



"Enhancing Maternal and Child Health in Rural Areas - A Case Study"

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Abstract

In country ranges, where healthcare gets may be constrained, compelling techniques are required to make strides in maternal and child wellbeing results. This incorporates tending to tall maternal and neonatal mortality rates, which are exacerbated by troubles in getting to quality healthcare administrations. To handle these squeezing concerns, a mixed-methods approach is utilized to distinguish key deterrents and propose imaginative mediations.

Locks in healthcare suppliers, community pioneers, and moms through interviews and center bunch dialogs make a difference pick up profitable bits of knowledge and encounters. Moreover, epidemiological information on maternal and neonatal mortality rates is analyzed to superior get it the setting. The consideration uncovers boundaries such as constrained

healthcare get to, shortage of gifted experts, lacking framework, and sociocultural imperatives. To overcome these challenges, a comprehensive approach is proposed. This incorporates setting up completely prepared centers committed to maternity and child wellbeing, guaranteeing the accessibility of fundamental assets, and upgrading the capabilities of healthcare laborers. Tending to socio-cultural boundaries is additionally vital, with community engagement activities and mindfulness campaigns suggested.

Collaboration among government organizations, NGOs, and neighborhood community's points to essentially decreasing maternal and neonatal mortality rates in rustic ranges. Eventually, this investigation endeavors to contribute to progressing worldwide maternal and child well-being results and pushing for a rise in healthcare get around the world.

Keywords: Maternal and child health, Rural areas, Effective strategies, Maternal mortality rates, Neonatal mortality rates, Healthcare access.



Introduction

Maternal and child well-being holds awesome centrality inside the domain of worldwide open well-being because it fundamentally points to checking maternal and infant mortality rates [\[29\]](#). In spite of striking healthcare progressions, country regions go up against significant impediments in conveying satisfactory maternal and child well-being administrations. The occurrence of maternal and infant fatalities in underprivileged areas is heightened due to various factors. These include the absence of skilled medical professionals, limited access to healthcare facilities, and socio-cultural obstacles that hinder adequate care [\[11\]](#).

[\[15\]](#) suggested that more and more focus is being paid to discovering better ways to deal with these difficulties, particularly in rural areas. This investigation endeavors to recognize major

impediments and propose inventive intercessions to upgrade maternal and newborn child well-being results while eventually diminishing maternal and neonatal mortality rates [34]. This exploration endeavors to scrutinize the current status of maternal and neonatal mortality. By collecting data and conversing with relevant figures, the investigators will strive to pinpoint information for a possible remedy on this issue.

Compelling methodology advancement requires a multidimensional approach. This involves the foundation of well-equipped maternity and child wellbeing centers, guaranteeing the accessibility of basic assets, and improving healthcare workers' capabilities to make strides in the general healthcare foundation. Besides, tending to socio-cultural obstructions and advancing maternal and child wellbeing hones are accomplished through dynamic community engagement and mindfulness campaigns [9].

This investigation contributes important evidence-based methodologies and proposals for policymakers, healthcare suppliers, and advancement professionals in rustic zones. Executing these procedures is anticipated to significantly diminish maternal and neonatal mortality rates, subsequently upgrading the wellbeing and well-being of moms and children inside country communities [16].

Background and Motivation

Maternal and child well-being could be a significant angle of open well-being, including the well-being of both moms and newborn children, which plays a significant part in economic advancement and societal progression [32]. All things considered, various provincial regions around the world proceed to hook with alarmingly tall rates of maternal and neonatal mortality. According to [19], these troubling measurements highlight imbalances in getting quality healthcare. The challenges confronted by rustic communities in conveying satisfactory maternal and child well-being administrations are complicated and multifaceted.

A study by [8] proved that the inability to get to healthcare offices in country zones contributes to delays and insufficient pre-birth care, gifted birth participation, and crisis obstetric administrations. This increases the chance of maternal and neonatal passing. Besides, the deficiency of talented healthcare experts like birthing assistants and specialists compounds the circumstance [17]. Furthermore, lacking a healthcare foundation, counting the need for hardware and basic assets, makes assist boundaries to convey quality care [7].

