DOI: https://doi.org/10.3126/phe.v16i1.96550

Decadal Effort of Maternal Mortality Reduction in Nepal (2014-2024): A Scoping Review of Barriers and Achievements

Jyoti Kuikel[1], Bhagwan Aryal [2*], Niyaa Tripati[1] , Prakash Subedi[1], Samjhana Poudel[1] , Sunita Devkota[1], Rebisha Sapkota[1]

[1]Department of Public Health, School of Health and Allied Sciences, Pokhara University, Kaski, Nepal
[2]Central Department of Education, Tribhuvan University, Kathmandu, Nepal
*Corresponding author: bhagwan.aryal@cded.tu.edu.np;https://orcid.org/0000-0002-9215-3551

Received: March 3, 2026 **Accepted: May 25, 2026** **Publication: June 10, 2026**

Abstract

Maternal health has been a global priority for decades. Despite the progress under the Millennium and Sustainable Development Goals (SDGs), most women still die in Nepal from preventable causes. Thus, this review looks at Nepal's journey (2014-2024), highlighting the achievements, challenges, and future interventions on maternal health. The scoping review identified and mapped the quantitative, qualitative, and mixed studies on maternal mortality published between 2014 and 2024. Searches were conducted in PubMed, Google Scholar, and key institutional websites. Eligible articles and reports were screened, extracted, and organized under themes of achievements, barriers, and global contextualization. The review's findings revealed that Nepal has significantly reduced maternal mortality between 2014 and 2024; however, persistent barriers remain, including inequities, weak infrastructure, staff shortages, cultural practices, and gaps in policy and practice. Thus, to reduce maternal mortality, Nepal should strengthen emergency obstetric care, improve referral systems, and ensure consistent supplies of medicines and equipment. Greater investment in trained staff, community engagement, financial protection schemes, and digital health tools can be essential to achieve global targets by 2030.

Keywords: Maternal mortality, Maternal health, Health service accessibility, Barriers, Achievements

Introduction

Maternal health is considered the heart of global health priorities, with the landmark initiatives emerging as early as the late 1970s and 1980s. The UN Decade for

Women, the Alma-Ata Declaration on primary health care, and the Convention on the Elimination of all forms of discrimination against women together laid the groundwork for maternal health as a global concern. Building on this foundation, the Millennium Development Goals (2000-2015) placed maternal health at the center, calling for a three-quarter reduction in maternal mortality between 1990 and 2015 (Wang & Ren, 2025).

According to Moran et al. (2016), the global maternal mortality ratio (MMR) fell by 44% between 1980 and 2015, which was a notable progress marked by MDG 5. However, maternal deaths continued to be an alarming public health issue, with around 303,000 women dying each year, particularly in Sub-Saharan Africa and Asia. In response, the WHO, together with other organizations, convened the Ending Preventable Maternal Mortality (EPMM) Working Group in 2013 to build consensus on new global goals for maternal health and survival for the 2015-2030 period (Moran et al., 2016).

The EPMM global MMR target was incorporated into the Sustainable Development Goals (SDGs) (2015-2030). The SDGs form the basis of a new global development agenda, which is broad and comprehensive, covering a wide range of socio-economic and environmental factors. The agenda with SDG 3 has aimed to lower the global maternal mortality ratio to fewer than 70 deaths per 100,000 live births by 2030 (Wang & Ren, 2025).

Despite all these efforts, maternal mortality remains a major global health challenge. Although these deaths are preventable and rates have declined markedly in recent decades, it continues to claim many lives, particularly in low-and middle-income countries (Moller et al., 2025). Nearly 92% of all maternal deaths occurred in low- and lower-middle-income countries, including Nepal in 2023 (WHO, 2025).

A UN report has shown that every two minutes, a woman dies during pregnancy or childbirth. The multifactor, including underfunding of primary health care systems, lack of trained health care workers, and weak supply chains for medical products, has threatened the progress. More precisely, one in three women misses out on at least four of eight recommended antenatal visits and does not receive essential postnatal care. While around 270 million women remain without access to modern family planning methods (UN, 2023), the vulnerable women face unequal access to care, poor service quality, weak infrastructure, and a shortage of skilled staff. In addition, pressure from economic hardship, political instability, social inequities, and environmental change further heightens the risks, making it difficult to reduce

maternal mortality and illness (Jolivet et al., 2018). This scoping review aimed to map the progress in reducing maternal mortality over a decade (2014-2024), by identifying evidence on key achievements and persistent barriers. More specifically, the study aimed to review Nepal's progress in reducing maternal mortality over a decade (2014-2024), the National Population and Housing Census 2021, Nepal maternal mortality study 2021, and the National Statistics Office, Ministry of Health and Population, focusing on key achievements and ongoing challenges, and contextualizing Nepal's experience within global maternal health goals.

