



Glenmark's Vision for Healthier Lives: A 360° Approach to Access to Healthcare and Nutrition

Shweta Munjal, Tincy George and Abhishek Mali

Abstract Glenmark Foundation's flagship initiative, Project Kavach, addresses persistent maternal and child health (MCH) challenges in India and beyond through a holistic, 360-degree approach. Maternal and child mortality rates, malnutrition, and anemia remain significant public health concerns, particularly in rural, tribal, and marginalized communities. Despite government-led efforts, progress is hindered by limited access to healthcare, poor nutrition, and socioeconomic barriers. Project Kavach integrates medical care, nutrition, education, behaviour change, and environmental interventions to create a protective ecosystem for mothers and children. Key components include the Mobile Health on Wheels service, reproductive and child health centers, nutrition gardens, and frontline worker training. Innovative projects such as the Boat Clinic for riverine villages and the distribution of improved PAVAK cookstoves expand healthcare access and address environmental risk. Community ownership is fundamental to Project Kavach and is fostered through direct community engagement and targeted capacity-building. Local community members actively participate in project planning, implementation, and monitoring to sustain positive health practices beyond the project's direct interventions. With over 3.6 million people reached across India, Kenya, and the Philippines, Project Kavach has demonstrated measurable improvements in health outcomes. By fostering partnerships, leveraging innovation, and empowering communities, Glenmark's model serves as an exemplary model. Comprehensive, collaborative action can break the cycles of poor health and build resilient futures for women and children.

Keywords Maternal and Child Health (MCH) · Community-Based Healthcare · Mobile Health Services · Nutrition and Anemia Control · Behaviour Change Interventions · Sustainable Health Access

1. Introduction

1.1 Maternal and Child Health Challenges

Maternal and child health (MCH) is one of the most critical pillars of global public health, directly shaping the well-being of future generations. Despite decades of policy focus and medical advances, millions of women and children across the world continue to face preventable health risks. The World Health Organization (WHO) estimates that nearly 45 million children under the age of five suffer from wasting, while 149 million are stunted due to chronic malnutrition. Maternal mortality remains alarmingly high in low- and middle-income countries, where 94 percent of maternal deaths occur, often due to causes that are avoidable with timely medical intervention, nutrition support, and proper antenatal care.

Child mortality is closely linked to nutrition status, maternal health, sanitation, and access to primary healthcare. Malnutrition contributes to almost half of all under-five deaths worldwide, weakening immunity and increasing vulnerability to preventable diseases such as pneumonia, diarrhoea, and malaria. The intergenerational effects of poor maternal nutrition also perpetuate cycles of stunting and developmental delays. Similarly, anaemia in women of reproductive age not only impacts their own health but also compromises pregnancy outcomes, leading to low birth weight and higher risks of neonatal mortality.

Shweta Munjal, Tincy George, Abhishek Mali

Glenmark Pharmaceuticals Limited and Glenmark Foundation (✉)

Email: csr@glenmarkpharma.com

1.2 India's maternal and child health landscape

India has made significant progress in reducing maternal and infant mortality over the past two decades. Government-led programs such as the Janani Suraksha Yojana, Integrated Child Development Services (ICDS), Pradhan Mantri Matru Vandana Yojana, Mission Indradhanush, Swasth Nari Sashakt Parivar Abhiyan, Beti Bachao Beti Padhao, Child Protection Services Scheme and the National Nutrition Mission (Poshan Abhiyan) have created important safety nets for mothers and children. Despite these efforts, the scale of the challenge remains vast. India accounts for nearly a fifth of the world's maternal deaths and continues to face high levels of child malnutrition. According to the National Family Health Survey (NFHS-5), 35.5 percent of children under five are stunted, 19.3 percent are wasted, and 32 percent are underweight. Anaemia is widespread, with more than half of women aged 15–49 years found to be anaemic, affecting their health and the survival of their infants.

The challenge is even more acute in rural, tribal, and marginalized communities. Many of these populations live in geographies that are difficult to access, such as riverine islands, forested regions, and hilly terrains. These communities often face multiple disadvantages: limited health infrastructure, shortage of medical professionals, lack of awareness about preventive care, and socio-economic barriers that restrict access to nutritious food and quality healthcare. In Aspirational Districts like Khunti in Jharkhand or Darrang in Assam, maternal and child health indicators consistently lag behind national averages, reflecting entrenched inequities.