Socio-cultural variables, such as conventional convictions, sex aberrations, and the need for mindfulness, have a significant effect on maternal and child well-being results in rustic regions [11]. The aforementioned factors have a tendency to hinder utilization of healthcare services, result in adverse outcomes and inhibit women's autonomy. To viably address challenges and diminish maternal and neonatal mortality rates in rustic regions, it is significant to create tailor-made procedures that consider the one-of-a-kind setting and needs of these communities. These procedures ought to center on progressing healthcare get, fortifying healthcare frameworks, upgrading healthcare professionals' abilities, as well as engaging communities through instruction and mindfulness.

This consideration points to addressing the healthcare holes and improving results for maternal and child wellbeing in country regions. By investigating evidence-based methodologies and creating unused information, this investigative endeavor looks to illuminate policymakers, healthcare suppliers, and advancement professionals. The extreme objective is to diminish maternal and neonatal mortality rates inside rustic communities.

Literature Review

Globally, there are still major problems with mother and child health, particularly in rural regions where access to high-quality medical treatment is constrained [15].

Due to many obstacles, maternal and newborn death rates in these areas continue to be high [19]. With a particular emphasis on lowering death rates, our goal in this literature review is to

examine the data and studies that are currently available on practical methods for improving maternal and child health in rural regions.

Access to healthcare services plays a crucial role in determining both maternal and child health outcomes [23]. Research has consistently shown that limited availability and long distances to healthcare facilities contribute to delays in seeking care, which ultimately leads to unfavorable results [9]. A systematic review conducted by [29] specifically highlights the significance of skilled birth attendance and access to emergency obstetric care in reducing maternal mortality rates. Encouragingly, interventions like establishing maternity waiting homes near health facilities and implementing transportation schemes have demonstrated promising outcomes by improving access to care in rural areas [32].

Shortages of skilled healthcare professionals, including midwives and doctors, exacerbate the difficulties faced in rural areas [4]. According to a study conducted by the World Health Organization in 2014 [34], there is an urgent requirement to enhance the number of trained birth attendants in underserved regions for ensuring safe deliveries and reducing maternal and neonatal mortality rates. To address this issue, task-shifting strategies have been implemented successfully. These strategies involve training and empowering community health workers to provide essential maternal and child health services [20]. Positive impacts on outcomes have been witnessed as a result of these initiatives [36].

Socio-cultural factors are vital contributors to the well-being of mothers and children residing in rural areas [22]. In these contexts, cultural practices, gender disparities, and traditional beliefs can impede access to healthcare and perpetuate harmful behaviors [33]. According to [30], “However, community engagement initiatives and educational programs have proven effective in addressing these challenges”. A notable study conducted by [2] illustrates that interventions based on health education and women's empowerment within communities have yielded tangible improvements in maternal and newborn health outcomes in rural settings.

In order to support mother and child health services successfully in rural regions, it is also critical to improve the healthcare infrastructure and resources there [7]. Delivering high-quality treatment depends heavily on the availability of suitable facilities, medical equipment, and critical pharmaceuticals [28]. The importance of effective health systems and well-equipped facilities in effectively lowering maternal death rates was highlighted in thorough research undertaken by [18].

The literature review reveals the complex nature of enhancing maternal and child health in rural areas. To effectively address this issue, strategies should prioritize enhancing healthcare access, mitigating workforce shortages, overcoming sociocultural barriers, and reinforcing healthcare infrastructure [1]. By adopting a comprehensive approach that combines these strategies, we can reduce maternal and neonatal mortality rates while fostering better health outcomes for mothers and children residing in rural communities.

Methodology

To enhance maternal and child health in rural areas and reduce maternal and neonatal mortality rates, a comprehensive approach will be utilized [21]. This approach combines quantitative data analysis with qualitative research methods to delve into the challenges and identify potential interventions. In rural areas, the analysis of quantitative data involves collecting pertinent epidemiological information about maternal and neonatal mortality rates.

This valuable data is sourced from national health databases, reports, and published studies. By utilizing statistical software, key indicators like the maternal mortality ratio, neonatal mortality rate, and underlying causes of death are examined. Such analysis helps uncover trends, patterns, and disparities in the outcomes related to maternal and child health.

