

Health-Seeking Behaviour and Health Outcome among Uninsured Patients Attending a Primary Care Clinic of a Teaching Hospital in Southwestern Nigeria

¹Solomon Olusoji Abidemi
Department of Family Medicine
Ekiti State University, Ado Ekiti, Nigeria.

²Solomon Oluremi Olayinka
Department of Community Medicine
Ekiti State University, Ado Ekiti, Nigeria.

³Amu Eyitope Oluseyi
Department of Community Medicine
Ekiti State University, Ado Ekiti, Nigeria.

Abstract:- Healthcare seeking behaviour is defined among others as the time difference between the onset of an illness and getting in contact with a healthcare professional. This study determined the health seeking behaviour of uninsured, out of pocket paying patients that attended a primary care clinic of a teaching hospital, their health outcomes and some sociodemographic characteristics associated. It is a retrospective cross-sectional study carried out between October and December 2022. It used secondary data of 16,030 patients seen at the General Outpatient Clinic of Ekiti State University Teaching Hospital between 2009 and 2018. The patient records were reviewed, and data about the period between symptoms onset and the time of presentation in the clinic, the outcome clinical consultation, and their socio-demographic characteristics, were extracted and analysed. Total of 16,030 patients were seen during the period under review, with 54.2% being females. 90.7%, 95.4% and 94.3% were of Yoruba origin, Christians, and urban dwellers respectively. Among the surveyed 24% of the surveyed presented within 24 hours of onset of illness while 16.5% and 59.5% presented between 24 and 48 hours and above 48 hours after symptom(s) onset respectively. The study observed significant association between timeliness of presentation and health outcomes with p value < 0.05 . Severity of illness was observed to determine the timeliness of presentation among uninsured patient attending the primary care clinic.

Keywords: Health-Seeking Behaviour, Uninsured, Health Outcomes, Timeliness Of Presentation, Primary Care Clinic.

I. INTRODUCTION

Healthcare-seeking behaviour (HSB) according to Olenja, is defined as, any action or inaction undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy.[1] It can be describe based on previous work done as the time difference between the onset of an illness and getting in contact with a healthcare professional, the type of healthcare provider patients sought help from, how compliant the patient is with the recommended treatment, reasons for the choice of healthcare professional, and reasons for not seeking help from healthcare professionals.[2] According to the WHO, the centrality of health-seeking behaviour can be seen in the context of early recognition of symptoms, presentation to health facilities and compliance with effective treatment.[3]

The National Academies of Sciences, Engineering, and Medicine (formerly known as the Institute of Medicine) define access to health care as the “timely use of personal health services to achieve the best possible health outcomes.”[4] Many people face barriers that prevent or limit access to needed health care services, which may increase the risk of poor health outcomes and health disparities.[5]

Payment for health care services have been observed to constitute a huge financial burden to families, with out-of-pocket payment (OOP) imposing great barrier to health care access,[6] with consequent limitation to Universal Health Coverage (UHC). UHC concept is central to attainment of the third Sustainable Development Goal (SDG).[7] SDG 3 reminds the world of the right of every human to health and seeks improved efforts by nations to implement healthcare systems that guarantee access to quality care and adequate financial protection against cost of ill health.[7] According to World Health Organization, 25 million households are forced yearly into poverty by illness and need to pay for health care. [8]

Barriers to adequate health service utilization has been identified in previous studies to be caused by the presence of financial difficulty imposed by informal payments and travel costs to healthcare facilities.[8] Quality of care barriers are related to drug stock-outs, chronic shortage of highly qualified staff, and users' lack of information on probable medical benefits; distance to health facilities, due to an uneven geo-spatial distribution of healthcare providers and cultural barriers, relating to low educational levels, traditional beliefs, and fear of stigma.[8]

Daramola et al observed that out of pocket payment contribute significantly to reduction in the number of those that present in the hospital as their first line health seeking behaviour compared to those who are insured.[9] In a study of health care seeking behaviour and out of pocket health expenditure for under five illnesses, Shubha et al observed an average delay of 1.8 ± 0.4 days in seeking health care.[8] The reason for the observed delay was attributed to the high cost of care and distance of health care facilities from households.[8] A study in United States by Schweitzer et. al showed that uninsured, out of pocket paying patients were less likely to receive timely and quality health care.[10] Martins et.al, observed in their study that those with severe symptoms were more likely to present to their physician when compared with those with minor symptoms.[11] Previous large out of pocket expense was found in the same study to be a deterrent to presentation to physicians to the same magnitude among those with severe and minor symptoms.[11]

