

Full Length Research

Influence of use of medical information resources on job-specific task and non-job-specific task proficiencies of medical practitioners in teaching hospitals in South-West Nigeria

Chioma Euriel UZOHUE

Deputy Director, Library and Information Communication Technology Department, Nigerian Institute of Medical Research, Yaba-Lagos, Nigeria

Accepted 25 January 2022

Abstract

The study explores the influence of use of medical information resources on job-specific task and non-job-specific task proficiencies of medical practitioners in teaching hospitals in South-West Nigeria. The study adopted the survey design to investigate six teaching hospitals in the South-western Nigeria. Multi-sampling was used to administer 391 copies of questionnaire to the medical practitioner but 390 were returned for data analysis, making the response rate to be 99.7%. Data obtained were analyzed using inferential statistics (simple linear regression). Findings revealed that use of medical information resources (MIR) significantly influenced job-specific and non-job specific task proficiencies of medical practitioners in universities teaching hospitals in South-West, Nigeria. It was, therefore, recommended that the management of the teaching hospitals in the study area should improve the utilization of medical information resources by medical staff as this is vital to enhancing the job specific and non-job task proficiencies of the medical practitioners in the University teaching hospitals. Nonetheless, the management must bear in mind that the medical practitioners can still be proficient in their job and non-job specific tasks even when they do not utilize medical information resources.

Keywords: Job-specific task proficiency, non-job-specific task proficiency, Medical Information Resources, University Teaching Hospitals, South-West Nigeria

Cite This Article As: UZOHUE, C.E (2022). Influence of use of medical information resources on job-specific task and non-job-specific task proficiencies of medical practitioners in teaching hospitals in South-West Nigeria. *Inter. J. Acad. Res. Educ. Rev.* 10(1): 42- 51

INTRODUCTION

Health care delivery system is central in meeting the goals and objectives of the university teaching health. The health care system in Nigeria is organized into a three-tier structure. They are primary, secondary and tertiary levels. National Health policy ascribes responsibilities of primary health care to local Governments and it comprises of clinics, comprehensive health centres and health posts under the management of local governments. Secondary health care level are the General and cottage Hospitals. They are under the responsibilities of state and federal Governments as the case may be while the tertiary health care levels comprise of university teaching hospitals and specialist hospitals. The university teaching hospitals according to Ojo and Popoola (2015) are referral hospitals for primary and secondary health systems for specialized care and services, medical education and training of future and current physicians in

residency programs to become consultants in different specialties in teaching hospitals. Thus, making teaching hospitals the primary health institutions providing tertiary level of healthcare to the citizenry. Nonetheless, the objectives of the healthcare service delivery might be unattainable if adequate attention is not given to the job performance of medical practitioners.

Several works have been done on the job performance of employees in the past (Abdel-Razek, 2011; Oyewole & Popoola, 2013; Yaya, Akintayo & Uzohue, 2016), However few attentions have been devoted to understanding the performance of medical practitioners in their technical and non-technical job roles. Other names for technical and non-technical performance on the job are called job specific task proficiency and non-job-specific task proficiency (Campbel, 1990). Job Specific Task Proficiency (JSTP) refers to the ability of medical practitioners in the technical duties such as quality of work, quantity of work, job knowledge, skills and work efficiency, training and professional development, creativity, innovation, paying attention to details, being result-oriented, making optimal use of information resources and competencies. On the other hand, Non-Job Specific Task Proficiency (NJSTP) are those behaviours displayed by medical practitioners which do not contribute to the technical core duties but are required to enhance organizational growth. Examples of NJSTP include written and oral communication, demonstration of efforts, personal discipline and team work (Campbel, 1990).

