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**Determinants of Health Care Seeking Behaviour Among Dwellers of Oron Urban in Oron  
L. G. Area, Akwa Ibom State**

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**ABSTRACT**

*Poor, delayed or inappropriate health seeking for a sick person with acute illness is associated with high morbidity/mortality. Delay in health seeking is implicated with fatal complications and prolonged need for health services. Thus, health seeking behaviour is an important factor in health management and it becomes relevant among underprivileged populations like urban slums, tribal populations. This study assessed the determinants of health care seeking behaviour among dwellers of Oron urban, in Oron Local Government Area of Akwa Ibom State, Nigeria. A community based descriptive study was adopted in the study. Five hundred and thirty participants were selected for the study using simple random sampling method. A researcher's structured questionnaire was used to collect the data and was administered after obtaining valid informed consent from the participants. Among 530 study participants, majority (40.7%) seek health care from Government owned health facilities for various illnesses. Also 27.2% of the study participants visited the patent medicine dealers/Pharmacy and 20.6% preferred private health facilities. Among various morbidity conditions, cold/fever (29.1%) and pain (19.4%) were the most common reasons for visiting a health care facility. Individual's income was significantly associated with the healthcare seeking behaviour of the study participants ( $p < 0.05$ ). Affordability, and accessibility were reported as most common reason for preferring to the Government owned health facility. On other hand, private practitioners were preferred due to their emergency services and quality of care. The choice of participants of health facility was statistically significant ( $p < 0.05$ ). Healthcare seeking behaviour of the study participants was influenced by health care facilities, income and the morbidity conditions hence, strengthening of public health care system to offer quality basic health services could improve health seeking behaviour of people. One of the recommendations was that provision of a seamless supply system, infrastructural support, and technical support for soft skills could minimize the turnaround time which is critical.*

**KEYWORDS: Health, Seeking, Behaviour, Morbidity, Facility, Choice**

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## Introduction

Health is the main aspect of human life. Although a healthy life is the desire of everyone, the reality is that everyone is not healthy. An essential aspect of preserving health is to identify the factors that enable or prevent people from making healthy choices in either their life-style or their use of medical care and treatment, the underlying assumption being that behaviour is best understood in terms of an individual's perception of their social environment (Tipping and Segall, 1995). Health care seeking behaviour refers to decision or an action taken by an individual to maintain, attain, or regain good health and prevent illness (Sudharsanam, 2007). The decision made encompasses all available health care options like visiting facility, self-medication and use of home remedies or not to utilise the available health services etc. (Chauhan *et al.* 2015). Sheeram and Abraham (1996) categorized the range of behaviours that has been examined using health belief model into three broad areas: preventive health behaviour, sick role behaviour and clinic use. In this type of model, individual beliefs offer the link between socialization and behaviour. When individuals make decisions in relation to their health, they weigh up the potential risks or benefits of a particular behaviour. They do so in a way that is influenced by their immediate physical environment, social rootedness, life-style, religious belief and their whole outlook on life generally (Norman and Bennet, 1996; WHO, 2002; Orubuloye, 2003). Thus, various authors (Egunjobi, 1983; Aregbeyen 1992; Orubuloye 1992; Ademuwagun, 1998) have noted that in a pluralistic medical milieu in which the rural dwellers find themselves, the decision to seek care, where to do this and the form of care perceived as appropriate are all influenced by a multiplicity of factors relating to the person, the facility and the socio-cultural environment.

As for health care system in almost all the developing countries, the public and private health sector coexist but private care providers are usually preferred all around due to easy accessibility even in the night, quick relief and individual attention (Sudharsanam, 2007). Whereas, public hospital in Nigeria are known for low quality treatment, long waiting period, long distance, inconvenient location and inadequate facilities (Orubuloye, 2003). However, some public hospitals charges money to free services (Varges *et al.* 2013). Also, owing to lack of money to access care at private hospitals, many poor people resort to self-treatment and by-pass primary healthcare providers (Gotsadza *et al.* 2005).

Health seeking behaviour is a result of a complex interaction of provider, patient, illness and household characteristics (Tipping and Segall, 1995). Health seeking behaviour is influenced by a variety of socio-economic variables, including sex, age, the social status of women, the type of illness, access to services and perceived quality of the service etc. This has been found to be associated with type of illness and gender of ill-person, income group and area of residence (Pillai *et al.* 2003; Sudha *et al.* 2003).