1.3 The need for a comprehensive approach

The complexity of maternal and child health challenges demonstrates that no single intervention can solve the problem. While immunisation, nutrition supplementation, or hospital-based delivery programs each play a role, they cannot address the interconnected factors that influence health outcomes on their own. Malnutrition, for instance, is not simply a medical issue; it is also shaped by factors such as food security, sanitation practices, maternal knowledge, cultural habits, and environmental conditions, including indoor air pollution from cooking fuels.

This recognition underscores the need for a 360-degree approach that integrates healthcare delivery with nutrition, education, behaviour change, and environmental sustainability. An effective maternal and child health program must ensure that mothers

receive antenatal and postnatal care, children are immunised, communities adopt better hygiene practices, families have access to nutritious foods, and awareness about health-seeking behaviours spreads widely. It must also address systemic barriers by training and empowering frontline workers, strengthening local infrastructure, and leveraging technology to reach the underserved on a larger scale

1.4 Glenmark's recognition of the gap

As an innovation-led and socially committed organization, Glenmark Pharmaceuticals recognized the urgent need to contribute meaningfully to this space through its Corporate Social Responsibility (CSR) arm, the Glenmark Foundation. Guided by the conviction that enriching lives creates a healthier and happier world for all, the Foundation sought to design an initiative that not only delivered healthcare but also transformed the ecosystem surrounding the well-being of women and children.

This led to the creation of Project Kavach, Glenmark's flagship initiative in India, focused on maternal and child health and nutrition. Built on a holistic 360-degree strategy, Project Kavach was launched to reduce infant and child mortality by addressing health challenges from every angle, combining medical care, nutrition interventions, education, awareness, and community engagement. Over time, it expanded across seven states - Sikkim, Maharashtra, Jharkhand, Assam, Himachal Pradesh, Madhya Pradesh, and Goa, demonstrating how a comprehensive model can bring measurable improvements in maternal and child health.

Ahiron's high-risk pregnancy in Darrang, Assam, shows how our Project Kavach's Boat Clinic delivers life-saving care in remote, underserved communities. Her story underscores that outreach healthcare, timely diagnosis, and compassionate support are essential for safeguarding women's health in the most challenging environments. Ahiron Nesa, a 30-year-old from Puthimari Char, exemplifies the obstacles many women face in accessing care due to distance, poor transportation, and lack of information. Her first antenatal check-up at the Glenmark Boat Clinic became a turning point. At the clinic, Ahiron was swiftly recognized as a high-risk case and referred for monitoring. The situation became critical when an ultrasound revealed triplets a rare event with grave risk in such limited settings. Confronted with danger and uncertainty, Ahiron and her husband urgently needed support, awareness, and institutional care.

This case study illustrates how targeted outreach, rapid intervention, and access to professional care can significantly impact outcomes for vulnerable mothers in isolated settings, as exemplified by Ahiron's journey.

2. Method/ Approach

2.1 The Launch of Project Kavach in India

When Glenmark Foundation, the CSR arm of Glenmark Pharmaceuticals, set out to design a long-term initiative for community health, maternal and child health (MCH) emerged as the most pressing area of focus. The reasons were clear. High maternal and infant mortality rates continued to hold back India's human development despite decades of government and civil society interventions. Malnutrition, anaemia, poor sanitation, and limited awareness of health-seeking behaviours were recurring challenges in almost every underserved community.

Glenmark believed that tackling these challenges was not just a matter of corporate responsibility but also a moral imperative for a healthcare company. As an organization deeply invested in improving quality of life through science, Glenmark recognized that its social investment needed to go beyond philanthropy and provide systemic, sustainable solutions. The outcome was Project Kavach, a flagship program designed to reduce infant and child mortality through a 360-degree approach.

