

# **APPRAISING THE CHALLENGES OF UTILISING MATERNAL HEALTHCARE SERVICES IN BENUE SOUTH SENATORIAL DISTRICT**

BENUE JOURNAL OF SOCIOLOGY  
Volume 11 Issue 1  
ISSN: ISSN: 0386  
Department of Sociology  
Benue State University, Makurdi  
Pg: 135 - 149

**Wegh, Francis S.,**  
Department of Sociology,  
Benue State University, Makurdi

**Ugbem-Onah, Comfort E.,**  
Department of Sociology,  
Benue State University, Makurdi

**Onazi Lucy**  
Department of Sociology,  
Federal University, Wukari

## **Abstract**

It is widely accepted that maternal healthcare is vital for improving maternal and neonatal health. Furthermore, the continuum of care—the integrated delivery of antenatal, delivery and postnatal care—has been shown to be particularly important. Sub-Saharan Africa has the highest neonatal and maternal mortality rates in the world due to several challenges such as limited access to healthcare facilities, proximity, decision-making, cultural barriers, financial constraints and religious beliefs which impede them from effectively using these services. This study investigated the challenges faced by women of reproductive age in accessing and utilizing MHCS in Benue South Senatorial District. The study was anchored on Andersen healthcare utilization model. It was cross-sectional and employed mixed-method approach by combining key informant interviews (KIIs) and survey for data collection. The population for the study were 376 women of reproductive age (15-49 years) and 9 health care providers in the nine local government areas that make up the Benue South Senatorial District. Quantitative data was analyzed through the SPSS and presented in frequencies and simple percentages while the qualitative data was content analyzed thematically. The study identified several challenges of utilizing MHCS in the study area which included; cost of services/financial

---

**Corresponding Author:**  
**Wegh, Francis S.**  
**Email:** wegshagbaor@gmail.com

constraints, lack of equipment in facilities, inadequate infrastructure, inadequate drugs supply, and shortage of skilled healthcare professionals and limited awareness of available services. The study highlights the need for targeted interventions to address these challenges, improve access to quality maternal and healthcare services and reduce health disparities in Benue South Senatorial District.

**Keywords:** challenges, maternal health, senatorial district, women, utilization

### Introduction

Maternal care encompasses a series of interventions aimed at mitigating the effects of risk factors, managing illnesses, and ultimately safeguarding the well-being of both women and children. Maternal healthcare services (MHCS) are concerned with maintaining the health of women before and during pregnancy, during childbirth, and in the postnatal period. Maternal care, which involves a broad spectrum of services including screening, early disease detection, prompt treatment, and health education, plays a vital role in decreasing mortality rates and improving women's health outcomes (Sarikhani, Najibi, & Razavi, 2024). It is widely accepted that the utilisation of effective maternal healthcare is key to improving both maternal and neonatal mortality rates.

Studies from around the world have shown that women who receive antenatal care, delivery care and postnatal care from skilled healthcare personnel have better pregnancy outcomes resulting in a reduction in both neonatal and maternal mortality rates. Sub-Saharan Africa has the highest neonatal and maternal mortality rates in the world, with 27 neonatal deaths per 1,000 live births and 533 maternal deaths per 100,000 live births, accounting for approximately 68% of all maternal deaths globally (Stewart & Hall, 2022). Malawi, a sub-Saharan African country with a total population of just over 19.6 million, is one of the poorest countries in the world with a GDP per capita of only 642.7 \$USD; neonatal mortality and maternal mortality rates are approximately 19 deaths per 1,000 live births and 451 per 100,000 live births respectively (Stewart & Hall, 2022). Although these mortality rates are not the highest of all sub-Saharan African countries, they are still regarded as unacceptably high and effective strategies are needed to significantly reduce these figures.

In many low-resource settings, healthcare service delivery is very poor. Nigeria, for example, ranks among the worst in access and quality of services. It is

ranked 42 out of 100 by the World Bank in its delivery of universal health coverage (Ajegbile, 2023). To improve rural women's access to quality maternal healthcare services, adequate budgets must be allocated to improve care delivery in those centers, implement programs to reduce out-of-pocket expenses for maternal health, ensure sufficient staffing and training, introduce innovative transportation methods, and promote male involvement. Providing quality maternal care is the only way to promote and increase access.