Material and Methods

This study followed the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines, and the methodology for this study is structured to provide a comprehensive mapping of evidence regarding maternal mortality in Nepal from 2014 to 2024.

Study Design

The study was conducted as a scoping review, synthesizing diverse evidence from quantitative, qualitative, and mixed-methods research. Scoping reviews are important in integrating evidence on specific topics, exploring diverse types of evidence, and revealing knowledge gaps (Munn et al., 2018). This design was selected to systematically map the achievements, persistent barriers, and global contextualization of maternal health in Nepal over a decade.

Search Strategy

The primary search engines used in the study were Google Scholar and PubMed. To ensure the inclusion of relevant grey literature and national data on maternal health and mortality, key institutional websites of the WHO, CDC, and UNFPA focusing on global and developing countries were searched. As the topic was specified to Nepal so, the relevant websites of MoH, DoHS, Census report 2021, NDHS 2022, and Annual Health Reports were also accessed.

Initially, a rigorous literature review was conducted, which helped to brainstorm on conceptualizing the study and establish objectives and keywords for the search. Simultaneously, the keywords were selected from the literature review. With the help of the keywords, the Medical Subject Headings (MeSH) terminologies were constructed, and those selected terms were validated with the MeSH terms. The primary keywords included were: "Maternal mortality", "Health status indicators", "Barriers", "Achievements", and "Nepal". The MeSH terms used in the search of the literature review are listed as follows:

Table 1
MeSH types used for the search

Search strategy	Search engine used	Number of articles from the search strategy
“Maternal mortality” AND “Progress” AND “Challenges” AND “Nepal”	Google Scholar	10,900
("Maternal Mortality"[MeSH Terms] OR "Maternal Mortality"[Title/Abstract]) AND (“Nepal”[MeSH Terms] OR “Nepal”[Title/Abstract]) AND ("2014/01/01"[Date - Publication]: "2024/12/31"[Date - Publication])	PubMed	95
("Maternal Mortality"[MeSH Terms] OR "Maternal Mortality"[Title/Abstract]) AND ("Nepal" [MeSH Terms] OR "Nepal" [Title/Abstract]) AND ("Maternal Health Services"[MeSH Terms] OR "Prenatal Care"[MeSH Terms] OR "Postnatal Care"[MeSH Terms]) AND ("2014/01/01"[Date - Publication]: "2024/12/31"[Date - Publication])	PubMed	39
("Maternal Mortality"[MeSH Terms] OR "Maternal Mortality"[Title/Abstract]) AND ("Nepal" [MeSH Terms] OR "Nepal"[Title/Abstract]) AND ("Health Services Accessibility"[MeSH Terms] OR "Rural Health Services"[MeSH Terms] OR "Socioeconomic Factors"[MeSH Terms]) AND ("2014/01/01"[Date - Publication]: "2024/12/31"[Date - Publication])	PubMed	28
Total articles		**11,062**

Inclusion/Exclusion Criteria

The national reports, policy brief and published articles, including quantitative, qualitative, and/or mixed studies reporting maternal mortality trends, determinants, and interventions, were selected. The exclusion criteria were the articles that did not follow the MeSH terms and were not relevant to maternal mortality, articles whose full documents were not obtained, articles of low quality, and articles published outside the 2014-2024 timeframe.

Data Extraction and Synthesis

The studies that met the eligibility criteria obtained from two databases, PubMed and Google Scholar, were imported into Zotero for referencing and to avoid duplication of articles. At first, the title and abstract of the articles were read thoroughly to analyze their relevance for the study. The methodology of those articles that were relevant was checked. Then the information on each of the relevant articles was extracted and paraphrased to be used in the study. In alignment with scoping review standards, findings were organized and synthesized under four themes:

1. Achievements and progresses
2. Persistent barriers and health system gaps
3. Contextualization to global targets
4. Evidence-informed interventions.

The progress on maternal mortality in Nepal was compared with global targets, and a narrative synthesis (summarizing, interpreting, and explaining patterns on four established themes of maternal mortality) was used to integrate findings.

Results

Selection of Sources (PRISMA Flow)

The search was carried out in 2 databases, yielding a total of 11,062 results. Of these, 1022 were discarded due to duplicity, 900 articles were excluded for not aligning to the objectives of the study. 64 articles were discarded for not being able to find complete reports and eventually, 7 articles met all the criteria.