2.2 Why maternal and child health became Glenmark's CSR priority

The decision to prioritize MCH was guided by three critical factors:

- a) Scale of the challenge: India accounted for one of the world's largest burdens of maternal and child mortality. Malnutrition remained a persistent threat, especially in tribal and rural populations.
- b) Opportunity for systemic impact: Interventions targeting maternal and child health have a multiplier effect. When mothers are healthy, children are more likely to be born stronger, families are more resilient, and communities are better able to thrive.
- c) Alignment with Glenmark's purpose: As a healthcare organization, Glenmark's CSR mandate was aligned with improving access to health and creating meaningful, long-term impact in the lives of vulnerable populations.

2.3 The philosophy behind Kavach: A 360-degree strategy

Project Kavach was conceived not as a standalone health project but as a comprehensive ecosystem of care. The word "Kavach," meaning "shield," symbolizes protection not just against medical diseases, but also against nutritional insecurity, behavioural resilience, community knowledge, and environmental hazards that together reduce the

vulnerabilities of mothers and children. The program design rests on Glenmark's guiding belief in enriching lives to create a healthier and happier world for all, with interventions ranging from healthcare access to nutrition, awareness, and environmental well-being. The program operates in seven states: Himachal Pradesh, Sikkim, Maharashtra, Madhya Pradesh, Jharkhand, Assam, and Goa.

3. Key Findings and Insights

3.1 The 360° Approach Explained

Project Kavach was designed on the principle that maternal and child health is influenced by multiple, interdependent factors. Access to medical services is critical, but it alone cannot reduce infant and maternal mortality or improve nutrition outcomes. Sustainable health improvements require interventions that touch every aspect of a woman and child's life, from medical care and nutrition to awareness, environment, and community participation.

Glenmark's 360° approach under Project Kavach brings together interconnected interventions, each addressing a different dimension of health and well-being. Together, they form a shield, a kavach, around mothers, children, and families.

3.1.1 Health on Wheels: Bringing Healthcare to the Last Mile

One of the central pillars of Project Kavach is Health on Wheels (HoW), mobile medical units that deliver comprehensive healthcare services directly to underserved communities.

a) Himachal Pradesh: In the hilly terrains of Himachal, Health on Wheels ensures access to immunizations, antenatal and postnatal care, as well as general outpatient services. With the support of local health authorities, Glenmark's units provide preventive screenings and community awareness sessions. A landmark outcome has been 100 percent antenatal registration among beneficiaries, ensuring that pregnant women enter the healthcare system early.

b) Sikkim: The Health on Wheels unit provides regular health check-ups for children in anganwadis, conducts camps, distributes free medicines, and even offers transport support for serious paediatric cases. A notable innovation in Sikkim was the launch of Matrushakti, the first breastfeeding pod in the state, which created a nurturing environment for mothers and set an example for the development of maternal support infrastructure.

c) Jharkhand (Khunti district, an Aspirational District): In Khunti, Health on Wheels focuses on maternal and child health in one of India's most underserved regions. By organizing 250+ health camps in Khunti district, the

program reached more than 5,000 children and 2000+ women, identifying malnourished children early and referring them to government treatment centres. Families received nutrition kits, ensuring both short-term relief and longer-term improvements.

d) Madhya Pradesh - Khandwa district (Aspirational District) - Korku tribal community: In Khandwa district, Health on Wheels supports some of the most marginalized tribal populations. The program strengthens nutrition indicators through home visits, counselling, and the promotion of backyard nutrition gardens, which have benefited more than 5,000 families over the years. 8500+ children with Severe Acute Malnutrition (SAM)/Moderate Acute Malnutrition (MAM) are identified early, treated, and supported with dietary interventions. Over the years, more than 14,000 women have been engaged through training and community mobilization.

3.1.2 Reproductive and Child Health (RCH) Centres: infrastructure and continuity

The Reproductive and Child Health (RCH) intervention in Himachal Pradesh focuses on comprehensive maternal and child health services, including antenatal, postnatal, and child health care. This intervention is conducted in partnership with district health authorities and serves over 7,000 beneficiaries. Antenatal care emphasizes early pregnancy registration, regular check-ups, essential examinations, iron and folic acid supplementation, identification and referral of high-risk pregnancies, and promotion of institutional deliveries. Post-natal services include counselling on early breastfeeding, diet, rest, hygiene, contraception, newborn care, birth registration, and family sensitization on girl childbirth. Child health services focus on essential newborn care, exclusive breastfeeding for six months, full immunization, Vitamin A supplementation, and prevention and management of malnutrition. Through this intervention, the aim is to strengthen maternal and child health systems, reduce preventable health risks, and foster healthier communities in Himachal Pradesh.

