

Determinants of health-seeking behaviour among enrollees of a social health insurance scheme in Anambra state, southeast, Nigeria

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SUMMARY

Background: Understanding factors that explain the health-seeking behaviour (HSB) among enrollees of Anambra State Health Insurance Scheme (ASHIS) is a critical entry point for improving health outcomes and achieving universal health coverage (UHC).

Aim: To assess the socio-demographic and health facility determinants of health-seeking behaviour among the enrollees of ASHIS in Anambra State, Nigeria.

Subjects and methods: A cross-sectional health facility-based survey involving enrollees of the ASHIS. A total of 447 enrollees were randomly selected from 12 (6 rural and 6 urban) facilities using a multi-stage sampling method. Data was collected on socio-demographics and facility characteristics using a pre-tested, interviewer-administered questionnaire.

Statistical analysis: The data was analyzed using SPSS version 25. Descriptive data were expressed as mean and proportions. Fisher's exact test was computed to determine the association between dependent and independent variables. Statistical significance was set at a p-value of <0.05.

Results: The mean age of respondents was 42 ± 13.5 years. The overall appropriate change in the HSB among the enrollees since they commenced accessing care under ASHIS was 76%. Majority (96.6%) of them now take prompt action (within 24 hours) while 90.9% of them seek care in a formal health facility when feeling sick. There was a statistically significant association between appropriate HSB and marital status (p<0.04); education (p<0.002); employment (p<0.002); facility location (p<0.04) and ownership of the facility (p<0.00). With respect to prompt care (when) and source of care when feeling sick, educational qualification, employment status, location, and ownership of the facility were statistically significant (p<0.05). Educational level (AOR 1.80, CI 1.06-3.05) predicts appropriate HSB. Other predictors of the appropriate HSB were facility location (AOR 1.49, CI 0.15-0.59) and facility ownership (AOR 2.42, CI 1.21-4.84). Prompt care when sick was not predicted by socio-demographics and facility characteristics.

Conclusions: The major factors determining the appropriate HSB of enrollees of the ASHIS are socio-demographics -educational and employment status and facility characteristics- location and ownership of the health facility.

Keywords: ASHIS; Determinants; Enrollees; Health insurance; Health-Seeking behavior; Nigeria

INTRODUCTION

Globally, social health insurance is widely accepted as a key instrument for improving universal access to health care and financial protection because it involves funds and risk pooling [1,2]. Evidence from low-and-middle-income countries (LMICs) show that health insurance scheme improves access to healthcare services [3-6] due to health insurance's perceived cost-effectiveness [7,8], and financial-risk protection [9]. More so, a previous study reported that insured people tend to adopt appropriate health-seeking behaviour (HSB) by using formal healthcare facilities than those who are uninsured [6,10].

HSB situated within the broader concept of health behaviour is defined as actions or inactions undertaken by people who perceived themselves to have a health challenge or to be ill for the purpose of finding an appropriate and prompt remedy [11]. It encompasses various activities undertaken to prevent or promote and or cure ill health or dealing with any departure from a good health status [12]. An important aspect of HSB is the choice of healthcare provider made by people in response to illness episodes. Inappropriate HSB has been attributed to worse health outcomes, increased morbidity and mortality [13,14].

Studies have described factors that significantly influence HSB during illness episodes, and these can be broadly categorized into two groups [12,15,16]. The first category of studies emphasized seeking care in a formal system [17], and is largely influenced by factors such as sex, age, the type of illness, the social status, access to health services and perceived quality of the service [18,19]. In the second category, the determinants of HSB lie between the patients and the services provided. These determinants include social, geographical, cultural economic, and organizational factors [20-21]. Other evidence indicated that a health insurance scheme can significantly increase access to healthcare services and equity in financing [22,23]. Several factors such as the location of choice service provider [24-26], family income [27], provider-patient relationship, [10,28-30] etc can hinder countries' progress toward UHC. More so, the place of residents determines HSB as previously reported that urban dwellers have reported appropriate HSB during their last illness episode than the rural dwellers [31].

Healthcare utilization and its patterns are reflected

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by the healthcare-seeking behaviour of people. Thus, health services should be planned and provided based on information relating to healthcare-seeking behaviour and utilization, and its determining factors in the context of social health insurance schemes.

