GENDER INEQUALITY AND HEALTHCARE UTILIZATION AMONG URBAN AND RURAL DWELLERS IN ANAMBRA STATE, SOUTHEASTERN NIGERIA

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Abstract
This study investigated gender and healthcare utilization among rural and urban dwellers in Anambra State, Nigeria. A mixed methods research design was adopted, combining both quantitative and qualitative approaches for data collection and analysis. Quantitative data were collected using a questionnaire, while qualitative data were obtained through in-depth interviews (IDIs). The quantitative data were processed using SPSS and analysed with descriptive statistics. Qualitative data were coded into themes aligned with the study's objectives. Findings indicate the existence of gender inequality in access to and utilization of healthcare services. Additionally, urban residents are more likely to access healthcare compared to those in rural areas. The study recommends further research that is more comprehensive and capable of generating broader evidence to support generalization.
Keywords: gender inequality and healthcare utilization, healthcare utilization, interventions on healthcare utilization, gender and healthcare

Introduction

Across the world, studies have shown that gender inequality can affect healthcare utilization (Kalaitzi, 2020; Thomas et al., 2014; Smits et al., 2018; Glick et al., 2018; Bevan & Learmonth, 2013; Mumtaz et al., 2003; Bourne & Brooks, 2011). Furthermore, environment has effect on how people react to health care access and utilization (Kalaitzi, 2020; Smits et al., 2018; Arcury et al., 2005). While there are empirical studies on cultural barriers and intervention on healthcare utilization, cultural beliefs and healthcare utilization, and other related studies (Ugwu & Okpara, 2024a; Ugwu & Okpara, 2024b) in Anambra State, Nigeria, there seems to be dearth of empirical research on gender inequality and healthcare utilization in this area. This study is therefore set out to understand gender inequality and healthcare utilization among the urban and rural dwellers in Anambra State, Southeastern Nigeria.

Literature review

Ovikuomagbe (2017) examined Nigerian maternal healthcare utilisation factors. This article uses 2017 Living Standard Measurement Survey Wave 3 data to compare male and female incomes. The researchers graphed marital status, education, and industry of work against the study's average salary using the ordinary least square (OLS) technique. We used Theil's entropy index to quantify economic disparities between sectors and industries using the overcrowding hypothesis. The results show that gender disparity is more prevalent in specific regions, municipalities, and industries. While geographical location influences income inequalities more for women, it affects both genders. Women's incomes normally grow with education, but the survey found gender inequity most visible across regions, educational performance, geographic location, and marital status. Married women struggle harder. The report emphasises the need to address gender inequality's economic, educational, and geographical inequities in Nigeria to increase opportunities and improve performance.

Ahmed, Oni, and Hossen (2021) examined how gender disparity affects maternity healthcare in Bangladesh. Bangladesh has severe gender imbalance, limiting maternity healthcare for certain women. This study examines the relationship between maternal health care utilisation and gender inequality, as measured by women's autonomy and attitudes towards intimate partner violence. The research employed 2014 Bangladesh Demographic and Health Survey (BDHS) data. The poll included 5,460 women who had given birth in the three years before. Logistic regression was used to examine how women's autonomy and IPV views affect their maternity healthcare utilisation. We also inferred the different ways gender inequality affects maternal healthcare access using several methods. Women's negative attitudes towards intimate partner violence (IPV) were positively correlated with five antenatal care (ANC) services, a sufficient number of ANC visits, a skilled birth attendant (SBA), and postnatal care (PNC) services. Women's autonomy also improved their access to the five ANC services (Adjusted Odds Ratio: 1.17; 95% Confidence Interval: 0.98-1.41). Living in rural locations, religious views, family wealth, and husband and wife education all affect maternity healthcare access due to gender disparity. In Bangladesh, women's independence, perspectives on intimate

partner violence (IPV), and access to maternity healthcare were strongly correlated. Therefore, the research offers methods to reduce domestic violence and empower women to advocate for greater maternity healthcare access and use in their homes.

