

PREDICTORS OF BIRTHPLACE PREFERENCE AMONG WOMEN OF CHILD BEARING AGE: A 10-YEAR SYSTEMATIC REVIEW FROM JANUARY 2013 TO DECEMBER 2022

¹Busayo Sarah IGE, ²Oluwaseyi Abiodun AKPOR, ³Risikat Idowu FADARE, ⁴Zainab Bimpe IJAIYA & ⁵Omotayo Deborah OGUNJE

^{1,2,3,4,5} Department of Nursing Sciences, Afe Babalola University, Ado Ekiti Ekiti State, Nigeria

Email: igebusayo@pg.abuad.edu.ng, akporoa@abuad.edu.ng, fadareri@abuad.edu.ng,

zainabijaiya@yahoo.co.uk omotayoogunje@gmail.com

Abstract

Childbirth, though a natural process, has largely become a medicalized event globally, impacting the well-being of women and their families both immediately and in the long term. This study aimed to systematically analyze the factors influencing where women choose to give birth. Conducted as a systematic review, it involved searching databases including Google Scholar, BMJ Clinical Evidence, PubMed, MEDLINE, and POPLINE for articles published from January 2013 to December 2022. Among 47,900 studies initially identified, 39 were reviewed, and 25 met inclusion criteria. The selected articles focused on factors affecting the utilization or non-utilization of healthcare facilities for delivery. Common predictors for birthplace choice included healthcare costs, lack of transportation, limited knowledge about birthing processes, fear of cesarean sections, insufficient hospital resources and staff, and healthcare workers' attitudes. Interventions highlighted the significance of access to health insurance covering obstetric care and supportive healthcare worker behavior in motivating women to opt for healthcare facilities for delivery. Such a shift is crucial for reducing maternal and child mortality rates in Nigeria. The findings underscore the importance of educating women about the benefits of facility-based delivery and fostering positive attitudes among healthcare workers during antenatal, delivery, and postnatal care. By addressing these factors, healthcare facility utilization can potentially increase, improving maternal and child health outcomes.

Keywords: Birthplace choice, facility delivery, healthcare workers, maternal health, predictors, utilization

Introduction

Childbirth, which also ushers in parenthood, profoundly alters a woman's life. The subjective psychological and physiological processes of birthing are influenced by social and environmental variables. Childbirth, which encompasses both the birth of a new life and the birthing process itself, is a significant life event. (Price et al., 2018; Hoffmann & Banse, 2020). Birth experiences

lead to sentiments of incompetence and future insecurity. Giving birth can be viewed by some women as life itself, the completion of God's purpose, and the law of procreation, a turning point between death and life for both the mother and her child (Namujju et al., 2018). Dealing with discomfort, losing control, and potential medical interventions (such as episiotomies, forceps or vacuum extraction, C-sections), among other physical and psychological issues, are all connected to labor and delivery. Hoffmann & Banse, 2020; Preis et al., 2018, and 2020. Recent data from the World Health Organization (WHO) indicate that more than 34% of all maternal fatalities worldwide occur in Nigeria. Compared to women in affluent countries, Nigerian women have a one in 22 lifetime risk of dying during pregnancy, childbirth, postpartum, or following an abortion. Sadly, there aren't many cottage hospitals or other healthcare institutions in the 36 states of the nation to address these issues. Where they do exist, there is a lack of staff and inadequate medical infrastructure. Without access to healthcare, women are more likely to have an unassisted delivery carried out in filthy settings by charlatan midwives, which can have harmful effects on both the mother and the fetus.(WHO, 2015). Nigeria has a 39% skilled birth attendance rate, with 13% of deliveries occurring in private facilities against 26% in public ones (National Population Commission [NPC], 2019). Given the benefits of skilled birth attendance and the accompanying potential complications that can arise during childbirth, it is alarming that more than 61% of Nigerian women still give birth at home. Undoubtedly, this contributes to the high prevalence of maternal death in the country (Okedo-Alex et al., 2021).

The manner women give birth can have an immediate and lasting impact on their own health and welfare as well as the wellness of their families. Given that the setting of childbirth affects the course of labor, women should have access to expert care during pregnancy and childbirth to ensure prevention, identification, and issue treatment. Assistance from properly qualified health workers working in supportive surroundings is necessary to eliminate unnecessary maternal and neonatal death. The place of delivery significantly affects the quality of life for mothers and their newborn children both during pregnancy and after delivery. It has been found that women who give birth in health facilities with access to skilled birth attendants had better outcomes and a reduced risk of maternal and infant morbidity and mortality than women who choose other delivery sites. According to Johnson et al. (2020), opting to give birth outside of a hospital is responsible for the majority of maternal and newborn mortality.

The National Institute for Health and Care Excellence (NICE) recommends that women be made aware that they can give birth anywhere and be given detailed information about their options, according to Hinton et al. (2018). In addition to local statistics on the likelihood of transfer, potential reasons for transfer, and potential length of time, this also includes data on intervention and serious adverse outcome rates. Local statistics also include access to a well-known midwife and one-on-one care, access to medical personnel, access to pain relief, and, for midwifery-led settings, the likelihood of transfer, potential causes of transfer, and potential length of time. Many of the women did not receive this information from their midwives, and some of the women were completely ignorant that statistics on intervention rates were available. 2018 Inton and associates

The low institutional delivery rate, which varies from as low as 3.7% in Amhara to as high as 79% in the capital city, Addis, demonstrating greater disparity within the country, may be the cause of Ethiopia's high maternal mortality rate when untrained birth attendants are employed (Bekuma et al., 2020). According to the study's findings, the mother's age, parity, education, marital status, household characteristics like family size and household wealth, community characteristics like socioeconomic status, community health infrastructure, residence, accessibility to health facilities, distance from those facilities, referral system quality, and accessibility of qualified nurses all affect the mother's place of birth.

In Nigeria, only about 36% of births take place in hospitals; 63% of women give birth at home. The majority of respondents (73.4%) who got prenatal care during their most recent pregnancy attended antenatal care (ANC) in institutional settings, according to a study on the variables influencing women's decision to give birth in rural areas in southwest Nigeria, which was done in Ile Ife, Osun State. Although there was a high incidence of ANC attendance, only 38.2% of births were place in hospitals, with 61.8% taking place outside of them. 2020 Ayamolowo and associates

Gombe state in northeastern Nigeria has poor maternal health indicators compared to the southern part of the country, where 71.4 percent of deliveries take place at home and only 27.6 percent in a health facility (Yahya et al., 2019).

According to a study conducted in Ibadan, Nigeria, on the factors that affect women's decisions about where to give birth and the accessibility of skilled birth attendants, 101 respondents (25.8%) gave birth their last time at home or in an alternative birthing facility (such as a TBA's

home or a faith-based maternity home), compared to 293 respondents (74.2%) who gave birth their last time in a private or public hospital. It demonstrates that pregnant women in Nigerian cities are now more aware of the benefits of giving birth at a hospital and may indicate an increase in maternal health services awareness. (Margaret and Prisca (2015); Rahman et al. 2021)list geographic accessibility, financial standing, religious affiliation, and educational attainment as relevant factors.

In addition to learning about ideas for improving mother health and child concerns to encourage facility delivery, the purpose of this systematic review is to discover recent research on factors that influence birthplace preferences among women of childbearing age.

Aim/Objectives

1. The systematic review aimed to identify predictors of birthplace preference among women of child bearing age
2. To identify and appraise existing outcome measures on predictors of birthplace preference
3. To determine the interventions needed to improve facility delivery in order to reduce maternal and fetal mortality

Methods

The systematic review follows the Preferred Reporting Items for Systematic Review and Meta-analysis (PRISMA) and were used as a foundation for the conduct and reporting of the systematic review. Findings that meet up with the inclusion criteria were included in the discussion.

Table 1: The stages of the systematic review

The review was conducted in six stages:

Stage 1	Development of search strategy
Stage 2	Searching for relevant studies
Stage 3	Screening of the article by determining the inclusion and exclusion criteria
Stage 4	Critical appraisal of studies meeting the review criteria
Stage 5	Data extraction, analysis and results
Stage 6	Description of the studies

1. Development of search strategy

In order to find research describing treatments aimed at women of reproductive age and children at international, national, state, and community level, publications published from January 2013 to December 2022 were searched for in Google Scholar, BMJ Clinical Evidence, PubMed, MEDLINE, and POPLINE databases. The MeSH (Medical Subject Headings) terms that were included in the search query were as follows: Birthplace preference (Choice of birthplace) (woman OR mother OR maternal), (child OR newborn OR infant), (Facilities OR Intervention OR Programme), (Facilities OR Delivery Centre), Non Facilities (Home Birth OR Traditional Home Birth OR Mission Home Birth) In order to determine whether further appropriate research could be found and added, a further phase entailed supplementary searches of the reference lists of the included papers.

Table 2: Search expression terms

Keywords	MeSH (Medical Subject Headings) term
Women	Mother, maternal
Child	Newborn, infant
Birthplace preference	Choice of birthplace
Strategies	Intervention, programme
Facility delivery	Delivery centre, hospitals, Health centre
Non-facility centre	Home birth, traditional home Birth, mission home birth

2. Searching for relevant studies

The systematic review was initiated by conducting literature search for relevant papers that related to or focuses on choice of birthplace and the influential factors among women of child bearing age from year 2013 till December 2022. The search strategy and selection criteria were based on the use of key words such as facility deliveries and its outcomes, non-facility deliveries and its outcomes, Choice of birthplace by women of child bearing age, and factors influencing the birthplace choice. The Google scholar search engine yielded about 47,900 reports while other database yielded about 3,972, 39 assessed for Eligibility from which about 25 studies finally extracted.

