

**ENHANCING HOME BIRTH OUTCOMES: BEST PRACTICES AND
EDUCATIONAL STRATEGIES IN AFEGWOM-LAMINGEL VILLAGE**

LISHIKAH Adams

Faculty of Nursing
Lincoln University College, Malaysia

Dr. MURTADHO, Alao

Lincoln University College, Malaysia

ADENIYI, Sarafadeen Diran

Lincoln University College, Malaysia

TONGDIMA Jaakuk Luka

Faculty of Nursing
Lincoln University College, Malaysia

MANGDIK Christiana Emmanuel

Faculty of Nursing
Lincoln University College, Malaysia

Abstract

This study aimed to identify and evaluate best practices and educational strategies to enhance the safety and quality of home births in Afegwom-Lamingel Village. A quantitative research approach was adopted, utilizing a structured questionnaire to collect data from 160 women of childbearing age and healthcare providers involved in home births. Stratified random sampling was used to ensure representation across relevant subgroups. Descriptive statistical analysis, including mean scores and standard deviations, was employed to assess respondents' perceptions of various interventions. The findings revealed strong support for several best practices, including the provision of health centres in rural communities (Mean = 4.34, SD = 0.868), the training of traditional birth attendants (Mean = 4.13, SD = 1.155), and the deployment of trained community midwives for home deliveries (Mean = 4.04, SD = 1.140). Additionally, respondents highlighted the importance of graduate and in-service training for birth attendants (Mean = 3.99, SD = 1.264) and community education on assisted home births (Mean = 3.98, SD = 1.327). The results underscore the need for improving healthcare infrastructure, enhancing the skills of birth attendants, and increasing awareness of safe childbirth practices. Based on these findings, the study recommends the implementation of structured training programs for birth attendants, community sensitization on home birth best practices, increased deployment of skilled midwives, and the establishment of well-equipped health centres. These interventions are crucial for improving maternal and neonatal outcomes in rural settings, ensuring safer home births in Afegwom-Lamingel Village..

Keywords: Home Birth Safety, Traditional Birth Attendants, Maternal Health Outcomes, Community Midwifery, Rural Healthcare Infrastructure

Introduction

Assisted home births, which was also referred to as planned domestic births attended via skilled birth attendants, had gained massive interest and sparked widespread acceptance in recent years. This period encompasses the exercise of giving delivery at domestic underneath the steering and guide of skilled midwives or different healthcare professionals, as opposed to in a medical institution or birthing environment. The American College of Obstetricians and Gynecologists (ACOG) defined assisted domestic delivery as a deliberate beginning that takes place at home, overseen by means of a certified beginning attendant, which includes a midwife (ACOG, 2020).

Assisted home delivery was a set experience that simply bringing an infant into the world; it's miles approximately coming into an entire life of wonder and opportunities where it allows safe birth. In order to discuss start protection, mothers and beginning attendants should be protection orientated as opposed to safety blind. Even if it had consequences whether or not deliberate or unforeseen, the efficacy of domestic assisted transport should not be left out. In 2021, there have been 51,642 home births, up 13% from forty-five (45),646 in 2020. This rise came after home births increased by 19% from 2019 (38,506) and 2020. Home births grew by means of 10% among White (non-Hispanic) women from 1.9% of all births in 2020 to almost 2.1% in 2021 (Center for Disease manage 2022).

The importance of assisted home births comes from a selection of things, encompassing individual possibilities, cultural issues, and access to healthcare services. A study conducted by way of Cheyney et al. (2019) shed a mild at the motivations of expectant moms who opt for home births, revealing a preference for a greater intimate and customized birthing enjoy this was devoid of the scientific interventions usually related to health facility settings. Furthermore, proponents argue that home births have the capability to empower girls and foster a sense of autonomy and control over the completed birthing manner (Hutton et al., 2019).

Nevertheless, the discourse surrounding the safety and effectiveness of assisted domestic births stays exceedingly contentious. Opponentshave explicit reservations regarding the potential risks associated with handing over the confines of a sanatorium, which may consist of headaches requiring on-the-spot clinical interventions (Wax et al., 2019). That whilst planned domestic births overseen via skilled attendants are related to lower rates of medical interventions, there may be a barely elevated hazard of negative neonatal outcomes compared to health facility births.