Planning for health care services provision depends on the health needs and health seeking attitude of the population. Determining the health care seeking behaviour is essential to provide need based health care services to the population. While hospital data remains the main source of information regarding the disease pattern, community based studies well reflect the preferences in seeking health care services. This study therefore sought to examine the determinants of health care seeking behaviour among dwellers of Oron metropolis, Akwa Ibom State.

## Materials and Methods

### Study area and design

A descriptive study was conducted in Oron metropolitan area in Oron Local Government Area of Akwa Ibom State. It is a coastal area which lies on latitude 4.8222 and longitude 8.2337 coordinates and altitude above sea level. The climate of the area is favourable for cultivation and extraction of agriculture and forest products. The population is majorly Christian, ethnically Oro, most are farmer, fishermen and petty traders. There is a primary health centre and a General hospital, which serves the community.

**Study population and sample size:** This comprised of households with children under five years old and other adult within the study community. The sample size was calculated using Yamane (1967) formula.

$$n = N/1 + N(e)^2$$

where n is the sample size, N is the population size, and e is the level of precision at 95% confidence level ( $p < 0.05$ ). This resulted in a sample size of 530. Household were randomly selected from the list of villages that made up the metropolis of the study area and the household selected were included in the study.

### Data collection

Researcher structured questionnaire was use to collect data by house to house visit. Interview scheduled was administered to the household head and all the available study participants. The questionnaires were divided into two parts. Data was collected on demographic characteristics, educational level, occupation, family size, possible morbidity problems, health care seeking behaviour and reason for non-utilization of a particular health facilities etc. A house to house survey was done during May to September 2018 and trained interviewers were employed in relation with the participants in all the household visited. Where any of the selected household was not found at the time of visit, then they visited again. Two return were made to household where eligible members were not available for interview during the first visit. Informed written consent and/or assent were taken from all the participants/guardians before the initiation of the interview. All available adult members in the household were interviewed and the information about the health seeking behaviour during illness was collected from their mother or primary caregiver.

### Definition

Choice of provider was defined as the place of first contact following an illness (Government owned health facility or public hospital, private health facility, patent medicine dealer/chemist or pharmacy, traditional/herbal healing center or spiritual healing homes). The alternative of traditional healers or self-medication refers to those who sought treatment outside the home from a traditional healer, drugstore or pharmacy. Those who seek remedies from herbs from their home were also included in the traditional/herbal healers. Another alternative sources of care were those who sought the services of spiritual healers or prayer houses.

## Statistical analysis

Data collected were subjected to statistical analysis using standard student's distribution t- Test and Analysis of Variance (ANOVA). Significant difference was established at 95% confidence level ( $p < 0.05$ ). Result of the data analysed were presented in tables in percentage as well as figures.

## Results

The result of this study is shown below as presented in tables below.

A total of 530 participants were considered for this study. The socio-demographic characteristics of the respondents as shown in table 1 indicate that majority (54.1%) of the respondent were female and also majority (51.3%) were household who were currently married. Many of them were within the age of 30-39 (27.9%). However, 37.2% of the participants had secondary education and majority (23.8%) were into trading.

Common illness among the participant were cold/fever (29.1%), pains (19.4%) and diarrhea (17.5%). Others common morbidity were diabetes/hypertension (11.7%), respiratory problems (10.9%) and accidents/wounds (7.2%) (fig. 1). Also, majority (40.7%) of the participants reported to visit Government owned health facilities for various illnesses. However, those who preferred patent medicine dealer (chemist/pharmacy) (27.2%) were more than the choice of private clinics (20.6%). Others seek health care through traditional/herbal healing centers (9.1%) and spiritual healing homes (2.4%) (fig. 2).

Various determinants like age, education, occupation, income and morbidity were found to be significantly ( $p < 0.05$ ) associated with the choice of a particular health facility patronized by the participants. Among various reasons for preferring a particular health facility, affordable cost, emergency services, easy access, neat environment, and quality of services were some of the reported reasons. Most of the common reason for the choice of government owned facilities were affordable cost (76.9%) and easy access (41.3%). Others preferred private clinic because of quality of services (39.3%) and emergency services (42.0%) (table 3).