3. Screening of the article by determining the inclusion and exclusion criteria

Inclusion Criteria

The predefined selection criteria used for this study

- a) Study carried out using English language or translated to English language
- b) Studies that combined qualitative and quantitative methods, such as cross-sectional descriptive studies and quasi-experimental designs, were taken into consideration. Studies that emphasize qualitative data were taken into account in the review's qualitative section. Original works as well as reviews, including narrative and systematic reviews, were taken into consideration.
- c) Study by which women within child bearing age (15-49) or women who gave birth within the Five years preceding the study were used as target population
- d) Published articles in peer reviewed journals that reports on choice of Birthplace and its outcome
- e) Report that deal with intervention programme on the attitude of health care workers in improving facility deliveries
- f) Lastly retrospective studies on delivery outcome on both facility and non-facility deliveries were also considered

Exclusion Criteria

- a) The criteria for exclusion of studies were articles not publish in English, editorial comment, News paper review
- b) study that were not targeting women of child bearing age or under-five children were not included.
- c) study published before 2013

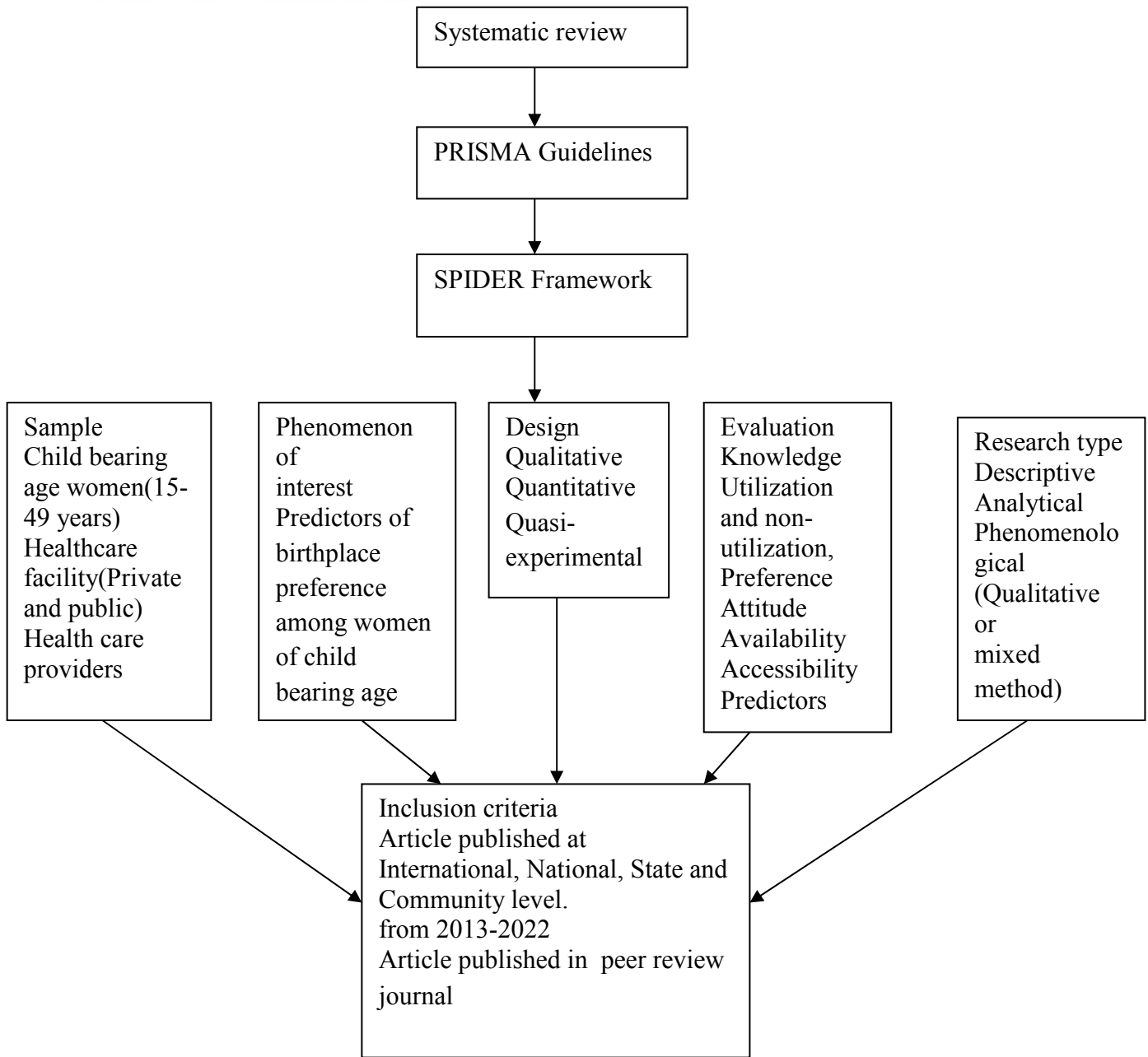


Figure 1: Systematic review framework

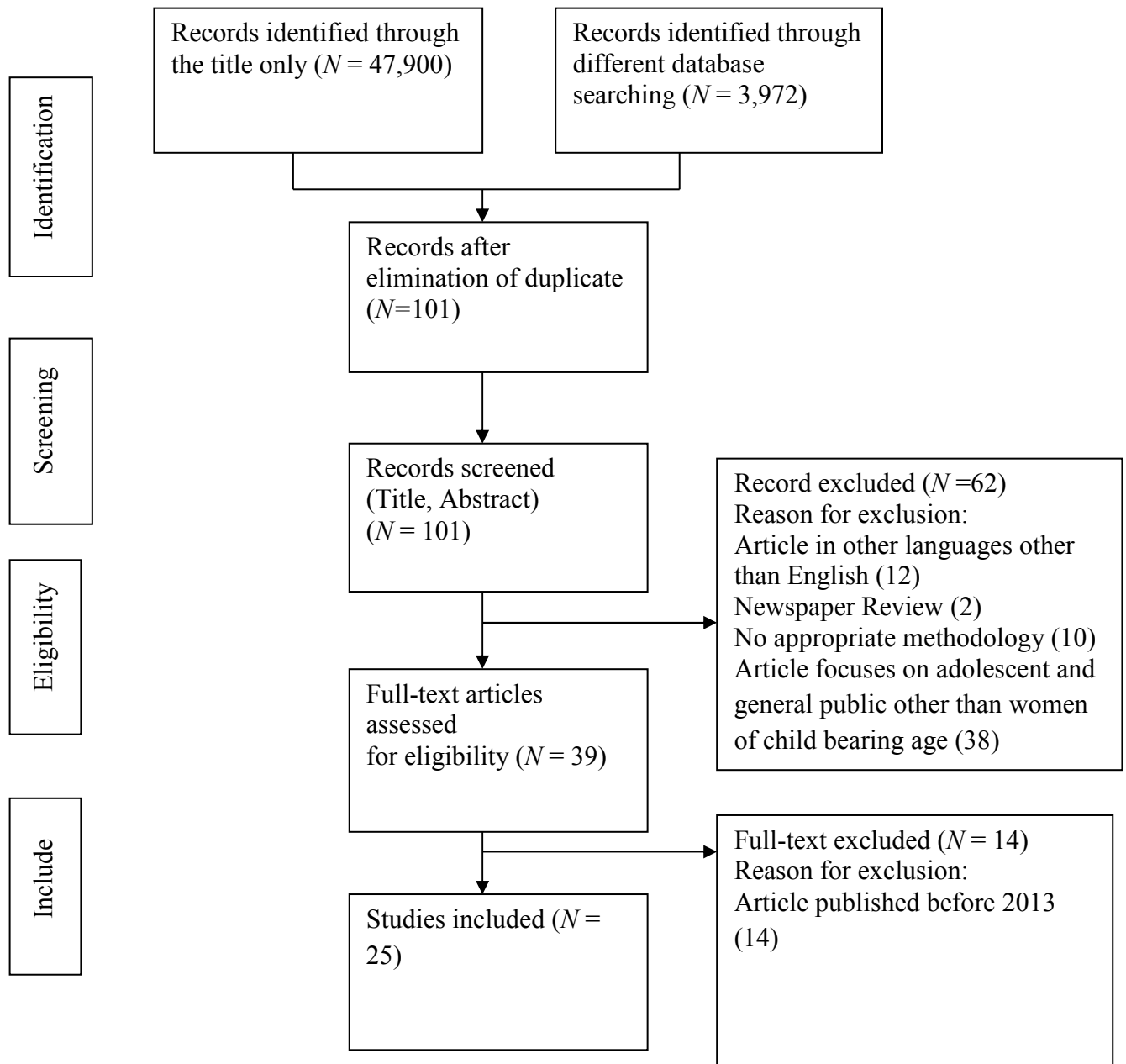


Figure 2: PRISMA flow diagram showing study selection process

4) Critical appraisal of studies meeting the review criteria

Critical appraisal is essential to ensure that the findings of the paper are correct and accurate. The selected articles that meet the inclusion criteria were assessed for quality. The included studies were critically appraised systematically for methodological quality with focus on the aim, Target

Population, methodology, participant recruitment strategies, instrumentation, findings and recommendations.

Quality appraisal indicator

1. Is there a clear statement of the aims and a research question?
2. Are the methods of data collection appropriate and clearly explained?
3. What are the recruitment strategies employed?
4. Is there a clear description of the findings and results?
5. Are the findings of the study generalizable or transferable to a wider population?
6. What are the recommendations and how important are the findings to policy and practice?

5) Data extraction, analysis and results

After critical review, unrelated articles were eliminated, selected abstract were downloaded and screened for inclusion or exclusion criteria, based on abstract, the preliminary screening yielded about 39 articles, another round of review was done, 25 articles that met the inclusion criteria were selected and analysed. The studies were summarized to reveal the authors, Titles aim/objectives, methodology, population, instrumentation, outcome and recommendations

6) Description of the studies

293 respondents (74.2%) had their most recent pregnancies in either private or public hospitals, while 101 respondents (25.8%) gave birth at home or in alternative birthing facilities (such as a TBA's home or faith-based maternity homes). This information comes from Margaret and Pisca's (2015) study on the factors influencing birthplace preferences. The main factors influencing birthplace choice are religion, economic position, educational attainment, geographic accessibility, and parity. Health practitioners who are concerned with maternal and child health should keep spreading the word about the advantages of hospital delivery in underdeveloped countries.

In their study on the impact of preferred place of birth, van Haaren-ten Haken et al. (2015) sought to ascertain whether variations in the course of pregnancy, intrapartum interventions, and birth outcomes in low-risk nulliparous women in the Netherlands were correlated with the initial

choice of birth location and model of care at the beginning of pregnancy. They discovered that the majority of women who wanted obstetric-led intervention had medical conditions like hypertension.

The environment in where it occurs as well as the notions of safety, choice, and risk have a substantial impact on where babies are delivered, according to Grigg et al.'s (2015) Evaluating Maternity Units study on women's birthplace decision-making in New Zealand. Five of the 37 focus group participants had already given birth to their first child in a TMH (Tertiary Maternity Unit), and six of the participants were first-time mothers. 24 of the 24 women who anticipated giving birth in the PMU (Primary Maternity Unit) participated in the PMU. 13 women in the TMH group, 5 of whom were new mothers. Two women in the PMU group unexpectedly gave birth at home, while five women in the PMU group gave birth at the tertiary hospital after an antenatal or (pre-admission) labor change of plan. According to a study by Sialubanje et al. (2015), societal and cultural norms encourage women to depend on their husbands, parents, and other close family members to make the final decision about where to give birth, which leads to home deliveries. The study also showed that individuals held many favorable ideas about TBAs and the advantages of employing their services, as well as a high level of faith and trust in them. They lauded the TBAs for being accessible, trustworthy, accustomed, knowledgeable, polite, patient, respectful, and caring. These characteristics all supported home delivery using TBAs.