The targets of helped domestic births contain extraordinary parts of maternal attention, wellness, independence, and enjoy. One crucial goal, was to give laboring women a feeling of independence and command over their birthing experience. Research proposes that for positive pregnant women, opt for the herbal and setting in their own homes to have more freedom and agreeable work insight (Hutton et al., 2019). The miles essential to underscore that proper gamble evaluation and admittance to disaster medical attention are critical components of ensuring safety in home birth settings (American Obstetricians and Gynecologists, 2020). Assisted home births look to paintings with a more custom designed and circle of relatives-targeted birthing experience. Being in a recognizable climate encircled by friends and family can strengthen constant reassurance and greater conveyance (Hutton et al., 2019).

However, past examinations had shown that planned home births with the aid of experts can be essentially as health facility births for typically safe pregnancies. Within the English Clinical Diary in 2020 found that, planned home births in normal simple pregnancies had been associated with decrease paces like cesarean segments and epidurals, will result in friendly outcomes for mothers or newborns (Kennare et al., 2020). This proposes that for precise women with simple pregnancies, homebirth may be a suitable preference. Therefore, the well-being of assisted home births can fluctuate contingent upon remarkable variables, inclusive of the accessibility of skilled attendance, immediate dealing with risk and complications worth scientific benefits, and the gamble compromise of the mother and infant. A specific survey distributed in the Diary of Maternity Care and Women's Wellbeing in 2021 observed that whilst planned home births with skilled birth attendance had been related to fewer interventions, they were likewise linked with a slightly higher risk of perinatal mortality related to health facility births (Olsen et al., 2021). This highlights the importance of in-depth evaluation and appropriate determination requirements for home births. Besides, the worth of assisted home births can significantly affect women's achievement, independence, and satisfaction. Research conducted on the Diary of Maternity Care and Women's Wellbeing in 2023 observed that pregnant or couples who preferred home birth will have significant degrees of success with their birthing experience and noticed greater prominent independence and command over their work and conveyance related with the women who delivered babies in medical clinics (Smith et al., 2023). This recommends that, for women who need a greater and enabling birth perception, home delivery with a preferred attendant would provide massive benefits.

One huge issue of the multistage approach was the comprehensive prenatal screening and assessment of potential risk in pregnant women. Numerous studies, together with the research conducted by means of Dahlen et al. (2019), had emphasized the essential importance of accomplishing an intensive chance evaluation if you want to discover those who are low-chance and consequently appropriate applicants for home births, by diligently evaluating the health reputation of the mother, her obstetric history, and other pertinent factors, healthcare facilities can ensure that home birthing was safe and feasible alternative for women who meet the eligibility criteria. An important key element of the multistage technique was the presence of skilled attendants at some point of the home birthing method. Research carried out through Snowden et al. (2020) has convincingly verified the safety and effectiveness of home births that are attended with the aid of licensed expert midwives (CPMs), in particular. These skilled attendants got vital training to offer continue training, help, and if required, emergency interventions during and after delivery with a purpose to minimize the risk of negative effects.

Moreover, the combination of telemedicine and mobile clinic technology had been these days emerged as a promising method to enhance the safety and high-quality of assisted home births. Studies performed by means of Fakhar et al. (2022) and Nguyen et al. (2023) had effectively shed light on the gigantic capability of telemedicine in facilitating virtual consultations, remotely monitoring the well-being of both the mother and the fetus (new born), and ensuring timely interventions in case of complications. By efficiently leveraging telemedicine programs and mobile monitoring devices, home delivery attendants can get at the right time and support from healthcare specialists and appreciably improve communication with the birthing individuals, thereby resulting in an average enhancement available.

One of the vital factors in making sure safety amidst assisted homes births was the presence of healthcare specialists who have gone through vast training, consisting of certified nurse-

midwives or obstetricians, who possess the vital expertise to offer suitable medical oversight and intervention if deemed vital (American College of Obstetricians and Gynecologists [ACOG], 2020). A look at the Journal of Midwifery & Women's Health, underscores the importance of midwife-led care inside homebirth settings, as it highlights the lower prevalence of interventions and similar perinatal results in relation to medical institution births (Grunebaum et al., 2021).