Figure 1

A flow diagram of the selection of articles

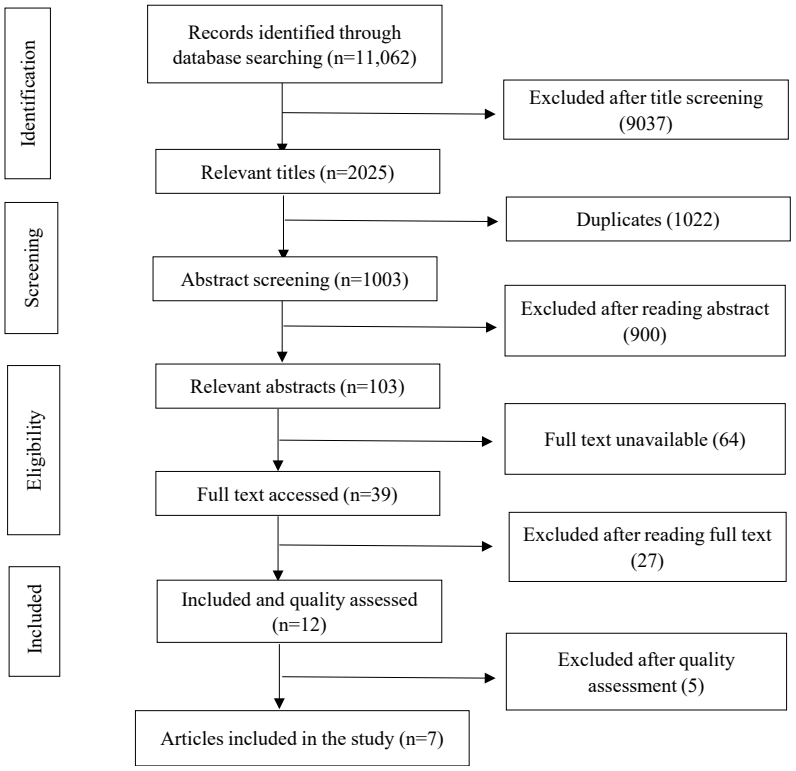

Table 2

Excluded papers

S.N.	References	Reasons for exclusion
1	Aryal and Chaudhary (2024)	Being a viewpoint article, it is opinion-driven, lacks methodological rigor, and risks bias
2	Thapa (2021)	Being a short communication article, it has insufficient methodological details and comprehensive data
3	Nepal and Dangol (2024)	Being a commentary paper, not based on systematic evidence
4	Onto et al. (2014)	Based on a specific community (single ward level), which could not be generalized
5	Sharma (2016)	Lack of detailed methods, inadequate information on the limitations of the study

Table 3

Synthesis of results

Reference	Study setting/ location	Study design	Study population and sample size	Main results
Bhusal et al. (2015)	Nepal	Narrative review	Results published in different journals across the world from 1995-2015 were reviewed and discussed in a Nepalese context	The challenges addressed in the review were a lack of awareness and underutilization of maternal health services, social disparities, political instability, low socio-economic status of women, teenage marriage and early pregnancy, unsafe abortion, and superstitious and indigenous practices.
Karkee et al. (2022)	Nepal	Qualitative study	36 KII with representatives from donor agencies, maternal health experts working in governmental and non-governmental sectors, and maternal health focal persons from federal, provincial, and local levels	A range of health system factors, including poor quality of care, were identified. To reduce maternal deaths, Nepal needs to ensure current family planning, birth preparedness, financial incentives, free delivery services, abortion care, and community post-partum care programs.
Sharma et al. (2024)	Nepal	Mixed method case study	A mixed-method iterative case study with several approaches and conceptual frameworks was used to guide the study	Although geographical challenges and political instability persisted, it is evident that improved quality and equity of access to antenatal care and childbirth services have achieved success in reducing mortality related to pregnancy and newborns.
Gupta et al. (2024)	Nepal	Policy brief	Evidence synthesis and knowledge translation	The key challenges included disparities in access to skilled healthcare, particularly in rural and remote areas, inadequate emergency obstetric care, and gaps between policy intentions and implementation. Socio-economic and geographical factors such as poverty, education, and difficult terrain accelerate those challenges.
MoHP, NSO (2023)	Nepal	A Report on maternal mortality	Census analytical report	The trends, causes, and programs on maternal mortality were synthesized from the report.
Tamang (2017)	Nepal	Poster Paper	The dataset from Nepal Multiple Indicator Cluster Survey, 2014, was used among 2048 women aged 15-49 years who had a live birth two years before the survey	The study found that maternal health program efforts should focus on improving the quality of ANC, promoting SBC, and prioritizing rural areas, targeting uneducated women from lower socio-economic households.
Bartlett et al. (2017)	Afghanistan	Retrospective observational study	Senior female household members of the urban areas of Kabul city and the rural area of Ragh, Badakshan	Despite maternal mortality reduction, there exist disparity between urban and rural sites. Thus, customized service delivery is needed to reduce maternal mortality.

