



Socio-Economic Indices and Choice of Healthcare Services among Adults in Rural Areas of Akwa Ibom North-East Senatorial District, Nigeria

Saviour Dominic Archibong & Felicia Saturday Ekpu (PhD)

^{1,2}Department of Human Kinetics and Health Education,
Faculty of Education,
University of Uyo, Nigeria.

¹+23407037515832; ²+23408033283612

¹saviourdominic0@gmail.com

DOI: <https://doi.org/10.67487/tjahs.v2i4.318>

Citation: Archibong, S. D. & Ekpu, F. S. (2026). Socio-Economic Indices and Choice of Healthcare Services among Adults in Rural Areas of Akwa Ibom North-East Senatorial District. *Transnational Journal of Arts, Humanities and Sciences*, 2(4). <https://doi.org/10.67487/tjahs.v2i4.318>

Abstract

The study investigated the influence of socioeconomic indices on the choice of healthcare services among adults in the rural area of Akwa Ibom North-East Senatorial District, Nigeria. The study was guided by six research questions and six hypotheses. A descriptive survey design was adopted for the study. The target population for the study comprised all 191,521 adults aged 18 years and above in rural areas of Akwa Ibom North-East Senatorial District. A sample size of 400 respondents was selected for the study using the simple random sampling technique. A researcher-made structured questionnaire entitled “Socio-economic Indices and Choice of Healthcare Services Questionnaire (SICHSQ)” was the main instrument for data collection. The instrument was face validated by five experts, two from the Department of Human Kinetics and Health Education, two from the Department of Psychological Foundations of Education and one from the Department of Sociological Foundations of Education, University of Uyo. The reliability coefficient result of 0.78 was obtained using Cronbach’s Alpha reliability method. The collated data were analysed using simple linear regression to answer the research questions and also used to test all the hypotheses at the .05 level of significance. The findings revealed that age, gender and educational attainment have a very strong influence on the

choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District. It was recommended, among others, that community health educators should develop healthcare programmes that tailor health education to different age groups to ensure relevant and effective health-seeking behaviour.

Keywords: Socioeconomic Indices, Healthcare Services, Age, Gender, Educational Attainment

Introduction

Healthcare services constitute a critical component of any nation's health system, encompassing a range of interventions designed to prevent, diagnose, treat, and manage health conditions. Globally, access to quality healthcare services remains uneven, influenced by socioeconomic, geographic, and systemic factors. The World Health Organization (WHO, 2021) emphasised that equitable access to healthcare is essential for improving health outcomes and achieving universal health coverage.

In many countries, disparities in healthcare utilisation are driven by socioeconomic determinants such as income, education, and social status, which affect individuals' ability to seek and access appropriate health services (Smith *et al.*, 2020). These disparities are often more pronounced in rural areas, where health infrastructure may be limited and socioeconomic barriers are more significant. At the national level, countries grapple with ensuring equitable access to healthcare for their populations. In Nigeria, despite efforts to expand health coverage, disparities persist, especially in rural communities. The Nigerian National Health Policy underscores the importance of addressing social determinants of health to improve service utilisation (Federal Ministry of Health, 2022).

Within the Akwa Ibom North-East Senatorial District, the rural communities face unique challenges impacting healthcare access and utilisation. This district, characterised by predominantly agrarian livelihoods and limited health infrastructure, serves as an illustrative case for examining how socioeconomic indices influence healthcare choices. The district's health system struggles with inadequate facilities, shortages of healthcare personnel, and limited health education, which compound the barriers faced by residents (Akpan & Udo, 2020). The decision to focus on this district stems from its high rurality, socio-economic challenges, and the critical need to understand local determinants influencing healthcare choices among its adult population.

According to Adebayo and Ojo (2021), socioeconomic factors such as income levels, educational attainment, and employment status play significant influence on healthcare-seeking behaviours among Nigerian populations. For instance, individuals with higher income and education levels tend to utilise healthcare services more frequently and promptly than their lower socioeconomic counterparts, often due to better health literacy and financial capacity (Nwachukwu *et al.*, 2023).