The Anambra State Health Insurance Scheme (ASHIS) is a sub-national social health insurance scheme established by law and managed by the Anambra State Health Insurance Agency (ASHIA), under the Anambra State Health Insurance Scheme law 2016 to address the existing health inequities and high out-of-pocket expenditures (OOPE) for residents of the state toward achieving UHC by the year 2030 [32]. The scheme was launched and started its operation in September 2018. The scheme covers employees in the formal and informal sectors who are entitled to benefit packages that comprise health promotion, disease prevention, curative and rehabilitative health care services provided at both public and private primary, secondary, and tertiary healthcare facilities [32,33].

The ASHIS is financed through premiums (payroll deductions, and private contributions); government subsidy (general, earmarked taxes, and non-tax revenues), and other sources (donations, donor funds, etc.) [32,33]. The ASHIA operational guideline stipulates the contributions will be from an equity fund established for the vulnerable persons; earnings-related for the public (State & LGA) and organized private sector employees where an employer pays 10% of the basic salary while the employee contributes 5% of the basic salary and; contributions from donors, philanthropists etc. There is a co-payment of only 10% of the cost of medications prescribed to an enrollee whether as outpatient or inpatient, made to the healthcare provider at the point of care. The law provides for the Anambra State Health Insurance Fund (ASHIF) as a single pool for the scheme. The provider payment mechanisms are capitation for primary care and fee-for-service (FFS) for secondary and tertiary care [32,33].

Little or no empirical evidence exist on ASHIS enrollees' HSB and its determinants. Previous studies in Nigeria have focused largely on the National Health Insurance Scheme (NHIS). Understanding the determinant of HSB among the enrollees of the ASHIS is particularly important for improving health outcomes and achieving universal health coverage (UHC) in Anambra state. This study was undertaken to assess socio-demographic and health facility factors that predict appropriate HSB among enrollees of the scheme in Anambra State, Nigeria. This information will be useful to government, policymakers, program/health insurance managers and health care providers for evidence-informed decision making to improve the functionality of the scheme and better health outcomes particularly in developing countries.

METHODS

Study area and design

The study was conducted in twelve (12) health facilities in Anambra State, South-east, Nigeria between January to March 2022. Anambra State is in the southeastern part of Nigeria. The State has an estimated annual growth rate of

2.8%, with a projected population of 4.5 million people in 2018 [34]. The state has twenty-one (21) Local Government Areas (LGAs). Structurally, the State health system is organized into three tiers: primary, secondary, and tertiary levels of healthcare. ASHIA manages and coordinates the State health insurance scheme. A cross-sectional study approach was adopted to collect information on the enrollee's HSB and its determinants prior to enrollment into the scheme.

Study population and sampling

The study population comprised of enrollees who are currently assessing care through the ASHIS at their respective health facilities at the time of the study. Patients who are accessing care at the selected health facilities who are not insured under ASHIS and who also access services at the selected facilities were excluded from being interviewed. In addition, the study also excluded eligible enrollees who refused to give consent to participate.

Multistage sampling technique was used to select facilities/respondents interviewed. The sampling methods include: i) Stratification of the state into three senatorial zones; ii) Selection of six (6) LGAs (two per senatorial zone) for inclusiveness and representativeness using the simple random sampling (SRS) method; iii) Selection of twelve (12) facilities (using a list of ASHIA accredited health care providers) from the six LGAs purposively using a set of criteria including urban-rural location, public and private health facilities, and health facilities about 500 and above the number of enrollees to ensure that a minimum sample size per facility is obtained and to enable subgroup data analysis and; iv) Lastly, purposive selection of the respondents who presented themselves for healthcare during the data collection period.

In estimating the sample size, the Yaro Yamane formula; $n = N / (1 + N(e)^2)$ was used. Where n is the calculated sample size; N is the total population of ASHIS enrollees; e is the allowable error of five per cent (0.05), while 1 is the constant. A minimum sample size of 402 was calculated but was increased by 5% to account for incomplete responses and/or errors in the survey.