Maternal and newborn mortality rates are higher in lower- and middle-income countries (LMICs) and Nigeria is one of the countries in this category with the highest maternal mortality rates globally (Ajegbile, 2023). In 2018 the maternal mortality ratio (MMR) in Nigeria was estimated to be 512 deaths per 100,000 live births, and in 2019, the MMR was estimated to be over 800 maternal deaths per 100,000 live births with a neonatal mortality rate at 33 per 1000 live births. In contrast, high-income countries like the UK and the US had much lower MMRs of 10-18 deaths per 100,000 live births and neonatal mortality rates of less than four deaths per 1000 live births (Ajegbile, 2023).

According to the Sustainable Development Goals (SDGs), the global target for maternal mortality is 70 deaths per 100,000 live births. Recent data from a World Health Organization (WHO, 2022) factsheet released in March 2023 presents a bleak picture of maternal health outcomes in sub-sahara Africa. In 2017, the maternal mortality rate in Nigeria was 917 deaths per 100,000 live births. In just three years, this rate has risen by approximately 14%, reaching 1047 deaths per 100,000 live births in 2020. These results highlight a significant and worrying mismatch between Nigeria's maternal health outcomes and the lofty SDGs targets. The maternal mortality rate in Nigeria is more than ten times greater than the SDGs' target. The large disparity between the worldwide aim and the country's reality highlights major difficulties within Nigeria's healthcare system as well as the urgent need for comprehensive maternal health measures (Alobo, et. al., 2021).

Maternal mortality is a major public health concern in Nigeria, with a significant percentage of deaths resulting from preventable obstetric causes. Recent research has shed light on the seriousness of this problem. According to this study by (Olamijulo, Olorunfemi, Okunola, 2022), the top causes of maternal mortality include hypertension (27%), sepsis (20.6%), haemorrhage (17%), anaemia (3.2%), HIV (3.2%), and sickle cell disease (2.4%). These troubling figures highlight the crucial need for comprehensive healthcare reform, better access to high-quality maternal healthcare services, and expanded public awareness efforts to address these preventable medical issues. Many reasons

have been advanced for the minimal decline in maternal mortality. Some scholars have cited the poor utilization of maternal healthcare services. This has serious implications on maternal and child health outcomes (Bello,et.al., 2024).

In Benue State, the maternal mortality ratio of 1118 deaths per 100,000 live births at Benue State University Teaching Hospital, Makurdi, which is very high. With direct causes of maternal death accounting for 80.8% of the cases while indirect causes were 19.2%. The leading causes of maternal mortality in the region include unsafe abortion and its complications, hypertensive diseases in pregnancy, puerperal sepsis and obstetric hemorrhage (Hembah-Hilekaan, et. al., 2019). The rural areas are the worst hit when it comes to issues of maternal health. Despite Benue state receiving many maternal health programs and interventions, the rate of maternal death remains alarmingly high. This could be due to a government tendency to prioritize projects in urban areas, neglecting the needs of rural regions.

In Benue South Senatorial District, Nigeria, access to quality maternal and healthcare services is a critical determinant of health outcomes for women, children, and families (WHO, 2019). Despite efforts to improve healthcare delivery, the region continues to face persistently high rates of maternal and infant mortality, with a maternal mortality ratio of 1,024 deaths per 100,000 live births (NDHS, 2019). Additionally, the district reports low utilization of healthcare services, with only 44% of women receiving antenatal care from a skilled provider and 26% delivering in a health facility (FMH, 2019; World Bank, 2020). The challenges underlying these trends are multifaceted and complex, involving factors such as inadequate infrastructure, shortage of skilled healthcare professionals, cultural and language barriers, financial constraints, and limited awareness of available services.

While previous studies have highlighted the importance of maternal healthcare (Nove, et. al., 2021) and identified some of the factors that influence the individual utilisation of antenatal care, delivery care and postnatal care (Tsawe, et. al., 2015), no study have investigated the appraiser of maternal healthcare service utilization among women of reproductive age in the Benue south senatorial district. This information is key for policy makers to be able to design and implement effective strategies to increase utilisation of maternal healthcare. This study investigated the challenges faced by women of reproductive age in accessing and utilizing MHCS in Benue South Senatorial District. By adding to the body of research investigating the utilisation of maternal healthcare, it sheds some much-needed light on the factors that are associated specifically with MHCSutilization.

## Method

The study was cross-sectional. The study was carried out in Benue South Senatorial District, Nigeria. Benue South district comprises of nine local government areas including Ado, Agatu, Apa, Obi, Ogbadibo, Okpokwu, Ohimini, Oju and Otukpo.

