REVIEW ARTICLE

Maternal Mortality: The Indian Story

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ABSTRACT

Maternal mortality is still a major problem of developing countries, and all the "so-called" developing countries have failed to achieve the Millennium Development Goal targets. Revised targets are given in Sustainable development goal (SDG) for maternal mortality rate (MMR) of 70. Due to multiple issues of women's health and empowerment and literacy, the targets have become different to achieve in India in the past few years. For the last 5 years, India has shown a new political will and a new multipronged drive to bring down MMR, and the results have been dramatic to bring the MMR down to 130. We are well on course to SDG-2030 goal of 70 MMR.

Keywords: Childbirth, Health, Moratality.

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INTRODUCTION

The Millennium development goal (MDG) was a commitment made by all the United Nation member states to work toward making a better world. Millennium development goal 5 was to improve maternal health and achieve a reduction in maternal mortality ratio (MMR) by three-fourths of 1990 rates by 2015.¹

The progress and achievements of MDG from 1990 to 2015 were monitored by the United Nations' Maternal Mortality Estimation Interagency Group (MMEIG) (Fig. 1).²

India recorded a fall of MMR from 437 in 1990 to 122 in 2015–2017, which falls short of the goal, but looking at the diversity of India, it was a fairly good effort.³

The state-wise data are depicted in Figure 2.

The success of 15 years from 1990 to 2015 can be attributed to the Government of India's efforts toward institutional delivery, emergency obsteric care (EMOC) trainings, and various health schemes and financing schemes introduced in 2005.

The trend of fall in MMR is depicted in Figure 3 and clearly shows how the introduction of National Rural Health Mission, Janani Suraksha Yojana, and public–private partnership with Federation of Obstetric and Gynaecological Societies of India (FOGSI) for EMOC trainings and free antenatal services by all obstetricians on ninth of every month.

Year 2015 saw a new political will and more emphasis on planning, program management, personal redistribution, and flexible and increased funding. These interventions have increased, and the results have started being visible (Fig. 3).

ROLE OF PRIVATE SECTOR AND FOGSI BACKGROUND

India has come a long way in improving maternal and newborn health. The MMR of India has reduced from 301 maternal deaths per 100,000 live births in 2001–2003 as per the Registrar General of India, Sample Registration System (RGI, SRS) to 122 maternal deaths per 100,000 live births in 2015–2017 (RGI, SRS).³ As a result, India has achieved the MDG in reduction of maternal and newborn mortality. At the same time, Indian public health system also experienced a rapid expansion of healthcare delivery infrastructure and phenomenal growth in the number of institutional deliveries. Still, this impressive increase has not led to an expected commensurate ¹Global Rainbow Healthcare, Agra, Uttar Pradesh, India

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decline in maternal and neonatal mortality, and every year, almost 34,000 mothers in India do not live to experience these precious moments. Most of these mothers are young and healthy, and their deaths are preventable. It is estimated that globally, about 800 women die every day of preventable causes related to pregnancy and childbirth, and of them, close to 20% of these women are from India.² Within India, there is stark regional disparity in terms of maternal mortality ranging from 46 for Kerala to 237 for Assam (Fig. 2). The Empowered Action Group states and Assam has an average of 175 per 100,000 MMR.⁴ One of the major contributors toward maternal deaths is suboptimal quality of intrapartum care.

The UN interagency estimates are produced by the Maternal Mortality Estimation Interagency Group (MMEIG):

- WHO (Lead)
- UNICEF
- UNFPA
- World Bank
- Lead technical consultant (Leontine Alkema, National University of Singapore)
- Technical Advisory Group

Fig. 1: Maternal Mortality Estimation Interagency Group members

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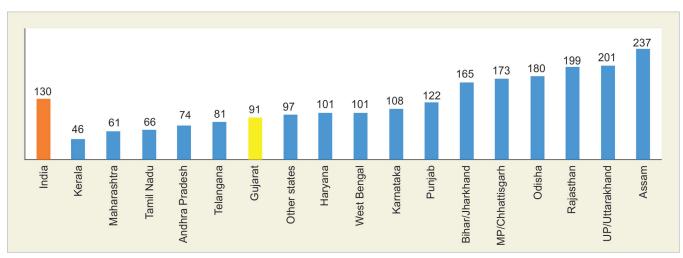