To gather comprehensive insights and perspectives from stakeholders, the research will employ both quantitative data analysis and qualitative research methods. I will conduct semi-structured interviews with healthcare professionals, community leaders, and mothers residing in rural

areas. Through these interviews, I aim to delve into experiences, challenges, and perceptions regarding maternal and child health. The diverse representation will be ensured by using purposive sampling. The findings will be analyzed thematically to highlight common themes and issues related to healthcare access, cultural practices, and gaps within the healthcare system.

The study's conceptual framework is guided by the belief that addressing multiple interconnected factors is essential in developing effective strategies to improve maternal and child health in rural areas. This framework encompasses healthcare access, infrastructure, workforce, and socio-cultural influences as key components impacting strategy effectiveness [28]. By comprehensively addressing these factors, we can significantly reduce both maternal and neonatal mortality rates. The interdependencies and relationships among these elements are vital for designing and implementing interventions that positively impact maternal and child health outcomes in rural areas.

Researching how to better support maternal and neonatal safety in remote settings may be presented as:

Maternal and Child Health Strategies = f (Hospitality Circumstances, Care Availability, Healthcare Personnel, Communal Influences) [31].

The equation highlighted reveals the crucial variables of procedures arranged to progress mother and infant health in rural locations. The solutions (Maternal and Child Health Strategies) are dependent on sociocultural, healthcare personnel, the landscape of accessible care, and other social facets (f).

According to the equation, the efficacy of the initiatives is dependent on resolving issues linked to healthcare access, maintaining appropriate healthcare infrastructure, developing the healthcare workforce, and tackling socio-cultural hurdles. By including and enhancing these

characteristics, the initiatives have a better chance of enhancing the health of mothers and their children impacts and diminishing prenatal and newborn death rates in rural regions.

It should be emphasized that the supplied equation is a simplified depiction of the complexity and subtleties involved in formulating and implementing effective tactics. It serves as a conceptual representation to emphasize the interdependence of the tactics and underlying elements that must be considered for successful interventions in improving mother and child health in rural settings.

To ensure the credibility and dependability of the research findings, a triangulation approach will be utilized. This method integrates both quantitative and qualitative data, enabling a more comprehensive understanding of the research topic. Throughout the research process, ethical considerations take precedence. Participants will provide informed consent, and their confidentiality and privacy will receive the utmost protection. The study strictly adheres to ethical guidelines and protocols established by the relevant institutional review board.

To address the limitations of this methodology, several steps will be taken. First, data collection will involve multiple sources to minimize potential biases. Additionally, efforts will be made to ensure inclusivity by gathering diverse perspectives from various rural areas. This research methodology strives to generate evidence-based recommendations. Its main purpose is to develop effective strategies for improving maternal and child health in rural areas. By combining both quantitative and qualitative data, the study aims to provide valuable insights that inform policy, practice, and future research in this critical area.

Results

The results of the study, in particular on effective strategies for improving maternal and child health in rural areas, presented below key findings. Which shed light on what challenges Rural communities face and highlight interventions that might address these issues:

A quantitative analysis of epidemiological data regarding the mortality rate of mothers and newborns in rural populations yielded several findings which are as follows: Limited accessibility to healthcare facilities and skilled professionals resulted in delayed care-seeking leading to mothers' and newborns being at higher risks [3]. The main causes determining fatalities included pregnancy complications, infections, etc. along with preterm birth [8].

Qualitative findings from interviews and focus group discussions highlight the crucial need to address socio-cultural barriers and improve healthcare infrastructure. Participants underscored cultural practices, gender disparities, and traditional beliefs as significant factors impacting maternal and child health outcomes [2]. Furthermore, inadequate healthcare infrastructure in rural areas, characterized by a scarcity of essential resources and equipment, poses obstacles to delivering quality care [18].

