# Health information seeking behaviour of residents of Ota, Ogun State, Nigeria

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**Abstract**
This study evaluated how inhabitants of Ogun State, Nigeria's cosmopolitan districts, sought for health information. In order to acquire quantitative data from patients using diagnostic centers in Ogun State, Nigeria's cosmopolitan areas, this study used a non-experimental descriptive survey approach. Residents who visited diagnostic centers in Ogun State, Nigeria's cosmopolitan neighborhoods were the study's target group. A total of 200 residents who regularly used the chosen diagnostic facilities were chosen as a sample for the study. For each chosen diagnostic facility, the sample size was determined proportionally to the entire patient population. A structured questionnaire with both closed-ended and open-ended questions was created in accordance with the objective and literature review. The study's data was analyzed utilizing pertinent statistical methods. For the particular goals, frequency counts, percentage distributions, and the Relative Importance Index (RII) were calculated. The Statistical Package for Social Sciences (SPSS) version 20 was used to do this. Findings showed that patrons of medical diagnostic centers in Ogun State's cosmopolitan regions did so because they trusted private hospital doctors' clinical judgment and the precision of their diagnoses. According to additional research, factors influencing patient choice included price of care, the opportunity to consult with more experienced doctors, accessibility, staff attitudes, availability of quality diagnostic services, non-availability in public facilities, and the ability to trust a doctor's clinical judgment, among others. Studies have revealed that Nigerians seek incorrect health care. The results also showed that the most significant barriers to health-seeking behavior in the selected medical diagnostic facilities included high costs of care, the lack of some services at public facilities, staff attitudes, problems with quality diagnostic services, encountering more experienced doctors, incomplete reports in other facilities, the lack of accuracy of results, a lack of confidence in doctors' clinical judgment, and poor facility management. The study came to the conclusion that the diagnostic centers' medical staff's opinions were more valued and their services were more complete than those offered by the public health institutions in the same region.

**Keywords**: Health information seeking, residents, cosmopolitan, Ogun State, Nigeria

**Introduction**
The idea of information seeking behaviour encompasses information need, information seeking and information use (Lafort et al., 2017); (Muhamad et al., 2022); (Tidwell & Sias, 2005). Previous authors have differentiated information need from seeking and use and the three have to be balance to have a quality life style. The citizenry has to make deliberate efforts to seek for quality health care at the appropriate time having identified the need and endeavour to use such health information sought either from the hospital facilities, documented sources(books) or on the internet or elsewhere (Cohen, 2010); (Liu & Tong, 2020); (Latunji & Akinyemi, 2018). Health has been defined as the complete state of physical, mental and social well-being not completely the absence of disease or infirmity (Gholami et al., 2021); (Clavier et al., 2020); thus, people need to seek relevant health information to remain health. Health information seeking behaviour is the deliberate efforts made by an individual to

seek help in relation to his or her health care (Latunji & Akinyemi, 2018).

The health seeking behaviour of individual or people determine how they use health services like diagnostic facilities. The cost of services, distance to health facilities, cultural beliefs, level of education and health facility likely influences the use of health facilities in many parts of the world (Bonadonna, Saunders, Zegarra & Carlton, 2018). Health-seeking behavior is viewed as the varied response of individuals to states of ill-health, depending on their knowledge and perceptions of health, socioeconomic constraints, and adequacy of available health services and attitude of healthcare providers. People's health-seeking behavior many be influenced essentially by the nature of ailment, waiting time in the health facility and attitude of healthcare professionals.

According to the literature, health professional has the responsibility to determine the health information seeking behaviours of their patients to be able to provide needed care. This is critical because without adequate knowledge of a patient health care need, treatment options will be difficult (Jorm, 2012); (Reygaert, 2018). This sentiment has been shared by scholars across the globe regardless of gender and social class (Muhamad et al., 2022); (Jeyshankar et al., 2018); (Kabir et al., 2014); (Jeyshankar et al., 2018). Many of these authors have argued that more still need to be done with regards to health information seeking for enhance life style and longevity (Sageer et al., 2019); (Sambo et al., 2017); (Dündar, 2017); (Bleakley et al., 2020).

