

Information Needs and Resource Utilization by Medical Doctors of Federal Medical Centre Katsina State, Nigeria

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Abstract- This study was carried out to find out the Information Needs and Resource Utilization by Medical Doctors of Federal Medical Centre Katsina State. To achieve this objective, quantitative research method was adopted, whereas survey design was employed for the study. Data were collected from the respondent's using questionnaire. A total of seventy-six (76) copies of questionnaire were administered to the respondents and seventy-two (72) were returned and found useful. All data collected were categorized and presented in tabular forms. Analyses of categorized data were done through simple percentages. Ultimately, it was found that the main types of information sought by the respondents are information to satisfy curiosity and personal interest, information for formal course of study, information for research and business opportunities. Based on the findings of the research, it was recommended that management of the hospital should provide functional library within the hospital premises with adequate and relevant information resources. Secondly, more and reliable internet service should be provided in the hospital so that medical doctors can benefit from this information sources right from their various offices.

Keywords: Information Needs, Resource Utilization, Medical Doctors

I. INTRODUCTION

Current and up to date information services is the key which permits any sector in the economy to produce and serve their community with latest, useful, and needed services with least cost possible. Information is regarded as resources for use and therefore its generation and use for efficiency and effectiveness is a very demanding and stressful task because any information that is not organized for future use may be wasted, also the relevance attached to information makes people to seek it in diverse ways and for diverse needs.

Doctors like other professionals are individuals with unique information needs. Each one of them may need practical knowledge to solve immediate problems in his or her daily life and work. And they need intellectual knowledge, the kind that furthers their understanding of science and that which adds to the value of their lives. Doctors seek information to synthesize new ideas with known facts as part of the research activities required of them in their carrier. They have wide information needs that make them to draw on or rely on the result of research and practice

from wide area of knowledge. Katsina State, which was created out of Kaduna State on December 23rd, 1987, is in the Northwest zone of Nigeria with 34 local government areas. It is popularly called the Home of Hospitality since the indigenes are very hostile. Its capital city is Katsina. There are two major ethnic groups in Katsina State which are: Hausa and Fulani.

The health sector of the State is not left out of the scene. Because of the increasing population in the State, a lot of hospitals and health care delivery centres have been established in the State to cater for the community health needs of the State. Among these health care delivery centres are General Amadi Rimi Othorpeadic Hospital, General Hospital Katsina, and Federal Medical Center Katsina among others. Apart from rendering health care delivery services to all the general populace, the Federal Medical Center Katsina also serve as a referral center to government and private hospitals, clinics, and health center in and around Katsina State and the nearby states.

II. STATEMENT OF THE PROBLEM

The objective of any medical library is to provide information to its user and to enhance their awareness, ease of access and proper utilisation of the resources. This importance of the library is well summarized by Bozimo (2013) when she stated that information services are not end in themselves; they are means to the broader end of helping individuals to attain their goals and to improve their performance.

Medical libraries, therefore, must be adequately supplied with the relevant materials to meet these information needs. The hope is to prepare the medical personnel most especially the doctors who are aware of the health problems of communities. They are also expected to relate to them and can work as part of health team to help a community to solve them. Therefore, medical training in Nigeria must be related to the health needs of the country and its components communities. The need for an up-to-date library in any type of hospital cannot be overemphasized. Despite the importance of library and information resources in medical center, it is amazing that the medical centers in the country, particularly in Katsina State have no functional

library. Yet doctors like any other professional groups in the country need library and information services to be able to be effectively handling their professional responsibilities, which are paramount in dictating their need, including their information needs.

A study such as this is necessary to find out what the information needs of doctors are and how are the doctors in the Federal Medical Center in Katsina State meeting these needs, especially in the absence of library and information services in their hospital.

III. RESEARCH QUESTIONS

The following research questions guided the study.

1. What is the information needs of the doctors of the Federal Medical Center in Katsina State?
2. What types of information resources do the medical doctors consult to meet their information needs?

IV. OBJECTIVES OF THE STUDY

The following are the objectives of the study

1. To Find out the Information Needs of Doctors of the Federal Medical Center in Katsina State.
2. To Determine the Types of Information Resources Medical Doctors, Consult to Meet their Information Needs.

V. LITERATURE REVIEW

According to Umar (2004) information is an instrument per excellence for any professional development. Information is used in the development of the whole person intellectually, psychologically, socially, vocationally, religiously, or morally. In trying to define information, one is confronted with the problem of semantic, terminological, and conceptual difficulties. John (2015) asks do we mean information which belongs to informatics, to management information systems, to objective and cognitive documentary information or to information belonging to public relations as subjective activity.

