

## REVIEW ARTICLE

# Advancing Maternal Health: India's Recent Initiatives

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### ABSTRACT

This review focuses on important health programmes introduced by the government in recent years that aim for better maternal health. The mother and child health outcomes have been markedly improved by the Government of India's programmes for maternal health, which have yielded many benefits. Reducing problems during childbirth and maternal fatalities has been made possible by programmes like the Janani Suraksha Yojana (JSY), which encourage institutional deliveries and provide experienced birth attendants. Improving nutrition has received significant attention as well. New initiatives / programmes like Poshan Abhiyaan and the Pradhan Mantri Matru Vandana Yojana (PMMVY) give pregnant and nursing women nutritional supplements and support, improving the health of both mothers and their unborn children. Comprehensive care guarantees that women and newborns receive all-encompassing medical attention and includes vaccines, supplements, and routine check-ups. Pregnant women who participate in programmes like PMMVY receive financial incentives that help them better manage their health, lessen the financial strain of being pregnant and postpartum, and spend less money out of their own pockets. High standards of care in labour rooms and maternity surgery theatres are ensured by the modernization of healthcare facilities and the training of healthcare professionals through programmes like LaQshya. A number of programmes involve health education and counselling, which equips women with information on labour, pregnancy, and child care. This review focuses on important health programmes introduced by the government in recent years that aim for better maternal health.

### KEYWORDS

Maternal health; Government programmes; Institutional deliveries; Nutritional supplements; Financial incentives; Healthcare modernization; Postpartum Period; Outcome Assessment; Health Care; Delivery of Health Care

## INTRODUCTION

A healthy woman forms the cornerstone of a healthy, dynamic and progressive nation. Safe pregnancy, childbirth and postpartum period are important milestones in the continuum of care for women to achieve optimal maternal and neonatal outcomes; that have a significant impact on the future of mothers, children and families in the long run. Improving the well-being of mothers is an important public health goal for the Government of India.

Government of India have recently initiated many national health programmes and intervention to improve maternal health services. Under the National Health Mission (NHM), India has made concerted efforts to increase access to quality maternal and newborn health services and reduce the numerically large number of preventable maternal, neonatal and infant deaths. The Government of India has made significant progress in reducing the maternal mortality ratio (MMR) from 556 per lakh in 1990 to 113 per lakh live births in 2016-18 (a decline of 80% compared to the global decline of 45%).

Maternal health is an essential aspect of the development of any country in terms of increasing equity and solving broader social challenges like reducing poverty. Significant and strategic investments have been made under the National Health Mission to improve maternal health. Approximately 1.38 lakh women die every year on account of complications related to pregnancy and childbirth. The global MMR during 1990 was much lower at 385. The MMR in India has declined to 167 (2011-13) against a worldwide MMR of 216 (2015). In the publication "Trends in Maternal Mortality: 1990 to 2015", the MMR in India has declined by 68.7% from 556 in 1990 to 139 in 2015 (25 years), an average annual decline of 4.6%. India's share of global maternal deaths has declined significantly to about 15%, as per the Maternal Mortality Estimation Inter-Agency Group (MMEIG) report.

With this persistent decline, India has achieved the National Health Policy (NHP) target of 100/lakh live births by 2020 and is poised to achieve the SDG target of 70/ lakh live births by

2030. The number of states which have achieved the Sustainable Development Goal (SDG) target has now increased from 5 to 7 viz. Kerala (30), Maharashtra (38), Telangana (56), TamilNadu (58), Andhra Pradesh (58), Jharkhand (61), and Gujarat (70). Nine (9) States have achieved the target of MMR set by the NHP which include the above 7 and the States of Karnataka (83) and Haryana (96).

Maternal Care Programme in India: Brief History:

India has a long history of addressing maternal health issues, with the programme evolving significantly over the past seven decades. Maternal health services were first initiated in the early 1900s when midwives and birth attendants received training. In 1951, India was the first country in the world to launch a family planning programme. In 1955 Maternal and Child Health was integrated with General Health Services in India. Till 1977 the major health activity was family planning which was changed into Family welfare programme with Maternal and Child Health becoming an integral part of Family Planning programme with the vision that reduction in birth rate which has a direct relationship with reduction in infant and child mortality. (1) Maternal and child health (MCH) gained importance in India in 1977 when government launched the Reproductive and Child Health (RCH) Programme to ensure safe pregnancy and childbirth, with survival and well-being of women. The second phase of the RCH programme, RCH – II, was launched in 2005. The aim of RCH programme Phase II is to derive outcome as envisioned in the Millennium Development Goals, 10th Plan, Population Policy and National Health Policy 2022.

Following the Government of India's "Call to Action (CAT) Summit" in February, 2013, the Ministry of Health & Family Welfare launched Reproductive, Maternal, New-born, Child, Adolescent Health and Nutrition (RMNCAH+N) to influence the key interventions for reducing maternal and child morbidity and mortality. The Government of India adopted the RMNCH+A framework in 2013, it essentially aims to address the major causes of mortality

and morbidity among women and children. This framework also helps to understand the delays in accessing and utilizing health care services. Based on the framework, comprehensive care is provided to women and children through five pillars or thematic areas of reproductive, maternal, neonatal, child, and adolescent health.

To bring pregnant women to health facilities to ensure safe delivery and emergency obstetric care, a demand generation scheme - Janani Suraksha Yojana (JSY), was launched in April 2005.(2) The utilization of public health infrastructure by pregnant women has increased significantly due to JSY and JSSK.(3) High-quality antenatal care before the delivery is essential for a positive outcome.(4) There is an increase in the number of births assisted by skilled birth attendants.(5) This indicated that the initiatives and incentives given to ASHA workers and mothers under schemes such as JSY and JSSK were well accepted and executed in the community.(6) Further building on the progress of the JSY scheme, the Government of India launched Janani Shishu Suraksha Karyakram (JSSK) on June 1, 2011, for mother and their newborns. The Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) was launched by the Ministry of Health & Family Welfare (MoHFW) in June 2016. Under PMSMA, all pregnant women in the country are provided free cost, assured minimum package and quality antenatal care on the ninth day of every month. It also involves the private care providers as volunteers to provide specialist care in Government facilities (7).

