



**MEDICAL PROFESSIONALS' INFORMATION COLLECTION SKILLS AND UTILIZATION
OF PATIENTS HEALTH RECORDS IN TERTIARY HEALTH INSTITUTIONS IN SOUTH-
SOUTH, NIGERIA.**

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Abstract:

Information literacy skills is to read, write, speak and listen in a way that enable an individual communicate effectively and make sense of the world that will help in the establishment of information literate person. This study investigated medical professionals' information collection skill and the utilization of patients' health records in tertiary health institutions in south-South, Nigeria. The study employed the correlational research design. It was carried out in South-South zone of Nigeria. A total population of 8993 medical professionals comprising medical doctors, health information personnel, pharmacists, and nurses were used for the study. A sample size of 386 was obtained using the Krejcie and Morgan table. An instrument named 'Questionnaire on Medical Professionals' Information Collection Skill and Utilization Patients Health Records (MPICSUPHRQ) was used for the study. The researchers validated the instrument. Cronbach's alpha method was used to determine the reliability of the instrument. Data was collected with the permission from the Management of each of the teaching hospitals present in south-south used for the study and also two research assistants were employed to distribute the questionnaires Simple regression was used in answering research question and ANOVA was used to determine the relationship. The result showed that there is

significant relationship in the utilization of patient health records and medical professional information Collection skills. Also, it was found that medical doctors, health information personnel's, nurses and pharmacists do significantly use information Collection skill to a very great extent in the tertiary health institutions. The study concluded that information Collection skill significantly relates the utilization of patients' health records by medical professionals of tertiary health institutions. This has demonstrated the relevance of information Collection skill in the health sector especially the tertiary health institutions in south south, Nigeria. Based on the findings, the study recommended among others that hospitals of tertiary health institutions should set up medical libraries for medical professionals to carry researches using patient health records.

Keywords: Medical Professionals, Information Collection Skills, Patients Health Records, Tertiary Health Institutions, South- South Nigeria.

Introduction

The essence of information management in health-related institution is to see medical practitioners explore various skills like the planning skill which ensure that patient care is delivered safely, efficiently and effectively managed by health care professionals in turn need to explore better ideas in information management. The various planning skills like 'to develop structured approaches to enhance information searching, develop search tools for each new query and establish an arrangement to satisfy short or long term information requirements' are also very essential in the healthcare development in the hospital, they are fundamental in information literacy techniques which aid medical professionals in their research out and new technology, this is because organizations like medical institutions complain of lack of timely, adequate and relevant information for their day-to-day activities, therefore researchers in the healthcare sector like health information managers, medical doctors and others need to acquire information literacy skill like the planning skill to improve their research out for better healthcare system in the hospital. Among the various organizations, the health sector seems to be the most information seeking/required organization (sector). Yet managers' and other health professionals of health in the health sector still wallow in the stream of lack of information literacy

skills, and other skills to engage in the utilization patient health records in the health care system.

The development and human capacity growth in any organization like the health sector is to provide human with adequate tools to develop or improve their selves for effectiveness and also to attain a level of efficiency in the system especially health institutions that take care of patients, as a result of that, there must be medical information availability at health workers disposal and management that aimed at achieving its stated goals and objectives in the health sector. Therefore they must have in back of their mind that human resources skills like information collection skill and other information literacy skills are strategies as well as techniques of individuals' ability to man that institution. Health professionals in their various capacities need to make sure that health facility need to be developed with different skills that will make the healthcare system move speedily with appropriate human and capital infrastructure that would enhance accuracy, timeliness and effectiveness of patient information in the propagation of healthcare system in the nation.

According to Elechi *et al.* (2018), health literacy is the ability to obtain, process, and understand health information to make informed decisions about health care. Femi, *et al.* (2017) also stated that health literacy relates to the possession of knowledge about health. It is a skill-based processes that individual use to identify and transform information into knowledge. According to Anyanwu *et al.* (2019), an information literate person should therefore be in the position to find out information need, the extent of information need, locate and retrieve appropriate information sources, evaluate and use them. Therefore, utilization of information resources like patient health records can be considered as one important attribute for development and constitutes one of the most important factors for research and problem solving (Lawrence *et al.* 2020). According Lawrence *et al.* (2020), which opined that people who are well read in the relevant literature, and at the same time keep up-to-date with the latest development in their specific field as well as keep on learning in the process are those whose intellectual

and conceptual skills are continuously developing and seen as lifelong learners.