Klärner, Gamper, Keim-Klärner, Moor, Von Der Lippe, and Vonneilich (2022) examined health disparities and social networks. Mortality and morbidity show gender differences. Male adolescents are more susceptible to health issues throughout puberty. Girls are more prone to have chronic and mental health issues throughout adolescence, whereas males have acute and occasionally fatal illnesses. Some people take more health risks. Few studies have examined transgender and queer experiences in this profession. Networks affect risk-taking differently for men and women. Women spend a disproportionate amount of time and effort on social support despite illness. Networks after widowhood may be good or bad, depending on gender. However, how gender inequality affects health care utilization among the rural and urban dwellers have gotten a little empirical mixed method research evidence. This attempts to fill this by examining gender inequality and healthcare utilization among urban and rural dwellers in Anambra State, Southeastern Nigeria.

Methodology

Research Design

This section describes the study's methodology and context. The study will involve mixed-methods survey research. This kind of research collects and analyses data using quantitative and qualitative methods (Tashakkori & Creswell, 2007). They then combine their results to make community-wide conclusions. For real-time population analysis, this study will employ a research approach known for its flexibility in obtaining trustworthy data while minimizing costs. This involves collecting a variety of important data at a specific moment. The researcher will detail the statistical methods utilized to analyze the data.

Area of Study

Anambra state comprises of twenty-one local government area, namely: Aguata, Awka North, Awka South, Anambra East, Anambra West, Anaocha, Ayamelum, Dunukofia, Ekwusigo, Idemili North, Idemili South, Ihiala, Njikoka, Nnewi North, Nnewi South, Ogbaru, Onitsha North, Onitsha South, Orumba North, Orumba South, and Oyi. Anambra state is located in southeastern part of Nigeria. It is among the five states that makes up southeast geopolitical zone of Nigeria. It was created in 21st August 1991. It is bounded in the north by Enugu state, in the east by Imo state, in the south by Delta state while in the west by Kogi state. The land area of Anambra state is approximately 4,844 square kilometers and Anambra state has a human population size of 5,953,500 people as of 2023 Nigeria presidential election (INEC, 2023).

In the aspect of occupation, the people of Anambra are well-known for farming and trading. Other forms of occupation they engage include; public and civil service, hotel catering services, banking business, artisanship, commercial transportation, among others.

Furthermore, as the location of the state, Anambra has succeeded in attracting the presence of the Federal Government through the establishment of a prestigious Federal University (Nnamdi Azikiwe University, Awka), CBN, NAFDAC, Agencies, parastatals, and so on.

Record reveals that, Anambra has an estimated number of six (6) urban centers out of one hundred and seventy-nine (179) towns that make up Anambra state (Awka Union, 2023).

Population of the Study

Social research is conducted in a given social research setting with a given target population in view, and not in a vacuum. The target populations for this research are male and female in urban and rural areas. Nigeria Population Census (2019) noted that Anambra state has a human population size of 4,177,828 people with 2117984 male and 2059844 females (United Nations Human Settlements Programme UN-HABITAT, 2009). When projected to the current year (I.e., 2024), the area has a population of 7,434,856 (Male: 3,768,542, Female: 3,666,314). The population is projected using the formula: $Nt = Pe^{(r * t)}$

Where:

Nt	=	Population in the future
P	=	Population at the beginning time (i.e., population in 2006)
e	=	The base of natural logarithms (given as 2.71828)

r = The population growth rate (i.e., 3.2 in Nigeria) divided by 100.
Tt = The time period involved (i.e., from 2006 – 2024)
Thus, the population projection for this study is calculated as follows:
Nt = 4,177,828 X 2.71828 $^{(0.032 * 18)}$
Nt = 4,177,828 X 1.78
Nt = 7,434,856
However, the target population for this study will include the urban and rural dwellers in Anambra state as at the time of this study. It is from the population that the sample needed for this study will be drawn.

