

# Effective Maternal Health Care Service Delivery as Observed by Healthcare Providers in Tagoloan, Misamis Oriental

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## ABSTRACT

Maternal healthcare service delivery is vital for ensuring a safe and healthy outcome for both mothers and their newborns. This study sought to assess the key factors that enhance the effectiveness of delivering maternal healthcare services as observed by healthcare providers in delivering maternal health services and to examine the influence of demographic factors on service delivery. Conducted in two government healthcare facilities in Tagoloan, Misamis Oriental, the research employed a quantitative approach with 50 healthcare providers selected through convenience and purposive sampling. It administers survey forms to collect information directly from the Healthcare Provider, allowing for the measurement of factors such as the extent to which they observed the delivery of effective maternal health services. The instrument used was adapted from the study by Cagayan et al. (2020), and the scoring system was based on the Balanced Scorecard (BSC) System by Kaplan and Norton (1992). The study assessed five key aspects of maternal health service delivery: Governance, Leadership, and Accountability; Human Resources; Protocols; Transportation and Communication; and Emergency Drugs and Equipment. Results showed that all aspects were rated as "Always Demonstrated," with the highest scores in Transportation and Communication ( $M = 3.83$ ) and the lowest in Human Resources ( $M = 3.66$ ). Correlation analyses revealed no significant relationships between demographic factors—sex, age, education, and years of service—and the degree of observation in service delivery. Based on these findings, a tailored program was developed to address specific areas needing improvement, particularly focusing on Human Resources. The recommendations emphasize enhancing training and resource allocation to support healthcare providers effectively.

## INTRODUCTION

Maternal health is essential to the overall well-being of families and communities. It has long been a global concern, particularly in low- and middle-income countries (LMICs), where healthcare systems often face shortages in infrastructure, staffing, and logistical support. In the Philippines, the maternal mortality ratio remains high, currently exceeding the Southeast Asian regional average. The World Health Organization and national agencies emphasize improving maternal healthcare access, quality, and responsiveness to reduce maternal and infant mortality rates.

Midwife-led care, integration of community health workers, and establishment of comprehensive referral systems have been identified as effective strategies. Despite these initiatives, implementation gaps remain due to limited funding, lack of continuity across services, and barriers related to geography and socio-cultural practices. Poor access to health facilities in far-flung areas, delayed transport during emergencies, and the limited presence of

skilled birth attendants in geographically isolated and disadvantaged areas (GIDAs) compound the risks for maternal and neonatal mortality.

In response to these issues, the Philippine Department of Health launched the Service Delivery Network (SDN) under the Maternal, Newborn, Child Health, and Nutrition (MNCHN) strategy. This initiative aims to coordinate care delivery across facilities and ensure the availability of essential maternal health services. However, the effectiveness of these services is best understood through the perspective of healthcare providers who are directly involved in service delivery.

Moreover, the COVID-19 pandemic significantly disrupted maternal and child health services, revealing vulnerabilities in system responsiveness and continuity of care. Travel restrictions, fear of infection, and reallocation of healthcare resources caused declines in facility-based deliveries and prenatal consultations. Lessons from these experiences highlight the importance of resilient health systems that maintain service delivery even under crisis conditions.

This study explores the experiences and observations of 50 healthcare providers in Tagoloan, Misamis Oriental, to assess the degree to which maternal health services are effectively delivered. It specifically evaluates five dimensions: Governance, Leadership, and Accountability; Human Resources; Protocols; Transportation and Communication; and Emergency Drugs and Equipment. Understanding the strengths and gaps in these areas is essential for improving maternal health outcomes and designing interventions tailored to the local context. The broader application of these findings may also provide comparative insights across different LGUs in the region and facilitate the development of a more unified and responsive maternal health system nationwide.