There has been a rise in skilled attendants' postnatal care. Many studies show that as the number of mothers who had received postnatal care from health personnel within two days (48 hours), within seven days and up to six weeks of delivery (%) increased, maternal mortality steadily declined.(8) The tools for improving data collection, by Confidential Enquiry into Maternal Deaths, such as Maternal Death Surveillance and Response (MDSR), need to be strengthened. At the healthcare facility level, MDSR systems promote a continuous action cycle for monitoring maternal mortality, identifying

trends in and causes of maternal mortality, and acting to prevent future deaths.

The initiatives taken by the GoI to improve the quality of care, such as the Surakshit Matritva Ashwasan (SUMAN) and the Labour Room & Quality Improvement Initiative (LaQshya), provide assured, dignified, respectful, and quality healthcare at no cost and with zero tolerance for denial of services for every woman and new-born visiting the public health facility to end all preventable maternal and new-born deaths (9).

Another initiative is the Maternity Benefit Programme, launched to improve the quality of care during the antenatal and postnatal periods. The Maternity Benefit Programme, a scheme for Pregnant Women and Lactating Mothers (PW & LM), will help improve health-seeking behaviour and nutrition among Pregnant Women & Lactating Mothers to reduce the effects of undernutrition, stunting, wasting, and other related problems.(10) Vaccination with tetanus toxoid during pregnancy helps prevent neonatal tetanus in new-borns.(11) To address the problem of anaemia, the government has initiated the National Iron+ Initiative; iron and folic acid supplementation are given at health facilities and during outreach activities to prevent anaemia in pregnant and lactating women.

The digital solutions delivered via mobile devices (mHealth tools) that connect frontline health workers to national health systems can improve healthcare service delivery, strengthen accountability, and generate real-time data. The initiatives include functionalizing the First Referral Units (FRUs) and the Wellness Centres by ensuring healthcare providers, blood storage units, referral linkages, etc. Augmenting the availability of skilled manpower through skill-based training such as Skilled Birth Attendance for Auxiliary Nurse Midwives/Staff Nurses/Lady Health Visitors; training of MBBS Doctors in Life Saving Anaesthetic Skills and Emergency Obstetric Care including Caesarean Section.(12) The Maternal and Child Health (MCH) Wings and Obstetric ICU/HDU at high case-load facilities have been initiated to improve the quality of care for mothers and

children. Establishing Referral systems, including emergency referral transport, for which the states have been given the flexibility to use different models. MCP Cards and Safe Motherhood Booklet are distributed to pregnant women to educate them on diet, rest, danger signs of pregnancy, benefit schemes and institutional deliveries. One of the key focus areas of Maternal Health is to generate demand through Information Education and communication (IEC), interpersonal communication (IPC) and Behaviour Change Communication (BCC) activities.

The Ministry of Women and Child Development implements schemes like Pradhan Mantri Matru Vandana Yojana (PMMVY) and Mission Saksham Anganwadi and Poshan 2.0 for the wellness of maternal and child health. All the initiatives and schemes launched by the government to provide antenatal and postnatal care to women reflect the improved outcome of decreasing maternal mortality. There is a significant increase in institutional deliveries and a reduction in out-of-pocket expenditure.

The COVID-19 pandemic substantially impacted and disrupted the delivery of essential Reproductive, Maternal, New-born, Child, and Adolescent Health and Nutrition (RMNCAH+N) services. The recommendations

to curb the pandemic restricted travel and urged people to stay home. The workforce in the informal sector, mainly from the productive age group, and those in the formal sector were rendered unemployed. Thus, the enforcement of these measures posed unprecedented difficulties to lakhs of vulnerable women in accessing health services due to their limited disposable income to support transportation expenses and other direct and indirect medical costs. All the progress made towards decreasing the MMR had to be revised and revamped after the pandemic circumstances. It reemphasized the need to ensure convergence among different stakeholders while structuring maternal health policies so that health reforms could be accomplished effectively at all levels of health care.

#### **Maternal Health: Key Strategies for accelerating the pace of decline in MMR:**

Several programmes and initiatives have been implemented by the Government of India to reduce maternal mortality rates and improve maternal health outcomes (Table 1). These programmes address various factors contributing to maternal mortality, including access to healthcare, quality of care, and socioeconomic determinants. Government of India has undertaken following key initiatives to reduce maternal deaths under the NHM:

**Table 1: Enlisted below are the maternal health policies and programmes related to maternal health**

Maternal Health Policies and programmes To Provide Pre-Conception Care	Maternal Health Policies and programmes To Reduce Maternal Mortality	Maternal Health Policies and programmes Addressing Financial assistance for Maternal Healthcare Services	Maternal Health Policies and programmes To improve Maternal Nutrition	Maternal Health Policies and programmes For Protection of the Women by the law	Maternal Health Policies and programmes For Maternal Health Equity
<b>1. Adolescent Reproductive and Sexual Health (ARSH) Programme</b>	1. Reproductive and Child Health (RCH) Programme I	1. Centrally Sponsored Scheme on Maternal Health (CSSM) launched under the National Rural Health Mission (NRHM) 2. Indira Gandhi Matritva Sahyog Yojana (IGMSY)	1. National Nutritional Anemia Prophylaxis Programme (NNAPP) 2. National Nutrition Anemia Control	1. Dowry Prohibition Act	1. Chiranjeevi Yojana

<b>2. Kanyashree Prakalpa</b>	2. Janani Suraksha Yojana (JSY)	3. MAMATA Scheme	Programme (NNACP) 3. Iron Plus Initiative	2. Medical Termination of Pregnancy Act (further amended in 1975, 2002 and 2021)	2. Reproductive, Maternal, Newborn, Child, and Adolescent Health (RMNCH+A)
		4. Pradhan Mantri Matru Vandana Yojana (PMMVY) 5. Balaram Yojana	4. Anemia Mukht Bharat		
<b>3. Rajiv Gandhi Scheme for Adolescent Girls (SABLA/SAG)</b>	3. Mamta Abhiyan			3. National Population Policy	3. MAMTA Vahan
	4. Mother and Child Tracking System (MCTS)			4. The Pre-Conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) Act (PCPNDT) (amended in 2003)	4. Kilkari
	5. Maternal Death Review (MDR)			5. Protection of Women from Domestic Violence Act	
	6. Janani Shishu Suraksha Karyakram (JSSK)			6. Maternity Benefit Amendment Act	
	7. Maternal Death Surveillance and Response (MDSR)			7. Medical Termination of Pregnancy Act (amendment 2021)	
	8. Dakshata Initiative launched under the National Health Mission (NHM)				
	9. Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)				
	10. LaQshya - Labour Room Quality Improvement Initiative				
	11. Surakshit Matritva Aashwasan (SUMAN)				

Janani Suraksha Yojana (JSY) to create demand for services and increase institutional deliveries.