When relevant information is passed, people are expected to obtain knowledge and skill and hence specialized in specific fields of study. It is this knowledge that allows people to contribute meaningfully to national development. The greatest resources for development, is the human resources hence no nation can develop in isolation of her human resources. It is therefore important that all levels of professionalism should have access to certain information most importantly information pertaining to their field to have commands of facts and to produce highly resourceful people to impact positively on national development.

Information need is a vague concept. It is often because of some unresolved problems. According to Pao (2009), it may arise when an individual recognizes that his or her current state of knowledge is insufficient to cope with the task at

hand or to resolve conflicts in a subject area, or to fill a void in some area of knowledge. The field of medicine is such that it is changing and expanding continuously, as more and more areas are being discovered thereby giving room for more specialization. As Penny (2006) has put it 'specialisation has become a way of life in medicine in the 19th century to cope with the exponential increase in the amount of relevant knowledge'. The traditional discipline of medicine and surgery have been divided and sub-divided with experts and practitioners in every sub-division. He went further to say that the image of medical practitioners has altered in recent years, the work of clinicians continues in a pattern supported by schemes for general and higher professionalism training. The proliferation of new specialties, each with its own literature, is a facet of the information explosion with which a doctor must cope.

In health care, the information need of various personnel has been explored from many viewpoints. Thus, the purpose of the need for medical information varies at different levels of specificity. Need for information could arise on treatment, education, professionals' interest, current awareness, and diagnosis. Another need could arise on patient care, patient education, research, teaching and administration. Other needs are on everyday need, problem solving and idea generalization. The extent to which health care professionals need information is urgent.

Wilson (2007) further explained that survey of Library and information of pre-clinical and clinical workers and the design of a Library network to meet these needs and a study of the needs of health care practitioners for information on voluntary organizations, the provision and use of medical literature all aspect of information transfer from generation to use, through published and unpublished materials and at international and national levels are being considered.

According to Bryant and Sue (2004), doctors are prompted to seek information they need arising from a combination of professional responsibilities and personal characteristics, such as

1. The need to care for individual patients. To provide the best possible patient care, they must have access to resources that will assist them in making clinical decisions.
2. The need to keep-up to date with new and updated clinical information relevant to their practice.
3. The need to acquire information to explain important risk factors to patients.
4. The need to obtain pharmacological information to back-up prescribing decisions.
5. The need to satisfy curiosity, personal interest, and inclination.
6. The need to resolve uncertainty and acquire evidence.

In a survey by Ocheba and Buba (2003), they discovered that medical doctors need specific information to enhance their knowledge on a day-to-day basis, particularly with the

information explosion such as e-mails and internet facilities. It is assumed, by librarians and information professional, that doctors have information needs associated with clinical work. However, as with any profession, the need varies amongst the population and is not homogenous. Shelstad (2006), on the other hand, argue that 98% and 81% of the questions are related to patient care.

Gorman *et al.*, (2004) undertook a study to determine if the information needs of primary care medical staff in rural areas were differently from those in non-rural areas. The results showed there were no statistically significant differences in terms of the number of questions asked, the number of questions perused, and the number of questions answered.

VI. METHODOLOGY

The study is quantitative in nature. According to Cohen (1980) quantitative research is defined as social research that employs empirical statements. It is the numerical representation and manipulation of observations for the purpose of describing and explaining the phenomena that those observations reflect. Survey research methodology was employed as the most convenient method because of its numerous advantages, as acknowledged by Osuala (2003) the survey research technique is suitable for conducting very large and small population.

Survey technique is chosen for this study because of its relevance in term of efficiency and usefulness in collecting data for acceptable outcome or result for the study. The population of the study comprises all the medical doctors working in the Federal Medical Center, Katsina State. Therefore, a total of seventy-six (76) Medical doctors are found to be the target population for the study. Due to the relative fewness in the number of the respondents, it was considered unnecessary to draw any sample from the respondents. In order words, the respondents are within manageable level. Thus, all the doctors in the Federal Medical Centre, Katsina State were used as respondents. Questionnaire was designed and used as instrument for data collection in the study.

VII. FINDINGS AND DISCUSSION

Out of the 76 copies of the questionnaire distributed to the medical doctors, a total of 72 (94.73%) copies were returned duly completed and found usable by the researcher. The data collected were analyzed using frequency tables, and percentages as presented below.