Fig. 2: Maternal mortality in India: state-wise

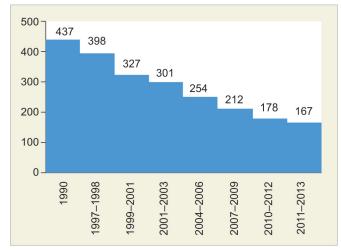


Fig. 3: Decline of maternal mortality rate in India year-wise

As per The Lancet Newborn Series of 2014, the time around labor and childbirth accounts for almost 46% of maternal deaths and 40% of stillbirths and neonatal deaths.⁵ This suggests the need for improving quality of care during intrapartum period during the institutional deliveries. Therefore, it is essential to focus on the provision of high-quality care during childbirth to reduce adverse maternal and neonatal outcomes.

RATIONALE

There is an immediate requirement to focus on private healthcare facilities for provision of quality maternity services to the community. The private sector contributes to a considerable proportion of institutional deliveries across the world and plays an important role in delivering healthcare services in India, providing 80% of all outpatient care and up to 60% of inpatient care. As many as 60% of hospital beds in India are in the private sector, as are the majority of human resources, including 70% of the total health workforce, 80% of physicians, and most obstetricians.⁶ According to the National Family Health Survey-4, the private sector accounts for up to 22% of institutional deliveries in rural areas and up to 43% of institutional deliveries in urban areas.^{3,5–7} Yet, the private sector has not received its due focus to ensure consistent and standard-based quality of maternity care.

MANYATA — A FOGSI INITIATIVE

Federation of Obstetric and Gynaecological Societies of India has launched a quality care initiative in 2016. Manyata is one of its kind quality improvement program that seeks to improve the quality of maternity care by strengthening skills and competencies related to key lifesaving practices among providers working in private sector maternity care facilities. The program is being implemented by FOGSI in collaboration with Jhpiego, an affiliate of Johns Hopkins University, with support from MSD for mothers. The program has been implemented in 700 health facilities across states of Uttar Pradesh, Jharkhand, Maharashtra, Rajasthan, and Karnataka. Manyata aims to create a robust quality improvement environment by helping private maternity care providers strengthen their services and recognize the health facilities that consistently deliver quality care to the women they serve through a standard-based quality care approach.

The program in its core is a quality improvement program backed with a guality assurance mechanism in the form of formal certification by FOGSI. Through this program, collaborating private sector maternity care providing facilities are assessed on the FOGSI-developed clinical standards and detailed action planning done to ensure adherence to clinical standards. Facilities undergo rigorous guality improvement interventions in the form of training and structured mentoring on key lifesaving practices, ensuring availability of essential supplies and medication and creating a quality environment within facilities suiting to their needs. After the intensive quality improvement exercise lasting 6-8 months, FOGSI independently evaluates the facilities through trained external assessors for adherence to clinical standards. Federation of Obstetric and Gynaecological Societies of India provides formal certification to the facilities that demonstrate adherence to >85% clinical standards.

The program data reveal monumental improvements in adherence to standards of clinical care at the facility level. Lifesaving practices such active management of third stage of labor has increased from 31% to 96%, identification and management of severe preeclampsia/eclampsia increased from 19% to 93%, and postpartum hemorrhage increased from 24% to 89%. Similarly, ensuring respectful maternal care has increased from 29 to 91%.

To ensure continuity and sustainability, FOGSI has set up a national and regional program management structures in the form of National Program Management Unit (NPMU), pool of Manyata assessors, Centers of Skills Enhancement (CSEs), and Quality Improvement Hubs (QI Hubs). While CSEs and QI Hubs provide intensive quality improvement support to the private sector facilities, FOGSI through NPMU and pool of Manyata assessors leads the quality assurance and certification process. Through this initiative, FOGSI has successfully demonstrated how a professional society can use its resources to self-regulate and build partnerships. In its third phase (2019–2022), the program will have a strengthened sustainability aspect through a "leaner QI support model," complemented by a digital platform for process management and aims to expand its reach to around 2,000 facilities. In an effort to institutionalize the quality-assured care model, FOGSI has recently collaborated with Government of Maharashtra to pilot this approach for effective engagement of private sector by the name of LaQshya Manyata initiative (Fig. 4).

Moving forward, FOGSI is keen to collaborate with national and state governments to implement the Manyata initiative for all interested private sector maternity care providers to build an inclusive, responsive, resilient, effective, and efficient maternity care model (Fig. 5).