The population for the study were 376 women of reproductive age (15-49 years) and 9 healthcare professionals residing within the study location. The study however focused on women how must have experienced pregnancy at least once. The Taro Yamane (1967) sample size determination formula for finite population was used in determining the sample size for the study. The formula is given as:

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

$$1 + N(e)^2$$

Where;

n = Sample Size (?)

N = Study Population (379,929)

e = Error of Precision 95%

1 = Constant

Thus;

$$\begin{aligned} n &= \frac{379929}{1 + 379929(0.05)^2} \\ n &= \frac{379929}{1 + 379929(0.0025)} \\ n &= \frac{379929}{1+949.8} \\ n &= \frac{379929}{950.8} \\ n &= 400 \end{aligned}$$

Multi-stage sampling technique was used in the selection of respondents for the study. The Questionnaire and key Informant Interviews (KII) were used for data collection. Quantitative data was analyzed through the Statistical Package for the Social Sciences (SPSS Version 26) and presented in frequencies and simple percentages while qualitatively data was content analyzed thematically.

## Results

A total of 400 copies questionnaire were distributed out of which 90.3% (376) were duly completed and returned. Therefore, the analysis of data is based on responses of the 376 respondents as well as qualitative data generated from 9 Key Informant Interviews(KIIs)

### Socio-Demographic Characteristics of Respondents

This section explores the background of the women in the study. The study looked at factors such as age, marital status, education level, and religious affiliation. Table 1 provides a summary of these sociodemographic characteristics.

**Table 1: Socio-demographic Characteristics of Respondents**

Characteristics	Frequency N=376	Percentage (100%)
<b>Marital Status</b>		
Currently Married	290	77.1
Divorce	45	12.0
Widow	41	11.0
<b>Total</b>	<b>376</b>	<b>100.0</b>
<b>Age</b>		
15-19	23	6.1
20-24	66	17.6
25-29	72	19.1
30-34	105	28.0
35-39	45	12.0
40-44	35	9.3
45-49	30	8.0
<b>Total</b>	<b>376</b>	<b>100.0</b>
<b>Education</b>		
No formal education	36	9.6
Primary education	191	50.8
Secondary education	107	28.5
Tertiary education	42	11.2
<b>Total</b>	<b>376</b>	<b>100.0</b>
<b>Occupation</b>		
Farming	159	42.3
business	107	28.5
Civil servants	110	29.3
<b>Total</b>	<b>376</b>	<b>100.0</b>
<b>Religion</b>		
Christianity	258	68.7
Islam	102	27.1
Traditional Realign	16	4.3
<b>Total</b>	<b>376</b>	<b>100.0</b>
<b>Number of live births</b>		
1-2	69	18.4
3-4	137	36.4
5-6	92	36.5
7-8	60	16.0
9 above	18	4.8
<b>Total</b>	<b>376</b>	<b>100.0</b>
<b>Pregnancies ever carried</b>		
1-2	70	18.6
3-4	109	29.0
5-6	151	40.2
7above	46	12.2
<b>Total</b>	<b>376</b>	<b>100.0</b>
<b>Monthly income</b>		
Below30000	72	19.1
31000-40000	62	16.5
41000-50000	64	17.0
51000-60000	34	9.0
61000-70000	18	4.8
71000-80000	53	14.1
81000and above	73	19.4
<b>Total</b>	<b>376</b>	<b>100.0</b>

Source: Field Survey, 2023

The findings on socio-demographic characteristics of women presented in Table 1 showed that majority (77.1%) of the women were currently married and were within peak periods of child birth and are likely to continue having children. Utilization of maternal health care services will therefore have significant implications for them and pregnancy outcomes. Also, there maybe much need for maternal health care services in the communities. Encouragingly, most women (over 80%) had some form of formal education (primary or secondary), allowing them to understand the survey questions. However, the primary level of education for most women might influence how they utilize these maternal healthcare services. The findings on religion of the respondents showed that the study area was dominated by Christians.

The study revealed that over 40% of the women were farmers, likely due to the area's agricultural nature or limited formal job opportunities. Their income was also relatively low. This low income status could be a barrier to using maternal healthcare services, even if they are affordable. The need to balance limited resources with other needs might negatively impact their utilization of these services. Furthermore, the finding that many women (40.2%) had 5-7 pregnancies but only delivered 3-4 live births (51.1%) suggests a high rate of negative pregnancy outcomes. This could be linked to a lack of or limited use of maternal healthcare services in the community.