Janani Shishu Suraksha Karyakram (JSSK) to eliminate out-of-pocket expenses.

Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) to detect and manage high risk pregnancies.

Reproductive, Maternal, Neonatal, Child and Adolescent health (RMNCAH+N)

LaQshya certification for facility level quality assurance and imparting respectful maternity care.

Pradhan Mantri Matru Vandana Yojana (PMMVY)

Maternal Death Surveillance and Response (MDSR) to utilise data for meaningful action.

Surakshit Matritva Aashwasan (SUMAN) for assurance of service provision.

Anaemia Mukht Bharat

Comprehensive abortion care

**Janani Suraksha Yojana (JSY):** JSY is a safe motherhood initiative within the National Rural Health Mission (NRHM) that encourages institutional delivery among pregnant mothers from low-income families in an effort to reduce maternal and newborn mortality. On April 12, 2005, the Hon'ble Prime Minister unveiled the Yojana, which is presently being executed throughout all states and Union territories, with a focus on the states that exhibit low performance. Women are encouraged to give birth at medical facilities through the JSY programme, which offers conditional cash transfers. It aims to reduce mother and newborn mortality by promoting institutional births and ensuring access to emergency obstetric care and professional birth attendance. Cash support is provided to expectant mothers who give birth at a medical

facility; this support also pays for the mothers' transportation costs.

Pre- and post-delivery care are combined with financial aid under the completely centrally supported JSY programme. The success of the programme would depend on how many low-income households began receiving institutional care. According to the Yojana, wealthy pregnant women in 10 low-performing states, Assam, J&K, the remaining NE states, the eight EAG states, and the underprivileged have found an effective channel in ASHA, the renowned social health campaigner. With a focus on low-income pregnant women, the programme offers special dispensation for states with poor institutional delivery rates, including Uttar Pradesh, Uttaranchal, Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Assam, Rajasthan, Orissa, and Jammu and Kashmir. These states have been labelled as Low Performing States (LPS), whereas the remaining states are categorized as High-Performance States (HPS). In order to deliver the services, AWW and TBAs or activists like ASHA who have worked toward this aim in other states and UTs that meet the requirements can be connected to this Yojana. The number of women the ASHA or any Yojana-affiliated link worker has led to a medical facility and the number of pregnant women she has been able to persuade to give birth there will be utilized to assess their job (Table 2).

**Important Features of JSY:** Tracking Each Pregnancy: Each beneficiary registered under this Yojana should have a JSY card along with a MCH card. ASHA/AWW/ any other identified link worker under the overall supervision of the ANM and the MO, PHC should mandatorily prepare a micro-birth plan. This will effectively help in monitoring Antenatal Check-up, and the post-delivery care.

**Table 2 Role of ASHA or other link health worker associated with JSY would be:**

1.	To Identify pregnant woman as a beneficiary of the scheme and report or facilitate registration for ANC,
2.	Assist the pregnant woman to obtain necessary certifications wherever necessary,
3.	Provide and/or help the women in receiving at least three ANC check-ups including TT injections, IFA tablets,

4. Identify functional Government health centre or an accredited private health institution for referral and delivery,
  5. Counsel for institutional delivery,
  6. Escort the beneficiary women to the predetermined health centre and stay with her till the woman is discharged,
  7. Arrange to immunize the newborn till the age of 14 weeks,
  8. Inform about the birth or death of the child or mother to the ANM/MO,
  9. Postnatal visit within 7 days of delivery to track mother's health after Delivery and facilitate in obtaining care, where ever necessary,
  10. Counsel for initiation of breastfeeding to the new born within one-hour of delivery and its
  11. Continuance till 3-6 months and promote family planning.
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#### **Eligibility for Cash Assistance:**

LPS States All pregnant women delivering in Government health centres like Sub-centre, PHC/CHC/ FRU / general wards of District and state Hospitals or accredited private institutions. HPS States BPL pregnant women, aged 19 years and above LPS &HPSA II SC and ST women delivering in a government health centre like Sub-centre, PHC/CHC/FRU/general ward of District and state Hospitals or accredited private institutions.

#### **Janani Shishu Suraksha Karyakram (JSSK):**

India saw a significant rise in institutional deliveries with the introduction of the Janani Suraksha Yojana (JSY). However, 25% of women still avoid giving birth in medical facilities because they have to pay for prescription medications, food, diagnostic tests, blood work, and other expenses out of pocket. Building on the success of this safe motherhood programme, Janani Shishu Suraksha Karyakram (JSSK), a significant

project, was introduced in June 2011 with the goal of removing all out-of-pocket costs for unwell newborn and pregnant women.

Within 48 hours, the woman and her newborn get critical treatment. For the purpose of identifying and treating postpartum complications, this postnatal phase is essential. when it comes to institutional delivery. It is slightly simpler to access and obtain this care. High out-of-pocket costs for tests, investigations, blood, medication, meals, and user fees are some of the causes. delivery within institutions in order to remove the financial burden of treating unwell newborns and delivering pregnant women in institutions, JSSK was introduced in June 2011.

The programme was expanded to include all prenatal and postnatal pregnancy difficulties in 2014, and comparable rights were established for all unwell newborns and babies (up to one year of age) seeking care in public health facilities (Table 4).

**Table 3: The Indian government has taken the following actions to guarantee that pregnant women in distant areas of the nation have access to all services close to their homes, particularly when it comes time for delivery:**

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To provide complete RMNCAH+A services, more than 25,000 "Delivery Points" around the nation have been enhanced in terms of infrastructure, tools, and skilled labour.

Establishing Maternal and Child Health (MCH) Wings in facilities with heavy caseloads in order to enhance the standard of care given to moms and kids.

Ensuring that First Referral Units (FRUs) have enough staff, blood storage facilities, referral connections, etc. The operationalization of 102 services for expectant mothers, which include free transportation from their house to the facility, transfer between facilities in the event of a referral, and return home.

In isolated and tribal communities, Birth Waiting Homes (BWH) have been built to encourage institutional birth and enhance access to medical amenities.