Nigeria has high level reliance on out-of-pocket payments with more than 90% uninsured and only 5% of the formal sector are covered by the National health Insurance Scheme (NHIS) since its inception in 2006.[12] Out of pocket payment for healthcare by households and individuals has been observed to contribute to worsening of poverty level in Nigeria. [12] This study determined the pattern of health seeking behaviour measured by timeliness of presentation and health outcomes determined by outcome of clinical consultation among uninsured, out of pocket paying patients that attended a primary care clinic of a tertiary hospital.

II. METHODOLOGY

The study was carried out at the general outpatient clinic which is the primary care clinic and a unit of the family medicine department of Ekiti state university teaching hospital (EKSUTH), Ado-Ekiti. Ado-Ekiti is the capital of Ekiti State in Southwestern Nigeria. The Clinic runs on outpatient bases from 8 am to 8 pm daily, every day of the week and 8 am to 2 pm, on weekends. Consultant family physicians, and resident doctors in and family medicine attend to patients. Patients aged 14 years to geriatrics were seen and treated, with referrals made to specialists and admission to the emergency department when necessary. All patients that attend this clinic were uninsured and pay out of their pockets.

The study was a retrospective cross-sectional study and made use of secondary data. The study population consisted of 16030 attendees of the general outpatient the Clinic between January 2009 and December 2018. All the records which were hard copies, of newly presented patients seen during this period were retrieved to extract their sociodemographic characteristics, duration of symptoms before presentation, and outcome of clinical consultation by a trained Research assistant.

➤ *Definition of Variables:*

• *Independent Variables:*

sociodemographic characteristics of the patients which include their gender, age group, marital status, tribe, religion, place of residence and educational level.

• *Dependent/Outcome Variables:*

✓ *Timeliness of Presentation:*

This is the measure of health-seeking behaviour, and it is the time interval between symptoms onset and presentation at the general outpatient clinic. It was categorized into three <24 hours, 24-48 hours and >48 hours [13,14].

✓ *Clinical Outcome:*

This is determined by whether the patient was treated and discharged, referred, or admitted. Those treated and discharged from the Clinic were considered to have the most favourable outcome while those admitted were considered as having the most un-favourable outcome.

The data was collated into a predesigned data collection sheet and later entered and analyzed with the Statistical Package for Social Sciences (SPSS) version 26. Descriptive analysis of the socio-demographic characteristics, duration of symptoms before presentation (timeliness of presentation), outcomes of clinical consultation (health outcome) using figures, tables, and percentages. Inferential statistics was done using chi-square to check the association between health-seeking behaviour and health outcomes, between health-seeking behaviour and socio-demographic characteristics and between health outcomes and socio-demographic characteristics. A significant p-value was set at < 0.05.

III. RESULTS

➤ *Socio-Demographic Characteristics of the Patients:*

Total of 16,030 attendees' records of initial consultation at the General Outpatient clinic of Ekiti State University Teaching Hospital that presented between January 2009 and December 2018 were surveyed, 8682 (54.2%) were females with M:F ratio of 1:1.2. Majority of the surveyed were of Yoruba tribal origin, married and are Christians; 14546 (90.7%), 9033 (56.4%) and 15300 (95.4%) respectively. Amongst those surveyed, the majority, 94.3 % were urban dwellers, 57.9 % had tertiary education whilst 41.8% were students (Table 1).

➤ *Timeliness of Presentation:*

The interval between the onset of the symptom (s) and the time of presentation by the uninsured at the clinic showed, 3,854 (24%) of the patient presented at the clinic within 24 hours of the onset of the symptom, 2,638 (16.5%) presented between 24-48 hours, while more than half 9,538 (59.5%) presented after 48 hours.

➤ *Outcome of Presentation:*

The majority, 12,482 (77.9%) of the patients seen within the period reviewed were treated and discharged from the Clinic, while 2,719 (17.0%) were referred to see Specialists and (5.2%) were admitted.