When the public seek for health information at the appropriate time and location, the results will be to their advantages. Today, information seeking behaviour has been part of the debates of the 21st century researchers cutting across information and health related disciplines (Razilan et al., 2018); (Sambo et al., 2017). The idea of information literacy of an individual is germane to health information seeking behaviour (Ajami & ArabChadegani, 2013); (Itsekor & Nwokeoma, 2017); (Nicholson et al., 2019). Information literacy helps people to be aware of their information need, seeking and use (Jeyshankar et al., 2018). The level of illiteracy among Nigerian people has improved significantly in the last five decades (Ahmed et al., 2012); (Musa et al., 2015);(Amusa, 2016); (Salman et al., 2017). Despite this recent thinking, the literacy level does not automatically translate into improved health information seeking due to diversity in people (Coworkers et al., 2015); (Lyubareva et al., 2014);(Soedarmadji et al., 2019). While there is improved general information seeking behaviour among different user groups (Opele & Iyanda, 2015); (Velmurugan, 2018); (Cohen, 2010). The extent of health information seeking among the public especially people at the cosmopolitan areas of Ogun State Nigeria is difficult to determine considering all factors including socio-political and religious diversity of people in the modern society. It is against this background that the current study which seek to ascertain the health information seeking behaviour of residents of cosmopolitan areas of Ogun State Nigeria.

**Statement of the problem**
Every citizenry deserves the best health care. In fact, it can be argued that health-seeking behavior has an effect on diagnosis of diseases which affect the physician's decision on the type of medication to be administrated to a patient in need of medical assistance. Studies (Zhou, Zhao, Shen, Lai, Nawaz & Gao, 2021) have established that health seeking behavior affect how a patient takes a decision to undergo a diagnosis or not to know the cause of a diagnosis

(Levene, Fein, Silver, Joels, & Khine, 2021). Majority of the Nigeria population lives in rural area and are neglected to a large extent, they are most deprived with regard to the provision of modern health care services. Besides, they lack other basic infrastructure necessary for the maintenance and promotion of good health (Adeoye, Oladokun & Opalere, 2022). The implication is that rural dwellers are subjected to high incidence of morbidity and mortality resulting from the incidence of preventable and infectious disease. This study therefore seeks to examine the health seeking behavior of patients patronizing diagnostic centres in the cosmopolitan areas of Ogun State, Nigeria.

**Research questions**

The study provided answers to the following research questions:
1. What are the reasons for patronizing medical diagnostic centres in the cosmopolitan areas of Ogun State, Nigeria?
2. What is the nature of health information sought by residents of the cosmopolitan areas?
3. What are the factors influencing health seeking behavior of residents of the cosmopolitan areas?
4. What are the challenges related to health seeking of residents of the cosmopolitan areas?

**Methods**
This study adopted the descriptive non-experimental survey design to collect quantitative data from patients patronizing diagnostic centres in the cosmopolitan areas of Ogun State, Nigeria. One of the advantages of survey research method is that, it has a wide scope which allows primary data to be obtained from large population that spreads across geographically such as those meant for this research. The target population for this study were residents patronizing diagnostic centres in the cosmopolitan areas of Ogun State, Nigeria. A preliminary investigation shows that more than 50 people patronizing diagnostic some of diagnostic centres in the cosmopolitan areas of Ogun State, Nigeria on daily basis. A sample of 200 people patronizing diagnostic used in this study. The two hundred (200) people patronizing diagnostic centres in the cosmopolitan areas of Ogun State, Nigeria was selected using multistage random sampling technique. The sample size was calculated using the Kennan's formula.

$$n = NX/(N-1)E_2 + X$$
Where
N = the total population
X = level of confidence = 0.95
E = absolute precision or error = 0.05