Table 1: Socio-Demographic Characteristic of Respondents

<b>Demographic characteristic</b>	<b>No. Of respondents N = 530</b>	<b>Percentage %</b>
<b>Gender</b>		
Male	243	45.9
Female	287	54.1
<b>Age (Years)</b>		
<18	78	14.7
18 -29	107	20.2
30-39	148	27.9
40-49	123	23.2
50-above	74	14.0
<b>Educational Status</b>		
No formal education	73	13.8
Primary	144	27.2
Secondary	197	37.2
Post-secondary	116	21.8
<b>Occupation</b>		
Civil/public service	51	9.6
Artisan	73	13.8
Trading	126	23.8
Fishing	88	16.6
Farming	91	17.2
Unemployed	101	19.0
<b>Marital status</b>		
Never married	159	30.0
Currently married	272	51.3
Divorced/separated	78	14.7
Widowed	21	4.0
<b>Income Per Month (Naira)</b>		
Below 10000	131	24.7
10000-50000	232	43.8
50000 and above	167	31.5
<b>Family size</b>		
Equal or<5	304	57.4
>5	226	42.6

Children below 13 years of age were excluded in the study

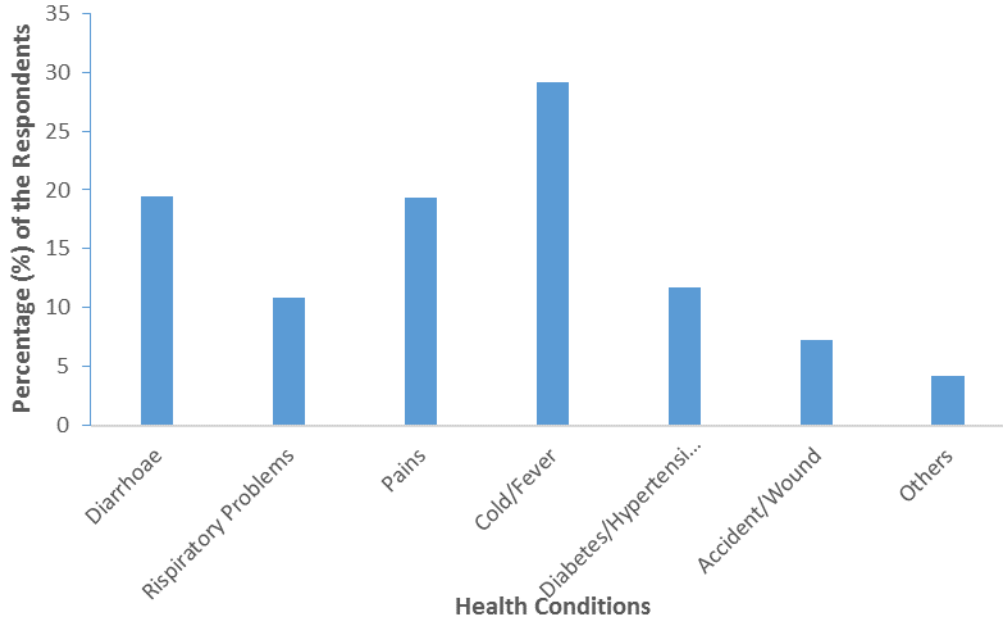


Fig 1: Morbidity condition last experienced by the respondent

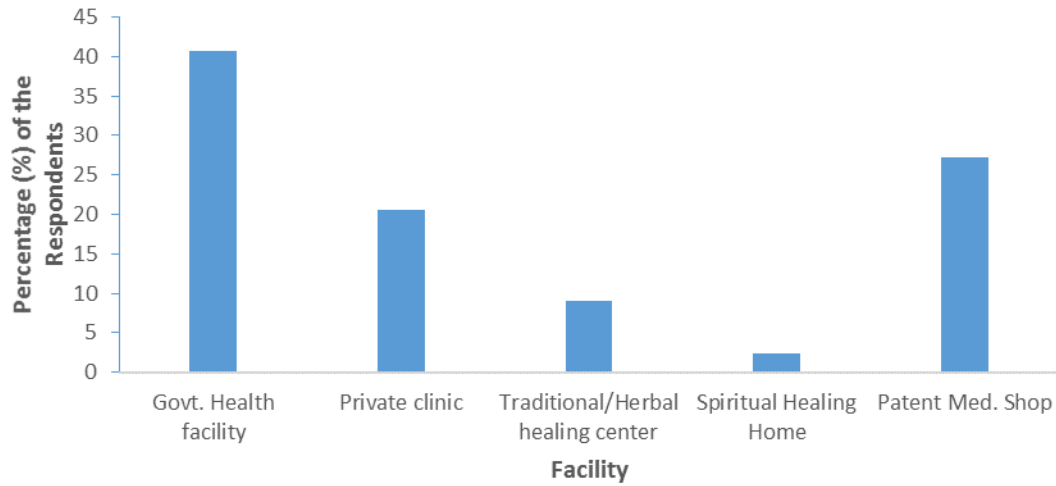


Fig 2: Choice of Place/Facility for Seeking health care

**Table 2: determinants of health facility used by the study participant**

<b>Determinant</b>	<b>Govt. owned hospital</b>	<b>Private hospital</b>	<b>Patent medicine shop (chemist)</b>	<b>Others</b>	<b>P value</b>
<b>Age group</b>					
Adolescent	19(24.4)	21(26.9)	25(32.1)	13(16.6)	35.320
Adult	184(48.7)	77(20.3)	100(26.5)	17(4.5)	
Elderly	13(17.6)	11(14.9)	19(25.6)	31(41.9)	
<b>Sex</b>					
Male	99(40.7)	56(23.0)	66(27.2)	22(9.1)	6.465
Female	117(40.8)	53(18.4)	78(27.2)	39(13.6)	
<b>Education</b>					
Illiterate	16(21.9)	7(9.6)	34(46.6)	16(21.9)	0.461
Literate	200(43.7)	102(22.3)	110(24.1)	45(9.9)	
<b>Occupation</b>					
Artisan	28(38.4)	19(26.0)	18(24.6)	8(11.0)	7.353
Trading	56(44.4)	26(20.6)	34(27.0)	10(7.9)	
Fishing	34(38.6)	21(23.9)	21(23.9)	12(13.6)	