### **Challenges of utilization of maternal health care services in Benue south senatorial district**

This section explores the challenges women face in accessing maternal healthcare services within Benue South Senatorial District. The key findings are summarized in Table 2.

**Table 2: Challenges of utilization maternal healthcare services in Benue South Senatorial District**

S/N	Variable	Always	Never	Sometimes	Mean	Std.Deviation
1	High cost of services	246	24	106	2.37	.894
2.	Long Wait time	58	128	190	1.65	.733
3.	Lack of equipment in facilities	221	59	96	2.33	.857
4.	Difficulties in accessing health personnel	81	98	197	1.69	.804
5.	Lack of drugs in facilities	112	63	201	2.03	.753
6.	Poor attitude of health personnel	94	159	123	1.92	.757
7.	Inadequate number of specialized doctors	204	69	103	2.27	.864

**Source: Field Survey, 2023**



Table 2 highlights the key challenges women face in accessing maternal healthcare services. Responses were based on a 3-point Likert scale (always = 3, never = 2, sometimes = 1). The table reveals that the biggest barriers include high service costs, lack of equipment and medication at facilities, and a shortage of skilled health personnel. These factors received average scores above 2.0, indicating significant challenges.

Wait times, difficulty reaching healthcare personnel, and poor staff attitudes received lower average scores (around 1.65 to 1.92), suggesting these are less significant barriers compared to the others. Interestingly, the qualitative findings support these conclusions.

Participants during the interviews acknowledged these and other challenges of accessing maternal health care services.

A 31 year old woman observed that:

*Cost of maternal health care services is a huge challenge affecting accessing of maternal health care services. They sometimes tell us that maternal health care services are free at the Primary Healthcare facilities in our community but none of this is true. I have gone to one of the facilities but was still asked to pay money for test and other things before I was attended to. Those who didn't come with money were not attended to. Cost of accessing services seriously scares me off whenever I am pregnant. I am a petty trader and my husband works at the Local Government but his salary is low and sometimes he even complain that it doesn't even come regularly and at other times it is delayed. All this combined with cost of maternal health care services in facilities affect my utilization of services whenever I am pregnant. I only utilize services for the periods I can pay for some services I don't like situations whereby one is in at the clinic but is not attended to because no money to pay for some test that may be required.*

A 26 years old woman on the other hand stated that:

*Cost of maternal health care services are not easy for us, they usually say in government hospitals it is better but I don't think so. When you are pregnant and make a mistake to start*



*going for maternal healthcare services from day one that is when you suffer more, you keep paying monies upon monies, they will even give you a list of test for you to carry out and at every point money is involved. We only hear that maternal services are free, there is nothing free. Maternal healthcare services are not free in my community even if services are free elsewhere, here in this community I am telling you that it is not free. This affects accessing services. Some people may feel it is little money they pay but add these little money sometimes one is required to pay in different sections you will know how much it amounts to. You can only understand what I am saying only if you have a need for such services and approach a maternal health care facility for services. Cost of maternal healthcare services remains a heavy burden for many women and it affects utilization of services.*

Another respondent, a 25 years old woman noted that:

*The maternal healthcare services are too expensive for a farmer like me to afford sometimes. One will have to eat before you start thinking of visiting the maternal healthcare services providers for services. So when there is no money especially with high cost of services it is only those who have money that can utilize services while others keep praying and depending on God for no complication to arise in the course of pregnancy.*

A 34 years old participant noted that:

*You have to pay to be able to use the services provided by the maternal healthcare providers and this is a poor community and all of us are farmers struggling to survive. Some of us are even the ones providing food for our children not our husbands due to so many factors. Combinig this with moneys required to access maternal healthcare services sometimes we just have no choice but to go without services except if it has become a really challenging circumstance of between life and death during pregnancies that some borrow money or do all they can to go and pay to be attended to.*

A 36 years old male health personnel confirmed that cost of services sometimes prevents women from accessing maternal healthcare services available in the communities. He observed that:

*Sometimes women are rushed to us for maternal healthcare services but in some cases the money they come with is usually not enough for the required service and when we ask for deposits for treatment to commence they will say they don't have such monies and decide to go home for alternative treatment. You know in as much as we are humans here and feel pity for some conditions it is not in our power to allow service without or before pay. We only do what we are asked to do. For instance I am in the lab and clients are supposed to come with prescription for test and evidence of payment before I carry out a test. In a situation where some come without paying there is no way I can attend to such. Some of the required test are truly quite expensive and some women use to say they can't afford it.*