Discussion

Theme 1: Progress and Achievements (2014-2024)

Maternal Mortality Trends

Reviewing the trend of maternal mortality in Nepal between the survey data shows that the maternal mortality has declined from 239 to 151 according to the data of NMMS and Nepal Demographic Health Survey (NDHS) data in different years, including 2016 and 2021, respectively (MoHP, NSO, 2023). According to the estimates provided by the UN Maternal Mortality Inter-Agency Group (MMEIG), the maternal mortality ratio (MMR) declined to 258 in 2015 with a reduction of 71% over the 25 years (MoHP, NSO, 2023). Between 2000 and 2015, MMEIG estimates showed a reduction of 53% (MoHP, NSO, 2023). The MMR is targeted to be reduced to at least 70 by 2030. As per the report, this implies a reduction of 73%, which is considerably higher than the reduction recorded during the earlier (2000-2015) period or the annualized rate of decline of 8.7% vs. 5.0%. Concurrently, more attention needs to be given to strengthening the recording and reporting of maternal deaths.

Talking about the trends of ANC coverage in Nepal from 2016 to 2022 based on NDHS data (MoHP, NSO, 2023), the data on the percentage of ANC visits in the first trimester showed 66% and 73%, respectively, in the year of 2016 and 2022. Furthermore, the percentage of pregnant women who had more than 4 ANC visits included 71% in 2016 and 91% in 2022 (MoHP, NSO, 2023). The trend shows that there is an increasing trend in ANC visits among pregnant women through awareness. The percentage of skilled providers involved in ANC has increased from 61% in 2011 to 86% in 2016 and 94% in 2022. The trend in receiving specific components of ANC was also observed, which showed that the percentage of blood pressure measures increased from 61% in 2001 to 92% in 2022. The percentage increase in the urine sample taken showed 31% in 2001 and 87% in 2022. The other trend showed that the blood sample collected was from 29% in 2001 to 84% in 2022 (MoHP, NSO, 2023).

According to MoHP, NSO (2023), the percentage of health facilities delivering increased from 44% in 2011 and 79% in 2022. Seeing a similar result, the percentage of home delivery showed that the trend has declined from 91% to 19% in 1996 and 2022, respectively. The continuum of care utilization among pregnant women revealed that the percentage of mothers who received three PNC check-ups increased from 18.8% in FY 2019/20 to 49.48% in FY 2023/24 (MoHP, NSO, 2023). In the same period, the percentage of postpartum women receiving IFA for 45 days has also increased from 37.6% in FY 2019/20 to 81.93% in FY 2023/24.

Institutional delivery has increased from 65.7% to 77.92% from FY 2019/20 to 2023/24. The women receiving IFA during pregnancy showed that the 44% has increased to 65.4% from FY 2019/20 to FY 2023/24, respectively.

Policy Achievements

Being a priority program of the government of Nepal, there are three major policies for maternal mortality reduction in Nepal: the Safe Motherhood Policy, Skilled Birth Attendant Policy, and Safe Abortion Policy (Karkee et al., 2022). These policies have main role in the scale-up of the provision of obstetric services, including cesarean section services. Skilled Birth Attendant Policy helped to generate and supply skilled human resources to lower-level and remote health facilities (Karkee et al., 2022). The role provided by the Safe Abortion Policy has reduced unsafe and illegal abortions. The Right to Safe Motherhood and Reproductive Health Act has enhanced the quality of maternal health services in Nepal (Karkee et al., 2022).

In Nepal, a comprehensive legal and policy framework has been established to ensure safe motherhood and promote maternal health including the Constitution of Nepal 2015, Public Health Service Act 2018, Nepal's safe motherhood and newborn health road map 2030, Right to safe motherhood and reproductive health act 2018, Nepal health sector strategic plan 2023-2030, Local government operation act 2017 and SDG 3. Particularly, in the National Health Policy 2019, there is a provision of free basic health services, including antenatal care, skilled birth attendance, and post-natal care. The policy has ensured all deliveries are attended by qualified health professionals (Gupta et al., 2024). The policy highlighted the role of health education for women of reproductive age on the availability of healthcare services and their utilization. It has also promoted the integration of maternal health services with other health programs such as family planning and reproductive health services(Gupta et al., 2024).