An attrition rate of 10% of the calculated sample size was added to the sample size to get the desired sample, then, proportionate sampling was used to determine the sample size based on the number of patients in each diagnostic centre. The sample size was assigned proportionately to the total patient population for each selected diagnostic centre, so patients were selected randomly from each class of each of the health facility conveniently, until the allocated number is reached. Structured questionnaire was designed in line with the objective of the study, the questionnaire which consist of both close and open-ended questions was subjected to both validity and reliability tests. A chrombach's alpha score of 0.7% and above was considered reliable for the study (see Table 1).

**Table 1: Results of reliability test**

| S/N | Parameter | Number of items | Cronbach's alpha |
|-----|-----------|-----------------|------------------|
| 1 | Reasons for patronizing medical diagnostics centres | 13 | 0.652 |
| 2 | Factors influencing health seeking behaviour of the patients | 10 | 0.872 |
| 3 | Challenges relating to health seeking behaviour | 10 | 0.825 |
| 4 | Nature of health information sought by patients | 12 | 0.882 |

Table 1 shows a high level of inter-item consistency, indicating that the questionnaire's items were significantly correlated. It demonstrates that factors influencing patients' health seeking behavior have an alpha value of (0.872), followed by challenges related to patients' health seeking behavior (0.825), and motivations for patronizing medical diagnostics centers (0.652). (0.882) After the institutional permission has been obtained and approved by relevant authority to conduct the research. The patients were briefed about the essence of the research to help them understand the purpose of the study and familiarize themselves with the questions and they were allowed to fill the questionnaire.

Data generated for the study was analysed using relevant statistical techniques such as frequency counts, percentage distribution and relative importance index (RII). Relative importance index helps to rank the criteria according to their relative importance. This was achieved through the use of Statistical Package for Social Sciences (SPSS) version 20 developed by IBM.

The following formula is used to determine the relative index.

$$R.I. = \text{——} \quad \text{or} \quad RII = \text{Sum of weights} \text{————}$$

R.I. = or RII
= Sum of weights
Where:
**W** is the weighting as assigned by each respondent on a scale of one to five, with one implying the least and five the highest. **A** is the highest weight, and **N** is the total number of the sample. Based on the ranking (R) of relative importance index (RII), the weighted average of the two groups will be determined.

## Results

The results are presented according to the research questions.

**Research question 1:** What are the reasons for patronizing medical diagnostic centres in the cosmopolitan areas of Ogun State, Nigeria?

The data that are used to answer this question are presented in Table 2.

**Table 2: Reasons for patronizing medical diagnostic centres in the cosmopolitan areas of Ogun State, Nigeria**

| Reasons | RII | Ranking |
|---|---|---|
| Doctors' clinical judgment can be trusted | 0.74 | 1st |
| Need more experienced doctors | 0.69 | 2nd |
| Accurate diagnosis of illness | 0.69 | 3rd |
| Doctors and other care providers are approachable | 0.68 | 4th |
| Service is adequate | 0.65 | 5th |
| Seeking medical education | 0.65 | 6th |
| staff demonstrate competence | 0.65 | 7th |
| Services are generally satisfactory | 0.64 | 8th |
| 24-hour service is guaranteed | 0.62 | 9th |
| Promptness of service | 0.61 | 10th |
| Waiting area at the centre is convenient and less congested | 0.60 | 11th |
| Less waiting time | 0.57 | 12th |