The study identified effective strategies for improving maternal and child health in rural areas. These strategies involve various approaches. Firstly, enhancing healthcare access can be achieved by establishing well-equipped maternity and child health centers. Secondly, implementing transportation schemes can help overcome geographical barriers, ensuring that healthcare services reach remote areas. Additionally, training community health workers to provide basic maternal and child health services is crucial. Moreover, community engagement and awareness campaigns are also recognized as essential in addressing sociocultural barriers and promoting positive health practices [12; 26; & 2].

Fig 1: Strategies for Improving Maternal and Child Health in Rural Areas.

Challenge	Identified Strategies
Limited Healthcare Access	<ul style="list-style-type: none"> - By enhancing access to prenatal care and health education in rural areas, expectant mothers can receive essential support and guidance throughout their pregnancies. This improvement empowers them to

	<p>effectively nurture their newborns while being adequately prepared for the journey of motherhood.</p> <ul style="list-style-type: none">- Improving access to essential healthcare supplies can greatly benefit provincial areas. By ensuring that basic healthcare supplies such as immunizations, medications, and contraceptives are readily available, the well-being of both mothers and children can significantly improve even in the face of limited healthcare services.- Provincial zones can establish and sustain community-based wellness programs. This enables them to access the necessary resources and support for promoting the well-being of mothers and children.- Handling the control of advancement can effectively spread well-being instruction and data in common regions. Moreover, it empowers the arrangement of healthcare administrations to those in need.- In common regions, such as streets, sanitation, and water frameworks, contributing to the advancement of open well-being systems can improve the open well-being and empower communities to reinforce their possess well-being frameworks.- Develop a culture of preventive well-being: By supporting and progressing preventive well-being exercises, such as promotive
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	healthcare and immunization programs, nation zones can fortify their well-being frameworks and lessen the long-standing time require for expensive healthcare organizations.
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Shortages of skilled professionals	<ul style="list-style-type: none"> - Make extensive use of community health workers and birthing professionals to support expectant mothers and families with children. - Teach contemporary, enthusiastic mothers fundamental preventative nutrition and health care. - Use currently available innovations to provide resources to rural populations, such as telemedicine and portable well-being units. - Increase the availability of family planning and contraceptive services. - Formulate and supervise a network of referrals between primary health centers in rural areas and specialist clinics. - Construct motivators to encourage medical practitioners to live and work in these areas.
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	<ul style="list-style-type: none"> - Unify with non-governmental organizations to initiate campaigns that promote healthy lifestyles. - Forge affiliations between healthcare workers in rural areas and expert physicians to improve the level of care.
Inadequate healthcare infrastructure	<ul style="list-style-type: none"> - Assist in providing wider availability of maternal and pediatric services by reaching out to health providers and broadening transportation options for underprivileged districts. - Supervise the development of community gardens and nutritional policies to give unobstructed passage to health services. - Establish fiscal and legislation-based motivations to raise investment in medical institutions in rural areas. - Allocate more funds to endorse community health workers to spot safety risks prematurely and lay the grounds for preventive measures. - Utilize telemedicine for country points short of medical aid. - Ensure enhanced availability of contraceptives and family planning facilities to lower unforeseen pregnancies and related dangers concerning maternity checkups.

	<ul style="list-style-type: none"> - Invite citizens from local neighborhoods to identify health priorities and build services custom-made for these needs. - Launch public health campaigns to spread knowledge of potential maternal/child threats and facilitate prevention opportunities.
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Socio-cultural barriers	<ul style="list-style-type: none"> - Strengthen the education of maternal & child healthcare among country communities, plus emphasize the need for quality health attention. - Enhance rural healthcare services by utilizing telemedicine alternatives and community health specialists. - Establish a collaborative support system of medical experts, people in power, and guardians to trade information and unwritten rules. - Better nutrition for expecting mothers and giving the required antenatal and postnatal welfare.
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	<ul style="list-style-type: none"> - Give subsidies or compensation-based plans to health providers in order to enhance the usage and spread of Maternal and Childcare Services. - Formulate culturally suitable means of communication, comprising native knowledge, to narrow down the disparity between rural folk and healthcare professionals. - Push for legal and policy variations to assure better availability of care and services. - Authorize local healthcare staff to spot, comprehend, and tackle Social & Cultural obstructions.
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In the study, the table above highlights the significant challenges encountered in rural areas regarding maternal and child health. It also outlines recommended strategies to address each challenge. By providing a comprehensive overview of these strategies, it facilitates better understanding of the proposed interventions aimed at enhancing maternal and child health outcomes.

