

## Viewpoint

# Closing the gap in maternal health access and quality through targeted investments in low-resource settings

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In many low-resource settings, healthcare service delivery is very poor. Nigeria, for example, ranks among the worst in access and quality of services. It is ranked 42 out of 100 by the World Bank in its delivery of universal health coverage. To improve rural women's access to quality maternal healthcare services, adequate budgets must be allocated to improve care delivery in those centers, implement programs to reduce out-of-pocket expenses for maternal health, ensure sufficient staffing and training, introduce innovative transportation methods, and promote male involvement. Providing quality maternal care is the only way to promote and increase access.

Maternal and newborn mortality rates are higher in lower- and middle-income countries (LMICs) and Nigeria is one of the countries in this category with the highest maternal mortality rates globally. In 2018 the maternal mortality ratio (MMR) in Nigeria was estimated to be 512 deaths per 100,000 live births,<sup>1</sup> and in 2019, the MMR was estimated to be over 800 maternal deaths per 100,000 live births with a neonatal mortality rate at 33 per 1000 live births.<sup>2,3</sup> In contrast, high-income countries like the UK and the US had much lower MMRs of 10-18 deaths per 100,000 live births and neonatal mortality rates of less than four deaths per 1000 live births.<sup>2</sup>

According to the Sustainable Development Goals (SDGs), the global target for maternal mortality is 70 deaths per 100,000 live births.<sup>4,5</sup> Recent data from a World Health Organization (WHO) factsheet released in March 2023 presents a bleak picture of maternal health outcomes in Nigeria. In 2017, the maternal mortality rate in Nigeria was 917 deaths per 100,000 live births. In just three years, this rate has risen by approximately 14%, reaching 1047 deaths per 100,000 live births in 2020.<sup>6</sup> These results highlight a significant and worrying mismatch between Nigeria's maternal health outcomes and the lofty SDGs targets. The maternal mortality rate in Nigeria is more than ten times greater than the SDGs' target. The large disparity between the worldwide aim and the country's reality highlights major difficulties within Nigeria's healthcare system as well as the urgent need for comprehensive maternal health measures.<sup>7</sup>

Maternal mortality is a major public health concern in Nigeria, with a significant percentage of deaths resulting from preventable obstetric causes. Recent research has shed light on the seriousness of this problem. According to

this study,<sup>8</sup> the top causes of maternal mortality include hypertension (27%), sepsis (20.6%), haemorrhage (17%), anaemia (3.2%), HIV (3.2%), and sickle cell disease (2.4%). These troubling figures highlight the crucial need for comprehensive healthcare reform, better access to high-quality maternal healthcare services, and expanded public awareness efforts to address these preventable medical issues. Another study<sup>9</sup> emphasises the need of resolving delays in maternal healthcare-seeking behaviour. Delays in seeking maternal health care, reaching a healthcare institution, and receiving expert pregnancy care were found as key factors contributing to maternal mortality. These delays are frequently caused by systemic difficulties, such as limited access to healthcare facilities, inadequate transportation infrastructure, and a lack of awareness about the significance of prompt and expert maternity care. While preterm birth complications, intrapartum events, and infections account for over 80% of newborn deaths and stillbirths.<sup>3</sup> Challenges impeding the improvement of maternal and newborn health are primarily attributed to inadequate access to quality healthcare services, poor health infrastructure, and a shortage of skilled health workers,<sup>5</sup> as well as religious and sociocultural norms like early marriage and childbearing, gender inequality, and poverty.<sup>10</sup>

Our country's stakeholders must urgently prioritise investments in healthcare research, with a particular emphasis on strengthening healthcare infrastructure, improving access to quality maternal healthcare services, and developing interventions that address the cultural and socioeconomic factors that contribute to maternal mortality.<sup>11</sup> The illness burden caused by maternal and neonatal health (MNH) concerns is an urgent matter that requires prompt attention. We can ensure that medical facilities are well-equipped, staffed, and accessible by investing in healthcare infrastructure. This will result in better maternity healthcare services, lower death rates, and better overall health outcomes for women. Furthermore, addressing the socioeconomic and cultural causes of MNH concerns is critical. Tailored interventions that provide assistance and education to vulnerable groups can help bridge gaps in healthcare access.

The Abiye programme<sup>12</sup> exemplifies how such activities can have a positive impact. It exemplifies the value of smart investments in MNH research and therapy. We can dramatically improve the well-being of women and their families by

embracing this approach and scaling up comparable activities, ultimately leading to healthier communities. Furthermore, these initiatives coincide with the SDG 3.1 target of reducing maternal mortality, a critical step toward attaining broader global health and development goals. Stakeholders must band together to support this cause, recognizing its critical role in ensuring a better and more prosperous future for our country.