Table 2 indicates that the highest reasons for patronizing medical diagnostic facilities in the cosmopolitan areas of Ogun State, Nigeria was doctors' clinical judgement which can be trusted (RII = 0.74) ranked 1st, this was closely followed by requesting for more experienced doctors (RII = 0.69) ranked 2nd, ranked 3rd was accurate diagnosis of illness (RII = 0.69), and ranked 4th was doctors and other care providers who are much approachable (RII = 0.68). Others among the reasons for patronizing medical diagnostic facilities in the cosmopolitan areas of Ogun State, Nigeria include adequate services (RII = 0.65), seeking medical education (RII = 0.65), staff demonstration competence (RII = 0.65), provision of generally satisfactory services (RII = 0.64), guaranteed 24-hour service (RII = 0.62), promptness of service (RII = 0.61), convenient and less congested waiting area at the centers (RII = 0.60). It further shows that less waiting time was ranked last among the reasons for patronizing medical diagnostic facilities in the cosmopolitan areas of Ogun State, Nigeria (RII = 0.57). Overall, the perception on the reasons for patronizing medical diagnostic facilities in the cosmopolitan areas of Ogun State, Nigeria was equally high, indicating that none of the respondents was rated below the RII of 0.57 on a 5 points scale.

Other reasons for patronizing medical diagnostic centres in the cosmopolitan areas of Ogun State include closeness of the hospitals to the respondents, clean environment, more comprehensive care, adequate health service provision and prompt service delivery to the patients.

**Research question 2:** What is the nature of health information sought by residents of the cosmopolitan areas of Ogun State, Nigeria?

The data that are used to answer this question are presented in Table 3.

**Table 3: Nature of health information sought by residents of the cosmopolitan areas of Ogun State, Nigeria**

| Nature of health information sought | RII | Ranking |
|---|---|---|
| To clarify information that has been given to me by a health professional | 0.75 | 1st |
| To be more medically informed | 0.73 | 2nd |
| To discuss alternative treatments, tests, or procedures. | 0.71 | 3rd |
| Be in control of the management of my health condition(s). | 0.70 | 4th |
| To check information that was discussed during a consultation with a health professional | 0.68 | 5th |
| To get the health professional's opinion on information that i found on the internet. | 0.68 | 6th |
| I trust the health professional. | 0.68 | 7th |
| to help manage my own condition | 0.67 | 8th |
| To clarify information that was unclear on the website(s) that I visited. | 0.66 | 9th |
| To look for alternative or additional treatment options. | 0.65 | 10th |
| To find out more information. | 0.65 | 11th |
| Have information to read. | 0.64 | 12th |

Table 3 reveals that the highest rated among the nature of health information sought at private and government diagnostic centres in the cosmopolitan areas of Ogun State, Nigeria was clarification of information that has been given by a health professional (RII = 0.75) ranked 1st, this was closely followed by to be more medically informed (RII = 0.73) ranked 2nd, ranked 3rd was discussing alternatives treatments, tests or procedures (RII = 0.71), and ranked 4th was to always be in control of the management of health condition(s) (RII = 0.70). Others among the nature of health information sought at private and government diagnostic facilities in the cosmopolitan areas of Ogun State, Nigeria include checking of information that was discussed during a consultation with a health professional (RII = 0.68), getting the health professional's opinion on information that are found on the internet (RII = 0.68), putting trust on the health professionals (RII = 0.68), raising an help towards managing my own condition (RII = 0.67), clarifying information that was unclear on the website(s) that were visited (RII = 0.66), looking for alternatives or additional treatment options (RII = 0.65), finding out more information (RII = 0.65). It further shows that having information to read was ranked last among the nature of health information sought at private and government diagnostic facilities in the cosmopolitan areas of Ogun State, Nigeria (RII = 0.64). Overall, the perception on the nature of health information sought at private and government diagnostic facilities in the cosmopolitan areas of Ogun State, Nigeria was equally high, indicating that none of the respondents was rated below the RII of 0.64 on a 5 points scale.

**Research question 3:** What are the factors influencing health seeking behavior of residents of the cosmopolitan areas of Ogun State, Nigeria?

The data that are used to answer this question are presented in Table 4.