Data collection

Data were collected using an interviewer-administered structured questionnaire developed by the researchers. The questionnaire elicited information on socio-demographic characteristics, change in HSB, duration of seeking care when feeling ill/ when sick, and preferred treatment facility before and during enrollment into ASHIS. Each respondent was surveyed by trained research assistants consisting of an interviewer who asked the questions and entered responses in the KoBoCollect formatted electronic questionnaire. Twelve research assistants were recruited and trained for three (3) days to enable them administer the survey tool properly. The training consisted of interactive plenary and role-play sessions. The role play was introduced on the second day and research assistants worked in groups, alternating roles as interviewers, recorders, and respondents. Data was collected on workdays and lasted

for a period of eight (8) days. Data collected were uploaded to the KoBoCollect server built for the study by an IT consultant also recruited for the purpose of the study. To ensure that good quality data were collected from respondents the study embedded supervision of fieldwork activity done by 4 trained fieldwork supervisors. At the end of data collection, the complete data set was downloaded in a Microsoft Excel file by the IT consultant for data cleaning and analysis.

Definitions of study variable

The appropriate HSB in this study was defined by two outcomes: 1) facility where care or treatment was sought from and 2) duration of observation before seeking care when sick/feeling sick. For the facility where care or treatment was sought, we defined an appropriate HSB as health care sought from qualified medical professionals - formal health facilities including primary, secondary or tertiary care at private or public hospitals while informal health facilities include PMV, TBAs, herbal or traditional medicine, self-medication, open drug market or vendors etc. The duration of observation before seeking care when sick/feeling sick is defined as prompt care, that is, seeking care less than or 24 hours of feeling sick while delayed care is seeking care after 24 hours of feeling sick.

Data analysis

Univariate, bivariate and multivariate analysis were performed using Social Science Statistical Software (SPSS)

Version 25. For the univariate analysis, frequency and proportions were reported for all categorical variables while the mean was reported for numeric variables.

Bivariate analysis: Enrollee's HSB, preferred treatment health facility and duration of seeking care when feeling ill (dependent variables) were disaggregated by (the independent variable) socio-demographic characteristics including, sex, age, and facility characteristics; geographical location (rural-urban) and ownership of facility (private-public) to highlight distribution as well as to test for correlation. Chi-square and p-values were reported for the multi-way tables. Statistical significance was set at a p-value of 0.05 and the confidence level at 95%.

Multivariate analysis: Logistic regression analysis to explain the relationship between dependent variables and independent variables was undertaken.

RESULTS

Background information of the study population

The characteristics of 447 enrollees included in the analysis are summarized in **Tab. 1**. The respondents mean average age is 42 years with most belonging to the age group of 31 to 40 years. Majority (80.1%) of them are married and about 62% completed tertiary education and are civil servants. With respect to the location of the health facility,

Tab. 1. Characteristics of the respondents and facility (N=447).

	Variables	n (%)
Age group	<20	42(13.5)
	20-30	88(19.6)
	31-40	140(31.3)
	41-50	96(21.6)
	51-60	85(19.0)
	61-70	30(6.6)
	71 & above	8(1.6)
Sex	Male	127(28.4)
	Female	320(71.6)
Marital status	Married	358(80.1)
	Single	72(16.1)
	Widow/Widowed	17(3.8)
Highest educational level	Primary	19(4.3)
	Secondary	121(27.1)
	Tertiary	281(62.9)
	Postgraduate	19(4.3)
	Other (Catering school, OND)	6(1.3)
Occupation	Unemployed	52(11.6)
	Petty Trader	22(4.9)
	Subsistence Farmer	6(1.3)
	Artisan	16(3.6)
	Government Worker	281(62.9)
	Businessman/woman	31(6.9)
	Employed in private sector	33(7.4)
	Others (retired, pensioner)	6(1.3)
Facility characteristics		
Location of facility	Urban	340(76.1)
	Rural	107(23.9)
Facility ownership	Private	303(67.6)
	Public	114(25.2)

urban respondents constitute 76% of the respondents while 68% of them were recruited from private health facilities. Other details of the respondents are detailed in **Tab. 1**.

HSB after enrollment in ASHIS

Tab. 2. shows the pattern of change in the HSB of the enrollees interviewed. The analysis indicated that 71% of the respondents reported that there is an appropriate change in their HSB change since they commenced accessing care/ services under the ASHIS. Generally, majority (96.6%) now take prompt action when sick (within 24 hours of feeling sick). Similarly, majority (90.9%) seek care in a formal facility unlike before they enrolled in the ASHIS. The detailed HSB is detailed in **Tab. 2**.