However, the utmost significance to acknowledge the ability risks which are associated with home births, which embody unforeseen complications that can arise statement a recent analysis, published in *Obstetrics & Gynecology* (2020), showed that, even though the overall threat of excessive unfavorable neonatal effects in deliberate domestic births attended by certified midwives was quite low, it nonetheless stays relatively better when as compared with deliberate medical institution births (Grunebaum et al., 2021). Home births, which are commonly taken into consideration to be safe for pregnancies with low threat, are related to unfavorable consequences as compared to hospital births, particularly in instances of high-hazard pregnancies or surprising headaches (American College of Obstetricians and Gynecologists, 2020). This accelerated hazard was further exacerbated by way of the restrained availability of scientific assets and emergency interventions in home settings, leading to potential delays in getting access to critical care.

A study was carried out through Grunebaum et al. (2019) which found that planned home births had been related to a notably higher occurrence of neonatal seizures and critical neurological dysfunction as compared to medical institution births. Similarly, a scientific evaluation performed by means of Wax et al. (2020) stated the emergency dangers of perinatal mortality and neonatal seizures in hospital births especially among first-time mothers and those with breech positions.

The objective of the study was to identify and evaluate best practices and educational strategies that can enhance the safety and quality of home births in Afegwom-Lamingel Village.

Research Method

Quantitative approach was adopted in this study as the researcher used nonprobability convenience for the survey questionnaires to collect the data from only women of childbearing age. The research population was extended to include those involved in providing care during assisted home births, such as midwives, nurses, or physicians specializing in home birth practices. Yaro Yamane's formula for sample size determination was used for this research. Yamene's method for sample size calculation was developed mathematical illustration of Taro Yamane's formula.

$$n = \frac{N}{1 + N(e)^2}$$

Where: n = Sample size
 N = Target population
 e = Marginal error (0.05)

Therefore:

$$n = \frac{500}{1+500(0.05)^2} \quad n = \frac{500}{2.25} = 222 \text{ (sample Size)}$$

Sample size (n) = 222 women of childbearing age and pregnant women.

The sample size was 222, but 160 respondents were used by a systematical collection of data due to the respondents engaged in daily activities. Sampling techniques utilized in this study was stratified random sampling. This method involved dividing the population into distinct subgroups or strata based on relevant characteristics, such as geographic location or socioeconomic status.

The study utilised a structured questionnaire as the primary instrument for data collection, focusing on best practices and teachings to improve home births in Afegwom-Lamingel village. The questionnaire comprised multiple items rated on a Likert scale to capture respondents' perceptions and level of agreement on various proposed interventions. The collected data were analysed using descriptive statistical methods, with mean scores and standard deviations computed to determine the level of acceptance of each item. Decisions were made based on the mean values, where higher scores indicated stronger support for the proposed practices. This analytical approach provided insights into the key strategies that could enhance home birth safety and maternal health outcomes in the community.

Results

Table 1: Best practices and teaching that can improve home birth in Afegwom lamigel village

Items	N	Mean	Std. Deviation	Decision
Provision of graduate and in-service training for birth attendance	160	3.99	1.264	Accept
Educate the community on the best practices to improve assisted home birth	160	3.98	1.327	Accept
Organize training for traditional birth attendants on antenatal care	160	4.13	1.155	Accept
Use trained community midwives and birth attendants to support delivery at home	160	4.04	1.140	Accept
Birth attendants should be trained on how to manage emergencies	160	3.97	1.157	Accept
Birth attendants should be trained on how to prevent, identify, and treat PPH	160	3.89	1.311	Accept
Provision of health centers in rural communities	160	4.34	.868	Accept
Increase skilled birth attendants at the community level	160	4.05	1.137	Accept
Valid N (listwise)	160			

The findings in Table 1 highlight key best practices and teachings that can significantly improve home births in Afegwom Lamigel village. The responses from 160 participants indicate a strong agreement on various strategies to enhance the safety and quality of home births. Among the listed items, the highest-rated practice is the provision of health centres in rural communities (Mean = 4.34, SD = 0.868), suggesting that respondents consider access to healthcare facilities

as a critical factor in improving maternal outcomes. This aligns with existing literature, which emphasises the importance of well-equipped health centres in reducing maternal and neonatal mortality rates in rural areas.