GOAL AND OBJECTIVES

Goal

Develop and validate an inclusive, viable, and investable qualityassured private sector maternity care model focused on standardbased care in India to reduce preventable maternal deaths.

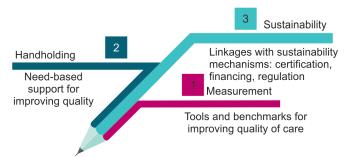


Fig. 4: Quality management framework

Objectives

- Develop a quality accreditation/certification program for private sector maternity care providers
- Deploy a robust quality improvement support mechanism for private sector maternity care institutions
- Develop a collaborative model and effective linkages for meaningful sustainability
- Forge partnerships for potential expansion to cater mothers seeking maternity care from private sector

APPROACH AND **S**TRATEGY

Federation of Obstetric and Gynaecological Societies of India views this program as a foundation for the larger quality management initiative for private sector institutions and proposes a basic conceptual framework for quality management comprising (Fig. 6)

- Improving capacity to measure quality through a jointly developed set of care standards aligning with national priority
- Establishing collaborative QI support structures to provide handholding support to the private sector institutions
- Creating/forging linkages with financing, incentivization, business models, and regulators for sustainability

Federation of Obstetric and Gynaecological Societies of India will closely work with national and state governments, donors, sustainability and development partners, and other relevant stakeholders to create a program implementation model using a Plan-Do-Check-Act approach for improving the quality of maternity care and developing sustainability mechanisms (Figs 4 to 6).

Through this program, FOGSI, in partnership with national and state governments, will work in the following areas:

- Implementation of the proposed accreditation/certification mechanism through regulatory bodies
 - State government
- Creating and nurturing QI support structures and mechanism
- Developing standards for certification in alignment with national priorities in concurrence with the Government of India acceptable norms through a consultative approach
- Developing training and mentoring ecosystem through
 - Regional centers of excellence
 - Strategically located QI support hubs

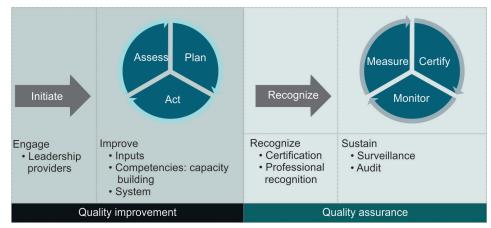


Fig. 5: Road map and monitoring quality improvement and assurance



Maternal Mortality



Fig. 6: Proposed approach to reducing maternal mortality rate

- Developing QI/QA support packages, tools, repository
- Streamlining QA management through
 - Assessment/certification management mechanisms
 - Post-certification quality assurance systems
- Leveraging technology—websites and performance management systems
- Developing investable and viable business models around quality improvement (QI) and quality assurance (QA)
- Partnership with professional bodies for recognition as a valid mechanism
 - National Health Systems Resource Centre (NHSRC)
 - Policy think tank of government of India (NITI Aayog)

EXPECTED RESULTS

- Meaningful and mutually beneficial engagement of private sector for provision of quality maternity care.
- Potential models for QI that are efficient, locally sourced, locally based, and linked with sustainable sources of financing in the short and intermediate terms, recommended for validation and establishment in the last phase of the initiative.
- Developing insights to private sector engagement models for better future programming.

Імраст

- Reduction of MMR across country
- Availability of a resilient and inclusive healthcare model

CONCLUSION

India is well on the way to reduce MMR to 70 by 2024 (Sustainable Development Goals), and this has been possible by a strong political will and the support of private sector to implement the various schemes by the Government of India.

In the words of Prof Mahmoud Fathalla for MDG-

"The way we are going, the MDG of reducing maternal mortality will certainly be left behind, far behind the other seven goals."

Albert Einstein once gave the definition of insanity: to keep on doing the same thing and to expect a different result.

The international community has two options either to do it differently by raising the maternal mortality to a platform of human rights or to keep on doing the same thing.

If we continue to do the same things, we should at least be sane enough not to expect a different result and we should have the honesty to look our mothers in the face and say: sorry we failed you.

India for years did the same things, realizing that we need to change our approach since last 5 years, we in India changed our approach and the change is showing the results. If India continues with the change, then surely the SDG target 70 MMR by 2030 is achievable.

ACKNOWLEDGMENTS

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