can occur and new born is extremely vulnerable aftermath (result) of birth. Therefore, following up-visits by a health worker to assess the health of both mother and child in the post-natal period is strongly recommended.

## 7. Strategies to control MMR

Although the government of India has taken some major decision for the betterment of safe motherhood and initiated different strategies since a long time. The initiative launched under NRHM has been focused on the availability of health care facilities. A substantial number of community health workers (ASHAs) have enormous potential for expanding coverage of community-based interventions, which can be facilitated and monitored by village health sanitation and nutrition committee (VHSNC). Some other important strategies have provided by the government for safe motherhood. This is as follows-

1. To involve neonatologist, paediatrician, and physician- to ensure that Childs family must have knowledge about their blood groups, Rh factor and girls should have at least > 14 gms haemoglobin and devoid malnutrition, UTI, and RTI etc.
2. To involve gynaecologist- to prevent and treat PCOS, endometriosis, and infections of the adolescent girl before marriage.
3. To inform the head of family-marriage of girls should be >20 years of age.
4. To involve obstetrician, midwife and paramedical staff- to find out any complications of pregnancy and prompt treatment.
5. To involve govt., NGO (FOGSI), IMA-for awareness programme at school/college/media/ Religious places/marriage/functions-regarding reproductive health care/sex education/adverse effect of drugs/smoking/alcohol etc.
6. To involve health care staff- to perform community studies, household survey, sisterhood and other measures and reproductive age mortality surveys.
7. To involve office staff- to maintain hospital data, data from other sources and other health records.
8. To involve DM, SDO, BDO and PANCHAYAT SABADIPATI- to initiate action plan and generate economic resources etc. for implementation of these programs.
9. Regular home visit by accredited social health activist (ASHA) and sensitizing mothers about the need of taking one extra meal, eight-hour sleep at night and two hours rest at daytime, early detection of a complication of pregnancy etc. ASHA educate the mothers about the need for institutional delivery and delivery by skilled birth attendant.
10. Provision of the arrangement of mothers meeting every month at Anganwadi Center.
11. Under Janani Suraksha, Yojana Scheme mother get initiative if the delivery occurs at govt. accredited institutions.
12. Under Vande Mataram Scheme gynaecologist who is not in govt. services, if treat pregnant ladies at government facilities free of cost, then they receive an amount of incentive from the govt. and get Vande Mataram certificate.

## 8. Conclusion

Although, India has progressed rapidly on the socioeconomic front progress in the improvement of maternal health has been slow. Review of safe motherhood efforts in India shows that, despite major initiatives taken by the government in the last 10 years, till recently, nearly half of all deliveries take place at home, and the coverage of antenatal care services are low. The MMR remains at around to 300-450. The challenges are how the make safe mother hood strategies in the future more successful. Strengthening emergency obstetric care (EMOC) should be the focus of the

safe mother hood strategy, along with ensuring skilled care at all births. Policy and programs designed to implement evidence based strategies and detailed micro-level programs planning are needed. Monitoring effective implementation and measuring progress is essential for success. It will take at least 10-15 years of consistent, concerted and committed efforts towards improving maternal health to show results.

**Table-1****Maternal Mortality Ratio (MMR) (per 100000 live births)**

<b>Maternal mortality ratio: India, EAG &amp; Assam, southern states and other states (per 100000 live births)</b>	<b>2004-06</b>	<b>2007-09</b>	<b>2010-12</b>	<b>2011-13</b>
India total	254	212	178	167
Assam	480	390	328	300
Bihar/Jharkhand	312	261	219	208
Madhya Pradesh/Chhattisgarh	335	269	230	221
Odisha	303	258	235	222
Rajasthan	388	318	255	244
Uttar Pradesh/Uttarakhand	440	359	292	285
EAG & Assam subtotal	375	308	257	246
Andhra Pradesh	154	134	110	92
Karnataka	213	178	144	133
Kerala	95	81	66	61
Tamil Nadu	111	97	90	79
South Subtotal	149	127	105	93
Gujarat	160	148	122	112
Haryana	186	153	146	127
Maharashtra	130	104	87	68
Punjab	192	172	155	141
West Bengal	141	145	117	113
Other	206	160	136	126
Another Subtotal	174	149	127	115

Source: SAMPLE REGISTRATION SYSTEM (According to NITI AYOJ, National Institutions Transforming India, Government of India)

NOTE: in order to understand the maternal mortality situation in the country better and to map the changes that have taken place, especially, at the regional levels, states have been categorized into three groups namely, “empowered Action Group” (EAG) states comprising Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Orissa, Rajasthan, Uttar Pradesh & Uttarakhand and Assam, “Southern” states which include Andhra Pradesh, Karnataka, Kerala and Tamil Nadu, and “other” states covering the remaining states/UTs.

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