3.1.3 Nutrition interventions: backyard gardens, SAM management and micronutrients

Nutrition is core to Project Kavach's model

a) Backyard nutrition gardens support household dietary diversity and small incomes, with large uptake in tribal and rural communities.

b) Severe Acute Malnutrition (SAM) is tackled through screening during camps and home visits, prompt referrals to malnutrition treatment centres, therapeutic follow up and distribution of nutrition kits.

c) Micronutrient promotion and counselling are integrated into home visits and anganwadi activities to reduce anaemia and improve maternal nutrition.

3.1.4 Community engagement and capacity building

Project Kavach invests in frontline capacity. More than 5,000 Anganwadi, frontline workers and NGO staff have been trained in maternal nutrition, early childhood care and WASH practices. Community activities include school rallies, street theatre (nukkad natak) and workshops that create demand for services and reinforce behaviour change. Training equips local actors to identify risk early and to support referrals, follow up and counselling. Community engagement and capacity building.

3.1.5 Kilkari: voice messaging for behaviour change at scale

Kilkari is a mobile health program under the Ministry of Health and Family Welfare. Kilkari delivers weekly voice messages on pregnancy and childcare from the fourth month of pregnancy until the child's first birthday. It reached over 200,000 women and children across four districts in Maharashtra and one in Madhya Pradesh, supported by state-level workshops for frontline workers to support integration into public health systems.

4. Discussion and Implications

4.1 Innovative and Thought Leadership initiatives

Alongside its core interventions, Project Kavach has pioneered a set of innovative and thought leadership initiatives that push the boundaries of conventional CSR in maternal and child health. These projects extend beyond service delivery to create new models, platforms, and technologies that inspire change on a broader scale.

4.1.2 Launched the Pioneering Boat Clinic Program to Enhance Maternal and Child Health in Assam

Glenmark was the first pharmaceutical company to launch the boat clinic initiative. It is a unique and first-of-its-kind healthcare intervention aimed at addressing critical gaps in medical services for the char (island) villages of the Brahmaputra River in Assam. These riverine communities face severe geographical

isolation, frequent displacement due to floods, and a lack of healthcare infrastructure, making access to even the most basic medical services a challenge. Glenmark recognized that these communities required an innovative and sustainable healthcare solution. The Boat Clinic Initiative is a strategic model of collaboration, bringing together the District Administration of Darrang, an Aspirational District, Glenmark, and CNES, our NGO partner, to address the unique healthcare challenges of Assam's remote riverine communities. The Boat Clinic travels from village to village, staffed with a doctor, nurses, lab technicians, a pharmacist, and community health workers. Pregnant and lactating women are provided with regular antenatal and postnatal care, screenings, and essential medicines to ensure safe pregnancies and healthier births.

Impacting thousands of beneficiaries, the Boat Clinic has become a symbol of our commitment to accessible healthcare, building stronger communities by putting mothers' and children's health at the heart of lasting change.

4.1.3 Combating Household Air Pollution

Approximately 2.1 billion people worldwide continue to cook with open fires or inefficient stoves, resulting in around 3.2 million deaths annually from household air pollution. In India, many households continue to cook with solid fuels daily, contributing to harmful indoor air pollution and posing health risks, particularly for women and children. To address this pressing issue, the Glenmark Foundation collaborated with CSIR-NEERI to develop PAVAK, a low-cost, improved cookstove that has undergone extensive research and field testing.

Over 13,000 PAVAK cookstoves have been distributed in two aspirational districts, namely, Nandurbar, Maharashtra, and Khandwa, Madhya Pradesh. Plans are in place to reach an additional 10,000+ households across both states. The cookstove is BIS 2013 compliant and offers several benefits, including reduced emissions, lower fuel consumption, durability, and easy maintenance. Additionally, demonstration sessions are also conducted across identified villages to build community awareness and promote adoption.