A 41 year old female health personnel on the other hand noted that:

*Cost of maternal health care services prevents a lot of women in this community from accessing maternal health care services. Although we don't charge that much for some of the maternal care services a lot of women still find it difficult to pay. Sometimes when we ask some pregnant women that are close to us that when will they come and start their antenatal they will respond that are the services now free? You people collect money for services and yet disturb us as if it is free. There is no money yet to come. Cost of accessing services is truly a challenge for some women.*

Expressing another view, a 41 years old woman noted that:

*There is serious challenge of lack of equipment in many of this health facilities in our communities. Some of the hospitals even the big ones the only have name and not equipment to use for work. when you go there sometimes they tell you to bring money so that they can go and buy some necessary*

*things required for treatment, even little things like syringes and scissors before they come back to attend to you. How can one comfortably access services from a maternal health facility that lacks equipment to handle some challenges women face during pregnancy? She questioned, It will definitely be challenging she concluded.*

A 38 years old woman on the other hand noted that:

*Drugs are normally lacking in some of the health facilities and this poses a serious challenge of accessing. Sometimes when one comes to the hospital and prescriptions are given after being attended to by a doctor and is asked to go to the pharmacy section and get drugs, on arrival they usually give one or two and say the remaining not available. Sometimes they recommend places for you to go and get or book for a day or two for you to come back and check if the drugs are available. Sometimes you go more than twice and they sometimes tell you they don't know what else to do since they have not been supplied drugs.*

During an interview session a 49 years old male health personnel in a primary health care facility confirmed that there is a problem of lack of drugs in the primary health care facility he works with and many other health care facilities in the community. He noted lack of drugs is a challenge is affecting many maternal health care service users in utilizing services. He noted that:

*Sometimes it is Non-Governmental Organizations (N.G.Os) that even supports us with drugs for women and we give out such drugs free because we are usually warned not to collect any monies for it. But generally most times we buy drugs ourselves to be able to maintain few people that still patronize the centers and we usually charge for the drugs and this is usually based on how we are able to buy such drugs too.*

Concerning the problem of inadequate number of skilled healthcare personnel in health facilities; a 43 years old woman stated that:

*The issue of none availability of doctors is quite challenging*

*and affects utilization of maternal healthcare services is a challenge in many of the health care facilities we have around. Some times when you approach a health facility for a problem you hear things like the doctor that handles such a problem is not on sit, he is a consultant and comes only on particular days. The available ones are not specialized in that aspect. And in such cases you keep waiting until the day the doctor comes. And sometimes when you are lucky to meet such a doctor on seat the number of women that will be waiting to see the same doctor are usually too much and one will be required to wait for long hours.*

### **Discussion of Findings**

Findings from the study revealed that the major challenges of accessing maternal health care services in the communities were cost of services, lack of equipment in facilities, lack of drugs in facilities, and inadequate number of specialized doctors. The findings of this study also corroborate with the previous findings that high unit costs reflect underutilization of the existing capacities of health centres and this includes underutilization of maternal healthcare services. Akinyemi, Bolajoko and Gbadebo, (2022), carried out by observed that cost is one among the top barriers for not attending health facility delivery in both urban and rural areas for both countries. The socio- demographic characteristic of respondents in this study showed that majority of the women earns relatively low income. Considering the fact that majority of the respondents earn low income cost of maternal health services will remain out of reach for many women.

Lack of equipment and drugs in facilities was also identified in this study as challenges affecting utilization of maternal health care services. This finding corroborates with previous observations from a study by(Bello, et. al., 2024), where it was observed that most health facilities in Nigeria have challenges of inadequate equipment. Omoluabi(2022) also observed that there is general loss of confidence in the health sector in Nigeria as a result of inadequate equipment. Previous findings also showed that challenges of accessing health care services include constant shortage of medicines in the hospitals among other challenges. The problem of lack of equipment and lack of drugs was noted by this scholars

almost a decade ago and the findings from this study shows that the situation has not significantly improved over the years and this is an indicator of continuous poor maternal health outcome including the problem of maternal mortality.