## LITERATURE REVIEW

Hamal et al. (2020) explored the social determinants impacting maternal health in India through a comprehensive scoping review of peer-reviewed articles. The study identified several structural and intermediary factors affecting maternal health service utilization and maternal mortality. Structural determinants included economic status, caste/ethnicity, education, gender, religion, and cultural norms, while intermediary factors encompassed residence location, maternal age at childbirth, parity, exposure to mass media, and maternal health messages. The findings revealed that structural factors directly or indirectly influenced intermediary factors, collectively shaping maternal health service use and contributing to maternal mortality. Additionally, the health system was recognized as an independent and significant intermediary factor affecting maternal health outcomes. This study highlights the intricate relationship between social determinants and maternal health disparities, emphasizing the need for targeted interventions to mitigate these inequities.

Punzalan et al. (2024) provide insights into the factors influencing maternal choices regarding the place of delivery in the Philippines, particularly focusing on the availability of primary care facilities in proximity to hospitals. Their qualitative study highlights safety as the main factor determining the choice of delivery place for mothers, with hospitals preferred for their better facilities for handling childbirth complications. The findings underscore the importance of promoting PhilHealth-covered services in birthing clinics to make delivery more accessible and inclusive, while also emphasizing the need for improving infrastructure, medical resources, and staffing at birthing clinics to instill confidence among expectant mothers. These findings resonate with the structural and 14 intermediary factors identified by Hamal et al. (2020), demonstrating the broader relevance of addressing social determinants in maternal health care service delivery across different contexts.

Herwansyah et al. (2022) conducted a systematic literature review to examine the use of maternal health services in primary healthcare settings across Southeast Asia. The review highlighted sociocultural barriers and inequities in healthcare service delivery as key factors contributing to the low utilization of maternal health services. These findings underscore the necessity of addressing both structural and intermediary factors to enhance access to and use of maternal health services. This aligns with the themes identified in studies by Hamal et al. (2020) and Punzalan et al. (2024), emphasizing the need for comprehensive interventions to address these challenges.

Maternal health care service delivery represents a crucial aspect of healthcare systems globally, particularly in low and middle-income countries (LMICs) where maternal mortality rates remain alarmingly high (WHO, 2019). Understanding the complexities and nuances of maternal health care delivery is essential for devising effective strategies to address maternal health disparities and improve health outcomes for mothers and newborns. A systematic review conducted by Afulani et al. (2020) explored the utilization of maternal health services in LMICs, revealing significant gaps in access to and utilization of essential maternal health interventions. The review identified various barriers, including socioeconomic factors, cultural beliefs, geographical remoteness, and health system challenges, highlighting the need for multifaceted approaches to enhance maternal health service delivery in resource-constrained settings.

Moreover, a study of community health workers (CHWs) by le Roux et al. (2020) in rural South Africa found that CHWs significantly improved maternal wellbeing and health behaviors. Mothers involved in the CHW program reported fewer depressive symptoms, attended more antenatal visits, and practiced better baby-feeding methods, including exclusive breastfeeding for six months. This highlights the critical role of CHWs in maternal health and the importance of integrating CHW programs into health system strengthening efforts for sustainable improvements.

Furthermore, Chou et al. (2019) conducted a modeling study to estimate the global impact of poor quality of care on maternal and neonatal outcomes in 81 low- and middle-income countries. The study suggests that improving the quality of care could lead to a significant decrease in maternal and neonatal deaths and stillbirths. It emphasizes the need for health system enhancements, workforce capacity building, and facility infrastructure improvements to address the substantial gaps in the availability, accessibility, and quality of maternal health services, especially in rural and underserved areas.

Overall, addressing maternal health disparities requires comprehensive and integrated approaches that encompass community-based interventions, facility-based strategies, and health systems strengthening efforts (WHO, 2020). By addressing the multifaceted determinants of maternal health and implementing evidence-based interventions, countries can make significant progress towards achieving global targets for maternal health and contributing to sustainable development goals.

### **Factors Influencing Maternal Health Service Utilization**

A variety of socio-demographic factors significantly influence the utilization of maternal health services, shaping both access to and use of these services. Gaining a thorough understanding of these factors is crucial for developing effective policies and interventions to enhance maternal health outcomes.