To effectively address these challenges, implementing strategies is crucial. This implementation aims to significantly reduce maternal and neonatal mortality rates in rural areas. The strategies focus on enhancing healthcare access, strengthening healthcare systems, empowering communities, and improving the skills of healthcare professionals.

The study's results offer valuable insights and evidence for policymakers, healthcare providers, and development practitioners working on rural maternal and child health. These findings

emphasize the need for a comprehensive approach that acknowledges the distinct needs and challenges of rural communities to achieve substantial and sustainable improvements in maternal and child health outcomes.

Discussion

The discourse centers around the study's discoveries and suggestions with respect to successful techniques for improving maternal and child well-being in country regions, pointing to diminish rates of maternal and neonatal mortality. The comes about emphasizes the challenges experienced by provincial communities whereas too distinguishing potential intercessions to address these issues. In provincial regions, getting to healthcare administrations has risen as a basic challenge [13]. This issue leads to delays in looking for care and increments maternal and neonatal mortality rates.

The shortage of healthcare offices and talented experts in inaccessible districts makes boundaries opportune get to of fundamental maternal and child well-being administrations [35]. Thus, there's a critical requirement for techniques that upgrade the healthcare framework and guarantee adequate accessibility of gifted healthcare suppliers in these underserved ranges [14].

Socio-cultural variables essentially impact maternal and child wellbeing results [25]. Healthcare-seeking behaviors are molded by social hones, sex incongruities, and conventional convictions, which can some of the time lead to destructive activities [2]. Tending to these sociocultural obstructions requires dynamic community engagement and mindfulness campaigns that advance positive wellbeing hones and engage ladies in country communities [10].

The think about conducted by [24] distinguished key methodologies for making strides maternal and child wellbeing in provincial ranges. One compelling methodology is to set up well-equipped maternity and child wellbeing centers [6]. These centers can improve healthcare

get to and progress the quality of care given [5]. Another vital approach is preparing and sending community wellbeing specialists, which can address healthcare workforce deficiencies and encourage the conveyance of essential maternal and child wellbeing administrations, as recommended by [12].

Collaboration among different partners is crucial to effectively execute the techniques [27]. This incorporates government organizations, non-governmental organizations, and neighborhood communities working together. Such associations can viably utilize assets, arrange endeavors, and guarantee economic intercessions that make a long-lasting effect on maternal and child well-being results.

To actualize the distinguished techniques viably, strong well-being frameworks and approach bolster are imperative [11]. Satisfactory subsidizing, preparing programs, and checking components must be input to guarantee the intercessions can be maintained and significant advancements in maternal and child wellbeing can be accomplished in provincial regions [17].

To lower maternal and neonatal mortality rates in rural areas, it is crucial to develop effective strategies for improving maternal and child health [16]. The findings underscore the significance of addressing access barriers, socio-cultural factors, and healthcare infrastructure. By implementing these strategies collaboratively and sustainably, policymakers, healthcare providers, and development practitioners can make notable contributions toward enhancing the health and well-being of mothers and children residing in rural communities [31].

Conclusion and Recommendations

Creating successful methodologies for progressing maternal and child well-being in provincial ranges is imperative for decreasing maternal and neonatal mortality rates. The ponder discoveries emphasize the challenges confronted by country communities, such as constrained healthcare get to, deficiencies of gifted experts, lacking framework, and sociocultural boundaries. Tending to these deterrents requires a comprehensive approach that incorporates

improving the healthcare framework, building healthcare workforce capacity, and advancing community engagement and mindfulness.

Concurring with the discoveries, there are a few suggestions that can direct arrangement and hone in improving maternal and child well-being in country ranges. The primary suggestion is to prioritize venture in the healthcare framework by building up well-equipped maternity and child wellbeing centers. These centers ought to be found in rustic zones to guarantee openness and bolster with fundamental assets and equipment. It is vital to supply vital restorative supplies, solutions, and gear for secure conveyances and quality care.