In order to eliminate all avoidable maternal and newborn fatalities, Surakshit Matratva Ashwasan (SUMAN) is commended for offering every woman and infant who visits the public health centre guaranteed, dignified, respectful, and high-quality healthcare at no cost. Additionally, SUMAN has zero tolerance for denial of services.

Every month on the ninth day, the Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) offers quality prenatal care to expectant mothers at no cost on a designated day.

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The nation's high case load tertiary medical facilities have established Obstetric High Dependency Units (HDU) and Intensive medical Units (ICU) to manage complex pregnancies.

The Labor Room Quality Improvement Initiative (LaQshya) aims to raise standards for treatment in maternity operation rooms and labour rooms so that expectant mothers receive considerate, high-quality care during labour and the first few hours after giving birth.

Village Health, Sanitation and Nourishment Day (VHSND) is a monthly outreach programme that provides nourishment together with maternity and child care.

The promotion of institutional deliveries through information, education, and communication (IEC).

Birth micro planning and preparedness through ANMs trained in skilled birth attendance (SBA).

Pregnant women receive an MCP card and a Safe Motherhood booklet to inform them about nutrition, rest, pregnancy danger indicators, insurance plans, and institutional births.

To increase the accessibility of health care services, particularly in remote and tribal communities, outreach camps are available. This platform is used to track high-risk pregnancies, mobilize the community, and raise awareness of maternal and child health services.

**Table 4 Entitlement to all pregnant women delivering in public health institution and all sick infants up to 1 year of age are as follows:**

1	Absolutely free and no expense delivery, including caesarean section.
2	The entitlements include free drugs and consumables, free diagnostics, free blood wherever required.
3	Free diet for 3 days during normal delivery and 7 days for C-section.
4	Free transport from home to institution, between facilities in case of a referral and drop back home.
5	In 2014 these entitlements extended to all antenatal & post-natal complications of pregnancy.
6	Similar entitlements have been put in place for all sick newborns and infants (up to one year of age) accessing public health institutions for treatment.

Under JSSK, around one crore beneficiaries benefited annually. There are 1.22 billion beneficiaries overall under JSSK. Institutional delivery rose by 20.32% and registered delivery by 20.77% following the implementation of the JSSK system. With a notable rise in preterm admission of 86.89%, the NICU admission rate climbed by 21.96%. The percentage of costly contemporary treatment techniques used increased by 3.97%. Preterm mortality has significantly decreased by 12.99%, while the rate of newborn deaths has decreased by 1.32%.

### **3. Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) to detect and manage high risk pregnancies:**

The Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) is an initiative launched by the Government of India in 2016 to provide comprehensive and quality antenatal care to pregnant women. The primary objectives of PMSMA are to reduce maternal and infant mortality rates and to ensure safe pregnancies and deliveries. Here are the key features and goals of the programme:

**a. Free Antenatal Check-ups:** PMSMA offers free antenatal check-ups to all pregnant women on the 9th of every month at government health facilities across India. These check-ups are conducted by Obstetricians/Gynecologists to ensure that pregnant women receive quality care.

**b. Screening for High-Risk Pregnancies:** One of the primary aims of PMSMA is the early identification and management of high-risk pregnancies. During the check-ups, women are screened for various health conditions such as hypertension, diabetes, and other complications that could pose risks during pregnancy and delivery.

**c. Safe Delivery Planning:** The programme emphasizes the importance of institutional deliveries and provides guidance to pregnant women on birth preparedness and complication readiness, ensuring that they are well-informed about the process and what to expect.

**d. Comprehensive Care:** PMSMA ensures that pregnant women receive essential services, including:

- Routine blood tests and urine tests



- Blood pressure measurement
- Iron and folic acid supplementation
- Tetanus Toxoid immunization

**e. Involvement of the Private Sector:** The programme encourages the participation of private sector healthcare providers to volunteer their services on the designated day, thus augmenting the capacity and reach of the initiative.

**f. Health and Nutrition Counselling:** Counselling services are provided to educate pregnant women about the importance of a nutritious diet, personal hygiene, and the benefits of breastfeeding.

**g. Community Engagement:** The programme involves community health workers like ASHAs (Accredited Social Health Activists) and ANMs (Auxiliary Nurse Midwives) to mobilize and educate pregnant women, ensuring they attend the PMSMA clinics regularly (1).

The impact of PMSMA has been significant in improving maternal health indicators in India by providing timely and adequate healthcare services to pregnant women, thus reducing the risks associated with pregnancy and child birth. Extended PMSMA- To ensure quality ANC to pregnant women, especially to high-risk pregnancy (HRP) women and individual HRP tracking by means of financial incentivization for the identified HRP women and accompanying ASHA for extra 3 visits. ASHAs/ANMs to prepare a line list of eligible women and mobilize them (7).

#### **4. Reproductive, Maternal, Neonatal, Child and Adolescent health (RMNCAH+N):**

RMNCAH+N strategy is built upon the continuum of care concept, encompassing all interventions aimed at reproductive, maternal, newborn, child, adolescent health and Nutrition under a broad umbrella, and focusing on the strategic lifecycle approach.

**R-** Basket of choices, home delivery of contraceptives, enhanced compensation scheme, MPV etc.

**M-** SUMAN, JSY, JSSK, LaQshya, PMSMA, Midwifery, FRUs, MCH, Wings etc.

**N-** FBNC, HBNC, HBYC, Immunization, promotion of breast feeding etc.

**C-** Immunization RBSK, Diarrhoea control, SAANS, NDD etc.

**AH-** RSKS, WIFS, AFHS, MHS, School health & wellness Ambassador Initiative etc.

The RMNCAH+N strategy is built upon the continuum of care concept and is holistic in design,

encompassing all interventions aimed at reproductive, maternal, newborn, child, adolescent

health and Nutrition under a broad umbrella, and focusing on the strategic lifecycle approach.

The RMNCAH+N strategy promotes links between various interventions across thematic areas

to enhance coverage throughout the lifecycle to improve child survival in India. The “plus” within the strategy focuses on:

- Inclusion of adolescence as a distinct life stage within the overall strategy.
- Linking maternal and child health to reproductive health and other components like family
- planning, adolescent health, HIV, gender, and preconception and prenatal diagnostic techniques.
- Linking home and community-based services to facility-based services.
- Ensuring linkages, referrals, and counter-referrals between and among various levels of healthcare system to create a continuous care pathway, and to bring an additive /synergistic effect in terms of overall outcomes and impact (13).