➤ *Association Between Timeliness of Presentation and Outcome of Presentation:*

The highest proportion of surveyed attendees that presented less than 24 hours, was treated, and discharged (68.5%), with those referred and admitted being 18.1% and 13.1% respectively. Those that presented between 24-48 hours had those treated and discharged, referred, and admitted being 86.8%, 10.9% and 2.4% respectively. Those who presented more than 48 hours of onset of symptoms have those treated and discharged, referred, and admitted being 79.2%, 18.2% and 2.6% respectively.

This showed that there is association between timeliness of presentation and health outcome as evidenced with the prevalence of those admitted highest among those reported within 24 hours 13.1% and lowest among those that reported 48 hours and more with p value of 0.001. severity is determined by timeliness of presentation which is also a measure of health seeking behaviour. (Table 2)

➤ *Association Between Sociodemographic and Timeliness of Presentation:*

Amongst patients seen during the period under review, being of Hausa/Fulani tribe (66.8%), being married (63.7%), and belonging to age group > 60years (74.7%) were found to significantly contribute to probability of delay in seeking health after the onset of symptoms. This is statistically significant, p = <0.01 (Table 3)

➤ *Association Between Sociodemographic and Outcome of Presentation:*

Amongst patients seen during the period under review being from rural place of residence, having only primary education and being single confer significant benefit on having good health outcome (being treated and discharged) p =< 0.01. Gender was associated with worse health outcome as more females were admitted with p value of < 0.01.(Table 4)

Table 1 Sociodemographic Distribution of Participants

S/N	Variables	Frequencies (12,200)	Percentage (%)
1	Gender		
	Male	7348	45.8
	Female	8682	54.2
2	Tribe		
	Yoruba	14666	91.5
	Igbo	661	4.1
	Hausa/Fulani	590	3.7
	Others	113	0.7
3	Marital Status		
	Married	9033	56.4
	Single	6997	43.6
4	Religion		
	Christianity	15300	95.4
	Islam	717	4.5
	Others	13	0.1
5	Place of Residence		
	Urban	15115	94.3
	Rural	913	5.7
6	Education		
	Primary	3769	23.5
	Secondary	2986	18.6
	Tertiary	9275	57.9
7	Occupation		
	Student	6698	41.8
	Civil/Public Servants	6028	37.6
	Business	1572	9.8
	Others	1732	10.8

Table 2 Association between Timeliness of Presentation (Health Seeking Behaviour) and Health Outcome

Timeliness of Presentation	Health Outcome			Total	P value
	Treated and Discharged	Referred	Admitted		
< 24 Hours	2641 (68.5%)	697 (18.1%)	516 (13.1%)	3854 (100%)	0.001
24 -48 Hours	2289 (86.8%)	287 (10.9%)	62 (2.4%)	2638 (100%)	
> 48 Hours	7552 (79.2%)	1735 (18.2%)	251 (2.6%)	9538 (100%)	

Table 3 Association between Sociodemographic and Timeliness of Presentation

	Sociodemographic	Duration of Symptoms before Presentation			P value
		<24 Hours	24-48Hours	>48 Hours	
1	Gender				0.18
	Male	1735 (23.6%)	1258 (17.1%)	4355 (59.3%)	
	Female	2121 (24.4%)	1382(15.9%)	5179 (59.7%)	
2	Religion				0.43
	Christianity	3685 (24.1%)	2525 (16.5%)	9090 (59.4%)	
	Islam	169 (23.6%)	110 (15.3%)	438 (61.1%)	
	Others	2 (15.4%)	5 (38.5%)	6 (46.2%)	
3	Tribe				< 0.01
	Yoruba	3523 (24.0 %)	2448 (16.7%)	8695 (59.2%)	
	Igbo	177 (26.8 %)	108 (16.3%)	376 (56.9%)	
	Hausa/Fulani	123 (20.8%)	72 (12.2%)	394 (66.8%)	
	Others	33 (29,2 %)	12 (10.6%)	68 (60.2%)	
4	Place of Residence				0.11
	Urban	3664 (24.2%)	2490 (16.5%)	8962 (59.2%)	
	Rural	192 (21.0 %)	150 (16.4 %)	572 (62.6%)	
5	Educational Level				< 0.01
	Primary	910 (24.2%)	862(22.9%)	1995 (52.9%)	
	Secondary	738 (24.7%)	444 (14.9%)	1802 (60.3%)	
	Tertiary	2208 (23.8%)	1334(14.4%)	5734 (61.9%)	
6	Marital Status				< 0.01
	Married	2009 (22.2%)	1278(14.1%)	5745 (63.7%)	
	Single	1847 (26.4%)	1362 (19.5%)	3789 (54.1%)	
7	Age Groups				< 0.01
	<20 years	1107 (24.2%)	1077(23.5%)	2398 (52.3%)	
	20-60 years	2625 (24.7%)	1483 (13.9%)	6533 (61.4%)	
	>60 years	124 (15.4%)	80 (9.9%)	603 (74.7%)	