Through this initiative, Glenmark aims to create a lasting impact on the health and environment of vulnerable communities by providing sustainable, scalable solutions that promote cleaner cooking and healthier lives.

4.1.4 Meri Poushtik Rasoi: blending tradition with nutrition science

The Meri Poushtik Rasoi serves as a creative and community-led platform to promote nutritious, affordable, and culturally rooted food. Launched in 2018, Meri Poushtik Rasoi has grown into a dynamic, multi-stakeholder platform dedicated to combating malnutrition across India. Guided by the powerful theme "Bacche na rahe kuposhit, jab khana bane poushtik" (No child remains malnourished when food becomes nutritious), the initiative brings together NGOs, food and nutrition professionals, students from hospitality institutes, and home cooks in a shared mission. This initiative combines cultural food practices with nutrition, leading the fight against malnutrition by raising awareness about locally sourced recipes. The initiative aims to achieve two core objectives firstly, to document affordable, culturally relevant, and nutritious indigenous recipes that can be leveraged at the grassroots level to address child malnutrition in both urban and rural communities. Secondly, to raise widespread awareness about child malnutrition and the critical role that accessible, nutritious food can play in improving public health. By combining culinary expertise with a public health agenda, the contest aims to generate a meaningful impact on the health and well-being of society.

Over the years, Meri Poushtik Rasoi has drawn more than 3,000 entries from across India. Recipes showcased the use of local, affordable ingredients to create nutritionally rich meals. The program encourages behaviour change by making nutritious food aspirational and accessible.

4.1.5 Glenmark Nutrition Awards: scaling grassroots innovation

The Glenmark Nutrition Awards have grown into a prestigious platform over the last five years. The awards identify, amplify, and support organizations creating impact through community-driven solutions to malnutrition. The awards not only recognize innovation but also foster collaboration and knowledge sharing among stakeholders. Corporate foundations, NGOs, and even government bodies participate, reinforcing the credibility and impact of this initiative. With over 1400 entries received from across India, the awards provide grants to scale impactful projects. Winners also participate in workshops on fortification, dietary diversity, and climate-smart nutrition, making the program a platform for nationwide knowledge exchange and sharing.

5. Impact

5.1 Impact Evidence

Project Kavach has reached more than 3.6 million people across seven states, improving maternal and child health outcomes through scale and innovation. Over 48,000 malnourished children have been identified and supported, 530,000 pregnant and lactating women engaged, and more than 1,000 health camps organized. Training of over 3,000 frontline workers has created a multiplier effect. More than 12,000 PAVAK cookstoves have reduced household air pollution in tribal areas.

In Darrang, Assam (Aspirational District), the Boat Clinic transformed access to maternal care. Expectant mothers now receive antenatal check-ups without the burden of long journeys. One woman shared: 'Now I no longer fear my pregnancy. The doctor is coming to us, and I know my baby will be safe.'

In Khunti, Jharkhand (an Aspirational District), regular health camps and nutrition support have altered perceptions of malnutrition. The story of a little child from Khunti, Jharkhand, exemplifies resilience in the face of adversity. Severely malnourished due to poverty, neglect, and limited access to proper nutrition, the child's life took a turn when our Health on Wheels team intervened. His grandmother, who serves as his caretaker, could barely afford packaged milk for him, and at first, the family was hesitant to seek further assistance. But with consistent support and encouragement from the team and the local Anganwadi (childcare centre) worker, the child was admitted to a Malnutrition Treatment Centre. In just 15 days, the child's transformation was incredible; he gained 1.6 kg and began his journey toward recovery. Stories like these are not just statistics to us; they represent the heartbeat of the work at the Glenmark Foundation.

6. Conclusion

6.1 Global Commitment Beyond India

While Project Kavach is Glenmark's flagship initiative in India, the company's vision of enriching lives to create a healthier and happier world for all extends to communities across the globe. Recognizing that maternal and child health challenges are universal, Glenmark has initiated programs in other countries that face similar vulnerabilities, adapting its holistic approach to local contexts.