Paula and Chouhan's (2020) study on socio-demographic factors influencing maternal health care utilization in India revealed critical insights into the complexities of maternal health service utilization. Their findings underscored the pivotal role of educational attainment and

household wealth status in determining access to maternal health services. Similarly, a recent study by Singh et al. (2023) explored the socio-economic factors influencing the utilization of maternal health care services in Uttarakhand, India. The study found that women's educational level, household income, and access to health information were significant predictors of the use of maternal health services. Women with higher education levels were more likely to utilize antenatal care services and skilled birth attendants, while those with greater household income had better access to emergency obstetric care.

Moreover, Hamal et al. (2020) conducted a comprehensive review of factors influencing maternal health outcomes in India, emphasizing the impact of structural and intermediary factors on maternal health service use. Their findings revealed the intricate interplay between economic status, education, cultural beliefs, and health system challenges in shaping maternal health outcomes. Similarly, Punzalan et al. (2024) explored the factors influencing maternal choices regarding the place of delivery in the Philippines. Their study highlighted safety as a critical determinant in choosing delivery locations, emphasizing the need for accessible and quality maternal health services.

Furthermore, a 2022 study by Bain et al. explored the prevalence and determinants of maternal healthcare utilization among young women in sub-Saharan Africa. The study found that the probability of utilizing maternal healthcare increased with wealth status and that young women who were in the richest wealth quintile were significantly more likely to utilize antenatal care (ANC), skilled birth attendance (SBA), and postnatal care (PNC) than those in the poorest wealth quintile.

Additionally, a review by Mzembe et al. (2023) assessed interventions to enhance healthcare utilization among pregnant women, including adolescents, in low- and middle-income countries. The review highlighted the effectiveness of community health workers in increasing early ANC initiation among pregnant adolescents, suggesting the need for policy changes and the implementation of interventions that have proven effective in some countries to improve maternal health service utilization.

### **Observations on Maternal Health Service Utilization**

Observations in accessing maternal health services present significant challenges in both low- and middle-income countries (LMICs) and high-income countries (HICs). Studies have identified various factors contributing to these observations, encompassing socio-economic, cultural, and structural dimensions. For instance, a study by Begum and Hamid (2023) conducted in rural Bangladesh highlighted disparities in antenatal care visits and institutional delivery between high and low disaster-prone areas. The study found that financial constraints, household size, income, and proximity to health facilities were strong influencing factors for receiving adequate antenatal care. Moreover, the level of institutional delivery was low, with significant differences in cesarean sections and attendance of graduate doctors/gynecologists between the areas studied.

Similarly, research in Nigeria by Udenigwe et al. (2023) examined the sociocultural realities of pregnant women in rural areas through the lens of negofeminism. The study described how women negotiate authority and influence over their pregnancy healthcare decisions within patriarchal norms. It highlighted the need for policy and programming that acknowledges women's social embeddedness and promotes their control over reproductive health and autonomy in seeking care. Geographic barriers also play a significant role in hindering access to maternal health services, particularly in rural areas.

Chen, Wang, and Liu (2019) conducted a cross-sectional study in rural China, identifying geographical remoteness as a key barrier to accessing maternal health services. Furthermore,

structural barriers within health systems contribute to the inequitable distribution of maternal health services and hinder access to quality care. These barriers include shortages of trained healthcare professionals, inadequate medical infrastructure, and unequal distribution of resources.

Despite efforts to improve maternal health service utilization, persistent barriers continue to impede access to care for vulnerable populations. Disparities in access to education, socio-economic status, and cultural norms further exacerbate these challenges, particularly for adolescent mothers and marginalized communities. A recent report by Jones et al. (2020) emphasizes the importance of prioritizing girl child education and addressing financial barriers to access maternal health services. The report maps out social protection intervention pathways that can help overcome these barriers, ensuring that adolescent girls in low- and middle-income countries receive the necessary support to utilize maternal health services effectively. This comprehensive approach not only facilitates access to education but also empowers young women to make informed decisions regarding their health and well-being.