#### **5. LaQshya– Labour Room Quality Improvement Initiative:**

It is estimated that approximately 46% maternal deaths, over 40% stillbirths and 40% newborn deaths take place on the day of the delivery itself. To ensure Quality of Care during intrapartum & immediate postpartum period in healthcare facility, MoHFW has launched Labour room Quality Improvement initiative named as LaQshya on 11<sup>th</sup> December 2017

The Labour Room Quality Improvement Initiative (LaQshya) is a programme launched by the Government of India to improve the quality of care in labour rooms and maternity operation theatres in public health facilities. The initiative is part of the broader efforts under the National Health Mission (NHM) to reduce maternal and neonatal mortality and

morbidity by ensuring safe and respectful maternity care. Here are the key features and objectives of LaQshya:

**Objective:**

**Quality Improvement:** Enhance the quality of care during delivery and the immediate postpartum period to ensure a safe and dignified birthing experience.

**Maternal and Neonatal Health:** Reduce maternal and neonatal mortality and morbidity by improving the infrastructure and practices in labour rooms and operation theatres.

**Key Components:**

**Infrastructure Upgradation:** Renovation and upgradation of labour rooms and maternity operation theatres to meet the quality standards and provide a conducive environment for delivery.

**Training and Capacity Building:** Training healthcare providers in essential and emergency obstetric care, respectful maternity care, and adherence to standard protocols.

**Quality Assurance:** Implementation of standard operating procedures (SOPs), checklists, and guidelines to ensure consistent and high-quality care.

**Monitoring and Evaluation:** Regular assessments and audits of labour rooms and operation theatres to identify gaps and ensure continuous quality improvement.

**Implementation:**

The initiative is implemented across various levels of public health facilities, including medical colleges, district hospitals, sub-district hospitals, and community health centres.

A dedicated unit at the national level oversees the implementation, monitoring, and evaluation of the initiative, working in collaboration with state health departments.

**Accreditation and Certification:**

Facilities meeting the quality standards are awarded LaQshya certification, recognizing their adherence to the highest standards of maternal and newborn care.

Continuous support and mentoring are provided to facilities to maintain and improve the quality of care.

**Impact:**

Improved quality of care in labour rooms and maternity operation theatres has led to better health outcomes for mothers and newborns.

The initiative has contributed to the reduction in maternal and neonatal mortality rates by ensuring timely and appropriate care during childbirth.

LaQshya is a critical component of India's efforts to improve maternal and child health, ensuring that every woman receives dignified and quality care during childbirth. (14)

**6. The Pradhan Mantri Matru Vandana Yojana (PMMVY):**

It is a maternity benefit scheme launched by the Government of India in January 2017. The programme aims to provide partial wage compensation to pregnant and lactating women to help them with rest and recuperation during their pregnancy and after delivery, thereby promoting better maternal and child health. Here are the key features and objectives of PMMVY:

**Eligibility:** The scheme is targeted at pregnant and lactating women for their first live birth. Women working in the organized sector who are already entitled to maternity benefits under the Maternity Benefit Act, 1961, or similar laws are not eligible for the scheme.

**Cash Incentives:** Eligible beneficiaries receive a total cash incentive of ₹5,000, which is disbursed in three instalments:

The first instalment of ₹1,000 is given upon early registration of pregnancy at the Anganwadi Centre (AWC) or the approved health facility.

The second instalment of ₹2,000 is given after six months of pregnancy upon receiving at least one antenatal check-up (ANC).

The third instalment of ₹2,000 is given after the birth of the child and registration of the child's birth, and the child has received the first cycle of immunizations.

**Objectives:**

**Financial Aid:** Provide partial wage compensation to pregnant women to enable them to take adequate rest before and after delivery.

**Health and Nutrition:** Improve the health and nutrition status of pregnant and lactating women and reduce maternal and infant mortality rates.

**Encourage Institutional Deliveries:** Promote institutional deliveries and ensure that women receive the necessary healthcare services during pregnancy and childbirth.

**Implementation:** The scheme is implemented through a web-based application, which helps in the direct transfer of funds to the bank accounts of the beneficiaries, thus ensuring transparency and efficiency.

**Impact:** PMMVY has significantly contributed to the well-being of pregnant and lactating women by providing them with the necessary financial support and encouraging them to seek appropriate healthcare services during pregnancy.

Overall, the Pradhan Mantri Matru Vandana Yojana aims to create a supportive environment for pregnant and lactating women, ensuring better maternal and child health outcomes.

## **7. Maternal Death Surveillance and Response (MDSR) to utilise data for meaningful action:**

**Maternal Death Surveillance and Response (MDSR) System:** The MDSR system was introduced to systematically review and investigate maternal deaths to understand the causes and preventability of each death. By identifying gaps in healthcare delivery and quality, the MDSR system helps in developing targeted interventions to reduce maternal mortality.

Maternal Death Surveillance and Response (MDSR) is a critical approach used by the Government of India and other countries to systematically review and analyze maternal deaths. The goal is to understand the underlying causes and contributing factors of maternal mortality and to take actionable steps to prevent future deaths. Here are some key points that might be covered in a research paper on MDSR in India:

**Implementation and Framework:** The paper may discuss how MDSR is implemented in India, including the framework, guidelines, and protocols followed for identifying, reviewing, and reporting maternal deaths.

**Data Collection and Analysis:** It would explore how data on maternal deaths are collected, analysed, and reported through MDSR. This

includes the role of health facilities, district-level committees, and state-level reviews in compiling comprehensive data.

**Causes and Contributing Factors:** Research would likely analyse the common causes of maternal deaths identified through MDSR data, such as haemorrhage, hypertension, infections, and indirect causes like pre-existing conditions.

**Quality Improvement Initiatives:** The paper may discuss how MDSR findings are used to drive quality improvement initiatives in maternal health services. This includes interventions to improve emergency obstetric care, referral systems, and health provider training.

**Policy Implications:** It would explore the policy implications of MDSR data, including recommendations for strengthening health systems, improving access to maternal health services, and addressing social determinants of health impacting maternal mortality.

**Challenges and Successes:** Finally, the paper might highlight challenges faced in implementing MDSR in India, such as data completeness and timeliness, as well as successes in using MDSR data to reduce maternal mortality rates over time.

## **8. Surakshit Matritva Aashwasan (SUMAN):**

The Surakshit Matritva Aashwasan (SUMAN) scheme in India is a government initiative aimed at ensuring comprehensive, quality maternal and newborn healthcare. Launched in 2019, the scheme focuses on reducing preventable maternal and neonatal mortality and morbidity by providing assured, dignified, and respectful care at no cost.