The nationwide implementation of the Aama program has provided free delivery services and financial support to women, which has improved the health and wellbeing of mothers. Between 2015 and 2021, the improvement was viewed in essential medicines for newborns and mothers, equipment and supplies, and trained providers. The health facilities leading to BEmONC services were improved (Tuladhar et al., 2024).

Most of the deliveries shifted to birthing centers with better quality of care from skilled birth attendants between 2001 and 2019 (Sharma et al., 2024). In 2001, only 10% of women delivered in a health facility, whereas in 2019 it was 78%, increasing the

utilization of healthcare services in the public sector. The ratio of doctors to 10,000 population rose from 2.12 in 2004 to 8.52 in 2021 (Sharma et al., 2024).

Community Level Progress

Female community health volunteers (FCHVs) primarily played an important role in motivating women to deliver in health facilities, increasing awareness at the community level (Sharma et al., 2024). The digitalization in improving maternal health through the "Mero Poshan Sathi" mobile application at the community level was established, through which mothers are informed about promoting proper antenatal and postnatal care practices, healthy diet practices, and empowering mothers with information for making them better choices about health and nutrition throughout pregnancy, childbirth, and caring for young children (Khanal, 2024).

Demand-side practices, including community health scoreboards and citizen report cards under social accountability, are constructed to focus on marginalized communities and promote equity and inclusion in access to care. Similarly, health facility operation and management committees (HFOMC), health mothers' groups, steering and coordination committees are established and mobilized to manage the health services effectively to address the health issues of women (Tamang, 2017).

Theme 2: Persistent Barriers and Challenges

Health System Gaps

The quality of care differs greatly across facilities, and there persists a shortage of skilled birth attendants, basically in rural and remote areas. Access to qualified health professionals remains uneven. Women of hard-to-reach areas practice home delivery without trained support. Weak health infrastructure has delayed prompt treatment. Referral systems are limited, and emergency obstetric services are scarce (Gupta et al., 2024).

The core challenges included limited accessibility of healthcare services, inadequate and unskilled staff, poor infrastructure, and negative health provider attitudes. Simply expanding local birthing centers with poor quality services has made difficulty in managing obstetric complications. Public facilities are widely perceived as offering lower-quality services (Karkee et al., 2022).

After 2015, new challenges emerged for maternal health in Nepal. Federalization raised concerns about uneven prioritization of health across municipalities; however, they were not addressed on time with effective interventions. The COVID-19

pandemic further disrupted service use and negatively affected maternal outcomes (Sharma et al., 2024). BEmONC services were inadequate in health facilities providing normal low-risk delivery services, and did not show relevant improvements by 2021. The infection prevention and control (IPC) measures are inappropriate for the improvement of maternal health in Nepal (Tuladhar et al., 2024).

Preventable maternal mortality continues to occur in health facilities, which are primarily linked with various delays, highlighting a lack of quality services, poor referral management, and inadequate early screening of complications (Tamang, 2017). The shortage and uneven distribution of the health workforce, especially in rural areas, and the underutilization of maternal health services due to lack of awareness, cost involved in the availability of health facilities, prohibition by the head of the family, less education, and low family incomes are reasons for not delivering children in health institutions (Bhusal et al., 2015).

Socio-economic and Geographical Factors

Geographical barriers in mountainous areas and financial constraints, including indirect costs such as transport and lost wages, remain prevalent, although there are free basic services. Khanal et al. (2024) reveal that Nepal's diverse geography, including the hills and mountains, creates unique obstacles, such as regional imbalances, challenging livelihoods, and uneven development. Many communities lack adequate knowledge of antenatal care and the benefits of institutional delivery, along with restricted decision-making power among women. Cultural norms, including early marriage, gender discrimination, traditional healing practices, and limited outreach services, have discouraged women from seeking professional care (Gupta et al., 2024).

The financial constraint, including poor families often underutilize services, many women do not perceive the need for care, and unsafe abortion persists. Women of marginalized groups such as Dalits, Dom, and Mushar are less likely to attend pregnancy checkups or delivery in health facilities. A lack of awareness about danger signs and fear of hidden costs discourage them from seeking preventive care, leading to lower use of institutional delivery services (Karkee et al., 2022).