Many women give birth in hospitals after being recommended by TBAs or other medical professionals as a result of difficulties during pregnancy or labor, according to Egharevba et al.'s 2017 study in Abakaliki. The community should encourage expectant mothers to begin ANC as soon as possible. During ANC, pregnant women should get guidance on identifying early labor and obtaining assistance. Women who have had multiple children or who have a history of home deliveries should get focused counseling that highlights the benefits of delivery in a facility. ANC may be useful in dispelling cultural stereotypes that prevent certain women from giving delivery in hospitals.

According to Coxon et al.'s 2017 analysis of 24 Papers, what variables influence birth place preferences, choices, and decision-making among healthy women in the UK who are carrying uncomplicated pregnancies? According to a qualitative evidence synthesis that used a "best fit"

framework approach, HCPs should work in an environment that supports their offering of a choice of place of birth and gives them enough time to hear the opinions and viewpoints of women, regularly share information about the various options available, and respond to women's inquiries.

Midwives may need to be more aware of the available online resources that women may access, such as, as Hinton proposed in 2018 to give evidence on UK women's experiences of choice and decision-making in the period. Maternity care providers must therefore ensure that midwives are suitably trained. Which? Birth Choice. Women make decisions in a continuous manner rather than coming to a single, firm decision.

Six predisposing characteristics, including lack of education for both parents, low wealth index, birth order of 2-3, Islam, and infrequent radio listening, significantly enhanced the likelihood of home delivery among young mothers in Nigeria. Young mothers, defined as those between the ages of 15 and 24, were also considerably underrepresented in the use of focused ANC.

An analysis of Boah et al.'s 2018 study on women in rural Ghana who receive antenatal care in health facilities but do not give birth there shows that there is a low rate of hospital deliveries at health facilities, despite frequent visits to antenatal care sessions. This shows that health education on the advantages of giving birth in a medical setting, the value of early ANC, and the symptoms of labor and delivery has to be increased.

Research study conducted by Pumpaibool and Yahya (2019) in Gombe state on the variables influencing pregnant women's decisions to choose a delivery facility. It showed that religion has a big impact on where babies are delivered, with Christian pregnant women having a higher chance of doing so than their Muslim counterparts. As a mother's understanding of safe delivery declines, her chances of having a safe delivery attended by untrained individuals outside of a medical facility rise.

Ajah et al.'s 2019 study, which included antenatal clinic visitors who had given birth before the index pregnancy and were recruited at Mater Misericordiae, sought to pinpoint the factors that influenced the location of the delivery. at their previous pregnancies, the majority of the respondents had given birth at a location that was far from medical services. Despite attending a

prenatal care clinic 60.2% of the time, and despite the fact that the majority of these facilities were privately owned, only 43.8% of the respondents who had previously given birth had hired skilled birth attendants.

In a survey on the best location for childbirth conducted in Akordet town, Eritrea, by Gebregziabher (2019), 6% of participants named home delivery by TBAs as their first option. 282 mothers who had given birth during the previous two years were included in the study. Given the context of the study and the high ANC coverage, the choice may have been made for reasons connected to the general trust in TBAs' skills and expertise, their availability when needed, and traditional and religious views on childbirth, as in many other situations. It's important to emphasize the value of early ANC adoption and regular attendance. Through health education, expectant mothers should be persuaded that each pregnancy and subsequent birth are unique.

In their 2019 study, Adedokun and Uthman sought to identify the Nigerian women who had not used medical services for childbirth. Where do they live and who are they? The region with the highest incidence is made up of northern states. Some of these states are Sokoto, Zamfara, Katsina, Kano, Jigawa, Bauchi, Yobe, and Borno. Mothers also have significant levels of illiteracy in the states where non-use of medical services during delivery is generally widespread. The importance of knowledge for utilizing maternal health services was also highlighted by the study. With her level of education, a woman is more likely to give birth outside of a hospital. Most of the time, educated women are given important information about using healthcare, including facility delivery. Some cultural assumptions that discourage people from utilizing maternal health services are probably not shared by these women.

Ayamolowo et al. (2020) identified distance, provider methods, inadequate healthcare facilities, and staff as drivers of choice for birthplace. Only 38% of respondents had institutional deliveries, and most women preferred non-institutional deliveries. Although more women receive ANC in hospitals, only few of the responders gave delivery there. Advocacy visits to village leaders and community stakeholders are encouraged because the findings will give local policy makers and facility stakeholders the required knowledge to guide policy on high-quality maternal health services in remote communities.

It was also found that mothers who had 2-3 ANC visits during the most recent pregnancy were four times more likely to choose a health institution than women who had only one ANC visit, according to Tariku et al., 2020 on Factors Affecting Choice of Childbirth Place among Childbearing Age Women in Western Ethiopia. In order to increase a girl's education beyond the primary school level, efforts should be undertaken, since this will eventually have a positive effect on the choice for institutional delivery. Those who are educated are more likely to favor institutional delivery than those who are not.

From August 12 to August 23, 2019, Johnson et al., 2020 did a cross-sectional study in West Itam, Itu, Nigeria to determine the causes of the poor use of the health facility for delivery despite documented clinic attendance. They revealed that 35.1% of the women delivered their previous child outside of a medical facility. The majority of deliveries outside of the hospital went at the TBAs' residences. The husband's income, career situation, and level of education were all strongly connected with the respondent's delivery in a medical institution. Location, travel time to the healthcare facility, the frequency of ANC visits, knowledge of maternal health services, and the number of doses of the TT vaccine were all significantly correlated with the usage of the healthcare facility delivery service.

According to Demisu et al., 82.7% of the facility-based delivery services in the research area were used in 2021. However, 17.3% of mothers delivered their children at home. Location, travel distance to the health center, the frequency of ANC visits, knowledge of maternal health services, and the number of doses of the TT vaccine were all significantly correlated with the utilization of the health center delivery service. Compared to moms who had fewer than 4 ANC visits, those who had 4 or more ANC visits were 4.02 times more likely to give birth in a hospital.

In both public and private health facilities in Ebonyi, Nigeria, Ijeoma et al. (2021) discovered characteristics that affect mothers' choices of birthing facilities and willingness to recommend them. Because of poverty, low educational attainment, and rural living, women were less likely to give birth in a public hospital. In order to raise awareness of the value of giving birth in healthcare facilities and reduce the risks of maternal problems associated with home deliveries, health education initiatives must be implemented among Nigerian women of reproductive age.

The facility was highly recommended or reused by patients who received additional obstetric care there. These health education programs should focus on women under 20 who are of childbearing age, uneducated individuals who are not currently employed, individuals who are in poverty, individuals who reside in the nation's north, individuals who follow Islam, and individuals who are not exposed to the media. 2021 (Bolarinwa and others)

The availability of midwives significantly increased the proportion of women giving birth in a health facility, which increased ID rates by 7.2 percentage points, according to Karen et al.'s 2022 analysis of the National Demographic Health Survey (NDHS) on the impact of the Subsidy Reinvestment and Empowerment Programme Maternal and Child Health Project (SURE-P MCH) on rates of institutional delivery and antenatal care. Accordingly, there should be a 10% proportional rise in the number of women who have access to healthcare, which represents a considerable improvement that was made nine months after the policy was introduced.

Zhang et al. (2022) noted that maternal education has a significant positive impact on institutional delivery for both enrolled women and non-enrolled women because maternal education, employment status, marriage type, autonomy on healthcare, number of ANC contacts, household wealth quintiles, residential status, geopolitical zones, community-level poverty, and community-level media use were significant predictors of health facility delivery. Higher educated mothers were far more likely to give birth in a hospital than mothers with less education.

The low percentage of women who give birth in medical facilities in Nigeria increases the risk of maternal and newborn mortality. The findings show that in order to improve facility delivery in Nigeria, advocacy and instructional tactics like peer teachings, focused group discussions, and mentor-mentee programs need to be strengthened at the national and local levels. According to the findings, non-institutional delivery is more likely to occur in areas with low socioeconomic status, low levels of education, and rural dwellings (Xu et al., 2022). Rules governing the use of maternal care must also be changed. These include lowering the cost of giving birth in a hospital and constructing additional medical facilities in communities. To reduce maternal mortality to 70 per 100,000 live births, it is proposed that an intervention program be started in Nigeria to expand the coverage of health facility delivery.

In Guinea-Bissau, more women give birth at home than in hospitals, according to a research by Sanni et al. (2022) on socioeconomic factors that affect mothers' decisions about where to give birth. Overall, 39.8% of deliveries took place in a hospital, with the percentage being much higher in urban than in rural areas (67.8% vs. 30.2%). This suggests that the low proportion of births in hospitals in Guinea-Bissau can be raised by improving the socioeconomic status of women. The findings may aid in addressing the problem of untrained delivery services and promoting the use of birthing facilities by more women, particularly those from disadvantaged backgrounds.

Thapa, Upreti, and colleagues completed the paper Factors related with health facility delivery among reproductive age women in Nepal: an analysis of Nepal multiple indicator cluster survey 2019 in 2022. According to the statistics, 75% of women gave birth in a medical facility, which may be credited to the government of Nepal's extensive efforts and initiatives to improve delivery in a medical facility. These programs include the construction of the birthing center, monetary benefits, cost-free delivery services, and incentives for four ANC visits. This study found that factors such as place of residence, province, parity, caste or ethnicity, household wealth status, and ANC visits had a significant impact on how well a patient was delivered in a medical facility with experienced doctors.