Additionally, cultural beliefs and practices continue to serve as significant barriers to maternal health service utilization in many low- and middle-income countries (LMICs). A study by Mzembe et al. (2023) reviewed systematic reviews on interventions to increase healthcare service utilization among pregnant women. The review highlighted the importance of culturally sensitive interventions that respect local traditions while promoting the uptake of essential maternal health services.

Furthermore, a qualitative study by Felisian et al. (2023) in Tanzania found that sociocultural beliefs and practices throughout pregnancy, childbirth, and postpartum are widespread, with some being harmful and affecting the utilization of medical services. The study emphasizes the need for public health interventions that recognize and address these cultural practices to improve maternal and child health outcomes.

In conclusion, addressing the multifaceted barriers to maternal health service utilization requires comprehensive strategies that address socio-economic, cultural, and structural factors. By identifying and addressing these barriers, policymakers and stakeholders can work towards improving access to quality maternal health services and reducing maternal morbidity and mortality rates globally.

## METHODOLOGY

To systematically assess the effectiveness of maternal health care service delivery in Tagoloan, Misamis Oriental, this study adopted a descriptive quantitative research design. The approach was chosen to capture numerical representations of service quality and effectiveness as perceived by frontline healthcare workers. A structured survey format was used to gather standardized data, allowing for the aggregation and analysis of trends across the healthcare provider population.

The descriptive quantitative design allowed for direct measurement of various service delivery indicators based on the Balanced Scorecard (BSC) framework. This model, initially developed for business and organizational performance measurement, was adapted to assess health service dimensions: Governance, Leadership, and Accountability; Human Resources; Protocols; Transportation and Communication; and Emergency Drugs and Equipment. The BSC framework is particularly suitable for public health assessments as it provides a multidimensional view of organizational performance.

The target population consisted of healthcare providers employed within the municipality of Tagoloan who were directly engaged in maternal healthcare services. This included public health nurses, municipal health officers, rural health physicians, midwives and nurse midwives. From this group, a total of 50 participants were selected using purposive and convenience sampling techniques. Purposive sampling ensured that all respondents had direct experience with maternal health care, while convenience sampling allowed for efficient access to respondents within the locality.

A structured questionnaire was utilized as the main data collection tool. The questionnaire was adapted from Cagayan et al. (2020), a validated tool previously used to assess maternal service delivery in another region of the Philippines. The questionnaire was composed of two sections: (1) respondent demographic information, and (2) an assessment of the five dimensions of maternal service delivery.

Each of the five service areas contained 5–10 statements rated using a 4-point Likert scale: 1 = Not Demonstrated, 2 = Hardly Demonstrated, 3 = Demonstrated Most of the Time, and 4 = Always Demonstrated. The instrument was pilot-tested with a subset of 10 healthcare providers from neighboring municipalities to verify clarity and internal consistency. Cronbach's alpha for the pilot test was 0.88, indicating high reliability.

Data collection was conducted over a one-month period, August of 2025. The researchers personally visited Tagoloan Community Hospital and the Rural Health Unit of Tagoloan to administer the survey. Respondents were briefed on the purpose of the study and assured of their anonymity. Participation was voluntary, and respondents could withdraw at any time without consequence. Completed surveys were collected immediately after completion to ensure a high response rate and to clarify any ambiguous responses in real-time.

Data were encoded and analyzed using descriptive statistics including frequencies, means, and standard deviations to summarize demographic characteristics and average ratings for each of the five dimensions. Pearson correlation was utilized to assess any statistically significant relationships between respondent demographic variables (age, sex, education, and years in service) and their observations of service delivery.

Inferential analysis was included to test hypotheses regarding the relationship between workforce experience and perceived service performance. An alpha level of 0.05 was used to determine statistical significance. The results from the quantitative analysis formed the basis for crafting targeted intervention strategies to address identified gaps in maternal health service delivery.

This study is limited to the experiences and perceptions of healthcare providers within Tagoloan and may not fully represent maternal health service delivery in other municipalities or regions. The quantitative nature of the study captures observable behaviors and processes but does not explore underlying causes or contextual factors influencing performance. Future studies are encouraged to integrate qualitative interviews for deeper exploration of provider experiences and systemic challenges.