A. Information Needs of the Medical Doctors of the Federal Medical Centre, Katsina State

The researcher presented some factors that dictate the information needs and the value attached to the information needs. Respondents were asked to tick as many responses as applicable to them.

TABLE I INFORMATION NEEDS OF MEDICAL DOCTORS

Sl. No.	Factors	Frequency	%
1	Search for evidence to support practice	72	100
2	Information to support lifelong learning and formal course of study	57	79.2
3	For pharmacological information	59	81.9
4	To satisfy curiosity and personal interest	49	68.1
5	For patient care	72	100
6	For research purpose	31	43.1
7	For business purpose	66	91.7

The table I above shows the responses of the medical doctors on their information needs. All doctors indicated that one of the factors that prompted them to seek for information was search for evidence to support practice. Some of the doctors confirmed that the field of medicine is information intensive in the sense that there is relatively higher increase in research in medicine than in any other field. New research is being carried out day in day out.

All the respondents also indicated that they need information for patient care. This is so because most frequently, the medical doctors are faced with challenges in the health of their patients which might be unfamiliar or not responding to the usual treatment and this will require the doctors to seek for information to serve their clients better by whatever information resources to put an end to the enigma in the health of their patient.

Another factor that dictates doctors' information needs which 66 (91.7%) of the respondents indicated is information for business opportunities like investments, etc. Also, according to the table, the fourth factor that dictates the information needs of the medical doctors is pharmacological information which is represented by 59 (81.9%) of the respondents. The doctors indicated that they need pharmacological information to acquaint themselves with the latest prescription and use of drugs in curing sickness and diseases.

Another reason that prompted the doctors to seek for information is to support lifelong learning and formal course of study. This factor was indicated by 57 (79.2%) of the respondents, this is owing to the fact that most of the doctors or overwhelming majority of the doctors were either resident officers, medical officers, students on internship or corporers and this categories of doctors also, considering their ages which fell between 25 and above need information mostly for formal courses available which suit their own interest including the details, the schools available at home and abroad and sponsorship if possible. Furthermore, the table also shows the medical doctors need information to satisfy curiosity and personal interest which about 49 (68.1%) of the respondents indicated, 31 (43.1%) of the respondents indicated that they need information for

research purpose. Most especially were those that were already in schools for continuing education, and they need information to help them carry out their research work and studies.

A follow up question was asked to the respondent to indicate the value attached to the information needs. Their responses reflected as follows.

TABLE II LEVEL OF VALUE ATTACHED TO INFORMATION NEEDS

Sl. No.	Information needs	Very High	%	High	%	Low	%	Very Low	%
1	Search for evidence to support practice	72	100	0	0	0	0	0	0
2	Information to support lifelong learning and formal course of study	21	29.2	22	30.6	14	19.4	0	0
3	For pharmacological information	38	52.8	21	29.2	0	0	0	0
4	To satisfy curiosity, personal interest and inclination	16	22.2	14	19.4	19	26.4	0	0
5	For patient care	66	91.7	6	8.3	0	0	0	0
6	For research purpose	31	43.1	0	0	0	0	0	0
7	For business opportunities	32	44.4	27	20.8	7	12.7	0	0

The table II above shows that all the respondents attached very high value to search for evidence to support practice because of the reason given in the discussion in table I, 66 (91.7%) also attached the same value to information for patient care, 38 (52.8%) also indicated very high level for pharmacological information and 32 (44.4%) attached just high level to business opportunities.

B. Information Sources Utilized by Medical Doctors

This research question tries to identify information sources utilized by medical doctors to meet their information needs. To do this, a list of information sources was outlined for the respondent to tick as many as appropriate.

TABLE III TYPES OF INFORMATION SOURCES UTILISED BY MEDICAL DOCTORS

Sl. No.	Resources	Frequency	%
1	Library	15	20.8
2	Contact with professional colleagues and superiors	72	100
3	Personal record of information	69	95.8
4	Textbooks and monographs	72	100
5	Learned journal	52	72.2
6	Seminars, workshops proceedings	42	58.3
7	Conference proceedings	8	11.1
8	In-house memoranda	18	25
9	Newsletters and bulletins	12	16.7
10	CD-ROM database	37	51.4
11	Internet	72	100
12	Video/film	31	43.1
13	Radio	14	19.4
14	Television	29	40.3

Table III above, revealed that all the respondents consult professional colleagues and superiors. The reason for this is not farfetched because professionals' internet formally or informally and in which ever form, there is exchange of professional information. All the respondents also indicated that they consult textbooks and monographs with the internet to meet their information needs. This is because the medical doctors in their course of study and practice, acquired some information sources in form of textbooks and monographs for personal use which they consult from time

to time and also since the internet has become faster means of getting and sharing information, so the doctors are not left out in the use of this information sources to meet their information needs.