The women from poor families are likely to have poor utilization of the healthcare services in Nepal. Along with this, poor road conditioning and inadequate transport infrastructure during childbirth, inaccessibility to reach the left behind population, and hidden costs despite the practice of free-of-cost services in maternal health have

become barriers to reducing maternal mortality among the rural population (Khanal et al., 2024). In addition, difficulties in accessing health care and challenging livelihoods in the mountains and hills have led to large-scale internal migration to the terai, leading to pressure on resource supply in terai. Superstition and indigenous practice of delivering the firstborn child at home, imposing women to give birth in a cow shed, avoidance of certain fruits like papaya, pineapple, mango, saying it causes abortion, are still prevalent in most of the parts of Nepal (Bhusal et al., 2015).

Gaps between Policy Intention and Implementation

There is a gap between policy and practice due to a lack of essential supplies, infrastructure, and specialized staff. The policy has addressed free basic health services during delivery, but it has been inconsistent, with women in remote areas receiving less care than those in urban centers (Gupta et al., 2024). Weak monitoring and evaluation systems, inadequate data collection, and restricted evidence-based decision making, lack of coordination between different levels of government, and limited integration with other health programs have reduced the effectiveness of maternal health policies and programs (Gupta et al., 2024). Although the governmental policies have worked in favor of people, political influence, improper planning, budgeting, and infrastructure have created an imbalance between the policy intention and implementation (Tamang, 2017).

Theme 3: Nepal in the Global Context

The SDGs 2030 have been committed to the improvement of maternal health by reducing maternal mortality to less than 70 per 100,000 live births by 2030, reducing the preventable deaths to less than 1 percent for newborns and children. The SDG-3 focuses on assuring healthy lives and promoting well-being for all people of all ages (NPC, 2016). However, there are hidden challenges to achieve the goal on targeted period. It includes challenges in government partnership with private and public sectors, weak monitoring and evaluation in every perspective, the persistent gap in the market strategy, and the real needs of the mothers are newly emerged challenges in hindering the reduction of maternal deaths in Nepal (NPC, 2016). UNFPA is supporting the achievement of the strategic vision leading to three zeros, including zero unmet need for contraception and family planning, zero preventable maternal deaths, and zero gender-based violence and harmful practices (UNFPA, 2019).

Maternal mortality reduction in Nepal has been strongly supported by political

commitment and partnerships. Raina et al. (2023) illustrate that in 2014, the government of South Asia set maternal and child survival as a flagship goal. Similarly, in 2015, major UN agencies pledged to help governments to take timely action, and in 2016, a regional resolution reinforced this commitment by linking it to the Global Strategy for the Health of Women, Children, and Adolescents. By 2018, parliamentarians joined in with a "Call to Action" to speed up efforts. The South-East Asia Regional Office provided technical leadership to help countries improve maternal, newborn, and child health. It studied national situations, created regional strategies, and offered ongoing support through meetings, workshops, and visits. These efforts helped countries share experiences, adopt guidance to their own context, and align policies with global standards. A Technical Advisory Group was formed in 2015, and later a subcommittee on sexual and reproductive health in 2019, both giving expert advice and monitoring progress (Raina et al., 2023).

Similarly, the regional office, with support from USAID, designed maternal and perinatal death surveillance and response (MPDSR) to review deaths of mothers and newborns so health services can improve and future deaths can be prevented. By 2019, most countries had policies requiring maternal death notification within 24 hours, mandatory reviews of all maternal deaths, and panels at national or sub-national levels to oversee the process. The South-East Asian Regional Office (SEARO) launched the first global virtual training program to strengthen MPDSR capacity in 2020 (Raina et al., 2023).

Theme 4: Evidence-Informed Interventions

To reduce maternal health disparities, there should be an investment in infrastructure, training, and service delivery for sustainable improvement (Gupta et al., 2024). There should be proper utilization of existing resources, focusing on most vulnerable groups through complimentary strategies (including expanding emergency obstetric and newborn care facilities, consistent supply of essential medicines and equipment, expansion of 24/7 maternal health services in remote areas, providing financial protection through health insurance and subsidies, engagement of local leaders and communities to align traditional practices with modern maternal health interventions (Gupta et al., 2024). Family planning should be strengthened, free delivery services with incentives should be emphasized, post-partum care and the health system should be improved through better hospital locations, maternity waiting homes, trained staff, and maternal death reviews. The birth preparedness was highlighted as an essential intervention (Karkee et al., 2022).

The key interventions to reduce maternal mortality include improving accessibility and quality of services at the local level, and enhancing equitable access to services through micro-planning exercises and provision of financial protection (Ohno et al., 2015). The government needs to develop clear guidelines and directives for the provincial and local health governments for better collaboration, accountability, and responsiveness for addressing the delays associated with maternal mortality. The evolving technological advancements and their preferences among the people have focused on improving digitalization. Mobile applications, social media platforms, and online reporting tools should be strengthened (Tamang, 2017).