Farming	26(28.5)	25(27.5)	22(24.2)	18(19.8)	
Civil services	33(64.7)	11(21.6)	5(9.8)	2(3.9)	
Unemployment	39(38.6)	7(6.9)	44(43.6)	11(10.9)	
<b>Monthly income</b>					
<10,000.00	60(45.8)	10(7.6)	48(36.6)	13(9.9)	17.779
10,000 – 50,000.00	85(36.6)	47(20.3)	64(27.6)	36(15.5)	
>50,000	71(42.5)	52(31.1)	32(19.2)	12(7.2)	
<b>Morbidity</b>					
Chronic disease	33(34.1)	21(34.4)	2(3.3)	5(8.2)	1.889
Febrile illness	58(37.7)	38(24.7)	41(26.6)	17(11.0)	
Pains	17(16.5)	26(25.3)	44(42.7)	16(15.5)	
Others	108(50.9)	24(11.4)	57(26.9)	23(10.8)	

**Table 3: Factors for the choice of a particular facility**

<b>Factors</b>	<b>Government Hospital</b>	<b>Private clinic</b>	<b>Patent medicine</b>	<b>Others</b>
Affordable cost	131976.9)	9(5.5)	23(14.2)	3(1.8)
Emergency services	7(14.0)	21(42.0)	20(40.0)	2(4.0)
Easy access	33(41.3)	13(16.3)	27(33.7)	7(8.7)
Staff attitude	3(5.1)	19(32.2)	26(44.1)	11(18.6)
Quality of service	12(21.4)	22(39.9)	19(33.9)	3(5.4)
Knowledge of ownership	-	14(35.9)	13(33.3)	12(30.8)
Neat environment	21(58.3)	11(30.6)	3(8.4)	1(2.7)
No specific reason	9(20.0)	-	13(28.9)	22(50.0)

$f_{cat} = 1.047, df(3,28) (p < 0.005)$

## Discussion

The present study seeks to determine the healthcare seeking behaviour among the people of Oron metropolis, considering the fact that, they have been an alarming concern in the under-utilization of health services provided by the government in the public sector at the global scale, mostly in the developing countries. On the other hand, private healthcare sector is growing rapidly in developing countries and has flourished everywhere because it focuses mainly on public good health such as antenatal care, immunization, family planning services and treatment of diseases (Aljiunid, (1995); Berman and Laura, (1996); Bennett *et al.* (2012); Chauhan *et al.* (2015).