Sample size and sampling technique

The sample size for this study is 400. To determine the sample size, Yamane (1967) formula was be used to calculate sample size for infinite (known) population. The formula provides a simplified way for determining appropriate sample size using 5% margin of error. The formula is given as: n = $\frac{n}{1+ N(e)2}$

This research used a mix method sampling, which is the combination of cluster, simple random, purposive, systematic, and accidental sampling strategies. Cluster sampling is the appropriate method to use when the population of interest seems uniform from the outside but has internal diversity. However, if the necessary circumstances for using probability sampling techniques are not satisfied, such as when there is a shortage of sample frames, purposive, convenient, and accidental sampling approaches were used. To begin, it is necessary to categories the 179 towns into urban and rural groups based on their primary economic activities. From the urban cluster, (Awka) was selected using balloting method. On the other hand, using the balloting method without replacement, one town (Agulu) was selected from the rural cluster. This process ensures that urban and rural dimensions to the subject under study will fully be harnessed.

Nevertheless, Awka has been identified and classified into streets, churches, avenues and estates despites the villages that make up the town. Awka comprises seven Igbo groups sharing common blood lineage divided into two sections. Ifite Section, the senior section, comprises four groups, Ayom-na-Okpala, Nkwelle, Amachalla, and Ifite-Oka followed by Ezinator Section, which consists of three groups, Amikwo, Ezi-Oka and Agulu. Each of these groups has a number of villages. Altogether, Awka comprises 33 villages (Awka Union, 2023). Furthermore, Agulu town comprises twenty villages. These are: Nwanchi, Nneohia, Okpu, Ama-Ezike, Odidama, Amorji, Isiamaigbo, Ukunu, Uhueme, Obeagu, Obe, Nkitaku, Okpu-Ifite, Umubialla, Amatutu, Umuowelle, Umunnowu, Ifiteani, Umuifite, and Nneogidi.

The researchers will approach the sampling of respondents using the household survey. This implies that the researchers and their team selected 50% respondents (200) from urban households and the remaining 50% (200) from rural households using multistage sampling techniques.
For the qualitative aspect of the study, the purposive sampling technique was used to select 12 participants including six (6) from urban household survey and the other six (6) from rural household survey for In-Depth Interview (IDI). The interviewees were selected based on their level of knowledge, experiences and roles in cultural beliefs and healthcare utilization in the communities of study.

Instruments of Data Collection and Administration

Questionnaire and In-depth Interview (IDI) were used for quantitative and qualitative method of data collection respectively. The researcher personally administered the questionnaire and carry out the In-depth Interview, with the assistance of a research assistant. The research assistant was graduate of Sociology who have gained basic knowledge about social science research method. Consent for the interview was sought from the selected interviewees through the consent letter.

Method of Data Analysis and Presentation

Data collected from the field, were processed with the statistical package for social sciences (SPSS) version 23.0. However, quantitative data were analyzed using descriptive statistics including frequency count and simple percentage. On the hand, the qualitative data gathered were processed using the Qualitative Data Analysis (QDA) miner software. This involved first the development of initial codes analyzed using the theme-based method of content analysis processed using Max QDA. Themes, thoughts catchphrase and expressions that are similar will be thematically grouped and coded to underscore findings from the quantitative data. Therefore, emerging themes that are similar will be grouped with major objective theme of the study.

Findings

This section presents the descriptive analysis and interpretation of the quantitative data collected from the field, complemented by the descriptive analysis of the qualitative data. The analysis is organized into two distinct sections: Section A, which presents the descriptive analysis of the socio-demographic characteristics of the respondents, and Section B, which contains the descriptive analysis related to the research question.

Socio-Demographic Characteristics of the Respondents

This section presents the descriptive analysis on the responses offered by the respondents on their socio-demographic variables including gender, age, religion, educational qualifications, marital status, occupation, level of income and place of residence. These are presented in table 1.

Data from table 1 shows that females outnumbered the males in the present study's sample (female respondents 50.5% while male respondents 49.5%). It was discovered that the minimum age in the present study's sample was 15 years; while the maximum age was 105 years. However, 22.3% of the respondents were aged between 31 – 28years, 19.5% of them aged between 36 – 60, 20.6% aged between 61 – 75, 17.8% aged between 76 -90; while the smallest proportion 8% of them were older men and women aged between 91 – 105years.