SUMAN promotes safe pregnancy, childbirth and immediate postpartum care with respect and dignity by translating the entitlements into a service guarantee which is more meaningful to the beneficiaries.

Provides assured, dignified, respectful and quality healthcare at no cost and zero tolerance for denial of services for every woman and newborn visiting public health facilities.

Ambulance services (102 or 108)

Minimum 4 antenatal check ups

Normal delivery or C-section delivery  
Medicines, lab tests for pregnant mother & baby up to 1 year  
Grievance redressal mechanism (Toll-free no.104)

Here are the key components and objectives of the SUMAN scheme:

**Objectives:**

**Maternal and Newborn Health:** To reduce maternal and neonatal mortality and morbidity through timely and high-quality healthcare services.

**Assured Care:** To provide assured delivery of free services to all pregnant women, mothers up to 6 months post-delivery, and sick newborns.

**Respectful Maternity Care:** To ensure dignified and respectful maternity care, focusing on the rights and privacy of the patients.

**Services Provided:**

**Antenatal Care:** Comprehensive antenatal care including routine check-ups, screenings, management of high-risk pregnancies, and essential medications and supplements.

**Institutional Deliveries:** Encouraging institutional deliveries by providing necessary facilities and skilled birth attendants.

**Postnatal Care:** Continuous postnatal care up to 6 months after delivery to monitor and manage the health of the mother and newborn.

**Newborn Care:** Essential newborn care including immunizations, breastfeeding support, and treatment of common newborn illnesses.

**Emergency Services:** Round-the-clock availability of emergency obstetric care and neonatal services.

**Implementation:**

**Public Health Facilities:** The scheme is implemented across various levels of public health facilities including primary health centres, community health centres, district hospitals, and tertiary care hospitals.

**Training and Capacity Building:** Training healthcare providers in the latest protocols and best practices to ensure the quality of care.

**Community Involvement:** Involving community health workers like ASHAs and

ANMs to educate and mobilize pregnant women and their families.

**Monitoring and Evaluation:**

**Quality Assurance:** Regular audits and assessments of health facilities to ensure compliance with quality standards.

**Health Information Systems:** Use of health information systems to track maternal and newborn health indicators and outcomes.

**Awareness and Accessibility:**

**Information Campaigns:** Conducting awareness campaigns to inform women and families about the services available under SUMAN.

**Access to Services:** Ensuring services are accessible to all women, particularly in rural and underserved areas, with a focus on equity.

## 9. Anaemia Mukht Bharat:

Anaemia is currently a major public health concern in a number of nations, including India. In our nation, anemia affects around 50% of pregnant women, 59% of children under five, 54% of teenage girls, and 53% of non-pregnant, non-lactating women.

Premature births, low birth weight, postpartum haemorrhage, neural tube defects, stillbirths, and maternal fatalities are all linked to anemia during pregnancy. Anaemia is linked to poorer immunological response, delayed cognitive development, and reduced productivity at work in other populations. The hazards of anemia-related morbidity and mortality make it imperative to develop a workable plan of action to deal with this public health issue.

The decrease in the prevalence of anemia will therefore help to enhance the rates of mother and child survival as well as the health of other population groups.

It is good to see coordinated efforts to address this issue in line with the recently announced POSHAN Abhiyaan and convergent measures like the "Anaemia Mukht Bharat" plan.

According to recent statistics from the National Family Health Survey-4, anemia affects 53% of women in the country who are in the reproductive age range of 15 to 49, 23% of men, and 50% of pregnant women. A closer look reveals a very large difference in the

frequency of anemia between rural and urban locations. Children and women living in homes in the lower wealth quintiles, as well as disadvantaged groups (especially scheduled tribes), have higher rates of anemia.

The goal of the 2018 launch of the Anaemia Mukh Bharat (AMB) plan was to lower the prevalence of anemia (due to nutritional and non-nutritional factors) By implementing six interventions through a strong institutional mechanism, it uses the 6X6X6 strategy and aims to reduce anemia among six beneficiary age groups: children (6-59 months), children (5-9 years), adolescents (10-19 years), pregnant and lactating women, and women of reproductive age (15-49 years).

The 6 interventions that the Anaemia Mukh Bharat plan will concentrate on are as follows:

1. Prophylactic Iron and Folic Acid supplementation
2. Deworming
3. Intensified year-round Behaviour Change Communication Campaign (Solid Body, Smart Mind) focusing on four key behaviours – (a) Improving compliance to Iron Folic Acid supplementation and deworming, (b) Appropriate infant and young child feeding practices, (c) Increase in intake of iron-rich food through diet diversity/quantity/frequency and/or fortified foods with focus on harnessing locally available resources and (d) Ensuring delayed cord clamping after delivery (by 3 minutes) in health facilities
4. Testing and treatment of anemia, using digital methods and point of care
  1. treatment, with special focus on pregnant women and school-going adolescents
5. Mandatory provision of Iron and Folic Acid fortified foods in government funded public health programmes
6. Intensifying awareness, screening and treatment of non-nutritional causes of anemia in endemic pockets, with special focus on malaria, haemoglobinopathies and fluorosis

**10. Comprehensive Abortion Care (CAC)** in India refers to a holistic approach to providing safe and legal abortion services, ensuring the health and well-being of women. The aim of

CAC is to reduce maternal mortality and morbidity resulting from unsafe abortions. The key components and features of Comprehensive Abortion Care in India include:

**Legal Framework:**

Abortion in India is governed by the Medical Termination of Pregnancy (MTP) Act, 1971, which was further amended in 2021 to expand access to safe abortion services.

The Act permits abortion up to 20 weeks of pregnancy under certain conditions and up to 24 weeks in specific cases, such as rape survivors, incest victims, and other vulnerable women.

**Services Provided:**

**Counselling:** Comprehensive pre- and post-abortion counselling to ensure informed decision-making, addressing emotional and psychological needs.

**Medical and Surgical Abortion:** Provision of both medical abortion (using medication) and surgical abortion (procedures like Manual Vacuum Aspiration and Dilatation & Evacuation) depending on the gestational age and medical indications.

**Contraceptive Services:** Post-abortion contraceptive counselling and provision to prevent unintended pregnancies in the future.