Age, defined as the length of time a person has lived, is a significant socioeconomic index affecting healthcare preferences and needs. Younger adults may primarily seek preventive or reproductive health services, while older adults often require chronic disease management and age-related health interventions (Oladele *et al.*, 2022). Age influences perceptions of health risks and the urgency with which individuals seek care, with older individuals generally recognising their vulnerability to health complications, thus affecting their healthcare-seeking behaviour (Eze *et al.*, 2021). In rural settings like Akwa Ibom North-East, age-related health challenges are compounded by limited access, making age a critical determinant of healthcare utilisation.

Gender, which refers to the socially constructed roles and behaviours associated with being male or female, profoundly impacts healthcare choices. Globally, women often utilise healthcare services more than men, particularly reproductive health services, but may face barriers such as cultural norms, financial dependence, and limited decision-making power (Nwachukwu *et al.*, 2023). In rural Nigeria, gender disparities are prevalent, with women sometimes unable to access healthcare independently due to societal restrictions or financial dependence on male relatives (Ojo & Adebayo, 2023). Recognising gender as a socioeconomic factor helps elucidate disparities in healthcare utilisation and outcomes in Akwa Ibom North-East, where traditional gender roles may influence health-seeking behaviours.

Educational attainment, representing the highest level of formal education achieved, is a key socioeconomic indicator linked to health literacy and awareness. Higher educational levels are associated with better understanding of health information, increased awareness of available services, and proactive health-seeking behaviours (Chukwu & Nwosu, 2021). Conversely, individuals with limited or no formal education may lack awareness of health risks or available healthcare options, leading to delayed or inadequate utilisation of services. In rural Akwa Ibom North-East, where educational opportunities are limited, the level of education significantly influences individuals' choices and ability to navigate the healthcare system.

The choice of Akwa Ibom North-East Senatorial District for this study is motivated by its predominantly rural composition, socio-economic challenges, and limited access to healthcare facilities. The district exemplifies the intersection of socioeconomic disadvantages and health disparities, making it an ideal setting to investigate how socioeconomic indices influence healthcare decisions among adults. Understanding these dynamics is critical for informing targeted interventions, policy formulation, and resource allocation to improve health outcomes in similar rural settings. The lack of documented literature on this creates a gap in knowledge, hindering the development of targeted interventions. Consequently, this study aims at examining the socioeconomic indices and choice of healthcare services for selected health challenges among rural adults in Akwa Ibom North-East Senatorial District.

Statement of the Problem

In an ideal healthcare system, socioeconomic indices such as income, age, gender, education, occupation and marital status would not influence an individual's ability to access and utilise appropriate healthcare services. Every person, regardless of socioeconomic background, would have equitable access to quality health interventions, timely diagnosis, and effective treatment for prevalent health challenges. This equitable access would be facilitated by well-developed health infrastructure, comprehensive health policies, and widespread health literacy, leading to improved health outcomes across all segments of the population, especially among vulnerable groups in rural communities.

However, in the Akwa Ibom North-East Senatorial District, this situation is far from reality. Observations indicate that rural adults face significant barriers to healthcare access, including financial constraints, limited health facilities, low health literacy, and cultural norms that influence health-seeking behaviours. These challenges are compounded by socioeconomic disparities; individuals with lower income, limited education, and certain occupational backgrounds are less likely to seek or receive appropriate healthcare for common health issues such as infectious diseases, maternal health challenges, and chronic conditions. Consequently, health outcomes in the district remain poor, with high morbidity and mortality rates, especially among the most socioeconomically disadvantaged groups.