The sample comprises of 90% of Christians, 2% of Muslims and 8% of African Traditional Religion. This shows that Muslim and African Traditional Religion somewhat low among the people of Anambra state.

With regard to educational qualification, 28.1% of the respondents completed secondary level of education. Approximately 42.8% of the respondents attended up to tertiary level of education, out of which 9% of them only completed Diploma/NCE level, 26.6% of them completed up to the first-degree level and only a very lower proportion 7.2% of them completed up to the post graduate level. This finding shows that education in the present study area is somewhat impressive, even though about half proportion of them could not attend up to the higher education.

The sample comprised of 27% of single men and women, and 70% of the respondents are married. Respondents who were divorced or separated were approximately 3% of the sample (1% and 2%). This shows that divorce and separation rate was somewhat low.

Data analysis shows that a relatively 91.3% of the respondents were employed, 8.7% of them were unemployed. Among those who were employed, data analysis shows that they varied in their occupations. Among those were employed, 30.3% of them were employed within the government/private sector. Those who were informally employed were 52.2% and those in religious sector were 3.6%

It was discovered that the minimum income level was below ₦30,000; while the maximum income level was above ₦91,000per month. However, 49% of the respondents earns between ₦61,00 - ₦90,000per month, 32% earns between ₦31,000 - ₦60,000per month; while the smallest proportion 7% of them earns below ₦30,000per month.

Table 1: Socio-Demographic Characteristics of the Respondents

Socio-Demographic Variables	Frequency	Percentage %
Sex		
Male	197	49.5
Female	201	50.5
Age Categories		
15 – 30	89	11.5
31 – 45	35	22.3
46 – 60	78	19.5
61 – 75	82	20.6
76 – 90	71	17.8
91 – 105	32	8
Religion		
Christian	358	90
Muslim	8	2
African Traditional Religion	32	8
Educational Qualification		
No formal education	32	8
F.S.L.C	83	20.8
J.S.S.C.E	0	0
S.S.C.E	112	28.1

O.N.D/N.C.E	36	9
H.N.D/B.A/B.Sc	106	26
M.A/M.Sc	21	5.5
Ph.D	8	2
Marital Status		
Single	101	27
Married	282	70
Divorced	7	1
Separated	8	2
Occupation		
Civil servant	67	16.8
Public servant	54	13.5
Trader	122	30.6
Farming	86	21.6
Artisan	21	5.2
Clergy	13	3.6
Unemployed	35	8.7
Income Level		
Below ₦30,000	28	7
₦31,000 - ₦60,000	129	32
₦61,000 - ₦90,000	193	49
₦91,000 – above	48	12
Place of Residence		
Urban	200	50.3
Rural	198	49.7

Researchers' Data Analysis, 2024

Research question. How does gender inequality affect healthcare utilization in Anambra state? To answer this research question, the responses offered by the respondents with regards to questionnaire items 21, 22, 23, 24, and 25 were analyzed and interpreted.

Table 2: How gender inequality affects healthcare utilization in Anambra state

Variables	Not at all	Rarely	Sometimes	Often	Always
Do you perceive gender inequality as a barrier to accessing healthcare services in Anambra State?	187 (46.9%)	122 (30.6%)	81 (20.3%)	5 (1.5%)	3 (0.7%)
Do you think gender biases influence the quality of healthcare services provided to women in Anambra State?	192 (48.6%)	153 (38.4%)	32 (8%)	14 (3.5%)	7 (1.9%)
Do societal expectations about gender roles impact women's ability to seek healthcare in Anambra State?	182 (45.7%)	174 (43.7%)	30 (7.5%)	7 (1.7%)	5 (1.4%)
Do you believe that gender discrimination affects women's access to specialized medical treatments in Anambra State?	113 (28.3%)	174 (43.7%)	102 (25.6%)	8 (2.%)	1 (0.4%)
Do you think women face economic barriers that prevent them from accessing necessary healthcare services in Anambra State compared to men?	96 (11.3%)	152 (38.1%)	168 (42.2%)	8 (2%)	11 (6.4%)

Researchers' Data Analysis, 2024

From table 2, 46.9% did not perceive gender inequality as a barrier to accessing healthcare services, 30.6% rarely perceive gender inequality as a barrier to accessing healthcare services, 20.3% sometimes perceive gender inequality as a barrier to accessing healthcare services, 1.5% often perceive gender inequality as a barrier to accessing healthcare services and 0.7% always perceive gender inequality as a barrier to accessing healthcare services.