Additionally, the organisation of training for traditional birth attendants (TBAs) on antenatal care received a high mean score of 4.13 (SD = 1.155), indicating strong support for equipping TBAs with knowledge and skills to improve maternal health. This finding is consistent with studies advocating for continuous education and skill enhancement for TBAs, particularly in settings where institutional delivery services are limited. Similarly, the use of trained community midwives and birth attendants to support home delivery was highly rated (Mean = 4.04, SD = 1.140), reinforcing the need for skilled personnel in home birth settings to improve safety and outcomes.

The study further reveals that graduate and in-service training for birth attendants (Mean = 3.99, SD = 1.264) and education of the community on best practices for assisted home births (Mean = 3.98, SD = 1.327) are essential interventions that should be prioritised. The significance of training is also evident in the recommendation that birth attendants should be trained to manage emergencies (Mean = 3.97, SD = 1.157) and prevent, identify, and treat postpartum haemorrhage (PPH) (Mean = 3.89, SD = 1.311). These findings suggest that building the capacity of birth attendants can play a crucial role in reducing maternal and neonatal complications during home deliveries.

Moreover, the need to increase the number of skilled birth attendants at the community level (Mean = 4.05, SD = 1.137) is strongly supported by the respondents. This indicates that increasing human resources in maternal healthcare is seen as a viable strategy to enhance home birth safety. Overall, the results suggest that a combination of improved healthcare infrastructure, training, and community education can significantly enhance the quality and safety of home births in Afegwom Lamigel village.

Discussion of Findings

The findings from this study align with existing literature on maternal health and home births, highlighting critical best practices that can enhance the safety and quality of home deliveries in Afegwom Lamigel village. The provision of health centres in rural communities emerged as the most highly rated intervention (Mean = 4.34, SD = 0.868), underscoring the importance of accessible healthcare facilities in improving maternal and neonatal outcomes. This is consistent with the recommendations of the World Health Organization (WHO, 2020), which emphasises the need for well-equipped health facilities in rural areas to reduce maternal mortality rates. Research by Thompson et al. (2022) further supports this finding, noting that the presence of healthcare centres significantly reduces delays in seeking medical care and enhances emergency response during childbirth.

Another critical finding was the strong agreement on the need for training traditional birth attendants (TBAs) in antenatal care (Mean = 4.13, SD = 1.155). Training TBAs has been identified in various studies as an effective strategy for improving maternal health in regions where institutional delivery services are limited (Johnson et al., 2021). Lee and Brown (2019) highlight that TBAs often serve as the primary healthcare providers for expectant mothers in rural areas, making it essential to equip them with updated knowledge and skills. The use of trained community midwives and birth attendants to support home deliveries (Mean = 4.04, SD

= 1.140) further reinforces this point, as skilled personnel have been shown to reduce birth complications and improve neonatal outcomes (Ahmed et al., 2020; Smith et al., 2021).

The study also found strong support for graduate and in-service training for birth attendants (Mean = 3.99, SD = 1.264) and educating the community on best practices for assisted home births (Mean = 3.98, SD = 1.327). Continuous training is vital in ensuring that birth attendants stay updated on modern obstetric techniques and emergency care protocols (Thompson et al., 2020; Johnson et al., 2021). According to WHO (2020), well-trained birth attendants can significantly reduce the risk of birth-related complications, particularly in settings where access to hospital care is limited. Moreover, Ahmed et al. (2021) found that community education plays a crucial role in encouraging safer birthing practices, as informed communities are more likely to seek professional assistance and adopt evidence-based maternal care practices.

Further analysis of the findings highlights the need for training birth attendants in emergency management (Mean = 3.97, SD = 1.157) and in preventing, identifying, and treating postpartum haemorrhage (PPH) (Mean = 3.89, SD = 1.311). PPH remains one of the leading causes of maternal mortality globally, particularly in rural settings where access to emergency obstetric care is limited (WHO, 2020). Studies by Lee and Brown (2019) and Thompson et al. (2022) indicate that equipping birth attendants with the skills to manage obstetric emergencies can substantially reduce maternal deaths. Additionally, Ahmed et al. (2020) and Smith et al. (2021) found that training birth attendants in PPH management, including the use of uterotonic drugs and manual techniques, significantly improved maternal survival rates in home birth settings.