However, efforts have been made at the government and non-governmental levels to improve healthcare access in the district, including the establishment of primary health centres, health education campaigns, and community outreach programmes. Despite these initiatives, disparities persist, and many residents continue to underutilise available health services. Existing research has primarily focused on general health challenges and service availability but has paid limited attention to how socioeconomic indices specifically influence healthcare choices among rural adults in this region. There is a notable gap in understanding the nuanced relationship between socioeconomic factors and healthcare decision-making within this context. This gap underscores the need for a focused study to identify the socioeconomic determinants that influence healthcare choices, with the aim of informing targeted interventions that can effectively address barriers and improve health outcomes among rural populations in Akwa Ibom North-East. Such research is crucial for developing evidence-based policies tailored to the socio-economic realities of the community, ultimately fostering equitable healthcare access and better health for all. Therefore, there is a need to carry out this study in order to examine the socioeconomic indices and choice of healthcare services for health challenges among adults in rural areas of Akwa Ibom North-East Senatorial District.

Objectives of the Study

The main objective of this study was to examine how socioeconomic indices influence choice of healthcare services for health challenges among adults in rural areas of Akwa Ibom North-East Senatorial District. The study specifically seeks to:

- i. Examine the influence of age on choice of healthcare services for health challenges among adults in rural areas of Akwa Ibom North-East Senatorial District.
- ii. Determine the influence of gender on choice of healthcare services for health challenges among adults in rural areas of the Akwa Ibom North-East Senatorial District.
- iii. Ascertain the influence of educational attainment on the choice of healthcare services for health challenges among adults in rural areas of the Akwa Ibom North-East Senatorial District.

Research Questions

The following research questions were formulated to guide the study:

- i. What is the influence of age on the choice of healthcare services for health challenges among adults in rural areas of the Akwa Ibom North-East Senatorial District?
- ii. What is the influence of gender on the choice of healthcare services for health challenges among adults in rural areas of the Akwa Ibom North-East Senatorial District?
- iii. What is the influence of educational attainment on the choice of healthcare services for health challenges among adults in rural areas of the Akwa Ibom North-East Senatorial District?

Research Hypotheses

The following hypotheses were formulated to guide the study and were tested at the .05 level of significance:

- i. There is no significant influence of age on choice of healthcare services for health challenges among adults in rural areas of the Akwa Ibom North-East Senatorial District.
- ii. There is no significant influence of gender on choice of healthcare services for health challenges among adults in rural areas of the Akwa Ibom North-East Senatorial District.
- iii. There is no significant influence of educational attainment on choice of healthcare services for health challenges among adults in rural areas of the Akwa Ibom North-East Senatorial District.

Research Method

A descriptive survey design was adopted for the study. Survey is a research method which focuses on a representative sample derived from the entire population of the study. It works on the premise that a given population is too large for any research to realistically observe all the elements in the population, and what a researcher does in this type of research is to use a particular sampling technique to select a sample from the whole population and use the outcome of the sample to generalise on the entire population. This design is therefore considered appropriate for this study.

This study was conducted in the Akwa Ibom North East Senatorial District. Akwa Ibom North East lies between latitudes 40 49' and 50 22' North and longitude 70 48' and 80 14' East and covers approximately 2,045,109 km² with a population of 784,736, being 28.2 per cent and 33.3 per cent of the state's total land area and population, respectively. The senatorial district headquarters is Uyo Local Government Area, which is also the capital of Akwa Ibom State. The senatorial district has a total of nine local government areas. These comprise Etinan, Ibesikpo Asutan, Ibiono Ibom, Itu, Nsit Atai, Nsit Ibom, Nsit Ubium, Uruan and Uyo.

The people of this senatorial district are mainly of Ibibio extraction. The Senatorial District is bounded in the north by the Abak and Ikono Local Government Areas, in the south by the Onna, Esit Eket, Eket and Okobo Local Government Areas, in the west by the Oruk Anam and Mkpato Enin Local Government Areas and in the east by Cross River State. Akwa Ibom North East Senatorial District, also known as Uyo Senatorial District, has both urban and rural settlements. There are a lot of amenities like good roads, hospitals and schools. There are 89 secondary schools in the Akwa Ibom North East Senatorial District.

