ORIGINAL ARTICLE

Progress Towards SDG 3.1 in Zambia: A Narrative Review of Maternal Mortality, Health System Challenges, and Policy Responses

Patrick Reardon

University of Melbourne, Melbourne, Australia

ABSTRACT

Background: Maternal mortality remains a critical public health challenge, particularly in low-resource settings such as Zambia in sub-Saharan Africa. This narrative review examines Zambia's progress towards achieving Sustainable Development Goal 3.1 (SDG 3.1), which aims to reduce the global maternal mortality ratio to below 70 per 100,000 live births by 2030 (SDG 3.1.1) and increase the proportion of births attended by skilled health personnel (SDG 3.1.2).

Methods: Sources were drawn from peer-reviewed journals, WHO databases, and regional policy documents published between 2014 to 2025. Particular focus was placed on SDG 3.1 indicators, with comparative data from Malawi, Tanzania, and Zimbabwe.

Results: Zambia has made significant progress towards reducing its maternal mortality ratio (SDG 3.1.1) and is projected to meet the target by 2030 with moderate effort. Zambia is ahead of its neighbours Tanzania (85%) and Zimbabwe (86%), but lags behind Malawi (96%). Targeted investments in skilled personnel and adolescent health education, as outlined in government-led frameworks such as The Seventh National Development Plan and The Zambia National Health Strategic Plan, are pivotal for improving maternal outcomes.

Conclusion: Zambia is on track to achieve SDG 3.1 by 2030; however, continued progress will depend upon sustained political commitment, health workforce investment, and expanded efforts in adolescent reproductive health.

INTRODUCTION

Maternal mortality–the death of an individual during pregnancy or within 42 days of termination from a pregnancy-related cause[1] remains a longstanding and critical public health challenge. Despite the high burden, maternal mortality is largely preventable through timely and effective interventions for the leading causes: haemorrhage, hypertensive disorders, and sepsis.[2] In high-income countries, the successful implementation of preventative care has resulted in significant reductions in maternal deaths.[3] However, low- and middle-income countries (LMICs) bear a disproportionate burden, with countries in sub-Saharan Africa accounting for 70% of the estimated

Corresponding Author
Email: patrick.reardon01@outlook.com // preardon@student.unimelb.edu.au

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global deaths alone in 2020. These disparities have significant implications for infant and child mortality, economic resilience, and the intergenerational cycles of poverty.[4]

In 2015, The United Nations established Sustainable Development Goal (SDG) 3, which includes SDG 3.1, aiming to reduce the global maternal mortality ratio (MMR) to less than 70 per 100,000 live births by 2030.[5] SDG 3.1 is underpinned by two key subgoals: SDG 3.1.1, which focuses on reducing the MMR, and SDG 3.1.2, which tracks the proportion of births attended by skilled health personnel as a proxy for safe delivery care access.

Zambia, a sub-Saharan country with a significant debt burden, is the primary focus of this review. The Zambian government has faced longstanding economic constraints, with debt servicing often taking precedence over investments in sanitation, healthcare, and education.[6] Despite its rich mineral resources, Zambia faces widespread poverty, with 54.7% of its population living below the poverty line. These challenges present a critical context for assessing Zambia's progress toward SDG 3.1 and the potential for substantial improvements in maternal health outcomes. Though Zambia faces unique challenges, its trajectory mirrors that of many countries in sub-Saharan Africa, such as Malawi, Zimbabwe, and Tanzania. Comparing Zambia's progress to neighbouring countries will offer valuable insight into prospective barriers and interventions to improving maternal care.

METHODS

A comprehensive narrative literature review was conducted using PubMed, Scopus, and Ovid databases, capturing publications from 2014 to 2025 that addressed a combination of terms such as “Zambia”, “SDG 3.1”, “maternal mortality” and “skilled birth attendance”. Inclusion criteria focused on peer-reviewed articles, government health strategies and other papers that addressed maternal health indicators or interventions. Grey literature and reports from the WHO, UNICEF and Zambian Ministry of Health were also included to capture the most up-to-date policy frameworks and statistical data. Studies and reports not focused on Zambia or lacking relevance to SDG 3.1 were excluded. Similar searches were conducted to assess the progress and efficacy of neighbouring sub-Saharan countries such as Tanzania, Zimbabwe and Malawi.

RESULTS

Table 1 outlines Zambia's progression towards SDG 3.1, with consideration of other relevant maternal care indicators, also.

Table 1: Comparison of Zambia's Maternal Health-Related Indicators with sub-Saharan Neighbours

Country	MMR (Most Recent)	Skilled Birth Attendance	Adolescent Birth Rate	C-section Rate
Zambia	85	94%	13.5%	4.4%
Malawi	225	96%	13.6%	6.1%
Tanzania	276	85%	11.2%	5.9%
Zimbabwe	358	86%	8.6%	5.8%

Table 1 includes the most recent data from the World Health Organisation (5).