The findings also stress the importance of increasing the number of skilled birth attendants at the community level (Mean = 4.05, SD = 1.137). This aligns with global recommendations advocating for the deployment of skilled health workers in underserved regions (WHO, 2020; Lee et al., 2023). Research by Ahmed et al. (2021) found that increasing the number of skilled birth attendants leads to improved maternal outcomes by ensuring that more women receive timely and appropriate care. Additionally, Thompson et al. (2020) and Johnson et al. (2021) assert that investing in human resources for maternal health is one of the most effective strategies for reducing home birth complications and neonatal mortality rates.

Overall, the results of this study indicate that improving home birth outcomes in Afegwom Lamigel village requires a multifaceted approach that includes strengthening healthcare infrastructure, training birth attendants, educating the community, and increasing the number of skilled health personnel. These strategies are well-supported by existing literature and global health recommendations (WHO, 2020). Investing in these interventions will not only improve maternal and neonatal health but also contribute to achieving sustainable development goals related to maternal health in rural communities.

Conclusion

The findings of this study highlight the importance of improving healthcare infrastructure, enhancing the training of birth attendants, and increasing community awareness to ensure safer home births in Afegwom Lamigel village. The provision of health centres, skilled midwives, and targeted training for traditional birth attendants were identified as crucial factors in reducing maternal and neonatal risks. Additionally, equipping birth attendants with emergency management skills and educating communities on best practices can further enhance home birth safety. Overall, a comprehensive approach that integrates healthcare resources, professional

training, and community engagement is essential for improving maternal health outcomes in rural settings.

Recommendations

1. Implement regular graduate and in-service training programmes for birth attendants, focusing on antenatal care, emergency management, and postpartum haemorrhage (PPH) prevention to improve maternal and neonatal outcomes in home births.
2. Conduct targeted awareness campaigns and educational programmes to inform communities about best practices for assisted home births, ensuring families make informed decisions and adopt safer childbirth methods.
3. Increase the deployment of trained community midwives and birth attendants to support home deliveries, ensuring that skilled personnel are available to manage complications and provide quality care.
4. Establish and equip health centres in rural communities to serve as referral points for complicated home births, ensuring timely medical interventions and reducing maternal and infant mortality rates.

References

- Acs, G., & Fairbairn, J. (2019). Breastfeeding and thrush: Diagnosis and management strategies. *Journal of Human Lactation*, 35(4), 593-600.
<https://doi.org/10.1177/0890334419868651>
- Adebayo, A. A., Adeoye, O. O., & Aluko, O. (2020). Sociocultural determinants of home births in rural northern Nigeria: Implications for maternal health interventions. *African Population Studies*, 34(1), 102-113.
- Akpabio, E. J., Ekpenyong, O. E., & Udo, E. I. (2019). Impact of Traditional Birth Attendant training on maternal outcomes in rural Nigeria: A case study of Cross River State. *BMC Pregnancy and Childbirth*, 19(3), 134-142.
- Abimbola, A., Ayodele, O., & Hassan, S. (2023). Sustaining maternal health interventions: Policy integration and government support in rural Nigeria. *Journal of Public Health Policy*, 44(2), 345-357.
- Amouzou, A., Ziegler, B., & Madzimbamuto, F. D. (2021). Community education campaigns and maternal health outcomes in sub-Saharan Africa: A systematic review. *BMC Public Health*, 21(1), 341-354.
- Adedokun, S. T., Olowokere, A. E., & Ojo, M. A. (2023). Sustaining multi-stage interventions in maternal health: Lessons from Nigeria's rural communities. *Journal of Global Health*, 13(2), 455-468.
- Brown, P., & Patel, M. (2022). Managing postpartum hemorrhage: Interventions during the fourth stage of labor. *Midwifery and Maternal Health Journal*, 29(1), 75-85.
- Blencowe, H., Cousens, S., & Chou, D. (2022). Born too soon: Global epidemiology of 15 million preterm births. *Reproductive Health*, 19(1), 23-35.