Determinants of appropriate HSB among the enrollees

The association between respondents' sociodemographic

and facility characteristics and their HSB, when and where to seek care when feeling sick after enrollment into ASHIS is shown in **Tab. 3**. The results indicate that there were statistically significant associations between appropriate change in HSB and some socio-demographic characteristics-marital status ($p < 0.04$), education ($p < 0.002$), employment ($p < 0.002$) and facility characteristics – location of the facility ($p < 0.04$) and ownership of the facility ($p < 0.00$). With respect to prompt care (when) and source of care when feeling sick, educational qualification, employment status, location, and ownership of the facility were statistically significant ($p < 0.05$).

Results of logistic regression analysis for predictors of change in HSB, where and when care was sought when feeling sick among enrollees are shown in **Tab. 4**. Change in HSB was predicted by educational level (AOR 1.80, CI 1.06-3.05). Facility location and ownership predict

Tab. 2. Descriptive analysis of HSB of the respondents.

Variable	n (%)	
Change in health seeking behaviour (N=447)		
Yes	320(71.6)	
No	127 (28.4)	
If yes, how? (n=320)	Before enrollment	
	n (%)	After enrollment n (%)
When care/treatment was sought		
• Immediately I feel sick	109(34.1)	268(83.8)
• Within 24 hours	72(22.5)	42(13.1)
• 48 hours after	62(19.4)	8(2.5)
• 7 days after	53(16.6)	1(0.3)
• At critical stage	24(7.5)	1(0.3)
Where care or treatment was sought from		
• Patent Medicine Vendor	207 (46.3)	36 (8.1)
• Herbal traditional healer	7 (1.6)	1(0.2)
• Hospital (Private/public)	167 (37.4)	403 (90.2)
• Primary health center (PHC)	18 (4.0)	3 (0.7)
• Self- medication	42 (9.4)	0 (0.0)
• No Action	6 (1.3)	4 (0.9)

Tab. 3. Association between socio-demographic and facility characteristics and positive health-seeking behaviour after enrollment into ASHIS.

Variable	Change in HSB	Source of care	When care was sought
	n (%)	n (%)	n (%)
Sex	Male	119(26.6)	119(26.6)
	Female	288(64.4)	288(64.4)
	X ² (p-value)	1.53(0.22)	1.53(0.22)
Age group	≤42	233(52.1)	233(52.1)
	≥43	174(38.9)	174(38.9)
	X ² (p-value)	0.34(0.56)	0.34 (0.56)
Marital status	Married	342(76.5)	342(76.5)
	Single	65(14.5)	65(14.5)
	X ² (p-value)	0.06(0.80)	0.06(0.80)
Educational level	Basic	135(30.2)	135(30.2)
	Higher	272(60.9)	272(60.9)
	X ² (p-value)	5.57(0.01)*	5.75(0.02)*
Employment status	Employed	356(79.6)	356(79.6)
	Unemployed	51(11.4)	51(11.4)
	X ² (p-value)	3.57(0.04)*	3.55(0.04)*
Facility ownership	Private	283(63.3)	283(63.3)
	Public	124(27.7)	124(27.7)
	X ² (p-value)	6.36(0.01)*	6.36(0.01)*
Location of facility	Rural	88(19.7)	88(19.7)
	Urban	319(71.4)	319(71.4)
	X ² (p-value)	13.4(0.00)*	13.39(0.00)*

p-value<0.05; * statistically significant value.

Tab. 4. Predictors of respondents' HSB within the ASHIS.

Variables	Change in HSB		Source of care		When care was sought	
	AOR (95% CI)	P-value	AOR (95% CI)	P-value	AOR (95% CI)	P-value
Socio-demographic characteristics						
Age	0.96(0.61-1.50)	0.86	1.03(0.50-2.12)	0.94	0.65(0.23-1.82)	0.41
Sex	0.71 (0.44-1.16)	0.17	0.63(0.27-1.46)	0.63	0.94(0.32-2.79)	0.91
Marital status	0.67(0.33-1.44)	0.32	0.63(0.27-1.46)	0.28	2.21(0.53-9.23)	0.28
Educational level	1.80 (1.06-3.05)	0.03*	2.39(0.91-6.34)	0.08	3.78(0.72-19.9)	0.12
Employment status	1.61(0.69-3.79)	0.66	0.20(0.002-1.88)	0.16	0.81(0.07-9.13)	0.87
Facility characteristics						
Location of facility	1.31 (0.78-2.19)	0.30	1.29(0.15-0.59)	0.00*	1.49(0.40-3.19)	0.48
Facility ownership	1.49(0.96-2.33)	0.08	2.42(1.21-4.84)	0.03*	1.59(0.44-5.76)	0.81

AOR = Adjusted odds ratio; CI = Confidence Interval *p<0.05.

the source of care when feeling sick (AOR 1.49, CI 0.15-0.59) and (AOR 2.42, CI 1.21-4.84) respectively. When care was sought when sick was not predicted by socio-demographics and facility characteristics in this study.