The rural area of Akwa Ibom North-East Senatorial District is characterised by communities that are predominantly agrarian with limited infrastructural development and access to amenities. These areas typically include small villages and settlements where residents rely heavily on farming, fishing, and other subsistence activities for their livelihood. Infrastructure such as paved roads, healthcare facilities, schools, and electricity may be sparse or underdeveloped, creating barriers to easy access to essential services. The population in these rural communities tends to have lower socioeconomic indices, including limited income, lower educational attainment, and reduced access to information and healthcare resources, which significantly influence their health-seeking behaviours and choices of healthcare services. These characteristics distinguish rural areas within the district from more urbanised or semi-urban centres, underscoring the need for targeted health interventions that consider the unique socio-economic and infrastructural realities of these communities. This makes the area suitable for this study.

The population of this study comprised all the adults of age 18 years and above in rural areas of Akwa Ibom North-East Senatorial District, with a total of 191,521 (National Population Commission, 2006). A sample size of 400 respondents was selected for the study using the simple random sampling technique.

A researcher developed a questionnaire, titled "Socio-economic Indices and Choice of Healthcare Services Questionnaire (SICHSQ)", which was the main instrument for data collection in the study. The instrument comprised 26 structured items with four points of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). The questionnaire was divided into two sections, namely, A and B. Section A consists of six items dealing with demographic variables (age, gender, educational attainment, occupation, financial income and marital status). Section B comprised 20 items on the choice of healthcare services. The respondents were required to place a tick (✓) as it applies to them based on their level of agreement with each item. The items in the questionnaire were organised to reflect the purpose of the study as well as research questions and hypotheses.

The instrument was submitted to five experts in the Faculty of Education, two from the Department of Human Kinetics and Health Education, two from the Department of Psychological Foundations of Education and one from the Department of Sociological Foundations of Education, University of Uyo, for face validation. The researcher asked the validators to assess the items to see if the items are clear and relevant to elicit the data required; to what extent the items are related to the content of the objectives, research questions and hypotheses and if the instrument adequately measured the concept it is expected to measure. Their corrections in the number of items per research question and the contents of the items were effected before the instrument was shown to the research supervisor, who gave approval before the final version of the questionnaire was produced for the fieldwork.

To ascertain the reliability of the instrument, 30 copies of the questionnaire were given to the adults in the Akwa Ibom North East Senatorial District who were not taking part in the main study but were part of the population. Data obtained were analysed using the Cronbach Alpha Statistical tool to calculate the reliability coefficient of the instrument, and it yielded a reliability coefficient of 0.78, which made the instrument considered suitable for the study.

The researcher, after determining the respondents for the study, proceeded with the help of two research assistants to distribute copies of the questionnaire to the respondents in their houses. The day of distribution was the same as that of retrieval. Care was taken to ensure that copies of the questionnaire were administered to the respondents at home so as to ensure a high return rate. Out of the 400 copies administered, 392 copies were correctly filled and retrieved, representing a 98 per cent return rate. The collated data were analysed using mean and standard deviation to answer the research questions, while Analysis of Variance (ANOVA) was used to test all the hypotheses at the .05 level of significance.

Results

Research Question One: What is the influence of age on choice of healthcare services for health challenges among adults in rural area of Akwa Ibom North-East Senatorial District?

Table 1: Summary of Simple Linear Regression of the Influence of Age on Choice of Healthcare Services for Health Challenges among Adults in Rural Area (n = 392)

Variables	R	R-square	Adjusted R-square	Std. Error	Remark
Age	.932 ^a	.868	.868	1.39960	Very strong Influence
Choice of Healthcare Services					

Source: Field Survey, 2026

The result in Table 1 shows the value of the regression coefficient (R) and its corresponding R² of .932 and .868, respectively. The R-value of .932 indicated age has a very strong influence on the choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District. The R² value of .868 indicates that age has 86.8 per cent influence on choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District.

Research Question Two: What is the influence of gender on choice of healthcare services for health challenges among adults in rural areas of the Akwa Ibom North-East Senatorial District?