Also, according to Salman *et al.*(2024), health workers or health professionals in developing countries continue to lack access to basic, practical information to enable them deliver safely, though many have come to rely on observation, advice from colleagues and building experience empirically through their own treatment of successes and failures. Some important steps have been made towards meeting the information need of health professionals but little progress has been achieved in meeting the information needs of the tertiary, secondary and primary healthcare professionals in the developing world (Godlee *et al.* 2004).For information collecting skill, medical professionals would be able to locate and access information and data needed by using different means of retrieval tools and resources, construct complex searches for use across digital and print resources thereby being able to translate the search strategies to work at different resources, redefine a search strategy based on previous results obtained, sort and manipulate results sets. The health professional should have the ability to access the full text information, both print and digital, read and download online materials; keep up to date with new information, engage with scholarly community via networking.

Aim and Purpose of the Study:

The aim and purpose of this study was to determine the association between medical professionals' information collection skills and the utilization of patients' health records in tertiary health institutions in south- south Nigeria.

Research Questions:

The following research question guided the study: To what extent does medical professionals' information collection skills relate with patients health records utilization in the different tertiary health institutions in south- south Nigeria?

Hypothesis

Medical professionals' information collection skills do not significantly relate

with patients' health records utilization in tertiary health institutions in south-south Nigeria

Literature Review:

Information Collection skill of Medical Professionals

According to SCONUL (1999), cited by (Nwosu *et al.* 2015), an information collection skill is a skill that can locate and access information and data needed by using different means of retrieval tools and resources; construct complex searches for use across digital and print resources. Thereby being able to translate the search strategies to work at different resources, redefine a search strategy based on previous results obtained, sort and manipulate results sets. The researcher should have the ability to access the full text information, both print and digital, read and download online materials; keep up to date with new information, engage with scholarly community via networking.

Not having the information, we need when we need it leaves us wanting. Not knowing where to look for that information leaves us powerless. In a society where information is king, none of us can afford that (Femi *et al.* 2017).

In today's society, there can be little doubt that acquiring the ability to retrieve and make use of information is an essential lifelong skill. Information literacy is indeed the root of information, as individuals need information in order to achieve educational, social, occupational, and economic goals (Kayode *et al.* 2016). While the concept of information literacy has existed since the 1970s, originating in the workplace, (Kayode *et al.* 2016) differences characteristically arise when it comes to determining theories or best practices for implementing this term into instructional settings. In our experiences with information literacy at the University of Calgary Health Sciences Library and the Tom Baker Cancer Centre, we have shied away from a lecture-based approach, focusing instead on providing tools for the user (the medical student or healthcare practitioner) to think critically and apply what has been learned in class towards solving his/her own research problems.

Femi *et al.* (2017) define an information literate person as one who is able to

recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information. This notion is emphasized because the goal is to allow the user to take control of his/her own learning. Rather than merely memorizing a pattern of search techniques demonstrated in class, retention of material will be better attained if the user is able to apply what has been learned. According to a 2004 report by the Institute of Medicine (IOM), nearly half of all American adults, about 90 million people, have difficulty reading and using health care information.

A 2003 National Assessment of adult literacy found that 45% of the US population have basic or below basic skills. Below basic skills consist of being able to sign a form, add amounts on a bank slip, and search simple text for pre test instructions (Health Literacy: a prescription to end confusion, 2004). According to most accepted definition, health information literacy requires a skill set that allows one to: recognize a need for health information, identify sources for the information and be able to retrieve the relevant information, assess the quality and applicability to the specific situation, and analyze, understand and use the information to make good health decisions (Sorensen et al, 2012). Therefore the utilization of medical information by health professional is paramount in health industry, which will enable them use it for research purpose and also for planning hospital equipment in the health sector.