DISCUSSION

The study observed a high proportion of appropriate HSB among enrollees of the ASHIS with respect to seeking prompt care in a formal health care facility. This could be explained by the fact that health insurance made access to health care easier for the enrollees. Other reasons could be due to affordability or low cost of treatment and availability of quality services offered by the scheme's accredited health care providers. The implication is that the insurance scheme is achieving its objective of universal access to health care and financial protection and could be a vehicle for achieving UHC in Anambra State. This assertion is in line with previous reports that health insurance significantly increases access to healthcare services [3-6]. Our finding is in line with other studies that found improved access to health care services among health insurance enrollees [6,10,35]. Similarly, access to health facilities has been reported to be a significant influencer of HSB in previous studies [36-38]. However, the finding disagrees with another study which documented that health insurance had no significant improvement in access to healthcare among the insured individuals studied [39].

Some socio-demographic characteristics such as educational level and employment status were the significant determinants of appropriate HSB among the ASHIS enrollees. The influence of higher education on HSB could be attributed to having higher knowledge or awareness of the benefits or health implications of appropriate HSB. The only predictor of change in HSB was educational level. This implies that the more educated individuals were nearly two times more likely to adopt appropriate HSB. On the other hand, employment has a direct effect on family income, thus increasing the chance to seek appropriate HSB. Our findings are consistent with reports that people who have attained higher education and

are employed have better HSB [14] and seek prompt care when feeling ill [40]. However, a previous study elsewhere found no significant association between educational level, occupation and HSB of the insured individuals [41].

In addition, the positive significant association between choice of providers indicate that enrollees are more likely to choose formal healthcare facilities over informal ones. This could be attributed to the low cost of access to care through health insurance as well as the perceived quality of care provided by the formal healthcare providers. The finding is not surprising because it has been documented that people sought care at informal facilities due to the high cost of health care in Nigeria [42,43]. Our finding agrees with another study which found that the insured are significantly more likely to seek formal healthcare than those who are uninsured [6].

Overall, facility characteristics; facility ownership and location of the facility were major determinants of appropriate HSB across the three variables explored – change in HSB, prompt care and source of care. The implication of the findings is that private hospital and those located in the urban areas significantly influence the appropriate HSB of the enrollees than their counterparts. This could probably be due to the level of satisfaction with health care as well as the proximity of the health facilities. Evidence shows that location is a common determinant of provider choice and frequency of visits [24,25]. Similarly, another study reported that urban dwellers have reported appropriate HSB during their last illness episode than the rural dwellers [31]. Facility location and ownership have a significant predictive effect on the source of care.

The major strength of this study is the sampling method which allowed for diverse responses from two types/ownership of health facilities (private and public accredited health care providers), geographical location (urban-rural), and a combination of respondents who are employed and unemployed which largely contributed to representativeness and richness of the findings. However, the study is limited by high reliance on self-reported responses which may be subject to recall and reporting bias.

Other confounders that are likely to affect HSB such as type of sickness and distance to the facility are still possible.

CONCLUSION

Respondents' socio-demographics- educational level and employment status and health facility characteristics- location and ownership were the major factors determining appropriate (prompt care and seeking care in a formal health facility) HSB during illness episodes. Targeted enlightenment to the less educated enrollees to improve their HSB is recommended for Anambra State Health Insurance Agency. In addition, attention should be paid to the quality of services provided by rural and public healthcare facilities to ensure global improvement in HSB among enrollees of ASHIS.

ETHICAL APPROVAL AND CONSENT TO PARTICIPATE

Ethical approval was obtained from the Health Research and Ethics Committee of the State Ministry of Health, Awka, Anambra State. Approval to conduct the study was also obtained from the Anambra State Health Insurance Agency and the Chief Medical Directors of all the participating hospitals. During data collection and analysis, the principles of ethical conduct of research involving humans; -voluntary informed consent, and privacy of information provided. Both verbal and written informed consent were obtained from each respondent.

CONSENT FOR PUBLICATIONS

We declare that permission for publication was obtained for this study.