Male involvement is a crucial practice that is required during the obstetric services, birth preparedness, and reduction in all three phases of delay, and bring positive impact on birth outcomes (Bhusal et al., 2015). Similarly, making services affordable to lower socio-economic groups through different schemes for partial funding, community payment or pre-payment schemes, insurance programs, and social or private insurance should be strengthened to reduce the hidden costs (Bhusal et al., 2015). Prioritizing the establishment of health institutions together with developing road links, increasing skills in birth attendance, and addressing inequities in rural-urban settings play a major role in reducing maternal mortality (Bhusal et al., 2015).

Evidence based interventions (Bartlett et al., 2017) are essential to ensure the complete coverage of community-distributed perception, antenatal care and postnatal interventions, increasing district-level emergency obstetric care availability beyond WHO guideline, outreach and task shifting from doctors to midwives and midwives to community health workers, community mobilization including women-led community health committees, home visitation, addressing financial barriers with demand and supply financial schemes can be effective interventions. The proper utilization of mobile phone technology, exploring Health applications to promote care-seeking and facilitate referrals, can be merits (Bartlett et al., 2017).

Thus, different studies in Nepal show that maternal and neonatal deaths can be reduced through a mix of community and health facility interventions. Community-based health literacy programs, especially those led by female community health volunteers (FCHVs), helped women recognize danger signs early, lowered neonatal deaths, and encouraged safer practices during childbirth (Wasti et al., 2025). Women's group meetings and participatory learning significantly reduced maternal and neonatal mortality, while FCHVs providing follow-up care and basic treatment greatly improved survival rates. Strengthening emergency obstetric care

and training health workers in neonatal resuscitation also led to fewer deaths (Wasti et al., 2025). At the same time, interventions like mobile messaging, involving husbands and families in decision-making, and improving health infrastructure increased institutional deliveries and the use of skilled birth attendants. Education is necessary to make people aware (Bogati et al., 2023), and together, these approaches show that empowering communities, training health workers, and improving health facilities are the key to saving mothers and newborns (Wasti et al., 2025).

Conclusion

Nepal has made strong progress in reducing maternal mortality over the past decade (2014-2024), with more women accessing ANC, institutional deliveries, and skilled birth attendants. Supportive policies and community programs have enhanced these improvements. However, the challenges, including unequal access in rural areas, a shortage of healthcare providers, and gaps between policy and practice, persist. Thus, to meet the global targets by 2030, Nepal must strengthen emergency care, improve referral systems, ensure equity, and invest in community-based and digital solutions so that no woman dies from preventable causes during pregnancy or childbirth.

References

Bartlett, L., LeFevre, A., Zimmerman, L., Saeedzai, S. A., Turkmani, S., Zabih, W., Tappis, H., Becker, S., Winch, P., Koblinsky, M., & Rahmanzai, A. J. (2017). Progress and inequities in maternal mortality in Afghanistan (RAMOS-II): A retrospective observational study. *The Lancet Global Health*, *5*(5), e545–e555. https://doi.org/10.1016/S2214-109X(17)30139-0

Bhusal, C., Bhattarai, S., & Bhaskar, R. K. (2015). Maternal health in Nepal progress, challenges and opportunities. *International Journal of Medical and Health Research*, *1*(3), 68–73. https://ln.run/Vwttx

Bogati, N. K., Aryal, B., Kuikel, J., Bogati, T., & Ranabhat, C. L. (2023). Prevalence and risk factors of uterine prolapse in Achham district, Nepal. *Journal of Health Promotion, 11*(1), 32–47. https://doi.org/10.3126/jhp.v11i1.61200

Gupta, A. K., Rana, P., Pandeya, P., & Bhattarai, B. K. (2024). *Promoting maternal health in Nepal; A policy brief.* Policy Research Bootcamp-Taking Insights to Action. https://ln.run/p48gJ

Jolivet, R. R., Moran, A. C., O'Connor, M., Chou, D., Bhardwaj, N., Newby, H., Requejo, J., Schaaf, M., Say, L., & Langer, A. (2018). Ending preventable

maternal mortality: Phase II of a multi-step process to develop a monitoring framework, 2016–2030. *BMC Pregnancy and Childbirth*, *18*(1), 258. https://doi.org/10.1186/s12884-018-1763-8

Karkee, R., Tumbahanghe, K. M., Morgan, A., Maharjan, N., Budhathoki, B., & Manandhar, D. S. (2022). Policies and actions to reduce maternal mortality in Nepal: Perspectives of key informants. *Sexual and Reproductive Health Matters*, *29*(2), 1907026. https://doi.org/10.1080/26410397.2021.1907026