However, 48.2% indicated that gender biases do not influence the quality of healthcare services, 38.4% indicated that gender biases rarely influence the quality of healthcare services, 7.5% indicated that gender biases sometimes influence the quality of healthcare services, 3.5% indicated that gender biases often influence the quality of healthcare services, while 1.9% indicated that gender biases always influence the quality of healthcare services.
Furthermore, 45.7% were of the opinion that societal expectations about gender roles do not impact women's ability to seek healthcare, 43.7% were of the opinion that societal expectations about gender roles rarely impact women's ability to seek healthcare, 7.5% were of the opinion that societal expectations about gender roles sometimes impact women's ability to seek healthcare, 1.7% were of the opinion that societal expectations about gender roles often impact women's ability to seek healthcare, while 1.4% were of the opinion that societal expectations about gender roles always impact women's ability to seek healthcare.

To add more, 28.3% did not believe that gender discrimination affects women's access to specialized medical treatments, 43.7% rarely believe that gender discrimination affects women's access to specialized medical treatments, 25.6% sometimes believe that gender discrimination affects women's access to specialized medical treatments, 2% often believe that gender discrimination affects women's access to specialized medical treatments, then 0.4% always believe that gender discrimination affects women's access to specialized medical treatments
Then, 24.1% do not think women face economic barriers that prevent them from accessing necessary healthcare services, 38.1% rarely think women face economic barriers that prevent them from accessing necessary healthcare services, 42.2% sometimes think women face economic barriers that prevent them from accessing necessary healthcare services, 2% often think women face economic barriers that prevent them from accessing necessary healthcare services, while 6.4% always think women face economic barriers that prevent them from accessing necessary healthcare services.
Data analysed in table 2 contains evidence to show that approximately majority the respondents indicated that gender inequality, gender bias and gender role does not prevent individuals access to modern healthcare services. It was noted that women face more economic barrier in accessing healthcare services in Anambra state.

> …well, actually women face more health disorder than men across the globe, but in terms of accessing healthcare services here in Awka, women are free as a bird. Even the governor removed some levies from the women side in terms of pregnancy delivery, but sometimes is not that easy to access because the rate at we hospital give attention to patients is very low with a lot of protocols involved. For instance, my neighbor at the market, his wife was due for delivery and the woman do not have strength to push out the baby, so the doctor said it is going to be operated but the husband must be around to sign and at that point the husband was not nearby, the lady's sister agreed to sign but the doctor refused. By the time the husband could reach the hospital the baby has died. I can go on and on and talk about the challenge women do face in health services. The major issue that supersede other challenges is money. If you don't have money no health insurance for you. (Male, 51 years old, chemist, Awka)

Sometime before I seek for medical attention, I will first of all inform my husband, if he does not grant me the permission nor give me money for the treatment, it will be difficult on me. Depending on the type of sickness, sometimes he gives me money, most often he will tell me …. woman go sort yourself out. (Rural interviewee)

Hypothesis:
Male and females in urban areas are most likely to utilize modern healthcare facilities than their rural counterpart. In testing this hypothesis, data collected using item 1 in the questionnaire regarding gender of respondents were used in cross tabulation with data measuring if cultural norms discourage respondents from accessing healthcare facilities as collected using item 28 in the questionnaire. Results of the are presented in table 3.

Table 3: Summary of chi-square test showing the relationship between male and females in urban areas are most likely to utilize modern healthcare facilities than their rural counterpart.