Table 2: Summary of Simple Linear Regression of the Influence of Gender on Choice of Healthcare Services for Health Challenges among Adults in Rural Area (n = 392)

Variables	R	R-square	Adjusted R-square	Std. Error	Remark
Gender	.784 ^a	.615	.614	2.39262	Strong Influence
Choice of Healthcare Services					

Source: Field Survey, 2026

The result in Table 2 shows the value of the regression coefficient (R) and its corresponding R^2 of .784 and .615, respectively. The R-value of .784 indicated that gender has a very strong influence on the choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District. The R^2 value of .615 indicates that gender has 61.5 per cent influence on the choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District.

Research Question Three: What is the influence of educational attainment on choice of healthcare services for health challenges among adults in rural areas of the Akwa Ibom North-East Senatorial District?

Table 3: Summary of Simple Linear Regression of the Influence of Educational Attainment on Choice of Healthcare Services for Health Challenges among Adults in Rural Area (n = 392)

Variables	R	R-square	Adjusted R-square	Std. Error	Remark
Educational Attainment	.724 ^a	.524	.522	2.66228	Strong Influence
Choice of Healthcare Services					

Source: Field Survey, 2026

The result in Table 3 shows the value of the regression coefficient (R) and its corresponding R^2 of .784 and .524, respectively. The R-value of .724 indicated that educational attainment has a very strong influence on the choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District. The R^2 value of .524 indicates that educational attainment has 52.4 per cent influence on choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District.

Hypothesis One: There is no significant influence of age on choice of healthcare services for health challenges among adults in the rural area of the Akwa Ibom North-East Senatorial District.

Table 4: Summary of F-ratio of the Regression of the Influence of Age on Choice of Healthcare Services for Health Challenges among Adults in Rural Area (n = 392)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	5037.537	1	5037.537	2571.642	.000 ^b
Residual	763.963	391	1.959		

Total	5801.500	392
Source: Field data (2026)		$P \leq .05$

The result in Table 4 shows the computed F-value as 2571.642 with 1 and 391 degrees of freedom as well as the p-value of .000. Since the p-value is less than the alpha value ($p < .05$), the null hypothesis, which states that there is no significant influence of age on choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District, is rejected, while the alternative is retained. Hence, it implies that there is a significant influence of age on the choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District.

Hypothesis Two: There is no significant influence of gender on choice of healthcare services for health challenges among adults in the rural area of the Akwa Ibom North-East Senatorial District.

Table 5: Summary of F-ratio of the Regression of the Influence of Gender on Choice of Healthcare Services for Health Challenges among Adults in Rural Area (n = 392)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	3568.897	1	3568.897	623.429	.000 ^b
Residual	2232.603	391	5.725		
Total	5801.500	392			
Source: Field data (2026)		$P \leq .05$			

The result in Table 5 shows that the computed F-value is 623.429 with 1 and 391 degrees of freedom as well as the p-value of .000. Since the p-value is less than the alpha value ($p < .05$), the null hypothesis, which states that there is no significant influence of gender on choice of healthcare services for health challenges among adults in rural areas of the Akwa Ibom North-East Senatorial District, is rejected, while the alternative is retained. It can therefore be concluded that there is a statistically significant influence of gender on choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District.

Hypothesis Three: There is no significant influence of educational attainment on choice of healthcare services for health challenges among adults in rural areas of the Akwa Ibom North-East Senatorial District.

Table 6: Summary of F-ratio of the Regression of the Influence of Educational Attainment on Choice of Healthcare Services for Health Challenges among Adults in Rural Area (n = 392)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	3037.275	1	3037.275	428.524	.000 ^b
Residual	2764.225	391	7.088		
Total	5801.500	392			

Source: Field data (2026)

$P \leq .05$

The result in Table 6 shows the computed F-value as 428.524 with 1 and 391 degrees of freedom as well as the p-value of .000. Since the p-value is less than the alpha value ($p < .05$), the null hypothesis, which states that there is no significant influence of educational attainment on choice of healthcare services for health challenges among adults in rural areas of the Akwa Ibom North-East Senatorial District, is rejected, while the alternative is retained. It can therefore be concluded that there is a significant influence of educational attainment on choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District.