AVAILABILITY OF SUPPORTING DATA

The datasets generated and analyzed in this study are not publicly available due to limitations of ethical approval involving patient data and anonymity but are available from the corresponding author on reasonable request.

COMPETING INTERESTS

The authors declare they have no conflict of interest nor competing interests.

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AUTHORS' CONTRIBUTIONS

URE and SBO conceptualized the study. SBO and URE participated in the data collection. URE performed the statistical analysis and interpretation of results. URE and SBO drafted the first version of the manuscript. The authors contributed in revising the first draft of the paper and approved the final version.

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REFERENCES

1. **Abiuro GA, McIntyre D.** Universal financial protection through national health insurance: A stakeholder analysis of the proposed one-time premium payment policy in Ghana. *Health Policy Plan.* 2013;28(3):263-278.
2. **Mills A, Ataguba JE, Akazili J, et al.** Equity in financing and use of health care in Ghana, South Africa, and Tanzania: Implications for paths to universal coverage. *Lancet.* 2012;380(9837):126-133.
3. **Onwujekwe O, Onoka C, Uzochukwu B, et al.** Is community-based health insurance an equitable strategy for paying for healthcare? Experiences from southeast Nigeria. *Health policy.* 2009;92(1):96-102.
4. **Dalinjong PA, Welaga P, Akazili J, et al.** the association between health insurance status and utilization of health services in rural northern Ghana: Evidence from the introduction of the national health insurance scheme. *J Health Popul Nutr.* 2017;36(1):1-10.
5. **Brugiavini A, Pace N.** Extending health insurance in Ghana: Effects of the national health insurance scheme on maternity care. *Health Econ Rev* 2016;6(1): 1-10.
6. **Suchman L, Hashim CV, Adu J, et al.** Seeking care in the context of social health insurance in Kenya and Ghana. *BMC Public Health.* 2020;20(1):1-3.
7. **Kotoh AM, Aryeetey GC, Van Der Geest S.** Factors that influence enrolment and retention in Ghana's national health insurance scheme. *Int J Health Policy Manag.* 2018;7(5):443.
8. **Gobah FF, Liang Z.** The national health insurance scheme in Ghana: Prospects and challenges: A cross-sectional evidence. *Glob J Health Sci.* 2011;3(2):90.
9. **Jehu-Appiah C, Aryeetey G, Agyepong I, et al.** Household perceptions and their implications for enrolment in the national health insurance scheme in Ghana. *Health Policy Plan.* 2012;27(3):222-233.
10. **Fenny AP, Asante FA, Enemark U, et al.** Malaria care seeking behavior of individuals in Ghana under the NHIS: Are we back to the use of informal care?. *BMC Public Health.* 2015;15(1):1-8.
11. **Olenja J.** Editorial health seeking behaviour in context. *East Afr Med J* 2003;80(2):61-62.
12. **MacKian S.** A review of health seeking behaviour: Problems and prospects. *Health Sys Dev Prog.* 2003.
13. **Atuyambe LM.** Adolescent motherhood in Uganda: Dilemmas, health seeking behaviour and coping responses. 2008.
14. **Mwase I.** Social capital and household health-seeking behaviour for children in the context of urban neighbourhoods: The case of Khayelitsha in Western Cape, South Africa. 2015.
15. **Geldsetzer P, Williams TC, Kirolos A, et al.** The recognition of and care seeking behaviour for childhood illness in developing countries: A systematic review. *PLoS One.* 2014;9(4):e93427.
16. **Moyer CA, Adongo PB, Aborigo RA, et al.** "It's up to the woman's people": How social factors influence facility-based delivery in Rural Northern Ghana. *Matern Child Health J.* 2014;18(1):109-19.
17. **Rosenstock IM.** Why people use health services. *Milbank Mem Fund Q.* 1966;44(3):94-127.
18. **Cronin T, Sheppard J, de Wildt G.** Health-seeking behaviour for schistosomiasis: A systematic review of qualitative and quantitative literature. *Pan Afr Med J.* 2013;16.
19. **Webair HH, Bin-Gouth AS.** Factors affecting health seeking