According to Onigbogiet *et al.* (2018), the use of electronic medical records (EMR) has been proven to improve the quality of health care worldwide by increasing productivity, reducing workload, minimizing costs and creating a sustainable link between health care providers. This has contributed to its increasing adoption by healthcare organizations globally including Nigeria, a country where electronic medical records have been prioritized by its government (Bashorun *et al.* 2021). In some parts of the country, electronic medical records have been implemented however, published research on the pre- implementation stages is scarce (Bashorum *et al.* 2021).

Also, Nanle *et al.* 2016 stated that the use of standardized electronic health records in the health care industry is becoming the standard. A growing

number of health care organizations are introducing and utilizing electronic systems to store patients' information (De Veer *et al.* 2010) thus facilitating communication between Nurses and other care providers and between Nurses and patient care in the hospital.

Methodology:

The design for the study was correlational research design. According to Kpolovie (2010), correlational research is adopted for investigation of the magnitude and direction or nature (positive or negative) of relationship that exists between a dependable variable (criterion variable) and one or more independent variables (predictor variable). A correlation reflects the strength and /or direction of the relationship between two or more variables. Nwankwo *et al.* (2016) defined correlational research design is a design that finds out the extent of relationship between two or more variables, and data from such variables are ratio or interval scales (scores) to create the positivity of the scores to be correlated. From, the definitions stated above, the research tends to find out the relationship between two or more variables by collecting data from the sets of variables and determining the magnitude of relationship that exists between them. Here, the researcher collected data from medical professionals' information literacy skills (predictor variable) and the utilization of patient health records (criterion variable) from respondents that made up the sample size; and the two sets of data were correlated without manipulating any of the variables. This study on Medical Professionals' information Collection skill predicts the utilization of patient health records in tertiary health institutions in south- south, Nigeria. Therefore, meets all the requirement of correlational research design. The target population of the study was (medical professionals in (7) tertiary health institutions) which is 8993 making up the population of the study and sample size 386 medical professionals was derived using the Krejcie and Morgan table and a two stage sampling (stratified and simple random) techniques was used which made up of health information personnels. These are Medical Doctors, Nurses, health information personnel and Pharmacist in these different tertiary health institutions of the south- south zone; Niger Delta University Teaching Hospital,

Okolobiri, Federal Medical Centre, Yenagoa, University of Port Harcourt Teaching, Port Harcourt, University of Uyo Teaching hospital, Uyo, University of Benin Teaching Hospital, Benin, Federal Medical Centre, Asaba, University of Calabar Teaching Hospital, Calabar. (Source: Staff Nominal Roll in each of the hospitals, 2025).

Results:

Research Question

To what extent do medical professionals' information collection skills relate with patient health records utilization in tertiary health institutions in south-south Nigeria?

Table 1 Regression Coefficients and Level of Significance of Respondents' Scores on the relationship of Medical Professionals' Information Collection Skills and Patient Health Records Utilization among Tertiary Health Institutions in South- south Nigeria

Item	Information Collection Skills	<i>N</i>	<i>R</i>	<i>P</i>	Remark
1.	I am proficient in using retrieval tools to gather information resources effectively	368	.90	.00	VGE
2.	I can construct complex searches appropriate to different digital and print resources	368	.67	.00	VGE
3.	I can assemble full text information, in both print and digital, read and download online material and data	368	.85	.00	VGE
4.	I can use appropriate technique to collect new academic research data	368	.76	.00	VGE

5.	I can connect with my academic community to share scholarly information with me	368	.79	.00	VGE
6.	When an information need has not been met, I engage in further information gathering to meet the information need	368	.79	.00	VGE
7.	I can use expert help to gather information	368	.58	.00	VGE
8.	I have the expertise to design instrument such as questionnaire, interview guide, oral history guide etc., to collect data for research	368	.78	.00	VGE
9.	I have involved in operating in a virtual world	368	.92	.00	VGE
10.	I can appraise and evaluating search results	368	.75	.00	VGE
Mean Regression Coefficient			.78	.00	VGE

Key: VGE= Very Great Extent (.45 – 1.00), GE = Great Extent (.29 – .44), LE = Low Extent (.10 – .28), and NE = No Extent (0 – .09). *N*= total number of respondents, *R*= Regression coefficient, *p* = error probability, * = $p < .05$. Dependent variable = Patient Health Records Utilization. All effect size conventions are consistent with Cohen (1988), as cited by McLeod (2019).