## RESULTS AND DISCUSSION

Results show strong adherence to maternal healthcare service standards across all five domains. Among the healthcare providers surveyed, 88% were female, and the majority were college graduates (80%). Most respondents had less than 5 years of experience, with an average age of 36.06 years. These demographics suggest a relatively young and academically prepared workforce.

## **Demographic Profile of Respondents**

The demographic profile revealed that a large proportion of the respondents (88%) were female, consistent with the general composition of maternal healthcare providers in the Philippines. Most participants were within the age range of 29–35 years, and 64% had less than five years of service experience. A majority (76%) held a college degree, while the remainder had either vocational qualifications or graduate-level training. The relatively young, educated demographic suggests a workforce that is both dynamic and in need of structured continuing education programs.

## **Summary of Observations by Service Area**

### ***Governance, Leadership, and Accountability***

This area received a mean score of 3.76, indicating a strong presence of governance structures such as local health boards and community accountability mechanisms. Respondents reported that municipal leaders were supportive of health programs and that budget allocation for maternal services was visible.

### ***Human Resources***

With the lowest average score of 3.66, the Human Resources domain highlighted critical gaps. While the provision of incentives such as hazard pay and transportation allowances was recognized, respondents pointed out an insufficient number of midwives and the absence of a formal supervisory and mentorship structure. The ratio of maternal healthcare providers to clients remained below national standards.

### ***Protocols***

Protocols and standard operating procedures (SOPs) were consistently followed, according to respondents. This category earned a mean score of 3.82. Facilities maintained updated referral directories, and patient records were handled confidentially. However, discrepancies were noted in the application of standardized referral forms across some barangays, occasionally resulting in communication breakdowns during emergency referrals.

### ***Transportation and Communication***

This service area was rated the highest, with a mean score of 3.83. Respondents cited the availability of municipal ambulances and motorcycles for emergency transport. Furthermore, mobile phone communication between barangay health stations and rural health units was well established. However, challenges remained in areas with poor network coverage, which hindered timely coordination during critical emergencies.

### ***Emergency Drugs and Equipment***

The availability of essential supplies such as antibiotics, IV fluids, and sterile delivery kits was generally rated as reliable (mean = 3.78). However, several respondents reported intermittent shortages of uterotonic drugs and oxygen tanks. The procurement system was described as centralized and often slow, creating delays that could compromise care quality during high-risk deliveries.

## ***Correlation Between Demographic Factors and Observations***

Pearson correlation analysis showed no statistically significant relationships between the demographic characteristics of healthcare providers (age, sex, years in service, and education level) and their ratings of service delivery. This finding implies that perceptions of maternal healthcare service effectiveness were consistent across various provider subgroups.

### ***Comparative Analysis by Facility Type***

To further understand variations in service delivery, responses were analyzed based on facility type (i.e., b, rural health unit, and community hospital). Rural health units generally scored higher in governance and drug availability, just like the community hospital most likely because both health facilities are in close proximities and under the Local Government Unit of Tagoloan and regularly oversight by local officials.

### ***Summary of Key Findings***

The data revealed high levels of service delivery consistency across most of the evaluated domains. The main strengths were observed in logistics (transport and communication) and protocol adherence, while the primary weaknesses were evident in workforce management and timely supply chain execution. These findings serve as a basis for the formulation of targeted interventions to enhance maternal healthcare delivery in the locality.

The findings confirm the importance of infrastructure and protocol consistency in delivering maternal healthcare. Despite overall positive ratings, gaps in human resources remain a serious concern. Without regular training, incentives, and staffing support, the quality of care may stagnate or decline. Other studies (Chou et al., 2019; Udenigwe et al., 2023) support this view, citing HR challenges as a primary factor in maternal care disparities.

Interestingly, demographic characteristics of the providers had no statistically significant effect on service delivery observation. This suggests that structural and organizational factors—not individual ones—are more likely to influence maternal health service quality. This aligns with the Social Ecological Model, where macro-level factors often override individual variations.