Gender	Not at all	Rarely	Sometimes	Often	Always	Total	X^2	Df	Sig.
Urban									
Male	59	34	2	3	1	99			
	59.95	31.59	2.49	3.73	2.24	99.0			
	0.01%	0.18%	0.10%	0.14%	0.05%	100%			
Female	61	34	4	1	1	101			
	61.16	32.23	2.54	3.81	1.27	101.0			
	0%	0.10%	0.84%	2.07%	0.06%	100%			
Rural							43.0605	12	.000022
Male	40	48	2	7	1	98			
	59.34	31.27	2.46	3.69	1.23	98.0			
	6.30%	8.95%	0.09%	2.96%	0.04%	100%			
Female	81	11	2	4	2	100			
	60.55	31.91	2.46	3.77	1.26	100.0			
	6.90%	13.70%	0.10%	0.01%	0.44%	100%			
Total	241	127	10	15	5	398			
	241.0	127.0	10.0	15.0	5.0	398.0			

Researchers' data analysis, 2024 (Chi-square)

The chi-square test was equally run to test the assumption that male and females in urban areas are most likely to utilize modern healthcare facilities than their rural counterpart in Anambra state. Based on the test conducted, this assumption was upheld, (x^2 (12) = 43.0605, $\rho = .000022$. This implies that male and females in urban areas utilize modern healthcare facilities than their rural counterpart.

Qualitative data also support this. For instance, one the participants acknowledged that residence may influence thought pattern. Therefore, this would affect healthcare utilization. Also what is available in place may affect choice.

> I think it is a matter of residence. In my point of view, people who are living in urban areas will less likely indulge in herbal medicine. Factors like class, even when herbs are effective will be there. But the people living in the rural areas will always see those that are taking it. Some of them even prepare the herbs.

Discussion of findings

The objective of this study was to examine whether gender inequality affects healthcare utilization among urban and rural dwellers in Anambra State. While a large majority of the state's population believes that gender discrimination does not influence access to healthcare, residents of Anambra State's most populous district report that women face financial constraints that hinder their ability to receive critical treatment. Descriptive statistics from the field indicate that women encounter more financial barriers to accessing healthcare. This highlights the impact of gender-specific economic challenges. Gender inequality in Nigeria contributes to disparities in healthcare access, treatment quality, and health outcomes between men and women. Traditional gender norms in many Nigerian communities influence healthcare decision-making. As a result, women may struggle to prioritize their own health due to caregiving responsibilities for children and the elderly.

Rural women may put their families' demands before their own and postpone or skip medical treatment (Okafor et al., 2019). Social conventions generally allocate men to manage home money, which may limit women's autonomy in managing their finances and obtaining healthcare (Akinola & Aremu, 2021). Cultural and religious norms may make it difficult for women to get healthcare freely, especially in Northern Nigeria, where transportation is problematic. In emergencies, this ban might delay women's medical attention (Yaya et al., 2018). In certain Nigerian communities, more males than girls may lead to resource discrimination. This means boys have better food and healthcare than females (Ezeh & Emina, 2020). Healthcare gender biases may cause uneven treatment of men and women. Ogunlesi and Ogunlesi (2021) found that gender biases in Nigeria downplay women's health issues. Thus, women are less likely to get proper pain treatment and symptom evaluation. Healthcare professionals may also be impacted by cultural

norms that respect male authority, forcing women to depend on their husbands or male relatives for health decisions. This reduces women's healthcare decision-making power (Fawole et al., 2020). Men in Nigeria use healthcare less due to gender inequity. Cultural standards that require strength and self-reliance may prevent many people, especially those with mental health difficulties, from seeking medical help. Men may suffer worse health outcomes because they postpone seeking medical help until their ailment is life-threatening (Adebayo, 2020). Cultural norms, financial reliance, mobility limits, and healthcare system biases affect gender inequity in Nigeria's healthcare utilisation. These variables cause major gender differences in healthcare access and outcomes.

Conclusion

This study investigated gender inequality and healthcare utilization among urban and rural dwellers in Anambra State, southeastern Nigeria. The findings align with previous research, establishing that a gender gap exists in access to and utilization of healthcare services. Additionally, the study reveals a relationship between environment and healthcare utilization, with urban residents more likely to access healthcare than their rural counterparts. However, broader multidisciplinary studies are recommended to further evaluate and deepen empirical understanding of this phenomenon, thereby supporting more effective policy formulation.

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