In the study, it was observed that majority of the respondents were women, this was similar to the finding reported elsewhere (Oberlander and Elverdan, 2000). The norm being that the well-being of the home is the joint responsibility of parents; the women as caregivers and the men, as providers and decision makers (Oberlander and Elverdan, 2000). The marital status tends to have a weak predictive value on health seeking decision of the respondents. The place of education is effectively predicting the health seeking behaviour has been established while gender also as a factor especially given the peculiar nature of disease and related socio-cultural conditions associated with it. In this study, majority of the respondents (37.2%) had education at secondary school level. However, Oluwadare and Ibirinde (2010) and others agreed that 10 years of education is enough to spur desirable health behaviour. But there must be other favourable conditions especially in the cultural and health system environment.

The participants in this study generally represent a low socio-economic status compared to the large social environment known for high literacy level, public salaried citizens and relatively better health care system. Owumi and Jerome (2008), and Oluwadere and Dada (2008) affirm that poverty encourages the patronage to indigenous healing therapy which most of the time is cheaper, closer and culturally analogous to the parents. The low socio-economic status also relates to not so enviable knowledge of disease which may likely fuel the epidemic.

The result of this study indicated that majority (40.7%) of the participants seeks their health services when they are ill in the Government owned facilities. This could be related to the available income of the participant. Since most of the government owned health clinics provides free health services and doctors in the private clinic does not. This finding corroborates the finding of Van der Hoeven *et al.* (2012) and Chauhan *et al.* (2015) who observed in their study where participants preferred public health clinic than private practitioners. On the contrary, this study contradicts the study in Bangladesh where majority of the participant were accessing private clinic for health care services. Also their study indicate that majority of the participant were low income people. As this influence their choice of health facility for care.

Also, a high number of the respondents preferred seeking health services from patent medicine dealers (chemist and pharmacist) (27.2%) than that of the private clinics (20.6%). It was observed in this study that patronage to patent medicine shop (chemist) for health service by the respondents was rampant. This is an aspect of self-medication which is found to be common among community people (Okeke and Okafor 2008). This study recorded some participants seeking health care from traditional/herbal healing center. This was not surprising because in many homes, the usual pattern of treatment began at home with herbal remedies or drugs purchased from patent medicine shop which often are administered inappropriately. It is only



when home treatment is obviously not working that one is taken to the health facility. It has also been reported elsewhere that high proportion of health episodes are often treated at home and that self-medication is a common practice (Derming *et al.*, 1989). Also the result of this study agrees with the finding of Espino, (1992) where many participant seek health services from traditional and spiritual healing homes. The implication is that; they are not important providers of health care services. Therefore, spiritual healers are not targets for intervention measures aimed at providing optimal health services.

The need for protection and the financial cost of treatment of certain ailments far overweight the respondent's knowledge for government or private health facility is better than native therapy (Oluwadare and Ibirinde, 2010). In this study, respondents give various reason why a certain health facility is being patronized. This include affordable cost, emergency services, easy access, staff attitude, quality of services, knowledge of ownership, neatness of the environment and others. In the present study, majority of the respondents preferred government owned health facility as a result of cost effectiveness. However, financial consideration has a weak impact on the decision making about seeking health services (Atre, 2004). This assertion confirms that the choice of health facility for health services is dependent on the financial strength of the individual as the social factors. This may bring about delay in seeking health care. However, Coping (2008), report that delay in seeking health care may also account for the fear emerging of non-utilization of health facility. This could be attributed to non-availability of Doctors, poor attitude of staff, lack of access because of cost, prolonged waiting time. Similar finding was noted in other studies (Rucbush, 1995; Ahorlu, 1995). Although the quality of services provided by private health care practitioner is also questionable but many factors like accessibility makes participants in this study to consider them as their preferred choice, particularly those that don't have any financial constraint. This was in line with the report of Kamat, (2001).