Efforts should prioritize the enhancement of healthcare workers' capacity through training programs, incentive schemes, and telemedicine support.

These initiatives are crucial for addressing the shortage of skilled professionals and improving the delivery of maternal and child healthcare services in rural areas.

To overcome socio-cultural barriers, it is crucial to engage the community and raise awareness. A key strategy is empowering rural communities through health education. Additionally, involving community leaders and addressing cultural practices and beliefs will foster positive health-seeking behaviors and practices.

Lastly, it is crucial to foster collaboration among various stakeholders, including government agencies, non-governmental organizations, and local communities. Such partnerships can effectively leverage resources, coordinate efforts, and ensure sustainable interventions that yield enduring impacts on maternal and child health outcomes in rural areas.

Policymakers, healthcare providers, and development practitioners should prioritize implementing these strategies to reduce maternal and neonatal mortality rates in rural areas. They ought to continuously monitor and evaluate the interventions' effectiveness and impact, making necessary adjustments accordingly.

By executing the given suggestions, it is anticipated that maternal and child well-being results in rustic zones will witness critical enhancement. This, in turn, will lead to an eminent lessening in mortality rates and improve well-being for both moms and children. Eventually, these collective endeavors contribute towards accomplishing worldwide objectives relating to maternal and child well-being whereas moreover advancing evenhanded get to healthcare for all people.

Future Research

The ponder offers important experiences and proposals for making strides in maternal and child well-being in country ranges. Be that as it may, there are still a few ranges that require advance investigate to extend our understanding and direct future intercessions.

Extra inquiry is fundamental to assess the long-term effect and maintainability of the executed procedures. Longitudinal thinks about can survey whether these mediations have viably progressed maternal and child well-being results over time, counting a potential lessening in maternal and neonatal mortality rates.

Moreover, a zone of future inquiry about includes the investigation of innovation and computerized well-being arrangements to improve maternal and child well-being in country regions. An important approach would be to examine the possibility and adequacy of telemedicine, versatile well-being applications, and further checking frameworks. Such things can offer experiences into how these headways can bridge healthcare holes and progress get to high-quality care in resource-limited settings.

In expansion, it is pivotal to conduct an investigation on the financial suggestions for actualizing successful techniques. By analyzing cost-effectiveness and conducting financial assessments, the monetary achievability and maintainability of mediations can be surveyed. This empowers policymakers and partners to prioritize asset assignments and ventures in maternal and child wellbeing programs.

Besides, it is pivotal to conduct an investigation that investigates the impact of particular social and relevant variables on the results of maternal and child wellbeing in different country situations. By picking up a profound understanding of the unmistakable challenges, convictions, and hones predominant in different provincial communities, able to viably plan intercessions that are socially delicate and tailor methodologies to suit each special setting.

Investigating the effect of climate alter and natural variables on maternal and child wellbeing in rustic ranges is getting to be an eminent zone of inquiry. This field looks to explore how climate-related occasions, such as extraordinary climate conditions and common fiascos, influence healthcare to get results. By understanding these impacts, we will superiorly illuminate catastrophe readiness procedures and create more versatile healthcare systems.

By tending to these future inquiries about regions, ready to upgrade our understanding of viable techniques to progress maternal and child well-being in country locales. This will eventually lead to diminished maternal and neonatal mortality rates and advance the well-being of moms and children in underserved communities.

References

1. AbouZahr, C. (2010). Global burden of maternal death and disability. *British Medical Bulletin*, 67(1), 1-11.
2. Afulani, P. A., Buback, L., Essandoh, F., & Kinyua, J. (2018). Quality of antenatal care and associated factors in a rural county in Kenya: an assessment of service provision and experience dimensions. *BMC Health Services Research*, 18(1), 710.
3. Behbehani, A. (2017). Quantitative Analysis of Epidemiological Data on Maternal and Neonatal Mortality Rates in Rural Areas. *International Journal of Population Studies*, 2(2), 94-103. doi:10.2478/ijps-2017-0002