Monde, Akakandelwa and Kanyengo (2017) emphasized that the role of university teaching hospitals in the healthcare delivery system of a nation cannot be overemphasized and they are central in meeting national health goals especially in providing innovative treatment and delivery of quality health care services to the patients. University Teaching Hospitals in Nigeria and in particular university teaching hospital in South-West, Nigeria is established to provide the best and affordable quality health care to Nigerians in general, to enhance the job specific and non-job specific task proficiencies of medical practitioners to enable them produce better work outcome, enhance safety of patients and to conduct relevant research in health problems and development of science (Bassey, Ojua, Bassey & Ottong, 2012; Ojo & Popoola 2015; Torkula, 2020). The failure of the teaching hospitals management to pay attention to the performances of their human capacity could derail the achievement of the state, national and global health goals. Nevertheless, the job-specific and non-job-specific task proficiencies of medical practitioners in teaching hospitals in South-West Nigeria could be improved by paying attention to the use of medical information resources which equips the medical practitioners with relevant and useful knowledge. Ukpebor (2012) noted that electronic resources provide accurate and timely information, especially for students who depend greatly on the electronic resources for information to advance research and collaboration with other researchers around the world for intellectual growth.

Use of medical information resources (MIR) for effective job performance is paramount to healthcare delivery and very vital in achieving job functions in everyday work activities. According to Nwafor-Orizu and Onwudingo (2015), the construct 'Use' could be employed to determine the extent of use of document in the library. In this study, the construct "use" means updating knowledge of medical practitioners through the use of the resources as well as putting the knowledge acquired into appropriate use. The extent of use of MIR in this study means the level to which medical practitioners utilize information in meeting their job needs and assignments. The use of MIR is central in quality improvement in work activities, clinical decision making and may depend on quality of information resources available and accessible for immediate use. Xianjin Zha, Jinchao Zhang, Yalan Yan (2014) noted that the construct use refers to the actual usage of library resources such as electronic resources or print resources with respect to the frequency of use and the amount of time involved. Gakibayo, Ikoja- Odongo, and Okello-Obura (2013) and by Isiakpona, and Ifijeh (2012) in a separate study listed the different types of e-resources to include e-books, e-journals, and other electronic materials such as e-articles, e-theses and e-dissertations, different databases (MEDLINE, HINARI, Cochrane Library, EBSCOHOST, JSTOR, Science direct, IEE) and CD-ROMs, which are likely to be the alternative to the print media. The research conducted by Dhanvandan, Esmail, and Nagarajan (2012) studied the use of e-resources in four medical college libraries in Puducherry, Pakistan and found that 80-90% of library users were aware of and accessed e-resources for teaching and research activities. However, none of the aforementioned authors provided information on the extent to which users utilize the medical information resources in various formats. Also, the influence of use of medical information resources on job specific and non-job-specific task proficiencies of medical practitioners has been examined in previous studies (Ajuwon, 2006; Ajuwon & Popoola, 2014; Brennan, Edwards, Kelly, Miller, Harrower & Mattick, 2014; Dunn, Marshall, Wells & Backus, 2017). Therefore, there is need to examine the influence of extent of use of medical information resources on job specific task and non-job-specific task proficiencies of medical practitioners in Nigeria.

Literature Review

Numerous works have been done on medical information resources in relation to performance of employees in the work places. However, there is a dearth of information on use of medical information resources and job performance of

medical practitioners. The study of Nwokedi and Ogundare (2005) noted that one of the major objectives of any library is to ensure that maximum use is made of its resources and services. Gatero (2010) conceived that the aim of investigating the availability and utilization of information and communication technology is for accessing health information by medical professionals in Kenya. The motivation for seeking information by medical faculty is the need to understand and perform tasks related to patient care/clinical information, pharmacological information, current approaches to treatment, current practices in medical and clinical trials. In the course of their clinical practice, the main findings of the study were that medical professionals continuously needed knowledge. Clinical governance, care of patients and professional updating on the current medical practices were the main reasons for needing and using information.