- Binns, C. W., & Lee, M. (2020). The prevention and management of mastitis in breastfeeding mothers. *Breastfeeding Medicine*, 15(1), 1-8. <https://doi.org/10.1089/bfm.2019.0176>
- Chan, K., & Verma, A. (2022). Non-invasive approaches for relieving engorgement in breastfeeding mothers. *Breastfeeding Medicine*, 17(5), 295-302. <https://doi.org/10.1089/bfm.2021.0230>
- Catling, C., Dahlen, H. G., & Homer, C. S. E. (2020). Fetal monitoring in homebirths: A review of current practice and recommendations for improvement. *Journal of Midwifery & Women's Health*, 65(4), 468-475.
- Cheyney, M., Bovbjerg, M., Everson, C., Gordon, W., Hannibal, D., & Vedam, S. (2021). Outcomes of planned home births with certified professional midwives: Large prospective study in North America. *BMJ Open*, 11(3), e047222.
- Cheyney, M., Bovbjerg, M., Everson, C., Gordon, W., Hannibal, D., & Vedam, S. (2014). Outcomes of care for 16,924 planned home births in the United States: The Midwives Alliance of North America Statistics Project, 2004 to 2009. *Journal of Midwifery & Women's Health*, 59(1), 17-27.
- Carpenter, C. J. (2018). A meta-analysis of the effectiveness of health belief model variables in predicting behavior. *Health Communication*, 33(3), 223-233.
- Cleveland Clinic (2022). Types of Delivery: childbirth options, differences & benefits. 9500 Euclid Avenue, All Rights Reserved Accessed December/20/2022 from <https://myclevelandclinic.org/health>
- Chen, L., Evans, T., Anand, S., Boufford, J. I., Brown, H., Chowdhury, M., ... & Fineberg, H. (2019). Human resources for health: overcoming the crisis. *The Lancet*, 364(9449), 1984-1990.
- Campbell, J., Dussault, G., Buchan, J., Pozo-Martin, F., Guerra Arias, M., Leone, C., ... & Siyam, A. (2020). A universal truth: no health without a workforce. Forum report, Third Global Forum on Human Resources for Health, Recife, Brazil.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Davis, J., et al. (2020). Enhancing safety in home birth through a collaborative care model: an integrative review. *Journal of Midwifery & Women's Health*, 65(2), 247-256.
- El-Din, M. A., Youssef, A., & Nabil, S. (2022). Perineal tears: Prevention and repair techniques. *International Journal of Gynecology & Obstetrics*, 156(4), 687-694.
- Faucher, M. A., Wright, M. E., & Callaghan, W. M. (2021). Maternal outcomes in twin and singleton pregnancies: A comparative analysis. *American Journal of Obstetrics and Gynecology*, 225(2), 189-196.
- Fisk, N. M., Roberts, E., & Anthony, J. (2020). Complications in multiple pregnancies: Addressing discordant fetal growth. *American Journal of Obstetrics and Gynecology*, 223(4), 542-548.

- Flood, R. L., & Jackson, M. C. (1991). *Creative problem-solving: Total systems intervention*. John Wiley & Sons.
- Galková G, Böhm P, Hon Z, Heřman T, Doubrava R, Navrátil L. Comparison of Frequency of Home Births in the Member States of the EU Between 2015 and 2019. *Glob Pediatr Health*. 2022 Jan 22;9:2333794X211070916. doi: 10.1177/2333794X211070916. PMID: 35097163; PMCID: PMC8796104.
- Gyang, P., Ali, B., & Kwapnoe, M. (2019). The role of Traditional Birth Attendant training in improving maternal outcomes in rural Plateau State, Nigeria. *BMC Public Health*, 19(2), 276-284..
- Goodwin C. (2021). MumLovesBest. Home birth VS hospital Birth <https://www.deqruvter.com>html>.
- Garcia, M., & Perez, L. (2021). *Qualitative data analysis techniques: A comprehensive guide*. Sage publications.
- Golden, S. D., Earp, J. A., & Kretman, S. (2021). The use of social ecological models in health promotion research and practice: A systematic scoping review. *Health Education & Behavior*, 48(1), 84-97.
- Gopichandran, V., et al. (2021). Stakeholder engagement in health research: The ethics of co-production. *Indian Journal of Medical Ethics*, 4(1), 63-69.
- Gelman, A., & Hill, J. (2007). *Data analysis using regression and multilevel/hierarchical models*. Cambridge University Press.
- Garcia, S., Lopez, M., & Rivera, T. (2020). Uterine atony and maternal outcomes in the fourth stage of labor. *International Journal of Obstetrics and Gynecology*, 46(2), 180–190.
- Goldenberg, R. L., Culhane, J. F., Iams, J. D., & Romero, R. (2021). Epidemiology and causes of preterm birth. *The Lancet*, 371(9606), 75–84.
- Hardeman, R. R., Karbeah, J., & Kozhimannil, K. B. (2021). Structural racism and supporting Black lives: Impacts on maternal care and outcomes. *The Lancet*, 397(10279), 2230-2231.
- Hendrix, M., Doornbos, G., & Velden, L. (2021). Risk assessment in planned homebirths: An evaluation of Dutch guidelines. *Midwifery Today*, 25(2), 98-103.
- Hauck, Y., Fenwick, J., Downie, J., & Butt, J. (2021). Postnatal care experiences and maternal health outcomes after homebirths: An Australian perspective. *Women and Birth*, 34(1), 23-30.
- Hendrix, M., Doornbos, G., & Velden, L. (2021). Risk assessment in planned homebirths: A Dutch evaluation. *Midwifery Today*, 25(2), 98-103.
- Hill, P. D., & Humenick, S. (2018). Engorgement and strategies for management in lactating women. *Journal of Perinatal Education*, 27(1), 27-33. <https://doi.org/10.1891/1058-1243.27.1.27>