Table 3: Predictors of choice of birthplace among women of child bearing age

S/N	Author & Year of Publication	Title of the article	Goal& Objectives	Methodology	Key Findings	Recommendations
1	Margaret & Pisca (2015)	Determinants of choice of place of birth and skilled birth attendants among women in Ibadan, Nigeria	to identify the determinants of choice of place of birth and, therefore, the use of skilled birth attendants at childbirth among the women	Descriptive cross-sectional study using a self-reported structured questionnaire Participants Child bearing women attending infant welfare clinics	<ul style="list-style-type: none"> According to this poll, 1,293 respondents (74.2%) gave birth to their most recent child in either private or public hospitals. 101 respondents (25.8%) stated that they last gave birth at home or in a different type of birthing facility, such as a TBA's home or a maternity center run by a religious organization. The factors that are most important to consider are parity, geography, economic standing, and educational attainment 	1. Maternal health specialists who work in child health clinic should create awareness of the value of hospital births in underdeveloped nations.
S/N	Author & Year of Publication	Title of the article	Goal& Objectives	Methodology	Key Findings	Recommendations

2	van Haarenten Haken et al. (2015) Netherlands.	The influence of preferred place of birth on the course of pregnancy and labor among healthy nulliparous women	The aim of the study is to explore whether the initial preferred place of birth at the onset of pregnancy and model of care are associated with differences in the course of pregnancy and intrapartum interventions and birth outcomes	Multicenter prospective cohort study(2007-2011) using self structured questionnaire -Participant low-risk nulliparous women with at least 20 weeks gestation	<ul style="list-style-type: none"> • 226 women preferred midwife-led home births with 23.9 medical indications, out of the 576 women assessed for the study. 168 women preferred midwifeled hospital births with 32.1 medical indications. • 182 preferred to give birth in a hospital under the direction of an obstetrician, with a rate of medical necessity of 43.1%. • Attitudes and characteristics of the women toward medical technology were the reason for a hospital birth and that they would experience an obstetrical intervention 	<ol style="list-style-type: none"> 1. Maternity care professionals need to have a better grasp of where a person chooses to give birth and how that affects pregnancy and labor. 2. More attention should be paid to these traits and Perspectives of women in future study 3. Both from the standpoint of the women receiving Care and the decision-makers, the process of deciding whether to use expert care or interventions should be investigated.
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S/ N	Author & Year of Publi cation	Title of th e article	Goal& Object ives	Methodology	Key Findings	Recommendations

3.	Celia et al. (2015) New Zealand.	Women's birthplace decision making, the role of confidence: Part of the Evaluating Maternity Units study	to explore women's birthplace decision-making and identify the factors which enable women to plan to give birth in a freestanding midwifery-led primary level maternity unit rather than in an obstetric-led tertiary level maternity hospital	a mixed methods prospective cohort design.; The qualitative data and quantitative data using three types of data 1.the core clinical outcome and transfer data(quantitative and qualitative) 2.survey data (quantitative and qualitative) 3.focus group data(qualitative) Participants: pregnant women	<ul style="list-style-type: none"> • Confidence in five variables among women who choose to give birth in a primary unit; Process (the birthing process) • Self (the capacity to conceive) Nurse (Their Nurse) System (The health system, for access to and transfer to specialized professionals and facilities. Place (The actual destination itself. • Contextual factors, such as safety, choice, and risk conceptions, have a significant impact on birthplace decision-making. 	1.Addressing the Fundamental assumptions that underline these confidences in women may make it easier for healthy women in western countries with abundant resources to prepare to give birth outside of modern hospitals.
S/	Author	Title of th	Goal& Object	Methodology	Key Findings	Recommendations

N	& Year of Publication	e article	ives			
4	Sialubanje et al., 2015. Rural Zambia	Reasons for Home delivery and use of traditional birth attendants in rural Zambia: a qualitative study	To identify reasons motivating women to giving birth at home and seek the help of Traditional Birth Attendants(TBAs)	Qualitative study with the use of Ten focus group discussions in five health centre;two in each health catchment areas with the lowest institutional delivery rates in the district 30 indepth interview using semi structure interview guide -Participant (15-49) years	<ul style="list-style-type: none"> Lack of funds for transportation, sociocultural norms surrounding childbirth, and a negative attitude toward the quality of care provided at the clinic due to the shortage of nurses are the main obstacles to facility deliveries. However, most women had a positive opinion of TBAs and thought that they were respectful, knowledgeable, affable, trustworthy, and available when needed. Wife makes the final choice. 	<ol style="list-style-type: none"> Interventions to Reduce the physical and financial barriers, such as building new mothers' shelters, renovating existing ones, and giving women the necessary supplies, such as mother-baby packs, may encourage more women to give birth at a hospital. By ensuring that Nurses and midwives are Serving in their local Communities by offering them financial, housing, and training incentives, intervention and policy should be focused on boosting the staff level in clinics.
S/N	Author & Year of Publication	Title of the article	Goal& Objectives	Methodology	Key Findings	Recommendations
5	Egharev	Factors Inf	To determine t	Cross-	• 75% (164) of the respondents	1. Following pregnancy or

	ba et al., (2017) Abakali ki Nigeria	luencing t he Choice of Child Delivery Location among Women Attending Antenatal Care Services and Immunization Clinic in South eastern	he factors that influence the choice of birth place among antenatal clinic attendees	sectional survey with 220 women using structured questionnaire -Participant women who (1) attended ANC at St Patrick's Hospital, (2) delivered in the 18 months prior to December 31, 2012.	gave birth at a hospital, whereas 25% (56) did so in TBA's office or at home. Of those who gave birth at a hospital, 146 (89%) did so at St. Patrick's Hospital, while 18 (11%) did so at another hospital. among those who gave birth outside of a hospital, 27 did so at a TBA's location and 29, at home. The number of ANC visits, the mother's and husband's education levels, the number of children, the journey time to the hospital, and transportation are all factors that affect healthcare facility delivery.	labor-related problems, many women give birth in a hospital institution after being referred by TBAs or other medical experts 2. If pregnant women are encouraged to make early reservations for ANC and are given advice on how to recognize labor symptoms during ANC, the use of the health facilities for birthing may increase. 3. Women with more Children should receive support that includes financial assistance for transportation to the healthcare institution in addition to targeted and intensive counseling.
S/N	Author & Year of Publication	Title of the article	Goal& Objectives	Methodology	Key Findings	Recommendations
6.	Coxon et al., 2017	What influences birth place pr	This paper presents a synthesis of qualitative	Peer review report Qualitative and quantitative study. Thematic fra	<ul style="list-style-type: none"> In the UK, lowrisk women choose hospital delivery. Women's preexisting attitudes, beliefs, and experiences influence ho 	There is a need to work in an environment that supports giving women a choice in where they give

	UK	ferences, choices and decision - making amongst healthy women with straightforward pregnancies in the UK?	evidence which explores influences on women's experiences of birth place choice, preference and decision-making from the perspectives of women using maternity services.	network analysis was used to synthesise extracted data from included studies.Using best fit' framework approach Qualitative evidence synthesis of UK research published (Jan1992-March 2015)Systematic	<p>w they feel about various delivery options, especially hospital versus non-hospital settings.</p> <ul style="list-style-type: none"> Obtaining a home birth was more difficult and contentious. 	birth and allows for enough time to engage with their opinions and perspectives, regularly disseminate information about the various alternatives available, and react to concerns from women.
S/N	Author & Year of Publication	Title of the article	Goal& Objectives	Methodology	Key Findings	Recommendations
7.	Hinton et al., 2018 England	Birthplace choices: what are the information needs of women when choosing where to give	to inform policy on 'choice' in relation to childbirth, aimed to provide evidence on UK women's experiences of choice and decision-	A qualitative study seven focus group online and one face to face using Questionnaire and interview -Participants Women in the last trimester of pregnancy	<ul style="list-style-type: none"> Women used a variety of resources, including the internet, recommendations from friends, antenatal classes, and their own life experiences. The midwife was not the primary source of knowledge Women do not always get information from their midwife about birthplace options at a time and in a way that they 	1. To ensure that all women are aware of their options and can make educated decisions, maternity care providers must guarantee that midwives are sufficiently trained, have

		birth	making in the period		will find useful.	access to user-friendly support materials, and have enough time. 2.How to best provide women with accurate, locally relevant information that covers possibilities outside the woman's local NHS trust should be taken into consideration. This knowledge may be available online or in a form that midwives can utilize with women directly.
S/N	Author & Year of Publication	Title of the article	Goal& Objectives	Methodology	Key Findings	Recommendations
8.	Adewuyi et al. (2018)	Prevalence and factors associated	study aims to assess the rural-urban differences	A comparative study of rural and urban residences based on second	<ul style="list-style-type: none"> The Research showed that in Nigeria, more than two-thirds (or around 70%) of young moms and teenagers gave birth at 	1Facilities for healthcare and ANC would need to be located in acceptable

ated with underutilization of antenatal care services in Nigeria

es in the prevalence and factors associated with ANC underuse in the country using the most recent NDHS, 2013.

dary analysis of the 2013 Nigeria demographic and health survey -Participant Young Mothers aged 15–24 years

home. This is because young mothers and teenagers may experience socioeconomic adversity, which is frequently brought on by poor levels of education and unemployment or underemployment.

- In this survey, over 53% of young mothers came from low-income homes and had no education at all. Roughly 45% of them were also unemployed. Given that in Nigeria, 'out-of-pocket' payments are the norm for healthcare services, this group of women may find it difficult to pay for healthcare facility delivery.

distances for accessibility.

2. Additionally, the Availability of universal Health insurance coverage (particularly in urban areas) and the provision of free ANC services (particularly in rural areas) may help alleviate the cost barriers to ANC attendance in Nigeria. Intervention programs aimed at enhancing rural residents' access to and knowledge of family planning services may be helpful in resolving the issue of frequent births and, as a result, underuse of ANC.