## Conclusions

The present study reveal that, many of the participants visit health facility because of febrile illness (29.1%) and pains (19.4%). Others common morbidities for health facility visit include diarrhea, respiratory problems, chronic disease such as diabetes/hypertension and accidents/wounds. The outcome of this study was similar to that of Chauhan *et al.* (2015). In the present study, participants between the age group (19 – 49), showed high preference to government owned health facility while majority of the adult preferred seeking health care from private medical practitioner. This could be as a result of their financial strength and choice of quality of service. This finding was in agreement with the earlier work by Oluwadare and Ibirinde, (2010) and Chauhan *et al.* (2015) where majority of majority of the adult seek health care from public facility. Both males and female from this study utilises government health facility more compared to the use of private clinics. This could be due to household preference and cost effectiveness of public health facility. The choice of female participants to public health care facility in the presents study could be due to availability of female health care officers in most public health care facilities than in private sector (Puthuchira *et al.* 2014; Barua and Kurz, 2001).

Finally, from this study, it could be concluded that the type of illness suffered by the people influence their reason of health seeking behaviour in the study area while affordability is the most significant factors influencing their choice where the seek health care. The study

however, conforms to the studies carried out by Aregbeyen (1992), Adeagbo, 1998 and Omotosho (2010) on health care utilization in Nigeria.

### **Recommendations**

1. It is quite obvious that perception and attitude of people toward health is dependent on the quality of health care services in health centers. These has to change to attract patients more to government hospitals and health centers. This can be done through strengthening of health care system to offer quality basic health services.
2. Health seeking behavior can be improved with the provision of a seamless supply system, infrastructural support, and technical support for soft skills.

## REFERENCES

- Adeagbo, D. (1998): Provision and Spatial Distribution of Health and Security Facilities. The Case study of Ibadan. Nigerian Institute of Social and Economic Research (NISER) Monograph Series No. 123.
- Ademuwagun, Z.A. (1998). The Challenge of the Co-existence of Orthodox and Traditional Medicine in Nigeria. *East Africa Medical Journal.*, 53(1), 21-32.
- Ahorlu, C.K., Dunyo, S.K., Afari, E.A., Koran, K.A. and Nkrumah, F.K. (1997). Malaria related beliefs and behaviors in southern Ghana. Implications for treatment, prevention and control. *Tropical Medicine and International Health*, 2(5): 488-499.
- Aregbeyen, J. B. O. (1992). *Healthcare Utilization in Nigerian Rural Communities: A Focus on Otuo Community and Environs in Edo State*. Nigerian Institute of Social and Economic Research (NISER) Monograph Series No. 3.
- Aljunid, S. (1995). The role of private medical practitioners and their interactions with public health services in Asian countries. *Health Policy Planning*, 10(4):333-349.
- Bennett, S., Dakpallah, G., Garner, P., Gilson, L., Nittayaramphong, S., Zurita, B. (1994). Carrot and stick: state mechanisms to influence private provider behaviour. *Health Policy Planning*. 9(1):1-13.
- Barua, A. and Kurz, K. (2001). Reproductive health-seeking by married adolescent girls in Maharashtra, India. *Reproductive Health Matters*. 9(17):53-62.
- Berman, P. and Laura, R. (1996). The role of private providers in maternal and child health and family planning services in developing countries. *Health Policy Planning*. 11(2):142-155.
- Chauhan, R. C., Manikandan, A. J., Purty, A. S., and Zile, S. (2015). Determinants of health care seeking behavior among rural population of a coastal area in South India. *International Journal of Scientific Reports*, 1(2):118-122.
- Coping with Ease (2008). Life without Tuberculosis, 4, AIDS Alliance in Nigeria, March.
- Egunjobi, T.O. (1983). Characteristics of the Healthcare Resource Production in Nigeria. *Canadian Journal of African Studies*, 17(2): 142-149.
- Deming, M. S., Gayibor, A., Murphy, K., Jones, T. S, Karsa, T. (1989). Home treatment of febrile children with antimalarial drugs in Togo. *Bulletin of World Health Organization*, 67: 695- 700
- Espino, E. (1992). Socio-behavioral research of endemic malaria in the Philippines: Implications for control, WHO/ TDR/SER Progress Report, 181.
- Gotsadze, G., Bennett, S., Ranson, K., Gzirishvili, D. (2005). Health care-seeking behaviour and out-of-pocket payments in Tbilisi, Georgia. *Health Policy Planning*. 20(4):232-242.