Discussion of Findings

The finding of research question one revealed that the influence of age on choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District is very strong. Hypothesis one indicated that there is a significant influence of age on the choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District. This finding could be attributed to the fact that age significantly influences individuals' perceptions, experiences, and decision-making processes regarding healthcare services. As people age, their health challenges tend to become more complex and chronic, requiring different types of healthcare interventions. Older adults in rural areas of Akwa Ibom North-East may have accumulated more health-related experiences and knowledge, which shapes their preferences and choices for healthcare services.

Furthermore, in the cultural context of Akwa Ibom North-East, where traditional beliefs and practices are deeply rooted, age often confers a level of respect and authority that influences health-seeking behaviours. Older adults may prefer traditional healers or community-based healthcare options because of longstanding trust and familiarity, whereas younger adults might be more receptive to modern medical facilities. The influence of age on healthcare choices can also be linked to economic factors; older adults might have different financial capabilities or access to resources, affecting their ability to choose certain healthcare services. Additionally, health challenges associated with ageing, such as chronic diseases or mobility issues, often necessitate specific healthcare services, which in turn influence choices. Older adults tend to recognise their health needs more acutely and may prioritise services that address these needs, thereby reinforcing the strong influence of age on healthcare decision-making. Overall, the interplay of health status,

cultural norms, economic capacity, and accumulated experience explains why age exerts a very strong influence on the choice of healthcare services among adults in this rural setting.

The finding is in line with Ngugi and Kamau (2021), who indicated that age significantly influenced healthcare preferences, with older adults more likely to seek formal medical services for malaria, whereas younger adults relied more on informal providers. The finding also agreed with that of Kumar *et al.* (2020), which revealed that age was a significant predictor of healthcare choice, with older adults more inclined toward formal health services because of perceived severity and trust. The study is in line with Wanjiku and Njoroge (2022), who revealed that younger adults (18-40) tended to prefer herbal remedies or over-the-counter medications (about 60%), citing convenience and cost as primary reasons; middle-aged adults (41-60) mainly utilised government health centres (around 55%), citing trust and accessibility; and older adults (61+) overwhelmingly used government hospitals (over 75%), mainly due to the severity of symptoms and trust in formal healthcare. The study found that age was a significant determinant of healthcare choice, with older adults more likely to seek formal medical care, while younger adults favoured alternative remedies.

The finding of research question two revealed that the influence of gender on choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District is very strong. Hypothesis two indicated that there is a significant influence of gender on the choice of healthcare services for health challenges among adults in the rural area of the Akwa Ibom North-East Senatorial District. This finding could be attributed to the influence of gender roles and societal expectations within the cultural context of Akwa Ibom North-East. In this region, traditional gender norms often dictate specific behaviours and responsibilities for men and women, which significantly shape their health-seeking behaviours and preferences for healthcare services. For example, women are generally regarded as primary carers and are more actively involved in health-related decision-making for themselves and their families, leading them to prefer healthcare services that are accessible, affordable, and culturally acceptable. Conversely, men may prioritise healthcare options that emphasise strength, resilience, and independence, influencing their choices differently.

Furthermore, in the socio-cultural setting of Akwa Ibom North-East, gender influences perceptions of vulnerability and autonomy. Women might be more inclined to seek healthcare due to societal expectations of nurturing and caring roles, whereas men may underutilise healthcare services due to norms that discourage vulnerability or the acknowledgement of illness. Religious teachings and community values often reinforce these gender-specific behaviours, making gender a powerful determinant in health service preferences. Additionally, gender-based differences in health literacy, economic power, and societal status can affect access to and decision-making regarding healthcare services. Women, often being more involved in community and family health matters, may have better awareness and willingness to utilise available healthcare options. Men, on the other hand, might delay seeking care due to perceptions of masculinity or fear of appearing weak,

which influences their healthcare choices. Given these cultural, social, and economic factors, it is understandable why gender exerts a very strong influence on the choice of healthcare services among adults in this rural setting. This underscores the importance of gender-sensitive health policies and interventions that address specific barriers and facilitators faced by men and women to improve healthcare utilisation and outcomes in the community.