S/N	Author & Year of Publication	Title of the article	Goal& Objectives	Methodology	Key Findings	Recommendations
9.	Boah et al., 2018 Rural Ghana (Builsa South District)	They receive antenatal care in health facilities, yet do not deliver there: predictors of health facility delivery by women in rural Ghana	This study sought to identify the predictors of health facility delivery by women in a rural district in Ghana.	a cross-sectional study using Interview method with the use of Self developed questionnaire -Participant Women aged 15-49 years who delivered in the past 6months preceding the survey	<ul style="list-style-type: none"> About 68.0% visited the AN four times or more before giving birth. However, 61.9% of pregnant women chose to give birth in a medical facility. Age, occupation, maternal education, religion, parity, having health insurance while pregnant, being exposed to information about delivery care during the most recent pregnancy, gestational age of pregnancy at the start of ANC attendance, and the number of ANC visits made before delivery were all significantly related to where a baby was born. 	<p>1.The study found that During their most recent pregnancy, 98.8% of women obtained prenatal care services, and 67.9% went to antenatal care at least four times before giving birth. However, 61.9% of the women gave birth in a medical setting with a trained caregiver. "Unaware of onset of labour and delivery" was the most commonly cited justification for home delivery.</p> <p>2.To improve women's ability to recognize early indications of labor and notify the nearest health facility to deliver with SBAs, health education must be intensified, especially during targeted ANC sessions on signs of labor and delivery and birth</p>

S/ N	Author & Year of Publi cation	Title of th e article	Goal& Object ives	Methodology	Key Findings	Recommendations
10	Okonofu a et al., (2018) Esan So uth East and Etsa ko East LGAs of Edo Sta te	Predictors of women 's utilizati on of prim ary health care for sk illed pregn ancy care in rural Ni geria	To identify the factors that lea d pregnant wo men to use or not use existin g primary healt h care facilities for antenatal a nd delivery car e in two LGAs of Edo State.	a cross- sectional community- based study pre- tested structured quest ionnaire to interview women using -Participant women of reproductiv e age in their househol ds	<ul style="list-style-type: none"> • According to the findings, 62.1% of women who are currently pregnant get antenatal care, and 46.6% of women who have recently given birth at PHCs had skillful deliveries, compared to 25% of women who gave birth at home or with traditional birth attendants. • Long travel times to PHCs, high service charges, and inadequate PHC service delivery were the causes. 	<p>eadiness'.</p> <ol style="list-style-type: none"> 1. Quality service delivery that is improved to expand access for rural women to Prenatal and postpartum care in PHCs. 2. Policymakers and Healthcare professionals Should focus on reducing The physical distance between PHCs, enhancing PHC infrastructure, Accessibility of healthcare workers, dependability of drug and equipment supply, consistency of opening hours, and decrease in service costs.

S/ N	Author & Year of Publi cation	Title of th e article	Goal& Object ives	Methodology	Key Findings	Recommendations
11	Yahya & Pump aibool (2019)	Factors inf luencing t he decisio n to choos e a birth c enter by p regnant w omen in G	assessed the fa ctors associate d with the deci sion by pregna nt women to ut ilize facility de livery	Quantitative Cross sec tional study with focus on antenatal care(AN C), delivery and post c are using structured qu estionnaire - ParticipantWomen of child bearing age(15-	<ul style="list-style-type: none"> • Despite the efforts of the governm ent and foreign non- governmental organizations promo ting maternal health services, hom e deliveries are more common tha n facility deliveries in Gombe stat e, which has a very low rate of fac ility deliveries. • Only 27.6% of deliveries take plac e in hospitals,with 71.4% occurrin 	<p>3. Ingenuity and Inventiveness in the areas of getting pregnant women to PHCs, community assistance for lowering expenses (such as health insurance), community health education, and connections to higher level care for women.</p> <p>Sermons from religious leaders can improve facility delivery in a meaningful and active way. In two specifically chosen local government regions of the state, increasing 1.750 women between the ages of 15 and 49 who were members of a savings</p>

		ombe state		49 years) that are pregnant	<p>g at home.</p> <ul style="list-style-type: none"> Costs of services, transportation to the facility, decision-making capacity, women's educational level, and religious/cultural customs were some of the obstacles found. 	<p>organization for women were registered for an empowerment program.</p> <p>2. Social mobilization messaging on the risks of pregnancy problems, particularly those linked to home deliveries, may lead to an increase in facility-based delivery.</p>
S/N	Author & Year of Publication	Title of the article	Goal& Objectives	Methodology	Key Findings	Recommendations
12	Ajah et al., 2019	Choice of birth place among antenatal clinic attendees in rural	To determine the factors that influence the choice of birth place among antenatal clinic attendees	Quantitative study cross-sectional study interviewer-administered semi-structured questionnaires were used	<ul style="list-style-type: none"> 80.9% of respondents reported that it took them at least an hour to reach maternity facilities. The proximity to medical facilities, the familiarity of the medical staff, the better services, and unexpected labor were the frequent factors 	<p>Health policy officials should create initiatives to guarantee free prenatal care. In order to make sure that health facilities in Nigeria maintain at least a minimal standard before they are</p>

		mission hospitals in Ebonyi State, South-East Nigeria	endees.	-Participant antenatal clinic attendees who had delivery prior the index pregnancy	determining birthplace.	permitted to operate, the Federal and State Ministries of Health should carry out effective monitoring of such institutions. 2. Health professionals need to be retrained in respectful maternity care, which will lessen their use of rudeness and other harmful tactics toward patients. To encourage effective use Of the healthy facilities by These women and guarantee safe delivery, the government and other stakeholders may offer incentives.
S/N	Author & Year of Publication	Title of the article	Goal& Objectives	Methodology	Key Findings	Recommendations
13	Gebregziabher (2019)	Factors determining choice of place of delivery	aiming at assessing the socio-demographic factors of women	A community based analytical cross-sectional study Interview method with	<ul style="list-style-type: none"> According to the study, 82.3% of moms in this urban setting gave delivery at a medical facility. The mothers who gave birth at home most frequently cited the issue of 	1. Early ANC implementation and consistent attendance has to be stressed. Pregnant women should be

		elivery: an alytical cr oss-sectional s tudy of m others in Akordet to wn, Eritre a	n which influe nce facility del ivery	the use of structured c losed ended questionn aire -Participants Women who have had at least one delivery. Women who gave birth within 2 years preceding the survey	ransportation. Given that 91.5% of the women in this survey reported having no personal transportation, this looks like a real issue. • 6% of the participants in this stud y cited home delivery by TBAs as the optimum setting for childbirth	convinced that each pregnancy and subsequent birth are unique through health education. 2. Increasing the amount of education engagement could result in high-quality service delivery by empowering the community in general and women in particular.
S/ N	Author & Year of Publication	Title of the article	Goal& Objectives	Methodology	Key Findings	Recommendations
14	Adedokun & Utman 20	Women who have not utilized	This study aims at filling these gaps by deve	The survey is cross-sectional, population-based study	• Nine states have a low prevalence of non-use of health services for delivery (3-	1. Regular health education workshops emphasizing the significance of using health services during pregnancy

	19	health Service for Delivery in Nigeria: who are they and where do they live?	Developing a three-level model of non-utilization of maternal health service for delivery defined at individual, community and state levels in Nigeria.	Using questionnaire to interview household women -Participant Women aged 15-49 years who gave birth to children within five years of the survey	10%), nine states also have a moderate prevalence (10-25%), ten states have a high prevalence (25-45%), and nine states are thought to have a very high prevalence (45-70%). States with low incidence are primarily found in the country's south. <ul style="list-style-type: none"> • The high prevalence of poor utilization is found in a small number of North and Eastern parts, whereas the moderate prevalence group covers parts of the South East, South West, and FCT. • The Northern region of Nigeria has a relatively high prevalence. This area has a high incidence of illnesses. • Individual, Community, and state factors all affect how often people use health services for delivery. 	and delivery should be incorporated into the process of delivering formal education for the women. 2. The National Health Insurance Scheme (NHIS), which is a federal program, might be used to boost the usage of maternal health services. 3. Community and religious leaders should be included in the campaign to emphasize the importance of health service delivery.
S/N	Author & Year of Publication	Title of the article	Goal& Objectives	Methodology	Key Findings	Recommendations

15	Ayamolowo et al.(2020)	Determinants of choice of birth place among women in rural communities of southwestern Nigeria	assessed the determinants of choice of birth places among childbearing women in rural communities	Qualitative and quantitative study Community based cross sectional study using pretested structured questionnaire with Focus Group Discussion (FGD) guide Participants Women of child bearing age that gave birth in the last five years	<ul style="list-style-type: none"> • Only 38% of respondents experienced institutional delivery; most women preferred non-institutional delivery; distance, providers' approaches, inadequate healthcare facilities, and personnel were identified as determinants of choice for birthplace. • Despite a higher percentage of women receiving ANC in hospitals, very few women gave birth there. 	<ol style="list-style-type: none"> 1. Visiting village leaders And other community stakeholders to advocate 2. Targeted group discussion with women who are able to have children 3. The research will provide local decision-makers and facility stakeholders with the data they need to make informed decisions about quality maternal health services in remote areas.
S/N	Author & Year of Publication	Title of the article	Goal& Objectives	Methodology	Key Findings	Recommendations
16	Tariku et al.(2020)	Factors Affecting Ch	To assess factors determining the choice of c	A community-based cross-sectional study design	<ul style="list-style-type: none"> • This study found that 200 respondents (39.5%) preferred home delivery, while the remaining participants (60.5%) preferred institutional 	1A girl's education should Be improved past the primary school level, as this will eventually influence her preference

S/N	Author & Year of Publication	Title of the article	Goal& Objectives	Methodology	Key Findings	Recommendations
		Choice of Childbirth Place among Childbearing Age Women in Western Ethiopia. Jimma Arjo District, Oromia regional state, Ethiopia.	Childbirth place among women of childbearing age in Jimma Arjo District.	using questionnaire and Interview method -Participant women of childbearing age who had at least one childbirth within two years	<p>delivery.</p> <ul style="list-style-type: none"> Smooth and quick labor (32.7%), uncomfortable behavior of medical personnel (34.6%), lack of transportation (17.8%), and inability to pay for medical services (16%) were the reasons given for preferring home delivery. Mothers who underwent 2-3 ANC visits during their most recent pregnancy were four times more likely to select a medical facility than those who underwent just one ANC visit. Couples with education tend to favor institutional delivery over those without education. 	<p>for institutional delivery.</p> <p>2. Using various information-dissemination techniques, All expectant mothers Should be encouraged to attend antenatal care appointments in adjacent public health facilities.</p>
17.	Johnson et al.(2020)	Choices and determinants of delivery location among mother	To determine the delivery locations available and factors that influence the choice of such locations am	descriptive cross-sectional study carried out from 12 th to 23 rd August 2019 using interviewer administered structured questionnaire mothers attending chil	<ul style="list-style-type: none"> About one-third of the women (35.1%) delivered their last child outside of a medical facility. The TBA homes were the most typical delivery site away from the health center. In the current study, about one-third of the participants said that non- 	<p>1. It is advised that pregnant women be given access to free or heavily subsidized medical care in order to enhance their delivery in medical facilities and dramatically lower the rates of maternal and infant mortality.</p>

S/N	Author & Year of Publication	Title of the article	Goal& Objectives	Methodology	Key Findings	Recommendations
		s attending a primary health facility in Southern Nigeria	ong women attending PHC, West Itam, Itu, Nigeria,	d welfare and antenatal clinics in the PHC during the period of study with previous birth experience	institutionalized venues were frequently taken into account since they were less expensive than healthcare institutions. <ul style="list-style-type: none"> The husband's salary, employment, and educational level were contributing variables. 	2. Healthcare professionals ought to make an effort to Improve interactions with The people who use their services. The promotion of female education will boost women's empowerment and provide them more power to choose the health care solutions that are best for them.
18	Demisu et al., (2021).	Utilization of Health Facility–Based Delivery Service Among Mothers in Gindhir District, Southeast Ethiopia.	The study was designed to assess utilization of health facility–based delivery service and associated factors among women who gave birth in the past 2 y	A community-based cross-sectional study carried out from March 1 to 30, 2020 with Face to face interview -Participant mothers who gave birth in the past 2 years	<ul style="list-style-type: none"> Around 320 moms have an excellent understanding of maternal health services, while 460 mothers have a poor understanding. In the research area, 82.7% of facility-based delivery services were utilized. The remaining 17.3% of moms, however, delivered their babies at home. Location, travel time to the medical facility, the number of ANC visits, awareness of maternal health s 	1. Mothers who had fewer ANC visits and less awareness of maternal health services must receive unrestricted assistance.