- Kamat, V. R. (2001). Private practitioners and their role in the resurgence of malaria in Mumbai (Bombay) and Navi Mumbai (New Bombay), India: serving the affected or aiding an epidemic? *Social Science and Medicine*, 52(6):885-909.
- Norman, P., Bennet, P. (1996). *Health Locus of Control*, In: Cornner, M., Normans, P. (Eds.), *Predicting Health Behaviors: Research and Practice with Social Cognition Models*. Buckingham, Open University Press.
- Oberlander, L. and Elverdan, B. (2000). Malaria in the Unites Republic of Tanzania: Cultural considerations and health seeking behaviour. *Bulletin of World Health Organization*, 78: 1352- 1357.
- Okeke, T. A. and Okafor, H. U. (2002). Perception and Treatment Seeking Behavior for Malaria in Rural Nigeria: Implications for Control. *Journal of Humanity and Ecology*, 24(3): 215-222.
- Oluwadare, C. and Dada, A. A. (2008). Cultural beliefs and attitudes on maternal health seeking in a typical Yoruba community of Nigeria. *The Nigerian Journal of Social Sciences*, 4(1): 194-204
- Oluwadare, C. and Ibirinde, B. (2010). Health Seeking Behaviour of Tuberculosis Patients in Ekiti State, Nigeria. *Ethno Medicine*, 4(3): 191-197.
- Omotosho, O. (2010). Health-seeking Behavior Among the Rural Dwellers in Ekiti State, Nigeria. *International Multi-Disciplinary Journal*, 4(2): 125-138.
- Orubuloye, I.O. (1992). The Impact of Family and Budget Structure on Health. *Health Review*, 2: 189-210.
- Orubuloye, I. O. (2003). Disease, Illness and Society. Centre for Population and Health Resources, Ado-Ekiki, Nigeria, pp. 1-26.
- Pillai, R. K. WS, G. H., Polsky, D., Berlin, J. A., Lowe, R. A. (2003). Factors affecting decisions to seek treatment for sick children in Kerala, India. *Social Science and Medicine*, 57(5):783-90.
- Owumi, B. E. and Jerome, P. A. (2008). Traditional medicine and national health care reforms in Nigeria: which way? Niger.ian Anthropological and Sociological Association (NASA). Proceedings of National Conference. Theme; *Social Dimension of Reforms and development*. pp. 149-161.
- Puthuchira, R. R. and Athimulam, K. R. (2014). Care seeking behaviour and barriers to accessing services for sexual health problems among women in rural areas of Tamil Nadu state in India. *Journal of Sexually Transmitted Diseases*,2(3): 8-13.
- Ruebush, T. K., Kern, M. K., Compbell, C. C. and Oloo, A. J. (1995). Self-treatment of malaria in a rural area of Western Kenya. *Bulletin of World Health Organization*, 73(2): 229-236.
- Sudha, G., Nirupa, C., Rajasakthivel, M., Sivasusbramanian, S., Sundaram, V., Bhatt, S. (2003). Factors influencing the care-seeking behaviour of chest symptomatics: a community-based

- study involving rural and urban population in Tamil Nadu, South India. *Tropical Medicine and International Health*, 8(4):336- 341.
- Sheeram, P., Abraham, A. (1996). *The Health Belief Model*, in: Cornner, M., Norman, P. (Eds.), *Predicting Health Behaviors: Research and Practice with Social Cognition Models*, Buckingham Open University Press, p. 23-61.
- Sudharsanam, M. B. (2007). Factors determining treatment seeking behaviour for sick children in a fishermen community in Pondicherry. *Indian Journal Community Medicine*, 32:71-2.
- Tipping, G., Segall, M. (1995). *Healthcare Seeking Behaviour in Developing Countries: An Annotated Bibliography and Literature Review*. Development Bibliography 2. Institute of Development Studies Sussex University.
- Van der Hoeven, M., Kruger, A., Greeff, M. (2012). Differences in health care seeking behaviour between rural and urban communities in South Africa. *International Journal of Equity Health*. 11:31
- Vargese, S., Mathew, P., Mathew, E. (2013). Utilization of public health services in a rural area and an urban slum in Western Maharashtra, India. *International Journal of Medical Science and Public Health*. 2(3):646-9.
- WHO. (2002). *The World Health Report 2000: Health System*. WHO Office, Geneva.
- Yamane, T. (1967). *Statistics: An introductory Analysis*. 2nd Ed, New York: Harper and Row