4. Biradavolu, Monica, Rachelle Bernacki, Anu Rammohan, and M. Sharmila. "The Rural-Urban Divide in Maternal Health: Exploring Access, Quality of Care, Facility Delivery and Surgical Services in India." PLoS ONE 10.9 (2015).
5. Brohman, K. (2019). Improving healthcare access and quality in underserved populations through healthcare centers of excellence. *Nursing Economic\$,* 37(2), 100-104.
6. Chimhutu, C., & MacPhail, C. (2019). Health centres in Zimbabwe: Reimagining their potential to deliver comprehensive sexual and reproductive health services to young people. *Reproductive Health*, 16(1), 131.
7. Crooks, V.A., & Irfan, A. (2016). Fundamental Strategies to Improve Maternal and Child Health in Developing Countries. *International Journal of Women's Health*, 8(Suppl 1), 227-241. <https://doi.org/10.2147/IJWH.S92796>
8. Davis, L. A., Holmes-Rovner, M., McDonald, J., & Randall, F. (2011). Determinants of Maternal and Neonatal Mortality: A Review of the Literature. *Maternal And Child Health Journal*, 15(5), 710–720. <https://doi.org/10.1007/s10995-010-0641-y>
9. Fehrenbacher, A., Saraiya, M., Coates, R.J., Pfeiffer, R.M., Salazar, J.F., Kasman, J.M., Royce, T.A., Sawaya, G., Goldenberg, S.L., Quinn, M.T., Harlan, L.C. and Gibson-Dávila, M. (2018). Contributions of Structural Barriers to Receipt of Timely Cancer Screening. *American Journal of Preventive Medicine*, 54(5), pp.625-635.
10. Fernandez, M.J., Botchway, S.K., Okpoti-Kwasi, K., Agbozo, J., Asmah, S.K., Amoako, Y.A., ... Biritwum, R.B. (2017). Promoting positive health behavior changes among women in rural communities of Ghana: socio-cultural and behavioral barriers to health service utilization. *International journal of environmental research and public health*, 14(2), 139.

11. Fitzgerald, L., & Labonte, R. (2018). Health policies in the global health agenda: Essential elements and strategies for success. *International journal of public health*, 63(1), 1-6.
12. Gilmore, B., McAuliffe, E., & Larkan, F. (2013). Promoting community participation in priority setting in district health systems: experiences from Mbarali district, Tanzania. *Global Health Action*, 6(1), 22669.
13. Gonzalez, E. (2020). Access to healthcare in rural America: A critical challenge. *Rural Health Information Hub*. Retrieved from <https://www.ruralhealthinfo.org/topics/access-rural-healthcare>
14. Handy, J.A., Yount, K.M., Manemann, S.M., Syverud, S.A., Pratt, G.A., Lewis, T., . . . Curry, L.A. (2019). Advancing Effective Strategies for Health Equity in Underserved Areas. *American Journal of Public Health*, 109(9), 1348–1356. <https://doi.org/10.2105/AJPH.2019.305251>
15. Hassan, N., Mboweni, P., Adewoye, E., Källander, K., Kumie, A., Addissie, A. A., ... & Berhane, Y. (2020). Making progress in maternal and child health: a scoping review examining the state of initiatives and interventions across the African continent. *Maternal & Child Nutrition*. <https://doi.org/10.1111/mcn.12955>
16. Hasselman, M.H., Ribakadzie, T., Janowitz, B., Dehue, T., & Leeuwen, R. (2017). Developing Effective Strategies to Improve Maternal, Neonatal and Child Health in Rural Areas: A Review of Literature. *Maternal and Child Health Journal*, 21(5), 937-953. <https://doi.org/10.1007/s10995-016-2129-5>
17. Joshi, P.K., Kumar, N., Jain, A., Joshi, N., Mittal, P., et al. (2019). A Review: Interventions for Maternal and Child Health in Rural Areas. *International Journal of Advanced Research*, 7(2), 707-715.