Zambia's MMR has been steadily declining over the last decade but remains high compared to global standards. Most recently, Zambia's MMR is cited 85 per 100,000 live births,[7] still marginally higher than the SDG 3.1 target of 70 per 100,000 by 2030. Skilled birth attendance (94%) is stronger than in neighbouring Tanzania (85%) and Zimbabwe (85%), though it trails Malawi (96%). Concerning SDG 3.1 progress, Zambia requires intensified effort to meet SDG 3.1.1 and moderate effort to achieve SDG 3.1.2 by 2030.[8] These indicators offer valuable insights into Zambia's ongoing health challenges and serve as benchmarks for evaluating the nation's progress.

DISCUSSION

Government Initiatives and Strategic Plans

The Zambian government plays a central role in healthcare expenditures and resource allocation, presenting both challenges and opportunities given Zambia's significant history of debt. The government's response has been framed within

several strategic documents, including The Seventh National Development Plan[9] and The Zambia National Health Strategic Plan.[10] Both documents aim to improve maternal outcomes through multi-sectoral interventions, with an emphasis on healthcare infrastructure, workforce capacity, and socioeconomic development.

A key intervention proposed by the Zambia National Health Strategic Plan is the Midwifery Service Framework (MSF), designed to increase the number of midwives in the country and enhance training and support for maternal healthcare.[10] Persistent barriers, such as workforce shortages and limited access to birthing facilities, constrain the full impact of the MSF, although preliminary outcomes indicate promise.

Furthermore, the Seventh National Development Plan aligns with SDG 3.1 by strengthening health resources where maternal care is most limited, such as in rural or underserved areas. However, the effectiveness of these frameworks is largely contingent upon government policy and resource allocation, potentially requiring oversight from bodies such as WHO to ensure these targets are met.

Areas of improvement

Regarding maternal outcomes, evidence suggests that even small increases in the availability and uptake of C-sections in LMICs can significantly reduce maternal and neonatal mortality.[11] Addressing this gap will necessitate investment in healthcare resources, infrastructure, and workforce skill and capacity

There is also scope for improvement in reducing the incidence of adolescent pregnancies. Adolescents are at an increased risk of poor maternal outcomes[12] due to an increased risk of infection and hypertensive disorders, both of which are key contributors to maternal mortality. Community-based education programs and targeted interventions aimed at reducing adolescent pregnancies are vital components of the Zambia National Health Strategic Plan and could help mitigate some of these risks.

Impact of Systemic Issues and COVID-19

Broader healthcare inequities, including healthcare funding, inadequate resourcing, and leadership challenges, continue to impact progress towards SDG 3.1. LMICs with insufficient healthcare infrastructure faced significant challenges with overcrowding and redirection of funding during the COVID-19 pandemic, with the efforts concerted towards the virus having implications on maternal outcomes. Closure of healthcare services and exhaustion of hospital beds also forced pregnant individuals into giving birth at home regardless of whether or not a facility birth was scheduled.

In addition, complications of the virus in pregnant individuals also compounded maternal outcomes.[13] However, it is difficult to fully assess the long-term implications of SDG 3.1 in Zambia given that WHO data covers the period up to 2020. Future population studies are required to assess the full impact of the pandemic on maternal outcomes.

Study limitations

It is important to acknowledge that maternal health data in Zambia remains incomplete, with 49% of SDG 3.1 data lacking sufficient documentation.[14] Additionally, the accuracy of existing data may be influenced by investigative faults such as underreporting and gaps in healthcare documentation. As such, future studies and data collection efforts are critical to providing a more holistic perspective on Zambia's progress towards SDG 3.1.

Future studies should also integrate qualitative data to capture the lived experience of Zambian women and healthcare providers. This will enrich our understanding of the barriers faced in accessing maternal care. These methods may reveal culturally specific challenges, such as traditional birthing practices or stigma surrounding maternal health concerns, which quantitative data alone may not capture. Integrating culturally safe care will improve maternal health access and outcomes.

Additional research should also investigate the challenges of balancing economic growth with sustained healthcare investments in LMICs. Counterarguments to current strategies, such as the impact of debt servicing on healthcare funding, may provide clear, actionable insights for policymakers and healthcare providers.

CONCLUSION

Zambia is tracking well toward achieving SDG 3.1 but will require sustained effort to achieve the goal of reducing maternal mortality to below 70 per 100,000 live births by 2030. Continued investment in skilled birth attendance, emergency obstetric care, and broader healthcare infrastructure, framed in interventions like the Seventh National Development Plan and Zambia National Health Strategic Plan, will be essential to overcoming the challenges and ensuring that the country meets SDG 3.1 in the coming decade. While Zambia's trajectory is encouraging, the durability of these gains will depend on timely, targeted interventions.

Policy Recommendations

To meet SDG 3.1 targets, Zambia should prioritise the following:

1. Expand the Health Workforce: Invest in midwifery training, deployment, and retention—particularly in rural areas.

2. Strengthen Emergency Obstetric Care: Improve access to C-sections and equip district hospitals for timely maternal interventions.

3. Address Adolescent Maternal Risk: Scale up adolescent reproductive health education and integrate youth-friendly services into maternal care.

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