- behavior for common childhood illnesses in Yemen. *Patient Preference Adherence*. 2013;7:1129.
20. Senbeto M, Tadesse S, Tadesse T, et al. Appropriate health-seeking behavior and associated factors among people who had cough for at least two weeks in northwest Ethiopia: A population-based cross-sectional study. *BMC Public Health*. 2013;13(1):1-7.
 21. Worku AG, Yalew AW, Afework MF. Maternal complications and women's behavior in seeking care from skilled providers in North Gondar, Ethiopia. *PloS One*. 2013;8(3):e60171.
 22. Odeyemi I, Nixon J. Assessing equity in health care through the national health insurance schemes of Nigeria and Ghana: A review-based comparative analysis. *Int J Equity Health*. 2013;12(1):1-8.
 23. Saleh K. The health sector in Ghana: A comprehensive assessment. 2012;27.
 24. Dzator J, Asafu-Adjaye J. A study of malaria care provider choice in Ghana. *Health Policy*. 2004 Sep 1;69(3):389-401.
 25. Wiseman V, Scott A, Conteh L, et al. Determinants of provider choice for malaria treatment: Experiences from The Gambia. *Soc Sci Med*. 2008;67(4):487-96.
 26. Dor A, van der Gaag J. Quantity rationing and the demand of adults for medical care in rural Cote d'Ivoire. 1993:193-213.
 27. Rehman A, Shaikh BT, Ronis KA. Health care seeking patterns and out of pocket payments for children under five years of age living in Katchi Abadis (slums), in Islamabad, Pakistan. *Int J Equity Health* 2014;13(1):1-6.
 28. Ashis D, Ravindran TK. Factors affecting treatment-seeking for febrile illness in a malaria endemic block in Boudh district, Orissa, India: Policy implications for malaria control. *Malar J*. 2010;9(377).
 29. Kinung'hi SM, Mashauri F, Mwanga JR, et al. Knowledge, attitudes and practices about malaria among communities: Comparing epidemic and non-epidemic prone communities of Muleba district, North-western Tanzania. *BMC Public Health*. 2010;10(1):1-1.
 30. Chuma J, Okungu V, Molyneux C. Barriers to prompt and effective malaria treatment among the poorest population in Kenya. *Malar J*. 2010;9(1):1-4.
 31. Onwujekwe O, Onoka C, Uzochukwu B, et al. Constraints to universal coverage: Inequities in health service use and expenditures for different health conditions and providers. *Int J Equity Health*. 2011;10(1):1-9.
 32. Anambra State Government. Anambra state health insurance scheme law. 2016.
 33. State Ministry of Health. Anambra state health insurance operational guideline and benefits package. 2019.
 34. Nigeria Population Commission. Nigeria demographic and health survey 2018. NPC, ICF; 2019.
 35. Chomi EN, Mujinja PG, Enemark U, et al. Health care seeking behaviour and utilisation in a multiple health insurance system: Does insurance affiliation matter?. *Int J Equity Health*. 2014;13(1):1-11.
 36. Gao W, Dang S, Yan H, et al. Care-seeking pattern for diarrheea among children under 36 months old in rural western China. *PloS One*. 2012;7(8):e43103.
 37. Babalola S, Fatusi A. Determinants of use of maternal health services in Nigeria-looking beyond individual and household factors. *BMC Pregnancy Childbirth*. 2009;9(1):1-3.
 38. Ng'anjo Phiri S, Kiserud T, Kvåle G, et al. Factors associated with health facility childbirth in districts of Kenya, Tanzania and Zambia: A population based survey. *BMC Pregnancy Childbirth*. 2014;14(1):1-4.
 39. Jutting J, Tine J. Micro insurance schemes and health care provision in developing countries: An empirical analysis of the impact of mutual health insurance schemes in rural Senegal. 2000;(7359).
 40. Ahmed SM, Adams AM, Chowdhury M, et al. socioeconomic development and health-seeking behaviour in Bangladesh. *Soc Sci Med*. 2000;51(3):361-71.
 41. Kim HK, Lee M. Factors associated with health services utilization between the years 2010 and 2012 in Korea: using Andersen's behavioral model. *Osong Public Health Res Perspect*. 2016;7(1):18-25.
 42. Odu BP, Mitchell S, Isa H, et al. Equity and seeking treatment for young children with fever in Nigeria: A cross-sectional study in Cross River and Bauchi States. *Infect Dis Poverty*. 2015;4(1):1-8.
 43. Colvin CJ, Smith HJ, Swartz A, et al. Understanding careseeking for child illness in sub-Saharan Africa: A systematic review and conceptual framework based on qualitative research of household recognition and response to child diarrhoea, pneumonia and malaria. *Soc Sci Med*. 2013;86:66-78.