6.2 Philippines: strengthening nutrition in underserved communities

In the Philippines, Glenmark has collaborated with local partners to enhance maternal and child nutrition in 23 barangays. The program promotes community nutrition gardens, provides dietary supplementation, a

nd trains health workers to encourage sustainable practices. The supported families reported greater access to fresh, nutritious food. This intervention mirrors elements of the nutrition garden model in India, adapted to Filipino diets and community structures.

6.3 Kenya: maternal health and food security in drought-affected regions

In Kenya, Glenmark's initiatives focus on Makueni and Kajiado counties, areas severely affected by drought and food insecurity. The program integrates maternal and child healthcare with livelihood support, providing antenatal and postnatal services, nutrition education, and training in climate-resilient agriculture. By addressing both health outcomes and food security, the program provides mothers and children with immediate care while strengthening long-term resilience.

6.4 Reflections and Learnings

Through the implementation of Project Kavach, Glenmark has gathered valuable insights into what it takes to improve maternal and child health in a meaningful and sustainable way. Operating across diverse geographies, from Himalayan states to tribal districts to flood-prone riverine islands, has demonstrated that lasting impact requires both innovation and deep community engagement. One of the most significant learnings is the importance of addressing maternal and child health through a comprehensive, 360-degree ecosystem approach. Health outcomes are not solely shaped by medical services, but also by nutrition, environment, education, and behaviour. By integrating multiple pillars, including Health on Wheels and the Boat Clinic, Kilkari, Nutrition Awards, Meri Poushtik Rasoi, and PAVAK cookstoves, the initiative ensures that no single factor is treated in isolation. This interconnected design has proven essential to reducing vulnerabilities and building healthier families.

6.5 Innovation as a differentiator

Experience has shown the value of innovation in overcoming barriers. The Boat Clinic in Assam demonstrates how unconventional solutions can overcome geographic isolation and bring services to populations that health systems often cannot reach. Similarly, the collaboration with CSIR-NEERI to develop the PAVAK cookstove shows how scientific technology can address environmental health risks that silently impact women and children. By piloting and scaling such innovations, Glenmark has expanded the possibilities for CSR interventions in healthcare.

6.6 Partnerships amplify impact

Another critical learning is the role of partnerships. Collaborating with government systems, local NGOs, and research institutions has allowed Project Kavach to extend its reach and credibility. By aligning with district health authorities in Himachal Pradesh for the RCH centre or supporting the programmatic augmentation and system strengthening of the Kilkari program, the largest mobile-based maternal messaging programme in the world under the Ministry of Health and Family Welfare (MoHFW), or empowering frontline Anganwadi and ASHA workers across states, Glenmark has built capacity within existing systems rather than creating parallel structures. This approach ensures that improvements are embedded and sustained locally.

6.7 Community ownership as a sustainability driver

Perhaps the most important lesson learned has been the importance of community ownership. From backyard nutrition gardens to community-based interventions for malnutrition management, those that actively engage families and communities have shown stronger adoption and longer-lasting results. Empowering mothers with knowledge, frontline workers with training to enhance their skills, and local innovators with recognition through the Nutrition Awards has fostered a sense of shared responsibility for improved health. Empowering the community through knowledge has built their capacity to identify problems, analyze causes and effects, and implement feasible solutions. Communities can evaluate the outcomes of their actions and learn from both individual and collective experiences. This process fosters self-sufficiency and encourages communities to assume responsibility for their own healthcare. This model of community ownership serves not only as a strategy for sustainability but also as a pathway to significant social and economic change.

6.8 Looking ahead

The experience of implementing Project Kavach reaffirms that maternal and child health cannot be transformed through fragmented action. A shield must be comprehensive, combining health, nutrition, environment, and behaviour. As Glenmark continues its journey, these learnings will guide its future CSR strategy, both in India and globally, ensuring that the purpose of enriching lives to create a healthier and happier world for all translates into tangible outcomes for women and children everywhere.

References

1. World Health Organization. (2023). Maternal mortality. <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality>
2. National Family Health Survey (NFHS-5). (2021). Ministry of Health and Family Welfare, Government of India.
3. UNICEF. (2023). Malnutrition in children. <https://www.unicef.org/nutrition/malnutrition>
4. World Health Organization (2024) Household air pollution and health, 16 October. Available at: WHO (<https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health>) (Accessed: 1 July 2025).