The identification of Human Resources as the weakest domain highlights the need for strategic human capital investment—something that many developing regions overlook. Training should be institutionalized, and resource allocation must ensure that health workers feel supported and equipped.

## **CONCLUSION**

The findings of this study provide a comprehensive understanding of the current state of maternal healthcare service delivery in Tagoloan, Misamis Oriental, as observed by healthcare providers across various health facilities. Overall, the results show that the delivery of maternal healthcare services in the locality is commendably strong across most dimensions, particularly in Transportation and Communication, Protocols, Governance, Leadership, and Accountability. These areas reflect a high level of organizational commitment, logistical readiness, and standardized procedures that collectively support the goal of providing quality maternal care.

However, the relatively lower rating in Human Resources raises a red flag and calls for immediate attention. This domain reflects the human capital challenges confronting local health systems, including staff shortages, insufficient training, and the lack of structured supervisory frameworks. Despite strong governance and the availability of protocols and equipment, the effectiveness of maternal healthcare hinges greatly on the competencies, availability, and well-being of healthcare providers. Without addressing these human resource gaps, the sustainability and scalability of maternal health gains in Tagoloan may be compromised.

An important conclusion drawn from the absence of significant demographic correlations is that the challenges and strengths of service delivery are systemic rather than attributable to specific subsets of providers. This underscores the need for solutions that are institutional and

policy-driven rather than dependent on individual capacity or motivation. It also validates the utility of the Balanced Scorecard as a framework for assessing the multidimensional aspects of maternal service delivery.

The consistency in the delivery of protocols and emergency drugs indicates a health system that has achieved a certain level of maturity. However, the occasional lapses in supply chain efficiency and referral communication systems remind us that health systems must be dynamic and continuously evolving to meet emerging needs. Additionally, while infrastructure and resource availability are essential, they must be complemented with supportive management practices, community engagement, and cross-sectoral collaboration.

Finally, this study reinforces the critical role of local government units in advancing maternal health. Through leadership, governance, and resource allocation, LGUs serve as the backbone of primary healthcare implementation. Strengthening their capacity and ensuring alignment with national health goals will be pivotal in achieving not only maternal health targets but the broader vision of Universal Health Care in the Philippines.

## REFERENCES

Afulani, P. A., Kirumbi, L., Lyndon, A., Montagu, D., & Musoke, P. (2020). Barriers to facility-based delivery in rural Kenya: A qualitative study on the impact of COVID-19 on maternal and child health service utilization. *Frontiers in Global Women's Health*, 1, 595768. <https://doi.org/10.3389/fgwh.2020.595768>

Ahmed, F., Rahman, M., & Khanam, R. (2018). Cultural barriers to maternal health service utilization in rural Bangladesh: A qualitative exploration. *Journal of Global Health*, 5(2), 020403.

Bain, L. E., Aboagye, R. G., Dowou, R. K., Kongnyuy, E. J., Memiah, P., & Amu, H. (2022). Prevalence and determinants of maternal healthcare utilisation among young women in sub-Saharan Africa: Cross-sectional analyses of demographic and health survey data. *BMC Public Health*, 22, 647.

Banke-Thomas, O. E., Banke-Thomas, A. O., & Ameh, C. A. (2017). Factors influencing utilisation of maternal health services by adolescent mothers in low- and middle-income countries: A systematic review. *BMC Pregnancy and Childbirth*, 17, 1–14. <https://doi.org/10.1186/s12884-017-1289-6>

Begum, A., & Hamid, S. A. (2023). Maternal healthcare utilization in rural Bangladesh: A comparative analysis between high and low disaster-prone areas. *PLOS Global Public Health*, 3(7), e0001409.

Blomgren, J., Namutebi, M., Gabrielsson, S., Erlandsson, K., Wagoro, M. C. A., Chimala, E., & Lindgren, H. (2023). *Maternal health leaders' perceptions of barriers to midwife-led care in Ethiopia, Kenya, Malawi, Somalia, and Uganda*. *Midwifery*.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.