**Follow-up Care:** Ensuring follow-up visits to monitor the health and recovery of the woman after the abortion procedure.

**Other features:**

Adherence to clinical guidelines and protocols to ensure safety and effectiveness.

Training of healthcare providers in safe abortion techniques and management of complications.

Ensuring availability of necessary infrastructure, equipment, and medications in healthcare facilities.

Making abortion services accessible to women across various regions, including rural and underserved areas.

Reducing barriers such as stigma, lack of information, and financial constraints to ensure equitable access to services.

Ensuring confidentiality and privacy for women seeking abortion services.

Providing care in a respectful and non-judgmental manner, recognizing the woman's

right to make decisions about her reproductive health.

Integrating abortion services with other reproductive health services to provide a continuum of care.

Educating communities and raising awareness about safe abortion practices and legal rights.

Regular monitoring and evaluation of abortion services to ensure quality, accessibility, and adherence to standards.

Using data and feedback to continuously improve services and address gaps.

Other recent initiatives taken by the Government of India envisions improving maternal health are summarised in Table 5.

**Table 5: Other recent initiatives taken by the Government of India for improving maternal health**

S.No.	Programme Name	Year	Benefits Given	Reference
1.	MAMATA Scheme	2011	This scheme aims to provide financial assistance to pregnant and lactating women to ensure better nutrition and healthcare during pregnancy and after childbirth. It focuses on improving maternal and child health outcomes by promoting institutional deliveries and ensuring access to essential healthcare services for women in need, particularly those from marginalized communities.	-15
2.	Iron Plus Initiative	2013	The Iron Plus Initiative in India plays a crucial role in addressing maternal mortality indirectly by focusing on reducing iron deficiency anemia among pregnant women. This initiative was launched under the National Health Mission (NHM) with the aim of addressing iron deficiency anemia among women and children through comprehensive strategies including iron supplementation, health education, and behaviour change communication. The Iron Plus Initiative specifically focuses on providing iron and folic acid supplements to vulnerable populations to improve their nutritional status and reduce the prevalence of anemia.	-16
3.	MAMTA Vahan	2013	This initiative involves mobile health units that provide healthcare services, including maternal and child health services like antenatal and postnatal care, to remote and inaccessible areas. MAMTA Vahan aims to improve maternal and child health outcomes by ensuring that essential healthcare reaches underserved communities where access to regular health facilities may be limited.	-17
4.	Mission Indradhanush	2014	Vaccinating unvaccinated mothers and children is the programme's main goal, especially in rural and isolated locations. It includes immunization drives for kids and provides free medical treatment to expectant moms and their babies. When it comes to educating new mothers about vaccinations and infant care, Mission IndraDhanush has been a huge help. It significantly improves healthcare accessibility by offering free consultations, comprehensive childcare advice, and vaccination drives for pregnant women and children who are not yet vaccinated or who have only had a partial vaccination.	-18
5.	Dakshata Initiative	2015	This initiative was launched with the aim of improving the quality of intrapartum and immediate postpartum care provided by healthcare providers.	-19

	launched under the National Health Mission (NHM)		It focuses on strengthening the skills of healthcare providers, particularly doctors and nurses, in managing and preventing postpartum haemorrhage (PPH), which is a leading cause of maternal mortality in India. The initiative includes training modules, guidelines, and job aids to support healthcare providers in delivering evidence-based practices during childbirth and immediately after delivery to improve maternal and neonatal outcomes.	
6.	Kilkari	2016	This initiative was launched under the National Health Mission (NHM) with the aim of improving maternal and child health outcomes through innovative mobile health (mHealth) solutions. Delivery of free, weekly audio messages to pregnant women and mothers to provide information on maternal and child health, nutrition, and immunization, improving health-seeking behaviours.	-20
7.	Maternity Benefit Amendment Act	2017	Extension of maternity leave and benefits for women workers to promote maternal health and well-being by providing adequate time for recovery, childcare, and breastfeeding support. It extended the duration of paid maternity leave from 12 weeks to 26 weeks, benefiting women in terms of better maternal health, increased bonding time with newborns, and support during the postpartum period. Additionally, the amendment introduced provisions for maternity leave for adopting mothers and commissioning mothers (using a surrogate).	-21
8.	Anemia Mukh Bharat	2018	This initiative aims to reduce the prevalence of anemia among women, children, and adolescents through a multi-sectoral approach that includes interventions related to health, nutrition, education, and food fortification. The goal is to address the high burden of anemia in India and improve overall health outcomes by increasing awareness, providing access to fortified foods, promoting dietary diversity, and ensuring effective iron and folic acid supplementation programmes.	-22
9.	Poshan 2.0	2021	It is an enhanced version of the Government of India's flagship programme, Poshan Abhiyan, aimed at addressing malnutrition and improving nutritional outcomes among children, pregnant women, and lactating mothers. Poshan 2.0 focuses on strengthening the implementation and impact of nutrition interventions through enhanced monitoring, convergence of services, and community participation.	-23
10.	Mission Saksham Anganwadi	2022	This initiative focuses on transforming Anganwadi Centres into places of excellence that provide quality early childhood care and education, along with maternal and adolescent health services. The mission aims to enhance the overall development and well-being of children, pregnant women, and lactating mothers by improving infrastructure, facilities, and the skill sets of Anganwadi workers.	-24

*NFHS - National Family Health Survey; NSS - National Sample Survey; RHIME - Routine, representative, re-sampled household interview of mortality with a medical evaluation, a method used in SRS; SRS - Sample Registration System*

Implementation of AYUSH health programmes with greater intensity, Trainings of doctors and frontline health care workers in ayurveda - Garbhini paricharya i.e. antenatal care, for dietary and lifestyle according to the stage of pregnancy. The management of undernourished children has been advocated addressing improving Agni i.e. digestive fire, removal of Ama i.e. intermediate metabolites and improving nutrition. Medicinal herbs- Sunthi (Dry Ginger), Pippali, Mareech etc to improve the Agni and removal of Ama. In case of breastfed children, the mother is given Shatavari Churna, Jeerakaadi lehyam, Methi modaka etc to improve lactation and its quality. Children fed only on milk are given milk boiled with Sunthi. There are good numbers of single and compound poly-herbal medicines are included / being administered to children for the management of malnutrition. These include Shatavari, Vidaari Kanda, Amalki, Jeeraka, Preenanamodaka, Rambhaphalarasayana, Ajamansrasayana etc. Supplementation of Sowbakya suntee lehyam, Thetran kottai lehyam, Urai mathirai, punarnavadi mandura etc to the mother to reduce malnutrition and improve lactation.