Table 4 Association between Sociodemographic and Outcome of Presentation

	Sociodemographic	Outcome of Treatment			P value
		Treated as Outpatient	Referred to another Specialty	Admitted	
1	Gender				< 0.01
	Male	5802 (79.0%)	1251 (17.0%)	294 (4.0%)	
	Female	6674 (76.9%)	1468 (16.9%)	535(6.2%)	
2	Religion				0.16
	Christianity	11885(77.7%)	2619 (17.1%)	791 (5.2%)	
	Islam	580 (81.0%)	98 (13.7%)	38 (5.3%)	
	Others	11(84.6%)	2 (15.4%)	0 (0.0%)	
3	Tribe				< 0.01
	Yoruba	11456 (78.1%)	2454(16.7%)	750 (5.1%)	
	Igbo	442 (66.9%)	167 (25.3%)	52 (7.9%)	
	Hausa/Fulani	490 (83.1%)	79 (13.4%)	21 (3.6%)	
	Others	88 (77.9%)	19(16.8%)	6 (5.3%)	
4	Place of Residence				< 0.01
	Urban	11728 (77.6%)	2590 (17.1%)	794 (5.3%)	
	Rural	748 (82.0%)	129 (14.1%)	35 (3.8%)	
5	Educational Level				
	Primary	3252 (86.3%)	411 (10.9%)	104(2.8%)	

	Secondary	2351 (78.8%)	470 (15.7%)	164 (5.5%)	< 0.01
	Tertiary	6873(74.1%)	1838 (19.8%)	561 (6.1%)	
6	Marital Status				
	Married	6900 (76.4%)	1578 (17.5%)	549 (6.1%)	< 0.01
	Single	5576 (79.7%)	1141 (16.3%)	280(4.0%)	
7	Age Groups				
	< 20 years	3813 (83.2%)	640 (14.0%)	129 (2.8%)	
	20– 60 years	7968(74.9%)	2005 (18.8%)	664(6.2%)	< 0.01
	>60 years	695 (86.3%)	74 (9.2%)	36 (4.5%)	

IV. DISCUSSION

This study examined the association between the health-seeking behaviour of uninsured patients that utilized the general outpatient clinic of a Teaching Hospital, measured by timeliness of presentation and their clinical outcomes. In this study, the proportion of females were more than that of males, this finding is supported by other local and international studies [15-17], while some other studies showed a reversal of the proportions [18], This could be due to generally improved utilization of health care by women compared to that of men,[19] that might be consequent on women being accustomed to use health care services during childbearing age and during and after menopause for reproductive health issues. [19] The unusual preponderance of male gender in the study by Ernest et al, in Ilorin Nigeria was explained to be probably due to the cultural and religious influence being a Muslim dominated area [18]

Slightly less than a quarter of the surveyed were timely in seeking health care by presenting at the health facility within 24 hours of the onset of their illness. This finding is like authors' observation in an unpublished study that observed health seeking behaviour among insured patient and buttressed that there might be other factors apart from finances that affect health-seeking behaviour or hospital utilization. Some of the factors that have been mentioned include, culture, socio-economic status and politics.[20] Delayed timeliness of presentation after symptom onset could be due to ignorance of the severity of symptoms and working of healthcare systems [21,22] A study by Benedict et al in Ghana observed that generally, the health seeking behaviour of both insured and uninsured participants in their study was poor although that of the insured were slightly better;[23] while Onyemaechi et al observed poor timely utilization of health among those paying out of pocket when compared with those insured.[24]

This study observed a significant association between timeliness of presentation, (i.e., less than 24 hours), and severity of illness evidenced by being admitted as an outcome. This finding is like the observation among those attending Health insurance clinic in the same environment. [25] Same finding was alluded to by Yehia et al, in their study to evaluate the effect of timely presentation on health outcome of people newly diagnosed with HIV; it was observed that there is a strong association between timely presentation and optimize health outcomes. [26]