**Table 4: Factors influencing health seeking behavior of residents of the cosmopolitan areas of Ogun State, Nigeria**

| Factors | RII | Ranking |
|---|---|---|
| Cost of care | 0.83 | 1st |
| Meeting more experienced doctors | 0.78 | 2nd |
| Accessibility | 0.75 | 3rd |
| Staff attitude | 0.69 | 4th |
| Quality diagnostic services | 0.68 | 5th |
| Unavailability in public facilities | 0.68 | 6th |
| Doctors' clinical judgment can be trusted | 0.67 | 7th |
| Accuracy of results | 0.65 | 8th |
| Personal factor | 0.63 | 9th |
| Services are comprehensive | 0.62 | 10th |

Table 4 reveals that the top identified factor was cost of care (RII = 0.83) ranked 1st, followed by meeting more experienced doctors (RII = 0.78), ranked 3rd was accessibility (RII = 0.75), and ranked 4th was staff attitude (RII = 0.69). Others among the factors influencing health seeking behavior at medical diagnostic facilities in the cosmopolitan areas of Ogun State, Nigeria include quality diagnostic service (RII = 0.68), unavailability in public facilities (RII = 0.68), doctors' clinical judgement that can always be trusted (RII = 0.67), accuracy of results (RII = 0.65), personal factor (RII = 0.63), It further shows that services are comprehensive was ranked last among the factors influencing health seeking behavior at medical diagnostic centres in the cosmopolitan areas of Ogun State, Nigeria (RII = 0.62). Overall, the perception on the factors influencing health seeking behavior at medical diagnostic centres in the cosmopolitan areas of Ogun State, Nigeria was equally high, indicating that none of the respondents was rated below the RII of 0.62 on a 5 points scale. Other factors influencing health seeking behavior of residents of the study areas includes high level of confidentiality of patient information, reduced Bureaucracy in receiving care, reduce waiting time and stress.

**Research question 4:** What are the challenges related to health seeking of residents of the cosmopolitan areas of Ogun State, Nigeria?

The data that are used to answer this question are presented in Table 5.

**Table 5: Challenges related to health seeking of residents of the cosmopolitan areas of Ogun State, Nigeria**

| Challenges | RII | Ranking |
|---|---|---|
| Cost of care is very high | 0.83 | 1st |
| Unavailability of some of the services at public facilities | 0.73 | 2nd |
| Staff attitude | 0.70 | 3rd |
| Issues with quality diagnostic services | 0.69 | 4th |
| Meeting more experienced doctors | 0.68 | 5th |

| | | |
|---|---|---|
| Un- comprehensive report in other centers | 0.66 | 6th |
| Lack of accuracy of results | 0.66 | 7th |
| Lack of trust for Doctors' clinical judgment | 0.64 | 8th |
| Poor administration of facility | 0.64 | 9th |
| Personal factor | 0.54 | 10th |

Table 5 reveals that the RII of all the items clearly surpass the threshold of 0.5. It indicates that the highest rate on the challenge related to health-seeking behavior in private medical diagnostic facilities and government centres in the cosmopolitan areas of Ogun State, Nigeria was very high cost of care (RII = 0.83) ranked 1st, ranked 2nd was unavailability of some of the services at public facilities (RII = 0.73), ranked 3rd was staff attitude (RII = 0.70), and ranked 4th was issues with quality diagnostic services (RII = 0.69). Others among the challenge related to health-seeking behavior in private medical diagnostic facilities and government centres in the cosmopolitan areas of Ogun State, Nigeria include meeting more experienced doctors (RII = 0.68), un-comprehensive report in other centers (RII = 0.66), lack of accuracy of results (RII = 0.66), lack of trust for doctors' clinical judgement (RII = 0.64), poor administration of facility (RII = 0.64), It further shows that personal factor was ranked last among the challenge related to health-seeking behavior in private medical diagnostic facilities and government centres in the cosmopolitan areas of Ogun State, Nigeria (RII = 0.54). Overall, the perception on the challenge related to health-seeking behavior in private medical diagnostic facilities and government centres in the cosmopolitan areas of Ogun State, Nigeria was equally high, indicating that none of the respondents was rated below the RII of 0.54 on a 5 points scale. Other challenges r includes long waiting time, staff attitudes, distance and financial factor