S/ N	Author & Year of Publi cation	Title of th e article	Goal& Object ives	Methodology	Key Findings	Recommendations
19	Ijeoma et al. (2021).	Determinants, reasons for choice and willingness to recommend birthing facility among mothers in public and private health facilities in Ebonyi, Nigeria	The study compared the determinants, reasons for choice of birth place and willingness to recommend birth facility among mothers whose childbirth occurred in public and private health care settings in Southeast Nigeria.	comparative cross-sectional study Semi structured interviewer administered questionnaire using -Participants Mothers whose childbirths occurred in the selected facilities recruited through immunization clinic	<ul style="list-style-type: none"> • The mission hospital's quick waiting times, affordable services, and patient friendly programs were the most valued aspects of its quality of care. • Women were less likely to give birth at the public hospital because of poverty, low educational attainment, and rural residency. Public health facilities have also been linked to lower quality of care as shown by unfriendly staff behavior, disrespectful treatment, demanding hospital protocols, limited supplies and equipment, and weak accountability systems. 	1. Better insurance coverage with better provider attitudes in public health facilities and Better service quality in private hospitals.

S/ N	Author & Year of Publi cation	Title of th e article	Goal& Object ives	Methodology	Key Findings	Recommendations
20	Bolarin wa et al. , (2021)	Health fac ility delive ry among women of reproducti ve age in Nigeria: D oes age at first birth matter?	The study aime d at examining the role age at first birth play s in health facil ity delivery am ong women of reproductive a ge in Nigeria.	The study involved a c ross- sectional analysis of s econdary data from N DHS conducted in 201 8 birth records. 41,821 individual women age d 15– 49. 40,666 occupied h ouseholds were selecte d for the sample, and	<ul style="list-style-type: none"> • The study found that among Nige rian women between the ages of 1 5 and 49 who were fertile, 59% of deliveries took place at home. • Compared to women who had thei r first child at age 20 or older, thos e who gave birth their first child b efore turning 20 were less likely t o deliver in a hospital. This may b e a result of the stigma associated with unexpected pregnancies outsi de of marriage, and the women ma y prefer home delivery in order to 	<ol style="list-style-type: none"> 1. Develop health education programs to inform Nigerian women of childbearing age about the necessity of giving birth in a hospital to reduce the risk of maternal problems associated with home deliveries 2. The target audience should be less

S/ N	Author & Year of Publi cation	Title of th e article	Goal& Object ives	Methodology	Key Findings	Recommendations
21	Karen et al., 202 2	Health fac ilities Esti mating the	To generate rig orous evidence on the potenti al effectiveness	Quasi- experimental study des ign Data on the outc	<ul style="list-style-type: none"> This study found • the number of women giving birth in a medical facility grew significantly as a result of the midwives' greater accessibility, increasing institutional deliv 	<p>than 20 years old, uneducated, unemployed, poor, dwelling in the northern region of the nation, practising Islam, and not exposed to mainstream media. Wealth index was one of the factors that led to more deliveries taking place at home because people in the poor wealth index group were less likely to give birth in a Hospital.</p> <p>1. More research is Necessary to fully Comprehend the effects of various supply-side innovations, as well</p>

		<p>impact of trained midwives and upgrade of institutional delivery rates in Nigeria</p>	<p>of comparable large-scale programmes to improve coverage of high-quality health services in other high maternal mortality settings. evaluation of the impact of the Subsidy Reinforcement and Empowerment Programme on Maternal and Child Health Project (SURE-P MCH)</p>	<p>ome and control variables measured at both the individual and household levels through 2013 NDHS Information System provides georeferenced locations of over 34,000 health facilities using (15-49)</p>	<p>ery (ID) rates by 7.2 percentage points.</p> <ul style="list-style-type: none"> This reflects a 10% proportional increase in the number of women who have access to health care, a significant improvement attained nine months after implementation. 	<p>as the complementary role they can play in conjunction with demand-side incentives, on health outcomes in Nigeria and other international contexts. 2. The results of this study indicate that by increasing investment in supply-side reforms, institutional delivery rates may significantly improve.</p>
S/N	Author & Year of Publication	Title of the article	Goal& Objectives	Methodology	Key Findings	Recommendations

22	Zhang et al.(2022)	Do Predictors of Health Facility Delivery Among Reproductive - Age Women Differ by Health Insurance Enrollment? A Multi - Level Analysis of Nigeria's Data	to compare the individual, household, and community-level determinants of health facility delivery for women under health insurance scheme and those not under health insurance scheme.	A comparative study, which grouped women into two; those enrolled in health insurance and those who did not. Secondary data drawn from the National Demographic and Health survey (NDHS) was used - Participants Child bearing age mothers	<ul style="list-style-type: none"> Mothers with health insurance coverage receive more than twice as much coverage for deliveries in medical facilities as mothers without health insurance. Additionally, there are minor variations between the two groups' health facility delivery determinants. Birth order and parity were distinct drivers of health facility delivery for women who were enrolled, whereas employment status, marital status, and geographical zones were distinct variables for women who were not enrolled. 	<ol style="list-style-type: none"> Health planners and authorities must devise additional ways to encourage widespread membership in health insurance schemes, especially among poorer and rural women, if Nigeria is to reap the maximum benefits from the implementation of health insurance programs. The government should redesign the health insurance scheme The government should Work to strengthen community-based health insurance programs in Nigeria with the goal of fostering enrollee confidence, efficient service delivery, and affordable premiums. Programs that promote health should be used to persuade women to give birth in hospitals.
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S/N	Author & Year of Publication	Title of the article	Goal& Objectives	Methodology	Key Findings	Recommendations
23	Xu et al., 2022	Individual and community-level factors associated with non-institutional delivery of women of childbearing-age in Nigeria	This study explores the determinants of non-institutional delivery among Nigerian women of reproductive age.	data for this study includes a cross-sectional data from 2018 National Demographic Health Survey [NDHS] this study extracted a sample comprising about 12,567 individuals -Participant women of reproductive age(15-49) who gave birth in the last five years	<ul style="list-style-type: none"> • In Nigeria, 58.6% of women who could bear children gave birth outside of medical facilities. • 64.3% of Muslim women gave birth outside of medical facilities, including 85.8% of moms with no formal education and 50% of mothers whose partners had no formal education. • Home delivery was shown to be more prevalent among respondents who were not enrolled in the health insurance program, mothers who were not employed, and those who scheduled antenatal visits later. • In Nigeria, a small fraction of women give birth in medical facilities. 	<ol style="list-style-type: none"> 1. According to the findings, in order to improve facility delivery in Nigeria, advocacy and instructional tactics like peer teaching, focused group discussions, and mentor-mentee programs must be strengthened at the national and local levels. 2. There is also a need to strengthen rules governing the use of maternal care by lowering the price of giving birth in a hospital and building more outpatient clinics. 3.To reduce maternal mortality in Nigeria to 70 per 100,000 live births,

S/ N	Author & Year of Publi cation	Title of th e article	Goal& Object ives	Methodology	Key Findings	Recommendations
24	S anni et a l. (2022)	Socioecon omic facto rs associat ed with ch oice of del ivery plac e among	This study aim s to examine th e association b etween women 's choice of he alth facility del ivery with their SES	population- based cross- sectional study Analysis of Multiple I ndicator Cluster Surve y conducted in Guinea -Bissau, 2014 -Participant 25-19 year old women	<ul style="list-style-type: none"> The findings indicate that a higher percentage of women gave birth at home than in a medical setting. Overall health facility delivery was 39.8%, with urban areas experiencing a greater proportion (67.8%) than their rural counterparts (30.2%). Women who live in rural areas with 	<p>which is the SDG 3.1 objective for 2030, an intervention program to increase coverage of health facility delivery should be put into place.</p> <ol style="list-style-type: none"> The study finds that Guinea Bissau has a low percentage of health facility delivery, which can be increased by increasing women's socioeconomic status. Healthcare policy-makers need to address the problem of unskilled

S/N	Author & Year of Publication	Title of the article	Goal & Objectives	Methodology	Key Findings	Recommendations
		mothers: a in Guinea-Bissau			hout access to radio or television were much less likely to give birth in a health facility than their less educated counterparts. People with lower socioeconomic status were much more likely to give birth at home.	delivery services and promote facility-based delivery, especially among women from underprivileged backgrounds. 3. There is a need to boost training for birth attendants for at home deliveries and to improve services in healthcare facilities
25	Thapa, & Upreti 2022	Factors associated with health facility delivery among reproductive age women in Nepal	to examine the factors associated with delivery in a health facility with skilled providers.	Data extracted from Nepal Multiple Indicator Cluster Survey 2019, a nationally representative cross-sectional survey. Using interview method -Participant women aged 15–49 years who had at le	<ul style="list-style-type: none"> The proportion of deliveries taking place in medical facilities with skilled staff rose with women's educational attainment and household wealth quintiles, as well as with the number of ANC visits, but fell with rising parity. 	1. Women who live in remote regions and come from low-income families need to have at least four ANC visits. As a result, the study urges relevant authorities to increase and the availability of maternal health services for women from low-income households, particularly

				ast one live birth in th e last two years preced ing the survey		those who live in rural areas.
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Discussion

Six themes emerged from the data analysis of the systematic review on the Predictors of Birthplace Preference Among Women of Child Bearing Age. These includes:

- 1) Health care facility utilization and non-utilization
- 2) Determinants/Predictors of birthplace choice
- 3) Influence of antenatal attendance on birthplace
- 4) Impact of health insurance enrollment on birthplace preference
- 5) Barriers to facility delivery
- 6) Impact of trained midwives and upgraded institutional delivery rates