This study showed that there are other sociodemographic factors like being married, aged >60 years and being of Hausa/Fulani tribal extraction, that are significantly associated with delayed timeliness of presentation of more than 48 hours. It has been documented that women tend to have limited rights to take decision regarding their health in Africa context, [27,28] this is driven by poor economic power and strong cultural belief about women and their rights within household, [28] this could explain why more married women had delayed timeliness of presentation. Those greater than 60 years of age are most likely to be dependent on children and family for finances to pay for healthcare hence might experience delayed presentation.[29] People of Hausa/Fulani tribal origin in addition to the fact majority may not have good financial safety net to draw upon in time of illness being an underserved community,[21] are known for their strong cultural beliefs and tendency not to make orthodox medical care their first point of call when they are sick.[30]

This study observed that being from rural place of residence, confer a better health outcome. This is in consonance with recent beliefs that rural dwellers are healthier than their urban counterparts [31] however at variance to the general belief that dwelling in rural community might confer a disadvantage on its dwellers in terms of their health outcomes as access to transportation, literacy level contributes significantly to health seeking behaviour and which in turns affect the outcomes. [31,32] Having only primary education was observed to have significantly contributed to better health outcome compared to higher levels of education. This finding contradicts the established norm that higher levels of education confer better health outcome on individuals.[33] Being single conferred significant benefit on having good health outcome (being treated and discharged) as some of the singles in this study are still under the care of their parent while others that are unmarried are free from encumbrances on their autonomy that comes with marriage.[28] Female sex was significantly associated with worse health outcome in this study, this finding contradict findings in other studies that showed females to have better health seeking behaviour and health outcome compared to males.[34-36] This could as a result of documented poor economic power and limited rights of women to take decision regarding their health within the household in Africa context [28] more importantly as they were expected to pay out pocket.

❖ *Limitations of this study:*

This study being a cross sectional study, cannot determine the temporality between outcomes and exposure, because both were examined at the same time. Similarly, the data used were secondary data, so the accuracy might be questioned.

V. CONCLUSION

This study showed that more than half (59.5%) of the uninsured patients attending the primary care clinic of EKSUTH didn't present timely at the clinic. In this study, being from rural area, having only primary education and being single confer significant benefit on having good health outcome. The study shows that the severity of illness is a major factor for timely presentation at the primary care clinic.

RECOMMENDATION

Social and behavioural change intervention is recommended in this study as this will seek to change behaviour (knowledge, attitude, and norms). Social and behavioural change intervention reduces misinformation, and barriers that prevent individuals, families, and communities from behaviour that improves health outcomes thereby, helping people in need to access available health care.

ACKNOWLEDGEMENT

The authors wish to acknowledge all the staff and members of the Family Medicine Department, Ekiti State University Teaching Hospital for their supports during the period of this research work.