In Africa generally, maternal mortality has remained a major public health issue especially for countries in sub-saharan Africa including Nigeria. Although the challenge of maternal mortality is a global phenomenon, generally the status of women in developing countries is worse when compared to the developed nations. Sub-Saharan Africa and Southern Asia accounted for approximately 86% (254 000) of the estimated global maternal deaths in 2022 Southern Asia accounted for nearly one-fifth (58 000) while sub-saharan Africa alone accounted for roughly two-thirds (196 000) of the maternal deaths with Nigerian accounting for 23% of such deaths (FMH, 2019; World Bank, 2020; WHO, 2022). This could be associated with challenges of accessing proper health care during pregnancies which include lack of, challenges of accessing drugs, inadequate number of specialized personnel in health facilities among other challenges.

### **Conclusion**

The study identified economic factors as major barriers to accessing maternal healthcare. These include lack of money, low income, and the high cost of services themselves. To address this challenge, the Nigerian government, at all levels, should consider two options:

- i. Completely eliminate user fees for maternal healthcare services in public facilities, especially in rural areas.
- ii. If complete removal is not feasible, subsidize the cost of these services for low-income earners in communities.

These policy changes would directly target the financial barriers that prevent women from utilizing essential maternal healthcare services.

### **Recommendations**

This study identified several key challenges women face in accessing maternal healthcare services. Here are some recommendations based on these findings:

- i. Recommendations include policy changes to reduce user fees
- ii. Investments in equipment and staffing

- iii. Improved transportation options
- iv. Community outreach programs to educate women and address cultural barriers.
- v. Additionally, training healthcare workers and establishing complaint mechanisms are crucial for ensuring quality care.

These combined efforts can create a more accessible and equitable healthcare system for women in the region.

## References

- Ajegbile, M. L. (2023). Closing the gap in maternal health access and quality through targeted investments in low-resource settings. *Journal of Global Health Reports*. doi:10.29392/001c.88917
- Akinyemi, J. O., Bolajoko, I. and Gbadebo, B. M. (2018). Death of preceding child and maternal healthcare services utilisation in Nigeria: investigation using lagged logit models. *Journal of Health, Population and Nutrition*, 37, 1-12
- Bello, S., Neill, R., Jegede, A.S., Bamgboye, E. A., Salawu, M. M., Afolabi, R. F., Nzelu, C., Azodo, N., Adoghe, A., Ogunlayi, M., Yaradua, S. U., Wang, W., Liu, A. & Fawole, O. I. (2024). Health systems challenges, mitigation strategies and adaptations to maintain essential health services during the COVID-19 pandemic: learnings from the six geopolitical regions in Nigeria. *BMC Health Serv Res* **24**, 625. <https://doi.org/10.1186/s12913-024-11072-2>
- Federal Ministry of Health, Nigeria (2019). National Health Policy.
- Hembah-Hilekaan, S. K., Eka, P. O., Maanongun, M. T., & Unazi, U. E. (2019). Maternal mortality statistics and risk factors at a tertiary hospital in Makurdi, Nigeria. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology*, 8(8), 3140-3146. doi: 10.18203/2320-1770.ijrcog20193525
- Nigeria Demographic and Health Survey, 2019
- Nove, A., Friberg, I. K., de Bernis, L., McConville, F., Moran, A. C. & Najjemba, M. (2021). Potential impact of midwives in preventing and reducing maternal and neonatal mortality and stillbirths: a Lives Saved Tool modelling study. *The Lancet Global Health*, 9(1):24–32. doi: 10.1016/S2214-109X(20)30397-1
- Tsawe, M., Moto, A., Netshivhera, T., Ralesego, L., Nyathi, C. & Susuman, A. S. (2015). Factors influencing the use of maternal healthcare services and childhood immunization in Swaziland. *International*

- journal for equity in health*, 14(1). doi: 10.1186/s12939-015-0162-2
- Sarikhani, Y., Najibi, S. M. & Razavi, Z. (2024). Key barriers to the provision and utilization of maternal health services in low-and lower-middle-income countries; a scoping review. *BMC Women's Health* **24**, 325 <https://doi.org/10.1186/s12905-024-03177-x>
- Stewart, C. L & Hall, J. A. (2022). Factors that affect the utilisation of maternal healthcare in the Mchinji District of Malawi. *PLoS One*, 17(12):e0279613. doi: 10.1371/journal.pone.0279613.
- World Bank (2020). Nigeria Health System Review.
- World Health Organization (2019). Maternal and child health.