However, the medical doctors make extensive use of the internet and books, reason which they gave is because the internet provides access to full text electronic journal which is also current and detailed. Books, on the other hand, carry information, while colleagues most especially superiors, due

to longer years in practice and experience, can offer professional advice. The next information resources used by the respondents ranking as the fourth highest which was ticked by 69 (95.8%) of the respondents is personal records of information. This can be in form of notes from formal course of study, personal records of information on acquired knowledge, etc.

The next information resources frequently consulted by medical doctors is the learned journals which was indicated by 52 (72.2%) of the respondents. This was followed by

seminar and workshop proceedings which was ticked by 42 (58.3%) of the respondents. Others are CD-Rom database which was ticked by 37 (51.4%) video and film by 31 (43.1%) of the respondents, followed by other information sources such as television 29 (40.3%), in-house memoranda 18 (25%) and the library which was ticked by only 15 (20.8%) of the respondents.

A follow up question was asked to determine the frequency of consulting the information resources. Below is the response of the medical doctors.

TABLE IV FREQUENCY OF CONSULTATION OF INFORMATION RESOURCES

Sl. No.	Resources	Daily	%	Weekly	%	Monthly	%	Yearly	%
1	Library	0	0	10	13.9	5	6.9	0	0
2	Contact with professional colleagues and superiors	72	100	0	0	0	0	0	0
3	Personal records of information	29	40.3	23	31.9	17	23.6	0	0
4	Textbooks and monographs	21	43.1	37	51.4	4	5.6	0	0
5	Learned journals	15	20.8	6	8.3	31	43.1	0	0
6	Seminars and workshops proceedings	2	2.8	8	11.1	32	44.4	0	0
7	Conference proceedings	0	0	0	0	6	8.3	2	2.8
8	In-house memoranda	0	0	8	11.1	10	13.9	0	0
9	Newsletter and bulletins	0	0	7	9.7	2	2.8	3	4.7
10	CD rom database	0	0	32	44.4	5	6.9	0	0
11	Internet	45	62.5	25	34.7	2	2.8	0	0
12	Video/Film			15	20.8	16	22.2	0	0
13	Radio	14	19.4	0	0	0	0	0	0
14	Television	13	18	16	22.2	0	0	0	0

The researcher wanted to find out how frequent the respondents consulted their resources in obtaining information to meet their information needs. Table IV above depicts the frequencies of the respondents. It should be noted that the respondents were asked to check all that applies to them. 72 (100%) respondents indicated that they consult their colleagues and superior on daily basis. This can be said to be true as members of staff interact daily with each other at place of work. A total of 69 (95.8%) respondents indicated that they consult their personal records at the four regular intervals respectively. Textbooks and monographs were consulted by 72 (100%) respondents at the four regular intervals.

It is also interesting to know that despite the wide recognition given to internet, only 45 (62.5%) respondents consult the internet on daily basis, 25 (34.7%) respondents consult the internet weekly and 2 (2.8%) monthly. The reason for this is attributed to the fact that doctors have limited internet services within their hospital premises. From the above analysis, it can be deduced that contact with professional colleagues and superiors is the information resource that doctors frequently consult in satisfying their information needs.

VIII. RECOMMENDATIONS

Arising from the findings of this study, the following recommendations were made

1. The need for a functional library in the federal medical center, Katsina is highly advocated. Management of the hospital should tackle this problem with immediate effect to enable doctors have adequate and relevant information resources to meet their information needs.
2. There is need to extend internet services to all nook and crannies of the hospital so that medical doctors can benefit from this information resources right from their various offices.

IX. CONCLUSION

Based on the findings of the study, it could be concluded that federal medical center, Katsina has no functional library or information center which is quite surprising because in organization of its status with about 76 medical doctors all together, there should be a library or information center to address the information needs of not only the medical doctors but also other workers. Doctors need information

mostly to support practice and for patient care, they also need pharmacological information, information to support lifelong learning and formal course of study to mention but few. All these information needs and more contribute immensely to professional performance or competence of the medical doctors. Without competence, one may be thrown out of job.

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