## FINDINGS AND PROPOSED INTERVENTIONS

Addressing the maternal health crisis in low-resource settings, particularly in rural areas of Nigeria, is a multifaceted challenge that demands a comprehensive approach. A recent qualitative study<sup>13</sup> delved into the underutilisation of primary health centers (PHCs) for pregnancy care among rural women in Nigeria, uncovering a range of contributing factors. These factors include accessibility issues stemming from poor transportation infrastructure and irregular facility hours, perceptions of poor quality care driven by various deficiencies in healthcare services, high costs of services, and the absence of partner support. Moreover, the study highlighted the critical need for effective strategies to promote male involvement in maternal healthcare. Drawing inspiration from India's successful "Janani Suraksha Yojana" (JSY) initiative, which has significantly reduced maternal and neonatal mortality rates in resource-constrained environments, Nigerian policymakers can consider tailored approaches. Elements of the JSY initiative, such as conditional cash transfers (CCTs) to encourage facility-based deliveries, innovative transportation options, and a strong emphasis on institutional deliveries with skilled attendants, offer valuable insights. By adapting these strategies and promoting male engagement through community education, Nigeria can make substantial progress in improving maternal and newborn healthcare, particularly in remote and underserved regions.

## HEALTH EDUCATION AND AWARENESS CAMPAIGNS

Cultural beliefs and delayed healthcare-seeking behaviours, stemming from limited awareness about pregnancy and postnatal care, lie at the core of the distressing maternal mortality rates and preventable complications. A poignant memory from 2018 still lingers in my mind, involving a premature infant born to Fatima and Ibrahim, residents of Kaduna, Nigeria. Despite the parents' sincere efforts, they grappled with addressing their baby's challenges and lacked comprehension of the situation, leading them to postpone seeking proper medical assistance for several weeks. Ultimately, when the situation reached a critical point, they hurriedly sought care at a distant hospital. It was at this juncture that I intervened, covering the medical expenses. Sadly, by then, the baby's condition had deteriorated significantly, and he succumbed to his illness just three days into his stay at the medical facility.

This poignant story underscores the critical need for increased education and awareness about maternal healthcare. Cultural beliefs and limited knowledge should never

stand in the way of accessing timely and appropriate care. Funders must be willing to support health education and awareness campaigns focused on educating women about the importance of regular check-ups, proper nutrition, and identifying warning signs during pregnancy and postpartum, from breaking down barriers to improving healthcare-seeking behaviours and ensuring that every expectant mother and her child receive the support and care they deserve.

In Nigeria, maternal healthcare education and awareness efforts have had varied effects. While they have improved awareness about maternal health issues, significant challenges remain. Urban places with greater healthcare infrastructure have shown success, but rural and remote areas continue to confront obstacles. For example, the Nigerian government's "Safe Motherhood" initiative, established in 1990,<sup>14</sup> attempted to minimise maternal mortality, but inadequate access to excellent healthcare facilities and cultural beliefs hampered its success, particularly in rural areas. Furthermore, initiatives like the "Midwives Service Scheme" established in 2009,<sup>15</sup> provided access to competent birth attendants in some areas but failed to overcome the urban-rural healthcare divide. While there have been areas of success, there are substantial discrepancies and hurdles in establishing universal maternal healthcare coverage throughout Nigeria.

## INVESTING ACCESS TO QUALITY MATERNAL HEALTHCARE SERVICES

In a recent study<sup>13</sup> where the authors sought to understand why rural women do not use primary health centres in Nigeria for pregnancy care by generating evidence using a qualitative study on their perceptions of maternal and child health care services in PHC centres." The study's goal was to look into the factors that contribute to rural women in Nigeria underutilizing primary health centres (PHCs) for pregnancy care. The study used qualitative research methods to obtain insight into maternal and child healthcare service perceptions in PHC centres. To collect qualitative data, the researchers had group talks with both married women and men in rural Nigeria. These talks most likely included open-ended questions and in-depth interviews designed to elicit participants' experiences and perspectives of PHC utilisation for pregnancy care. Some of the reasons behind the under-utilisation of primary health care (PHC) centres for skilled pregnancy care among rural women in Nigeria were uncovered through group discussions with married women and men. Firstly, accessibility factors included poor roads, transportation difficulties, long distances, and irregular facility opening hours. Secondly, perceptions related to poor quality of care include inadequate availability of drugs and consumables, abusive behaviour by health providers, insufficient numbers of providers, inconsistent availability of providers in the facilities, long waiting times, and inappropriate referrals. Thirdly, high costs of services played a role, including the inability to afford services even when costs were not high, as well as the introduction of informal payments by staff. Lastly, other factors

included a lack of partner support and misinterpretation of signs of pregnancy complications.