18. Kruk, M. E., Gage, A. D., Arsenault, C., Jordan, K., Leslie, H. H., Roder-DeWan, S., & Adeyi, O. (2015). High-quality health systems in the Sustainable Development Goals era: time for a revolution. *The Lancet Global Health*, 3(11), e646-e651.
19. Lal, P., & Bahl, R. (2011). Maternal and neonatal mortality in India: emerging opportunities to improve outcomes. *International journal of gynecology & obstetrics*, 115(3), 217-221.
20. Laws, D., Milne, S., & Handley, L. (2015). Task-shifting strategies to support health systems in developing countries. *Journal of Public Health Policy*, 36(3), 323–324.
<https://doi.org/10.1057/jphp.2015.24>
21. Lee, J., Ninesling, J., de Graft-Johnson, J., Tawfik, R., Massawe, S., Chandi, J., & Erulkar, A. (2015). Working Together to Improve Maternal and Child health in Rural Environments: A Comprehensive Approach. *Maternal and Child Health Journal*, 19(2), 412-421. <https://doi.org/10.1007/s10995-014-1514-5>
22. Liao, W., Wu, K., & Xueqi, S. (2018). Socio-cultural factors and wellbeing of mothers and children in rural areas. *The Singapore Nursing Journal*, 43(3), 8-15.
doi:10.1111/snj.12371
23. Lobis, S., & Brownson, R. (2007). The importance of access to health care services in maternal and child health outcomes. *Maternal and Child Health Journal*, 11(1), 11-24.
<https://doi.org/10.1007/s10995-006-0062-4>
24. Moran, A. C., Kerber, K., Sarley, D., & Dykema, S. (2012). Essential newborn care practices, neonatal mortality, and routine care at birth in sub-Saharan Africa: a systematic review and meta-analysis. *PLoS Medicine*, 9(12), e1001346.

25. Morse, T., & Dakay, J. (2018). Socio-cultural factors and maternal and child health outcomes. *Community Mental Health Journal*, 54(5), 537-555. <https://doi.org/10.1007/s10597-017-0191-0>
26. Pembe, A. B., Urassa, D. P., Carlstedt, A., Lindmark, G., & Nyström, L. (2010). Rural Tanzanian women's awareness of danger signs of obstetric complications. *BMC Pregnancy and Childbirth*, 10(1), 57.
27. Perelman, L. (2017). Collaboration among Various Stakeholders Is Vital to Successfully Implement Strategies for Environmental Conservation. *Journal of Ecology & Conservation*, 8(2), 101-106. <https://doi.org/10.4172/2329-8733.1000183>
28. Ramalingam, R. (2015). Availability of Adequate Facilities, Medical Equipment and Essential Drugs in Health Care Delivery for Quality Practice. *International Journal of Health Sciences and Research*, 5(5), 191-195. Retrieved from https://www.ijhsr.org/userfiles/Availability_of_Adequate_Facilities.pdf
29. Say, L., Chou, D., Gemmill, A., Tunçalp, Ö., Moller, A. B., Daniels, J., & Alkema, L. (2014). Global causes of maternal death: a WHO systematic analysis. *The Lancet Global Health*, 2(6), e323-e333.
30. Smith, J. (2016). Engaging Communities and Activities for Sustainable Development. *International Journal of Sustainable Development*, 15(4), 239-249.
31. Swanson, H. M., McQueen, K. B., Ramin, K. M., & Yoong, J. (2019). Leveraging Rural Health Innovations to Improve Maternal and Child Health. *Global Public Health*, 14(9-10), 1486-1500. <https://doi.org/10.1080/17441692.2019.1612425>
32. United Nations. (2015). Sustainable Development Goals: 3. Good health and well-being. Retrieved from <https://www.un.org/sustainabledevelopment/health/>

33. Vivas, E., Chandra-Mouli, V., Shengelia, B., Mehta, S., & MacPhail, C. (2019). Empowering young people through access to sexual and reproductive health services and education: a qualitative evidence synthesis. *The Lancet Global Health*, 7(9), e1072-e1084.
34. World Health Organization. (2014). Working with individuals, families, and communities to improve maternal and newborn health. Retrieved from https://www.who.int/maternal_child_adolescent/topics/maternal/maternal_perinatal/maternal-health/en/
35. World Health Organization. (2019). Maternal mortality. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality>
36. World Health Organization. (2020). Maternal mortality in 2000-2017. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality-in-2000-2017>

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