Health care facility utilization and non-utilization

The choice of place of delivery remains a matter of concern as it remains a significant risk factor for maternal mortality. Despite the intervention of federal and state Government on health care delivery such as basic health care provision fund, some women still delivers at home or with traditional birth attendants. This study revealed that most women attends health care facility for antenatal despite this about $\frac{1}{4}$ of women that enrolled for antenatal in one health facility or the other either primary, secondary or tertiary still delivers at home or with Traditional Birth Attendant (TBA) (Ayamolowo et al., 2020; Tariku et al., 2020). Meanwhile some end up in coming back to health care facility based on referrer from TBAs based on pregnancy or labour related complications (Egharevba et al., 2017). In some settings, health facility deliveries dominates home deliveries (Demisu et al., 2021, Okonofua et al., 2018). However there is high prevalence of home delivery with very low facility deliveries in some parts of Nigeria (Yahya & Pumpaibool, 2019) High prevalence of non-utilization are found in few North & Eastern part and very high prevalence were found in Northern region and the major reason is high illiteracy level while moderate prevalence is found in part of southeast and part of southwest (Adedokun & Uthman, 2019). On a general note, all the studies included in this review showed that pregnant women usually registered for antenatal care in health care institutions but some still end up delivering in either TBA house or Mission home (Boah et al., 2018). Therefore intensify efforts should be made to ensure health care facility deliveries through promotion of awareness on the importance of hospital delivery to avoid pregnancy and labour process complications so as to

reduce maternal & neonatal mortality. Also dissemination of social mobilization messages on the dangers of pregnancy complications mostly associated with home births tends to increase facility delivery.

Determinants/Predictors of birthplace choice

Findings from these studies showed that most predicting factors influencing the choice of birthplace were: (a) Education level of either the wife or the Husband. Those with high level of education has higher chance of delivering their babies in health care facility while those women with low level education delivers their babies at home (Adewuyi et al., 2018). (b) Socio economic factors; factors which includes unemployment, lack of money for out of pocket payment in the hospital, this makes affordability of healthcare facility delivery to be financially tasking for women with low socio economic status (c) Socio demographic such as Religion; Womens choice are being shaped by their pre-existing values and beliefs which are being attached to the fact that mission home delivery will be saver in order to be delivered from ones enemy. (Coxon et al., 2017) Mission home deliveries preference by women may equally be associated with short waiting time, reduced cost of services and patient friendly (Ijeoma et al., 2021) . another socio demographic factor is Parity and age; women who had their first birth below age 20 were less likely to give birth at health facility compared to those who had their first birth at age 20 and above in order to avoid stigmatization that goes with teenage pregnancy by health care personnel (Bolarinwa et al., 2021). Other Predictors are; Inadequate facility personnel which does not allow running of shift in some health facilities, distance of the hospital, high cost of services, unfriendly health care personnel attitudes, disrespectful care and stressful hospital protocols (Ijeoma et al., 2021). Development of educational programmes among women of child bearing age to increase awareness on the importance of health facility's delivery to avoid maternal and neonatal complications associated with home or non facility delivery.

Influence of antenatal attendance on birthplace

From these studies the rate of antenatal care attendance were higher than the rate of facility deliveries, although the number of antenatal session attended by the pregnant women determines whether they will deliver in health care facility or not; in a study conducted by Ayamolowo et

al., in 2020 only 38% of ANC attendees eventually delivered in the health care facility. Distance, providers approach inadequate healthcare facilities and personnel were identified to be the cause. According to Tariku et al.,2020 in his study it was revealed that mothers who had 2-3 antenatal visits during the last pregnancy were 4 times more likely to choose health institution compared to women who had a single antenatal visit (Tariku et al., 2020). Therefore Friendly approach by health care personnel, Community stakeholder's involvement in health literacy programmes will serve as motivational factors that build confidence of women of child bearing age in choosing health care facility for delivery of their babies. During the antenatal clinic, maternity care professionals need to have a better grasp of where a person chooses to give birth and how that affects pregnancy and labour so that proper education can be given at appropriate time

Impact of health insurance enrollment on birthplace preference

Women who enrolled in health insurance programme is more than twice likely to deliver in health care facility than those who did not enroll in health insurance. Home deliveries were noted to be high among the respondent that were not enrolled in the health insurance scheme, unemployed mothers and those who booked antenatal care at later stage(Xu et al., 2022). Educational strategies that will enlighten the women and community members on obstetric danger signs and dangers attached to non facility deliveries. All pregnant women should have access to health insurance scheme and it should cover a wide range of maternal and child health care. Also there is the need to improve policies relating to maternal care utilization by reducing cost associated with delivery in health facilities and setting up more health facilities in communities

Barriers to facility delivery

Women who are living in rural areas who does not have access to radio and television were less likely to deliver in health care facility than women who lives in urban areas and individuals from lower wealth status were much more likely to deliver at home. Women with high level of education tend to deliver in health facility than women with low level of education (Sanni et al., 2022).in a study conducted by Adewuyi et al. 2018. Over 53% of young mothers had no education at all and belonged to poor households, while about 45% were unemployed making

hospital delivery to be unaffordable. Sociocultural norms that permits the significant other to take decision serves as another barrier in some cases husband or in-law decision of place of delivery supersedes that of the woman who is under this norms. Women should be allowed to take decision on her choice of delivery place and Individual Traditional Birth Attendance should be linked with skilled birth attendants so as to refer when necessary. Community engagement and Community sensitization to create awareness on importance of health care delivery and dangers associated to with home delivery so that those who do not have access to radio and television will be timely informed about necessary knowledge about obstetric care as well as associated danger signs

Impact of trained midwives and upgraded institutional delivery rates

The study conducted by Karen et al., 2022 revealed that the increased availability of the midwives led to substantial increases in the proportion of women giving birth in a health facility leading to an increase in institutional delivery rate. By 7.2%. It was deducted from another study that necessary information needed by the pregnant women on choice of delivery place were not usually given during the antenatal care; women do not consistently receive information about birthplace options from their maternity care provider who are not skillful enough most especially at the primary health care level at a time and in a manner that they will find helpful decision(Hinton et al., 2018)instead they drew multiple choices from the internet, friends recommendations and experiences, therefore maternity care providers needs to be trained appropriately and have adequate time to educate women during antenatal care so that all women will be aware of their options and can make informed decisions. Also more midwives should be employed to rural settings with good incentives in order to increase facility deliveries at Primary Health Care Level.

Conclusion

This systematic review shown that women of reproductive age have preference for birthplace which is usually influenced by individual factors, household factors, community factors and facility factors. Part of these influencing factors are individual factor; age at first pregnancy, parity, socioeconomic status, educational level and exposure to media messages; Household

factors; birth place is dictated by the choice of the household head or parents; Community factors are norms, beliefs, as well as cultural and religious practices which has a great influence in determining the delivery place. The facility factors includes the availability and location of the facility, in addition, attitude of healthcare workers in most cases play a major role in whether or not a woman will choose to deliver in Health Facility.

Despite government effort to improve health care system in Nigeria with good antenatal care attendance, the utilization of health care facility for delivery is still low. Pregnant women tend to book in health care facility either public or private but still deliver at home of Traditional Birth Attendants (TBAs) or mission clinic. However in order to improve facility delivery, there is need to train women of child bearing age on importance of facility delivery and health care workers on modified attitudinal behaviour towards women during antenatal care, delivery and postnatally.

Gap identified

- Reviewed articles does not involve training programme for healthcare provider and women of child bearing age on improvement of facility delivery in Nigeria.
- Recommendation on new policy favourable for women, Healthcare providers and Healthcare system reform in Nigeria were not well spelt in the studies.

Implication to Nursing Practices

- Attachment of pregnant women to a particular midwife would encourage interpersonal relationship as well as facility delivery.
- Individualize clear explanation of birth process during antenatal care with one's chosen midwife would encourage pregnant women to make facility delivery their best choice to reduce maternal and foetal mortality.
- Midwives care should not focus on individual pregnant woman alone but the core care should be extended to the entire family.
- Politeness of midwives in addressing situation during the duty hour would bring positive image to Nursing Profession

Implication to Nursing Administration

- Training and retraining programme for midwives would enhance service delivery at all levels.
- Building good relationship with other Health Care disciplines to work together would be advantageous to health care services in Nigeria.

Implication to Research

- More systematic review would be needed to identify gaps on choice of birthplace by women of childbearing age so as to carry out research that would fill the gaps.
- Health Care delivery would be improved if research findings are disseminated to the policy makers and health care workers with community representatives are involved in health care policy making.

Reference

- Adedokun, S.T., Uthman, O.A. (2019). Women who have not utilized health Service for Delivery in Nigeria: who are they and where do they live?. *BMC Pregnancy Childbirth* 19, 93 (2019). <https://doi.org/10.1186/s12884-019-2242-6>
- Adewuyi, E.O., Auta, A., Khanal, V., Bamidele O.D., Akuoko C.P., Adefemi K., Samson, J., Tapshak, Y. Z.(2018). Prevalence and factors associated with underutilization of antenatal care services in Nigeria: A comparative study of rural and urban residences based on the 2013 Nigeria demographic and health survey. *PLoS ONE* 13(5): e0197324. <https://doi.org/10.1371/journal.pone.0197324>
- Ajah, L.O., Onu, F.A., Ogbuinya, O.C., Ajah, M.I., Ozumba, B.C., Agbata, A.T., Onoh, R.C., Ekwedigwe, K.C. (2019). Choice of birth place among antenatal clinic attendees in rural mission hospitals in Ebonyi State, South-East Nigeria. *PLoS One*. 2019 Nov 5;14(11):e0211306. doi: 10.1371/journal.pone.0211306. PMID: 31689292; PMCID: PMC6830769.
- Ayamolowo, L.B., Otedola, T.D., Ayamolowo, S.J (2020). Determinants of choice of birth place among women in rural communities of southwestern Nigeria *International Journal of Africa Nursing Sciences* Vol 13, 2020 <https://doi.org/10.1016/j.ijans.2020.100244>