From Table 1, results show that respondents consented to all Likert items to a very great extent (VGE), with a mean regression coefficient of .78 ($p < .05$). This connotes that medical professionals' information collection skills relate with patient health records utilization to a very great extent among tertiary health institutions in south-south Nigeria. Information collection skills among medical professionals in this study, to a great extent, enhance proficiency in using retrieval tools to gather information resources effectively, helps the construction of complex searches appropriate to different digital and print resources, and enhance connection with academic community to share scholarly information. Other benefits include the use of appropriate technique to collect new academic research data, possession of the expertise to design

research instrument, and the use of expert help to gather information

Table 2: Summary of Analysis of Variance Associated with the Relationship between Medical Professionals' Information Collection Skill and Patient Health Records Utilization among Tertiary Health Institutions in south - south Nigeria

Source of Variance	Sum of Squares	Df	Mean Square	<i>F</i>	<i>p</i> - value
Regression	3555.055	1	3555.055		
Residual	10546.847	366	28.817	123.369	.000***
Total	14101.902	367			

Key: Df = degree of freedom, *F*= ANOVA *F*- statistic, *p*- value = error probability at .05 margin, *** = Significant at $p < .001$

To verify the extent of significance of the relationship of medical professional's information collection skills and patient's health records utilization, the scores of medical professionals' information collection skills were subjected to analysis of variance. The results obtained are itemized in Table 2.

Results from Table 2 showed that the calculated *F*-value of 123.369 was obtained at 1 and 366 degrees of freedom, and at 0.00 level of significance. Therefore, since the calculated level of probability ($p = 0.000$) is less than the chosen level of significance ($p = 0.05$), the null hypothesis was rejected. Thus, this implies that there is significant relationship of medical professionals' information collection skill on patient health records utilization in tertiary health institutions in south- south Nigeria.

Discussion of findings. Conclusion and Recommendations:

From Table 1, results show that respondents consented to all Likert items to a very great extent(VGE), with a mean regression coefficient of .78 ($p < .05$). This connotes that medical professionals' information collection skills relate to

patient health records utilization to a very great extent among tertiary health institutions in south-south Nigeria. Information collection skills among medical professionals in this study, to a great extent, enhance proficiency in using retrieval tools to gather information resources effectively, help the construction of complex searches appropriate to different digital and print resources, and enhance connection with academic community to share scholarly information. Other benefits include the use of appropriate technique to collect new academic research data, possession of the expertise to design research instrument, and the use of expert help to gather information

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This finding could be attributed to the benefit of information collection skill in creating proficiency in using retrieval tools to gather information resources effectively, construct complex searches appropriate to different digital and print sources, assemble full text information in both print, digital, read, and downloadable formats, use appropriate technique to collect new academic research data, connect with my academic community to share scholarly information with me, engaging in further information gathering to meet the information need, use expert help to gather information, and fostering the expertise to design instrument such as questionnaire, interview guide, and oral history guide in data collection.

Rahoo *et al.* (2019) corroborated the relevance of using information retrieval tools (IRTs) in their study among post-graduate students of higher educational institutes in Pakistan. They revealed that the use of IRTs impacted positively on the social and academic life, and also enhanced the global knowledge of the students on different issues. A study carried out by Ilogho and Nkiko (2014) in Ogun State, revealed that majority of respondents from

five private universities had low level of information literacy and search skills, which was a setback to information literacy utilization, and resulted in a huge waste of intellectual development and academic performance.

Conclusion:

Based on the result of the study, it was concluded that medical professionals' information skills enhance the utilization of patient's health records in tertiary health institutions in South- South, Nigeria

Recommendation: The following recommendations were made: Tertiary health institutions should provide a rich promotional campaign activity by incorporating information identification skills in the hospitals to enhance the utilization of patient health records for easy research and publication. Hospitals or tertiary health institutions should set up medical libraries for medical professionals to carry researches using patient health records. Hospitals and medical professionals should adopt the use of search tools in promoting the utilization of patient health records.

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