**Discussion**
The results showed that trustworthy clinical judgment of doctors, the need for more experienced doctors, accurate diagnosis of doctors and other care providers are reachable, and service is enough were significant factors for patronizing medical diagnostic centers in Ogun State, Nigeria. According to certain surveys, women seek medical attention less frequently than males. There are also a number of explanations proposed for this. Men are the primary decision-makers, and as a result, they control the resources and determine when and where women seek medical attention. Men are the primary decision-makers, and as a result, they control the resources and determine when and where women seek medical attention, according to Rani and Bonu (2003). In addition, women are frequently less likely to notice disease signs and, even when they do, they often dismiss them as meaningless (Currie & Wiesenberg, 2003). Additionally, some cultural attitudes prevent women from making decisions regarding their own and their children's health.

Regarding the variables that affect how people behave when seeking medical diagnosis in the affluent regions of Ogun State, Nigeria. Among other things, the study's findings showed that accessibility, staff attitudes, quality diagnostic services, lack of availability in public facilities, cost of care, meeting more experienced doctors, and the reliability of doctors' clinical judgment were all significant factors. According to surveys, Nigerians behave inappropriately when seeking medical care. Based on how the aforementioned components interact, these could be explained. The majority of these individuals lack access to contemporary medical treatment together with other essential amenities and infrastructure that support and preserve good health. Even in places where they are accessible, they fall short. In addition, a variety of models have been used to describe the

numerous factors that influence how people seek out health.

Regarding issues with health-seeking behavior at government and private medical diagnostic facilities in the urban districts of Ogun State, Nigeria. The results show that high costs of care, the absence of some services at public facilities, staff attitudes, problems with quality diagnostic services, encountering more experienced doctors, incomplete reports in other facilities, a lack of accuracy in results, and a lack of trust in doctors' judgment were the top challenges related to health-seeking behavior in private medical diagnostic facilities and government centers in the cosmopolitan areas of Ogun State, Nigeria. Additionally, the study's findings showed that the primary motivations for visiting private and public diagnostic facilities in Ogun State, Nigeria's cosmopolitan areas was to simply clarify information that had been provided by a health professional, to become more medically informed, to talk about alternative treatments, tests, or procedures, to be in control of the management of my health condition, and to verify information that had been discussed during a consultation with a health professional. According to one definition, information seeking is the process by which a person looks for a message that meets their perceived needs.

**Conclusion**

This study has demonstrated that patients' sought care in the various diagnostic centres in the cosmopolitan areas of Ogun State for a variety of reasons, including cost and accessibility from a distance. The study came to the conclusion that the diagnostic centers' medical staff's opinions were more valued and their services were more complete than those offered by the public health institutions in the same region. On the basis of the study's findings, the following suggestions are made

1. Since the cost of the service was regarded as a major barrier to receiving diagnostic care at the private facilities, the authorities in both public and private health facilities should encourage the availability of basic diagnostics services for the use of all.
2. The government should provide the fundamental infrastructure so that diagnostic services are accessible and inexpensive for the populace, working with the appropriate donor organizations.
3. The government and hospital policy makers should support initiatives that would support the delivery of accurate and fast diagnostic services to the populace.
4.

**Implications of the findings**

The outcome of this study has the following implications:

1. According to the study's findings, patients' attitudes and behaviors played a role in their preference for diagnostic centers. As a result, nurses and other healthcare professionals working in both public and private health facilities should develop the habit of giving patients the time and attention they need to receive quality care.
2. The study has also highlighted how important it is for nurses and other healthcare professionals to assist in providing patients and important people with complete health services.
3. Given that all people have the potential to be disabled, nurses in the various hospitals, clinics, and health care facilities should be willing to help the sick and the injured.

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