## **MATERIAL & METHODS**

### **Study Type & Study Design**

This review employs a narrative review design, synthesizing and summarizing data from government reports, programme evaluations, and relevant peer-reviewed articles to evaluate the impact of maternal health programmes on health outcomes in India.

### **Study Setting**

The study focuses on national-level programmes implemented in India, particularly those targeting maternal and child health outcomes in both rural and urban settings.

### **Study Population**

The population under review includes pregnant women, nursing mothers, and

newborns, as they are the primary beneficiaries of the maternal health programmes discussed, including JSY, PMMVY, and Poshan Abhiyaan.

### **Study Duration**

The review considers programmes introduced and evaluated in recent years, with a particular emphasis on policies implemented in the last decade.

### **Sample Size Calculation**

Since this is a review, sample size calculation is not applicable. Instead, the study involves a purposive selection of programmes and outcomes based on available literature and governmental data.

### **Inclusion Criteria**

- Programmes aimed at improving maternal health outcomes in India.
- Government initiatives focusing on institutional deliveries, nutrition, financial incentives, and healthcare modernization.
- Articles and reports published in English.

### **Exclusion Criteria**

- programmes or studies unrelated to maternal health.
- International programmes not implemented in India.
- Articles lacking substantive evidence or programme evaluations.

### **Strategy for Data Collection**

Data was collected through a comprehensive literature review of government documents, policy briefs, programme evaluation reports, and peer-reviewed publications from databases like PubMed and Google Scholar. Search terms included "maternal health programmes India," "JSY," "PMMVY," and "Poshan Abhiyaan."



### **Working Definition**

**Maternal Health Programmes:** Government-initiated schemes aimed at improving the health and well-being of pregnant women, nursing mothers, and their children.

**Institutional Deliveries:** Births occurring in healthcare facilities under the supervision of trained medical professionals.

### **Ethical Issues & Informed Consent**

As this is a review paper, no human participants were directly involved, and therefore, no informed consent was required. The study relied solely on secondary data, ensuring ethical compliance.

### **Data Analysis - Software**

No specialized statistical software was required due to the narrative review nature of the study.

### **CONCLUSION**

The Government of India's initiatives for maternal health have addressed all related aspects in a holistic comprehensive manner to bring benefits, significantly improving maternal and child health outcomes. Encouraging institutional deliveries through initiatives like Janani Suraksha Yojana (JSY) and providing skilled birth attendants have helped in reducing complications during childbirth and maternal deaths. Another major effort has been on enhancing nutrition. Schemes such as the Pradhan Mantri Matru Vandana Yojana (PMMVY) and Poshan Abhiyaan provide nutritional support and supplements to pregnant and lactating women, ensuring better health for both mothers and babies. Comprehensive care includes immunizations, supplements, and regular health check-ups, ensures that women and newborns receive holistic healthcare. programmes like PMMVY provide financial incentives to pregnant women, which help them manage their health better and reduce economic burdens during pregnancy and after childbirth and reduce out-of-pocket expenditure. Upgrading of healthcare facilities and training of healthcare providers under initiatives like LaQshya ensure high standards of care in labour rooms and maternity operation theatres. Finally, multiple initiatives include counselling and health

education, empowering women with knowledge about pregnancy, childbirth, and child care. This promotes better health-seeking behaviour and informed decision-making.

### **RECOMMENDATIONS**

The future directions for initiatives to promote maternal health in India can focus on several key areas to enhance access, quality, and equity in maternal healthcare services. These directions could include:

#### **1. Strengthening Primary Health Care**

- Expanding the reach of maternal health services in rural and remote areas through robust primary healthcare systems.
- Increasing the availability of trained midwives and community health workers to ensure quality antenatal, delivery, and postnatal care.
- Ensuring the integration of maternal health services with the Ayushman Bharat Health and Wellness Centres.

#### **2. Technology Integration**

- Leveraging digital health platforms and mobile technology for better tracking of pregnancies, follow-ups, and health counselling.
- Expanding telemedicine services to reach underserved populations.
- Developing data-driven monitoring systems for maternal health indicators.

#### **3. Nutrition and Anemia Prevention**

- Scaling up nutrition programmes under POSHAN Abhiyaan to address malnutrition and anemia among pregnant women and lactating mothers.
- Promoting the consumption of iron-folic acid (IFA) supplements and fortified foods.

#### **4. Reducing Inequalities**

- Addressing socioeconomic and geographic disparities by tailoring programmes for marginalized communities, including tribal populations and urban poor.
- Ensuring financial protection through schemes like Janani Suraksha Yojana (JSY) and cashless delivery services under Janani Shishu Suraksha Karyakram (JSSK).

## 5. Capacity Building

- Training healthcare providers on respectful maternity care to improve patient satisfaction and reduce maternal deaths.
- Enhancing emergency obstetric care capacity through better infrastructure and skilled staff.

## 6. Expanding Access to Family Planning

- Promoting awareness about contraception and spacing between pregnancies through initiatives like Mission Parivar Vikas.
- Expanding access to long-term reversible contraceptive methods.

## 7. Community Participation and Awareness

- Strengthening community engagement to increase awareness about institutional deliveries and maternal health services.
- Enhancing the role of Accredited Social Health Activists (ASHAs) and village health committees in promoting maternal health.

## 8. Addressing Non-Communicable Diseases

- Screening and managing non-communicable diseases (e.g., hypertension, diabetes) among pregnant women to reduce high-risk pregnancies.

## 9. Policy Convergence

- Ensuring better coordination among various programmes, such as RMNCAH+N, Ayushman Bharat, and Swachh Bharat Abhiyan, to improve overall maternal health outcomes.

## 10. Monitoring and Evaluation

- Strengthening mechanisms for real-time monitoring of maternal health indicators.
- Using insights from data to design targeted interventions and refine existing programmes.

**By focusing on these directions, the government can ensure sustainable improvements in maternal health outcomes, contributing to a significant reduction in maternal mortality and morbidity.**

## AUTHORS CONTRIBUTION

All authors have contributed equally.

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## CONFLICT OF INTEREST

There are no conflicts of interest.

## DECLARATION OF GENERATIVE AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

During the preparation of this work, the authors did not use any generative AI or AI-assisted technologies.

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