This finding agreed with Chukwu and Nwosu (2021), which revealed that women were more likely to seek formal healthcare services (around 65%) compared to men (about 45%), with women citing perceived vulnerability and maternal health considerations as key motivators. Men were more inclined toward self-medication or traditional remedies, citing cultural beliefs and work commitments as barriers to formal healthcare. The finding is also in agreement with Ogunleye and Adeyemi (2022), which indicated that women were more likely to seek formal healthcare services (around 70%) compared to men (approximately 50%). Women also reported higher levels of health literacy and greater trust in formal healthcare providers, which facilitated their healthcare choices. Conversely, men tended to delay seeking treatment, preferring informal sources initially, such as traditional healers or self-medication, citing stigma and work commitments as barriers. This finding also supported Mutua and Kilonzo (2024), which indicated that women were more likely to access formal health services (around 72%) for HIV/AIDS care than men (about 50%), primarily due to social support systems, reproductive health considerations, and awareness. Men were more prone to delay seeking care or resort to traditional healers, citing stigma and work-related constraints. The study revealed that gender roles and social perceptions significantly influenced healthcare-seeking behaviour, with women more proactive in managing their health.

The finding of research question three revealed that the influence of educational attainment on choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District is very strong. The corresponding hypothesis three indicated that there is a significant influence of educational attainment on choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District. This finding could be attributed to the role of educational attainment in shaping individuals' awareness, understanding, and attitudes towards healthcare options. In the cultural context of Akwa Ibom North-East, higher levels of education often correlate with increased health literacy, which enables adults to better understand the importance of various healthcare services and how to access them effectively. Educated individuals tend to have greater knowledge about disease prevention, treatment options, and available healthcare facilities, making them more confident and proactive in choosing appropriate services for their health challenges.

Moreover, education influences perceptions of healthcare quality and safety. Adults with higher educational attainment are more likely to be aware of the benefits of modern medical facilities and may have more trust in scientific and institutional healthcare providers. Conversely, those with lower education levels might rely more on traditional

healers or community-based remedies due to limited awareness or misconceptions about modern medicine. In addition, educational attainment often impacts economic capacity, social status, and decision-making autonomy, which further affects healthcare choices. Educated adults are often more empowered to make informed decisions, advocate for themselves, and navigate complex healthcare systems. They may also have better access to information through media, community programmes, or peer networks, facilitating more deliberate and informed healthcare choices.

The finding is in line with Chijioke and Adebayo (2020), which revealed that adults with higher education (secondary and tertiary) were more likely to utilise formal healthcare services (about 75%), citing better understanding of disease and trust in medical facilities. Conversely, those with no formal education or only primary education preferred traditional healers or self-medication (around 60%), citing accessibility issues and lack of awareness. The study also found that education significantly influenced health literacy, which in turn affected healthcare choices. Adults with higher education levels reported earlier healthcare-seeking behaviour and better adherence to treatment protocols. This finding agrees with the finding of Wambui and Kariuki (2022), which indicated that individuals with secondary and tertiary education were more likely to seek formal healthcare (around 80%) compared to those with only primary or no formal education (below 50%). Adults with higher education demonstrated better understanding of hypertension, leading to earlier healthcare-seeking and consistent medication use. Those with low education levels often relied on traditional remedies or delayed seeking formal care, citing lack of awareness and misconceptions about hypertension. The study highlighted that educational attainment directly impacted health literacy, which influenced healthcare choices and adherence. This finding is also in line with Ogbu and Chukwu (2023), which revealed that adults with secondary and tertiary education were significantly more likely to utilise formal healthcare services (over 70%) for diabetes management, citing better understanding of the disease and greater trust in health providers. Conversely, adults with no formal or only primary education often relied on traditional medicine, self-medication, or delayed seeking treatment, mainly due to limited health literacy and awareness. The results emphasised that higher educational attainment improves health literacy, facilitating earlier diagnosis and consistent management of diabetes.