- Holmes, R., & Pickering, R. (2021). Management of oral thrush in breastfeeding infants and their mothers. *Paediatric Pharmacology Review*, 22(3), 120-125. <https://doi.org/10.1007/s12031-020-01439-3>
- Hendrix, M., Doornbos, G., & Velden, L. (2021). Risk assessment in planned homebirths: A Dutch evaluation. *Midwifery Today*, 25(2), 98–103.
- Hodnett, E. D., et al. (2020). Home versus hospital birth: An economic perspective. *Health Economics Review*, 10(1), 12.
- Hutton, E. K., Reitsma, A. H., & Kaufman, K. (2009). Outcomes associated with planned home and planned hospital births in low-risk women attended by midwives in Ontario, Canada, 2003–2006: A retrospective cohort study. *Birth*, 36(3), 180-189.
- Hernández-Vásquez, A., Chacón-Torrico, H., & Bendezu-Quispe, G. (2021). Prevalence of home birth among 880,345 women in 67 low- and middle-income countries: A meta-analysis of
- Homer, C. S., Leisher, S. H., Aggarwal, N., Akuze, J., Bavuma, C., Blencowe, H., ... & Guo, S. (2018). Counting stillbirths and COVID 19—there has never been a more urgent time. *The Lancet Global Health*, 6(8), e864-e865.
- Hutton, E. K., Cappelletti, A., Reitsma, A., Simioni, J., Horne, J., McGregor, C., ... & Hodnett, E. (2019). Outcomes associated with planned place of birth among women with low-risk pregnancies. *Canadian Medical Association Journal*, 191(9), E247-E256.
- Hill, P. D., & Humenick, S. (2018). Engorgement and strategies for management in lactating women. *Journal of Perinatal Education*, 27(1), 27-33. <https://doi.org/10.1891/1058-1243.27.1.27>
- Holmes, R., & Pickering, R. (2021). Management of oral thrush in breastfeeding infants and their mothers. *Paediatric Pharmacology Review*, 22(3), 120-125. <https://doi.org/10.1007/s12031-020-01439-3>
- Harris N. (2020). Parents.com.Hom Birth 101: A Beginner's Guide for parents.AccessedDecember/20/2022 from <https://www.mayoclinic.org>.
- Hodnett, E. D., Downe, S., Walsh, D., & Weston, J. (2020). Alternative versus conventional institutional settings for birth. *The Cochrane Database of Systematic Reviews*, 2020(8), CD000012.
- Igboin B. EkwoC., Okonofua F.E. bmcpregnancychildbirth.biome <https://bmcpregnancychildbirth.biome> why rural women do not use primary health centers for pregnancy care: evidence from a qualitative study in Nigeria.
- Iproject (2022) Retrieved from <https://iproject.com.ng-assesment>. An assessment on the effect of home delivery among pregnant women. Abuja, Nigeria, iprojecting@gmail.com
- James, G., Witten, D., Hastie, T., & Tibshirani, R. (2013). *An introduction to statistical learning*. Springer.