Khanal, R. (2024). Health economics: A tool to combat maternal mortality rate in Nepal. *Nepal Economic Forum*. https://ln.run/QBnO-

Khanal, V., Bista, S., & Mishra, S. R. (2024). Prevalence of and factors associated with home births in western Nepal: Findings from the baseline of a community-based prospective cohort study. *Clinical Epidemiology and Global Health*, *27*, 101594. https://doi.org/10.1016/j.cegh.2024.101594

MoHP, NSO. (2023). National population and housing census 2021: *A report on maternal mortality*. Ministry of Health and Population; National Statistics Office. https://elibrary.nhrc.gov.np/bitstream/20.500.14356/866/1/A%20Report%20on%20Maternal%20Mortality.pdf

Moller, A.-B., Patten, J., Hanson, C., Essen, B., & Jacobsson, B. (2025). Five decades of advancing global maternal and newborn health and rights: Milestones and initiatives. *International Journal of Gynecology and Obstetrics*. https://doi.org/10.1002/ijgo.70344

Moran, A. C., Jolivet, R. R., Chou, D., Dalglish, S. L., Hill, K., Ramsey, K., Rawlins, B., & Say, L. (2016). A common monitoring framework for ending preventable maternal mortality, 2015–2030: Phase I of a multi-step process. *BMC Pregnancy and Childbirth*, *16*(1), 250. https://doi.org/10.1186/s12884-016-1035-4

Munn, Z., Peters, M. D. J., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC Medical Research Methodology*, *18*(1), 143. https://doi.org/10.1186/s12874-018-0611-x

NPC. (2016). *Sustainable development goals 2016-2030* [Developmental Goals]. https://www.undp.org/sites/g/files/zskgke326/files/publications/SDG%20

final%20report-nepal.pdf

Ohno, N., El-Saharty, S., Sarker, I., & Bhattarai, M. (2015). Maternal and reproductive health at a glance. *World Bank Group*, *7*. https://openknowledge.worldbank.org/entities/publication/56aef561-3811-547c-9d74-6d42c4cd3b4a

Raina, N., Khanna, R., Gupta, S., Jayathilaka, C. A., Mehta, R., & Behera, S. (2023). Progress in achieving SDG targets for mortality reduction among mothers, newborns, and children in the WHO South-East Asia Region. *The Lancet Regional Health - Southeast Asia*, *18*, 100307. https://doi.org/10.1016/j.lansea.2023.100307

Sharma, S., Campbell, O. M. R., Oswald, W. E., Adhikari, D., Paudel, P., Lal, B., & Penn-Kekana, L. (2024). Increased utilization and quality: A focus on inequality and a learning health system approach—explaining Nepal's success in reducing maternal and newborn mortality 2000–2020. *BMJ Global Health*, *9*(Suppl 2), e011836. https://doi.org/10.1136/bmjgh-2023-011836

Tamang, T. M. (2017). Factors associated with completion of continuum of care for maternal health in Nepal. In *IUSSP XXVIII International Population Conference, Cape Town, South Africa* (Vol. 2017). https://ln.run/CpHa5

Tuladhar, S., Paudel, D., Rehfuess, E., Siebeck, M., Oberhauser, C., & Delius, M. (2024). Changes in health facility readiness for obstetric and neonatal care services in Nepal: An analysis of cross-sectional health facility survey data in 2015 and 2021. *BMC Pregnancy and Childbirth*, *24*(1), 79. https://doi.org/10.1186/s12884-023-06138-8

UN. (2023, February 22). A woman dies every two minutes due to pregnancy or childbirth: UN agencies. *Press Release*. https://ln.run/-VE65

UNFPA. (2019, October 22). UNFPA to support Nepal to achieve strategic vision. *Republica*. https://myrepublica.nagariknetwork.com/news/unfa-to-support-nepal-to-achieve-strategic-vision

Wang, M., & Ren, M. (2025). World Health Day 2025: Time to change mindset beyond global commitment to maternal health and women's wellbeing. *National Library of Medicine*, *7*(14), 449–452. https://doi.org/10.46234/ccdcw2025.074

Wasti, S. P., Van Teijlingen, E., Adhikari, N., & Morgan, J. (2025). A scoping review of interventions to improve maternal and neonatal care in Nepal. *Discover*

Public Health, *22*(1), 855. https://doi.org/10.1186/s12982-025-01241-x

WHO. (2025). *Maternal mortality* (Factsheet No. World Health Organization). https://www.who.int/news-room/fact-sheets/detail/maternal-mortality