REFERENCES

- [1]. Olenja J. Editorial. Health seeking behaviour in context. *East Afr Med J.* 2003;80(2):61–2. <https://doi.org/10.4314/eamj.v80i2.8689> . Accessed 26/08/22.
- [2]. Poortaghi S, Raiesifar A, Bozorgzad P, Golzari SE, Parvizy S, Rafii F. Evolutionary concept analysis of health seeking behavior in nursing: a systematic review. *BMC Health Serv Res.* 2015; 15:523.
- [3]. Bhutto AQ, Nisar N. Health-seeking behaviour of people living with HIV/AIDS and their satisfaction with health services provided at a tertiary care hospital, Karachi, Pakistan. *Eastern Mediterranean Health Journal (EMHJ)* 2017; 23: 13-19
- [4]. Institute of Medicine (U.S.) Committee on Monitoring Access to Personal Health Care Services. (1993). *Access to health care in America* (M. Millman, Ed.). National Academies Press.
- [5]. Institute of Medicine (U.S.) Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care (2003). *Unequal treatment: Confronting racial and ethnic disparities in health care* (B. D. Smedley, A. Y. Stith, & A. R. Nelson, Eds.). National Academies Press.
- [6]. Gotsadze G, Bennett S, Ranson K, Gzirishvili D. Health care-seeking behaviour and out-of-pocket payments in Tbilisi, Georgia. *Health Policy Plan.* 2005;20(4):232-42.
- [7]. Nakovics, M.I., Brenner, S., Bongololo, G, Chinkhumba J, Kalmus O, Leppert G. et al. Determinants of healthcare seeking and out-of-pocket expenditures in a “free” healthcare system: evidence from rural Malawi. *Health Econ Rev* 10, 14 (2020). <https://doi.org/10.1186/s13561-020-00271-2> Accessed 18/08/22.
- [8]. Shubha D, Kaur N, Mahabalaraju D Health Care Seeking Behaviour and Out-of-Pocket Health Expenditure for Under-Five Illnesses in Urban Slums of Davangere, India *BMJ Global Health* 2016;1: A11.
- [9]. Daramola OE, Abu JM, Oderinde AF, Anene CM, Adeniran A, Akande TM. Health Insurance and Health Seeking Behaviour: A Facility-based Comparative Study between Insured and Uninsured Patients in Northeast, Nigeria. *Nigerian Medical Practitioner.* 2020; 20;77(5-6):57-62.
- [10]. Schweitzer J, Fairman N, Schreyer K, Waxman K. Appendicitis, 2002: Relationship between Payors and Outcome. *The American Surgeon.* 2003;69(10):902-908. doi:10.1177/000313480306901017 Accessed 19/9/22.
- [11]. Martin FS, Rodney AH, Howard EF, Seymour S, Christopher RC. Out-of-Pocket Payments and Use of Care for Serious and Minor Symptoms Results of a National Survey *Arch Intern Med.* 1989; 149:1645-1648 Accessed 19/2/22
- [12]. Aregbeshola, B. S. (2016). Out-of-pocket payments in Nigeria. *The Lancet*, 387(10037), 2506. doi:10.1016/s0140-6736(16)30798-x
- [13]. Techalew S, Gill S, Birkneh TT, Sabine D, John AC, John M, et al Timely health care seeking and first source of care for acute febrile illness in children in Hawassa, southern Ethiopia Published: June 9, 2022 <https://doi.org/10.1371/journal.pone.0269725> Accessed 15/12/22
- [14]. Zhang Q, Feng S, Wong I.O.L, Dennis KMI, Cowling BJ, Eric HYL. A population-based study on healthcare-seeking behaviour of persons with symptoms of respiratory and gastrointestinal-related infections in Hong Kong. *BMC Public Health.* 2020; 20:402-12 <https://doi.org/10.1186/s12889-020-08555-2> Accessed 15/12/22
- [15]. Najiya Fatma, Varun Ramamohan Analysis of Healthcare Seeking Behavior Among Patients Visiting Public Primary and Secondary Healthcare Facilities in an Urban Indian District. *medRxiv* 2022.08.31.22279441; <https://doi.org/10.1101/2022.08.31.22279441> Accessed 17/02/23.