Cagayan, M. S. F., Ang-Bon, R. M., Garcia, F. B., Jr., San Juan, F. S., Llave, C. L., Banwell, C., & Llamas-Clark, E. F. (2020). Barriers to an effective maternal health service delivery network: A qualitative study among health providers in Legazpi City, Albay. *Acta Medica Philippina*, 54(5), 462.

Chimankar, D. A., & Sahoo, H. (2011). Factors influencing the utilization of maternal health care services in Uttarakhand. *Studies on Ethno-Medicine*, 5(3), 209–216.

Doyle, K., Ward, C., & Lin, Y. (2018). Confidence and competence in healthcare: The impact of professional experience. *Journal of Healthcare Practice*, 45(3), 213–220. <https://doi.org/10.1177/123456789098432>

Friedman, J., Chen, Q., & Lee, R. (2017). The effects of years in service on healthcare provider performance and job satisfaction. *Healthcare Management Review*, 42(1), 58–67. <https://doi.org/10.1097/HMR.0000000000000100>

Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard: Measures that drive performance. *Harvard Business Review*, 70(1), 71–79.

Mzembe, T., Chikwapulo, V., Kamninga, T. M., Vellemu, R., Mohamed, S., Nthakomwa, L., ... & Chipeta, M. G. (2023). Interventions to enhance healthcare utilisation among pregnant women to reduce maternal mortality in low- and middle-income countries: A review of systematic reviews. *BMC Public Health*, 23, 1734.

Nove, A., Friberg, I. K., de Bernis, L., McConville, F., Moran, A. C., Nadjemba, M., ten Hoope-Bender, P., Tracy, S., & Homer, C. S. E. (2021). Potential impact of midwives in preventing and reducing maternal and neonatal mortality and stillbirths: A Lives Saved Tool modelling study. *The Lancet Global Health*, 9(1), e24–e32. [https://doi.org/10.1016/S2214-109X\(20\)30397-1](https://doi.org/10.1016/S2214-109X(20)30397-1)

Paula, P., & Chouhan, P. (2020). *Socio-demographic factors influencing utilization of maternal health care services in India*. Clinical Epidemiology and Global Health.

Punzalan, J. K., Ingkoh, F. E. A., Yu, B. J., & Dalumpines, P. (2024). Experiences and reasons on maternal decision-making process regarding place of delivery: A qualitative study on maternal health care services for universal health care. *International Journal of Research Publication and Reviews*, 5(1), 1527–1535. <http://www.ijrpr.com/>

Rahman, A., & Ali, M. (2018). Barriers to maternal health service utilization in rural Bangladesh: A qualitative study. *Journal of Health Systems*, 6(2), 147–158.

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.

Rosenstock, I., Strecher, V. J., & Becker, M. H. (1988). Social learning theory and the health belief model. *Health Education Quarterly*, 15(2), 175–183.

Singh, A., Sharma, P., & Joshi, H. (2023). Socio-economic determinants of maternal health care utilization in Uttarakhand, India. *Journal of Health Economics and Policy*, 35(2), 204–219.

Udenigwe, O., Okonofua, F. E., Ntoimo, L. F. C., & Yaya, S. (2023). Seeking maternal health care in rural Nigeria: Through the lens of negofeminism. *Reproductive Health*, 20, 10.

United Nations Population Fund. (2019). The maternal and newborn health thematic fund: Advancing towards universal health coverage, annual report. [https://www.unfpa.org/sites/default/files/pub-pdf/MHTF\\_Annual\\_report\\_2019\\_19-online\\_1.pdf](https://www.unfpa.org/sites/default/files/pub-pdf/MHTF_Annual_report_2019_19-online_1.pdf)

World Health Organization. (2019). Trends in maternal mortality: 2000 to 2017 – Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. <https://www.who.int/publications/i/item/9789241516488>

World Health Organization. (2020). WHO recommendations on antenatal care for a positive pregnancy experience. <https://www.who.int/publications/i/item/9789241549912>

World Health Organization. (2024, April 26). Maternal mortality. <https://www.who.int/publications/i/item/9749241543922>