- Bekuma, T.T., Firrisa, B., Negero, M.G, Kejela, G., Bikila, H.(2020).Factors Affecting Choice of Childbirth Place among Childbearing Age Women in Western Ethiopia: A Community-Based Cross-Sectional Study. *Int J Reprod Med.* 2020 Apr 25;2020:4371513. doi: 10.1155/2020/4371513. PMID: 32411781; PMCID: PMC7204181.
- Boah, M., Mahama, A.B. & Ayamga, E.A.(2018). They receive antenatal care in health facilities, yet do not deliver there: predictors of health facility delivery by women in rural Ghana. *BMC Pregnancy Childbirth* **18**, 125 (2018). <https://doi.org/10.1186/s12884-018-1749-6>
- Bolarinwa, O.A., Fortune, E., Aboagye R.G., Seidu, A-A., Olagunju, O.S., Nwagbara, U.I., Edward K., A., Bright O., A. (2021)Health facility delivery among women of reproductive age in Nigeria: Does age at first birth matter? *PLoS ONE* 16(11): e0259250. <https://doi.org/10.1371/journal.pone.0259250>
- Coxon, K., Chisholm, A., Malouf, R., Rowe R., Hollowell J.(2017). What influences birth place preferences, choices and decision-making amongst healthy women with straightforward pregnancies in the UK? A qualitative evidence synthesis using a ‘best fit’ framework approach. *BMC Pregnancy Childbirth* **17**, 103 (2017). <https://doi.org/10.1186/s12884-017-1279-7> <https://www.researchgate.net/publication/281926334>
- Demisu, Z., Biniyam, S., & Mitiku, B. (2021).Utilization of Health Facility–Based Delivery Service Among Mothers in Gindhir District, Southeast Ethiopia: A Community-Based Cross-Sectional Study *The Journal of Health Care Organization Provision and Financing* <https://doi.org/10.1177/00469580211056061>
- Egharevba, J., Pharr, J., Van, W. B., Ezeanolue E.(2017). Factors Influencing the Choice of Child Delivery Location among Women Attending Antenatal Care Services and Immunization Clinic in Southeastern Nigeria. *International Journal of Maternal and Child Health and AIDS.*;6(1):82-92. doi: 10.21106/ijma.213. PMID:
- Emmanuel, O.A., Vishnu, K., Yun, Z., Lungcit, D., Olasunkanmi, D., Asa, A.(2020).Home childbirth among young mothers aged 15–24 years in Nigeria: a national population-based cross-sectional study <https://bmjopen.bmj.com/content/9/9/e025494>
- Fletcher, B.R., Rowe, R., Hollowell, J., Scanlon, M., Hinton, L., Rivero-Arias, O. (2019). Exploring women’s preferences for birth settings in England: A discrete choice experiment. *PLoS ONE* 14(4): e0215098. <https://doi.org/10.1371/journal.pone.0215098>
- Gebregziabher, N.K., Zeray, A.Y., Abteu, Y.T Kinfe, T.D., Abrha, D.T. (2019). Factors determining choice of place of delivery: analytical cross-sectional study of mothers in Akordet town, Eritrea. *BMC Public Health* **19**, 924 (2019). <https://doi.org/10.1186/s12889-019-7253-8>
- Hinton, L., Dumelow, C., Rowe, R.(2018) Birthplace choices: what are the information needs of women when choosing where to give birth in England? A qualitative study using online

- and face to face focus groups. *BMC Pregnancy Childbirth* 18, 12. <https://doi.org/10.1186/s12884-017-1601-4>
- Hoffmann, L., Banse, R., (2020). Psychological aspects of childbirth: Evidence for a birth-related mindset <https://doi.org/10.1002/ejsp.2719>
- Johnson, O.E., Obidike, P.C., Eroh, M.U., Okpon, A. A., Bassey, E.I., Patric, P.C., Ebong, P.E., Ojumah, E. (2020) Choices and determinants of delivery location among mothers attending a Primary Health Facility in Southern Nigeria *Niger Postgrad Med J.* 2020 Jan-Mar;27(1):42-48. http://doi:10.4103/npmj.npmj_150_19. PMID:32003361.
- Karen, A., Adanna, C., Marcus, H., Marcos, V., Qiao, W. & Pedro R. (2022). Estimating the impact of trained midwives and upgraded health facilities on institutional delivery rates in Nigeria using a quasi-experimental study design *National Library of Medicine.* 12(5) doi: 10.1136/bmjopen-2021-053792
- Leahy-Warren, P., Mulcahy, H., Corcoran, P., Bradley, R., O'Connor M. & O'Connell R (2021.) Factors influencing women's perceptions of choice and control during pregnancy and birth: a cross-sectional study. *BMC Pregnancy Childbirth* 21, 667. <https://doi.org/10.1186/s12884-021-04106-8>
- Margaret, O.A. & Prisca O.A. (2015). Determinants of choice of place of birth and skilled birth attendants among women in Ibadan, Nigeria *African Journal of Midwifery and Women's Health.* <http://doi: 10.12968/ajmw.2015.9.3.121>
- National Bureau of Statistics [NBS]. United Nations Children's Fund [UNICEF] (2017). *Multiple Indicator Cluster Survey 2016–17, survey findings report.* Abuja: National Bureau of Statistics and United Nations Children's Fund.
- National population commission (NPC) and ICF. Nigeria demographic and health survey (2018). Abuja, Nigeria and Rockville, Maryland, USA. 2019 October.
- Namujju, J., Muhindo, R., Mselle, L.T. *et al.* Childbirth experiences and their derived meaning: a qualitative study among postnatal mothers in Mbale regional referral hospital, Uganda. *Reprod Health* 15, 183 (2018). <https://doi.org/10.1186/s12978-018-0628-y>
- Ngozi, A.O., Chizoma, M. N., Ogochukwu, I. O., Omineokuma T., A. (2021). Influence of cultural factors on choice of childbirth place among women in Oyigbo L.G.A. Rivers State, Nigeria <https://doi.org/10.21203/rs.3.rs-1093346/v1>
- Ofonime, E. J, Precious, C. O., Miriam, U. E., Abasiono, A. O., Emmanuel, I. B., Paschal, C. P., Princewill, E. E., Emmanuel, O. (2020) Choices and determinants of delivery location among mothers attending a primary health facility in Southern Nigeria ; Nigeria post graduate Medical Journal 27(1) 42-48 http://doi: 10.4103/npmj.npmj_150_19

- Okedo-Alex I.N., Akamike I.C., Nwafor J.I., Onwasigwe C.N (2021).Determinants, reasons for choice and willingness to recommend birthing facility among mothers in public and private health facilities in Ebonyi, Nigeria. *Pan Afr Med J.* 2021 Mar 19;38:289. doi: 10.11604/pamj.2021.38.289.24437. PMID: 34122716; PMCID: PMC8180001.
- Okonofua1, F., Ntoimo, L., Julius Ogungbangbe, J., Anjorin, S., Imongan, W.& Yaya, S.(2018). Predictors of women’s utilization of primary health care for skilled pregnancy care in rural Nigeria. *BMC Pregnancy and Childbirth* (2018) 18:106 <https://doi.org/10.1186/s12884-018-1730-4>
- Preis , H.,Pardo, J.,Peled,Y. & Benyamini Y. (2018).Changes in the basic birth beliefs following the first birth experience: Self-fulfilling prophecies? *PLoS One*,13, e0208090.<https://doi.org/10.1371/journal.pone.0208090>.
- Sanni, Y.,Ghose, B.,Nathali, G.(2022). Socioeconomic factors associated with choice of delivery place among mothers: a population-based cross-sectional study in Guinea-Bissau available at <https://gh.bmj.com/content/4/2/e001341>
- Sialubanje, C.,Massar, K., Hamer, D.H., Ruiter, R.(2015).Reasons for home delivery and use of traditional birth attendants in rural Zambia: a qualitative study *BMC Pregnancy Childbirth* 15,216. Retrieved from <https://doi.org/10.1186/s12884-015-0652-7>
- Snowden, A., Martin, C., Jomeen, J., Martin, C.,H (2011) Concurrent analysis of choice and control in childbirth. *BMC Pregnancy Childbirth* 11(1):40. <https://doi.org/10.1186/1471-2393-11-40>.
- Tariku, T. B., Belaynesh, F., Melese, G. N., Gemechu, K. & Haile B.(2020). Factors Affecting Choice of Childbirth Place among Childbearing Age Women in Western Ethiopia: A Community-Based Cross-Sectional Study. *Int J Reprod Med.* Vol. 2020,Article ID 4371513,9 pages, <http://doi: 10.1155/2020/4371513>
- Thapa, N.R.& Upreti, S.P. (2022).Factors associated with health facility delivery among reproductive age women in Nepal: an analysis of Nepal multiple indicator cluster survey 2019. *BMC Health Serv Res* 22, 1419. <https://doi.org/10.1186/s12913-022-08822-5>
- This Day Newspaper (2023). <https://www.thisdaylive.com/index.php/2022/09/08/maternal-mortality-in-nigeria-2/> 24th January, 2023.
- Van H. H., T.M., Hendrix, M., Smits, L.J., Nieuwenhuijze, M.J., Severens, J.L., de Vries, R.G.& Nijhuis, J.G.(2015). The influence of preferred place of birth on the course of pregnancy and labor among healthy nulliparous women: a prospective cohort study.*BMC Pregnancy Childbirth* 15, 33 (2015). <https://doi.org/10.1186/s12884-015-0455-x28798897>; PMCID: PMC5547229.

- World Health Organization. Health in 2015 from MDGs. (2015).Millennium development goals to SDGs, sustainable development goals. Geneva. 2015.
- Xu, Y., Peng, M.YP.,& Ahuru, R.R.(2022). Individual and community-level factors associated with non-institutional delivery of women of childbearing-age in Nigeria. *Humanit Soc Sci Commun* **9**, 197 (2022). <https://doi.org/10.1057/s41599-022-01168-7>
- Yahya, M.B. & Pumpaibool, T. (2019). "Factors influencing the decision to choose a birth center by pregnant women in Gombe state Nigeria: Baseline survey", *Journal of Health Research*, Vol. 33 No. 3, pp. 228-237. <https://doi.org/10.1108/JHR-10-2018-0129>
- Yuill, C., McCourt, C., Cheyne, H., Leister, N (2020). Women's experiences of decision-making and informed choice about pregnancy and birth care: a systematic review and meta-synthesis of qualitative research. *BMC Pregnancy Childbirth* 20(1):343. <https://doi.org/10.1186/s12884-020-03023-6>
- Zhang, X., Anser, M.K., Ahuru, R.R., Zhang, Z., Peng, M.Y., Osabohien, R., Mirza, M.(2022). Do Predictors of Health Facility Delivery Among Reproductive-Age Women Differ by Health Insurance Enrollment? A Multi-Level Analysis of Nigeria's Data. *Front Public Health*. 2022 Apr 14;10:797272. doi: 10.3389/fpubh.2022.797272.