- [16]. Apostolidis, A., Kirana, P.-S., Chiu, G., Link, C., Tsiouprou, M., & Hatzichristou, D. Gender and Age Differences in the Perception of Bother and Health Care Seeking for Lower Urinary Tract Symptoms: Results from the Hospitalised and Outpatients' Profile and Expectations Study. *European Urology*, 2009; 56(6): 937–947. doi: 10.1016/j.eururo.2009.07.050
- [17]. Oyefabi AO, Aliyu AA, Idris A. Sources of health care financing among patients at the Ahmadu Bello University Teaching Hospital, Zaria, Nigeria. *J Med Trop [serial online]* 2014 <https://www.jmedtropics.org/text.asp?2014/16/1/27/132574> Accessed 17/02/23;
- [18]. Ernest MA, Adeyemi MF, Bolarinwa OA, Alabi KM. Oral health seeking behaviour among patients attending outpatient clinic in University of Ilorin teaching hospital (UITH) Ilorin. *Res. J. of Health Sci.* 2022; 10(2): 80 -89. <https://doi.org/10.4314/rejhs.v10i2.2> Accessed 17/02/23.
- [19]. National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division. *Factors That Affect Health-Care Utilisation - Health-Care Utilisation as a Proxy in Disability Determination*. Washington (DC): National Academies Press (US); 2018.
- [20]. Babar TS and Juanita H. Health seeking behaviour and health service utilisation in Pakistan: challenging the policy makers. *Journal of Public Health* 2004; 27: 49–54
- [21]. Ohlstein JF, Edwards TS, Riley CA, Buell JF, Friedlander PL (2019) Improved Timeliness of Care for the Underserved: A Potential for Patient Navigation. *Otolaryngol Rhinol* 5:053. <https://doi.org/10.23937/2572-4193.1510053> Accessed 17/02/23.
- [22]. Shimelis T, Schierhout G, Tadesse BT, Dittrich S, Crump JA, Kaldor JM, et al. Timely health care seeking and first source of care for acute febrile illness in children in Hawassa, southern Ethiopia. 2022; *PLoS ONE* 17(6): e0269725. <https://doi.org/10.1371/journal.pone.0269725> Accessed 5/02/22.
- [23]. Benedict OA and Seth A. Analysing the Influence of Health Insurance Status on Peoples' Health Seeking Behaviour in Rural Ghana. *Hindawi Journal of Tropical Medicine* 2017, 1-7 <https://doi.org/10.1155/2017/8486451> Accessed 17/02/23.
- [24]. Onyemaechi S and Ezenwaka U. Influence of sub-national social health insurance scheme on enrollees' health seeking behaviour in Anambra state, Nigeria: a pre and post study. *BMC Public Health* 2022; 22:1171. Accessed 3/09/22.
- [25]. Solomon OA, Solomon OO, Akinola YO, Olusola AE, Ibirongbe DO. Sociodemographic factors associated with health seeking behaviour and clinical outcomes among patients attending health insurance facility of a teaching hospital in Southwestern Nigeria. *West African Journal of Medicine [Accepted for Publication]*
- [26]. Yehia B, Frank I. Battling AIDS in America: an evaluation of the National HIV/AIDS Strategy. *Am J Public Health*. 2011;101(9): e4–8.
- [27]. Sougou, N.M., Bassoum, O., Faye, A. Women's autonomy in health decision-making and its effect on access to family planning services in Senegal in 2017: a propensity score analysis. *BMC Public Health* 20, 872 (2020). <https://doi.org/10.1186/s12889-020-09003-x> Accessed 28/02/23.
- [28]. Osamor P, Grady C. Factors associated with women's health care decision-making autonomy: empirical evidence from Nigeria. *J Biosoc Sci.* 2018 50(1):70-85. doi: 10.1017/S0021932017000037. Accessed 28/02/23.
- [29]. Amiri M. Problems faced by old age people. *The International Journal of Indian.* 2018;6(3):52-62.
- [30]. Gordon, A. J. Cultural identity, and illness: fulani views. *Culture, Medicine, and Psychiatry*, 2000; 24 (3),297–330. doi:10.1023/a:1005677825795 Accessed 28/02/23.
- [31]. Higgs, G. Investigating trends in rural health outcomes: A research agenda. *Geoforum*, 1999;30(3), 203-221. [https://doi.org/10.1016/S0016-7185\(99\)00021-4](https://doi.org/10.1016/S0016-7185(99)00021-4) Accessed 01/03/23.
- [32]. Onyeonoro, U. U., Ogah, O. S., Ukegbu, A. U., Chukwuonye, I. I., Madukwe, O. O., & Moses, A. O. (2016). Urban–Rural Differences in Health-Care-Seeking Pattern of Residents of Abia State, Nigeria, and the Implication in the Control of NCDs. *Health Services Insights*, 9, 29-36. <https://doi.org/10.4137/HSI.S31865> Accessed 01/03/23.
- [33]. Olarewaju FO, Olurinola IO. Educational Attainment and Health Outcomes in Nigeria: A Survey from NDHS (2008 & 2013). *Scholars Journal of Science and Technology*. 2021 Feb 28;2(1):247-57. Accessed 01/03/23.
- [34]. Thompson AE, Anisimowicz Y, Miedema B, Hogg W, Wodchis WP, Aubrey-Bassler K. The influence of gender and other patient characteristics on health care-seeking behaviour: a QUALICOPC study. *BMC Fam Pract.* 2016, 31;17:38. doi: 10.1186/s12875-016-0440-0.
- [35]. Peter FMV, Monique JWMH, Loe P, Mieke R. Chronic disease, and mental disorder. *Soc Sci Med.* 2005;60(4):789–97. doi: 10.1016/j.socscimed.2004.06.012.
- [36]. Matheson FI, Smith KL, Fazli GS, Moineddin R, Dunn JR et al. Physical health and gender as risk factors for usage of services for mental illness. *J Epidemiol Community Health.* 2014;68(10):971–8. doi: 10.1136/jech-2014-203844.