The “Janani Suraksha Yojana” (JSY) in India teaches Nigerian policymakers how to lower maternal and newborn mortality rates in resource-constrained environments. JSY aims to improve maternal healthcare accessibility and quality while also including men in the process. Conditional cash transfers (CCTs) to incentivise facility-based deliveries, innovative transportation options such as mobile ambulances, emphasising institutional deliveries with competent attendants, and boosting male engagement are all key components of this initiative.<sup>16</sup> In India, JSY has resulted in greater institutional deliveries, lower mother mortality, and better neonatal health. Policymakers in Nigeria can consider implementing CCTs to reduce financial barriers, exploring innovative transportation options such as community-based networks or telemedicine, increasing the availability of skilled healthcare providers in rural areas, and promoting male involvement through community education to adapt these strategies. Policymakers may make substantial steps in enhancing maternity and neonatal healthcare and promoting the country’s maternal and newborn health objectives by customising these techniques to Nigeria’s specific setting, particularly in distant and under-served locations.

#### RESEARCH TO DRIVE DATA-DRIVEN DECISIONS

The importance of research in driving data-driven decisions cannot be understated. Limited funding for research initiatives, along with logistical challenges in data collection and analysis, pose obstacles to evidence-based solutions. To overcome these barriers, it is imperative that stakeholders advocate for increased funding from diverse sources, forge partnerships, and explore innovative funding mechanisms. Bold investments, unwavering commitment, and collaborative action are the keys to creating a world where every woman and child in low-resource settings can access the quality healthcare they deserve, ensuring their survival and well-being.

Limited funding for research initiatives hampers the generation of evidence-based solutions and innovative interventions. Additionally, logistical constraints, including remote locations and infrastructure limitations, hinder data collection and analysis. Despite these challenges, we must continue prioritising research in maternal and child health to identify context-specific solutions and drive effective interventions.

Investing in research is critical to understanding the complexities of maternal and child health in low-resource settings and finding sustainable solutions that address the unique challenges faced by these communities. All stakeholders passionate about this cause must continue to advocate for increased funding from multiple sources, including governments, international organisations, philanthropic foundations, and private sector entities, forge partnerships and stay innovative in exploring more innovative funding mechanisms. Now is the time for bold investments, unwavering commitment, and collaborative action to create a world where every woman and child can access the quality

healthcare they deserve. Working together, stakeholders can make a tangible and lasting difference in the lives of millions of women and children, ensuring that they survive and thrive.

#### CONCLUSIONS

In the pursuit of addressing the maternal health crises in low-resource settings, it is evident that a multi-pronged approach is essential. Cultural beliefs and delayed healthcare-seeking behaviors remain significant contributors to maternal mortality rates and preventable complications. To illustrate this, the heartbreaking story of Fatima and Ibrahim from Kaduna, Nigeria, serves as a poignant reminder of the dire consequences of limited awareness about maternal healthcare. Their tragic experience underscores the urgent need for health education and awareness campaigns. These initiatives must break down barriers, improve healthcare-seeking behaviors, and ensure that every expectant mother and her child receive the support and care they deserve.

While Nigeria has made efforts through initiatives like the “Safe Motherhood” and “Midwives Service Scheme,” success has been varied, with urban areas benefiting more than rural regions. The challenges of inadequate access to healthcare facilities and deeply rooted cultural beliefs persist. Nevertheless, the lessons from India’s “Janani Suraksha Yojana” (JSY) provide valuable insights for Nigerian policymakers. By implementing strategies such as conditional cash transfers (CCTs) to reduce financial barriers, innovative transportation options, and promoting male involvement through community education, Nigeria can make significant strides in improving maternal and newborn healthcare.

Research remains a crucial component in driving data-driven decisions and finding context-specific solutions. Limited funding and logistical constraints present challenges, but these should not deter us from prioritizing research in maternal and child health. Stakeholders, particularly in LMICs, must continue to advocate for increased funding from various sources and explore innovative funding mechanisms to support research initiatives.

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#### AUTHORSHIP CONTRIBUTIONS

Mopelola Laurretta Ajegbile is the sole author.

#### DISCLOSURE OF INTERESTS

The author completed the Unified Competing Interest form at <http://www.icmje.org/disclosure-of-interest/> (available upon request from the corresponding author) and declare no conflicts of interest.

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