Conclusion

The study looked at how socioeconomic indices influence the choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District. The findings showed that age, gender and educational attainment have significant influence on the choice of healthcare services for health challenges among adults in the rural area of Akwa Ibom North-East Senatorial District. It can be concluded that socioeconomic factors such as age, gender and education significantly influence the choice of healthcare services among adults in the rural area of Akwa Ibom North-East, shaping their health-seeking behaviours and access to care.

Recommendations

Based on the findings of this study, the following recommendations are made:

- i. Community health educators should develop healthcare programmes that tailor health education to different age groups to ensure relevant and effective health-seeking behaviour.
- ii. Government should develop gender-sensitive health communication strategies to address the specific healthcare needs and preferences of men and women.
- iii. Education authorities should promote health literacy initiatives that improve understanding of healthcare options among adults with varying educational levels.

References

- Adebayo, O., & Ojo, O. (2021). Socioeconomic factors influencing healthcare-seeking behaviours in Nigeria. *Journal of Health Economics and Policy*, 15(2), 123-135.
- Akpan, U., & Udo, E. (2020). Healthcare infrastructure and accessibility in rural Akwa Ibom. *African Journal of Public Health*, 8(4), 45-52.
- Chijioke, O., & Adebayo, R. (2020). Educational level and healthcare utilization for malaria among rural adults in Rivers State, Nigeria. *Nigerian Journal of Tropical Medicine*, 15(4), 234-242.
- Chukwu, A., & Nwosu, T. (2021). Education and health literacy in rural Nigeria. *International Journal of Health Education*, 10(1), 67-75.
- Eze, O., Ugwu, C., & Nwachukwu, I. (2021). Age-related health-seeking behaviours among rural populations. *Nigerian Journal of Community Medicine*, 12(3), 109-117.
- Federal Ministry of Health. (2022). *Nigeria National Health Policy*. Abuja: Federal Ministry of Health.
- Kumar, R., Zhang, Y., Smith, J. A., & Lee, A. (2020). Influence of age on healthcare choices among adults with chronic illnesses in Uttar Pradesh, India. *International Journal of Community Medicine and Public Health*, 7(4), 1425-1432.
- Mutua, M., & Kilonzo, C. (2024). Gender disparities in healthcare service preferences for HIV/AIDS among rural adults in Makueni County, Kenya. *East African Medical Journal*, 101(3), 150-163.

- Ngugi, I. K., & Kamau, C. (2021). Age-related preferences in healthcare service utilization for malaria among rural adults in Kiambu County, Kenya. *Journal of Rural Health Studies*, 15(3), 45-60.
- Nwachukwu, J., Okechukwu, B., & Udo, E. (2023). Socioeconomic determinants of healthcare utilization in Nigeria. *Health Policy and Planning*, 38(2), 250-259.
- Ogbu, C., & Chukwu, E. (2023). Educational attainment and healthcare choices for diabetes in rural Anambra State, Nigeria. *Nigerian Journal of Endocrinology*, 18(2), 118-127.
- Ogunleye, A., & Adeyemi, O. (2022). Gender-based variations in healthcare service choices for tuberculosis among rural adults in Osun State, Nigeria. *Journal of Rural Health Studies*, 16(4), 200-214.
- Ojo, T., & Adebayo, M. (2023). Gender disparities in healthcare access in rural Nigeria. *African Journal of Gender and Development*, 9(1), 23-35.
- Oladele, A., Eze, B., & Nwosu, K. (2022). Age and health service utilization in rural settings. *International Journal of Geriatric Medicine*, 7(2), 89-97.
- Smith, J., Johnson, L. A., & Thompson, R. (2020). Socioeconomic determinants of healthcare disparities: A comprehensive review. *Journal of Health Equity*, 12(3), 45-58.
- Wambui, K., & Kariuki, D. (2022). Educational attainment and healthcare service choices for hypertension in Meru County, Kenya. *East African Medical Journal*, 99(4), 215-223.
- Wanjiku, J., & Njoroge, M. (2022). Age and healthcare choices for hypertension among rural adults in Murang'a County, Kenya. *Kenyan Journal of Medicine*, 10(4), 200-209.
- World Health Organization. (2021). *Social determinants of health: Policy brief*. WHO.