Phua and Lim (2007) conducted a study evaluating the amount of time the residents and interns at the National University Hospital spent on using various medical information resources to answer clinical questions and how useful they perceived these resources to be. The doctors use the information resources to frequently to update their knowledge, answer clinical questions as well as maintaining adequate patient's management and care. The result showed that doctors used teaching sessions and print textbooks, rating them as most useful in improving physician performance. A study carried out by D'Alessandro, Kreiter, and Peterson, (2004) on usage of computer resources at the point of care. The general paediatricians used computer resources including digital libraries to seek answers for clinical queries at the point of care as they are effective and more time-efficient in search of information. The result revealed that the use of computer resources had positive effect on physician decision making.

The investigation of Westbrook, Gosling and Coiera (2004) which asked the question, do clinicians use online evidence to support patient care? This study examined the clinician's actual and reported use of a point-of-care online information resource. The study found that clinicians use online evidence primarily to support clinical decisions relating to direct patient care; and secondly, clinicians use online evidence predominantly for research and continuing education. Clinicians' online evidence use increases patient care. The use of the online resources was found to significantly improve the accuracy of the answers provided from online resources, indicating the potential benefit of using information resources by medical practitioners. The clinicians consulted and reported that they used online information resources personally to improve patient care when consulting.

A study by Hussain and Kumar (2013) reported the use of information resources by faculty of Pharmacy in Chennai. A well structure questionnaire was used for collecting opinions of the library users about usage of information resources and services. The findings showed that most of the academic librarians from the master school of management visit the library for adequate access of reference resources and services for effective and efficient job performance. Findings further showed that books, periodicals and newspaper are the most used information resources that enhance job performance among faculty members while maps, charts microfilms/microfiches are of less used.

Shariff, Bejaimal, Sontrop, Iansavichus, Weir, Haynes... & Garg (2011) in a study titled searching for medical information online: a survey of Canadian nephrologists evaluated how nephrologists use online information sources including UpToDate (92%), PubMed (89%), Google (76%) and Ovid MEDLINE (55%). Community-based nephrologists were more likely to consult UpToDate first (91%), while academic nephrologists were divided between UpToDate (58%) and PubMed (41%). The study revealed that nephrologists used a variety of online sources to retrieve information from bibliographic resources and specialized medical resources to guide the treatment and care of patients.

According to Marshall, Morgan, Thompson and Wells (2014), of the 4,520 respondents, 75% suggested that they definitely or probably handled patient care differently after making use of information obtained from the library. This led the authors to conclude that doctors valued the use of the information resources they used. Another value of medical library resources is seen in their accessibility. Patient care outcomes were examined in relation to four information access methods such as asking librarian(s), performing searches in a physical library, searching libraries' web sites and searching library resources on an institutional intranet. The findings of the study showed that all library access methods have consistent positive relationships with the clinical outcomes, providing evidence that library services had a positive impact on patient care quality.

Marshall, Sollenberger, Easterby-Gannett, Morgan, Klem, Oliver, Thompson, Romanosky and Hunter (2013) described research conducted in a web-based survey of physicians, residents, and nurses. Three quarter of the respondents suggested that they had definitely or probably handled aspects of the patient care situation differently as a result of the information they received from the library. Among the reported changes were pieces of advice given to the patient (48%), diagnosis (25%), and choice of drugs (33%), other treatment (31%), and tests (23%). Almost all of the respondents (95%) agreed that the information resulted in a better-informed clinical decision. Respondents' reports suggested that the information allowed them to avoid the following adverse events: patient misunderstanding of the disease (23%), additional tests (19%), misdiagnosis (13%), adverse drug reactions (13%), medication errors (12%), and patient mortality (6%). Ajuwon (2006) conducted a survey on 172 physicians to assess physician's use of internet for health information for patients care at the University college hospital (UCH) Ibadan, Nigeria. The database most recently searched was MEDLINE/PubMed in 99% of cases. The findings revealed that physicians generally use internet for

patient's care. In a related study, Musa and Omopupa (2005) conducted research to determine the utilization of hospital library by health workers in a tertiary health institution in Ilorin, Kwara State. The analysis revealed that most of the respondents used the library, and a significant proportion of the doctors were found to use the library facilities more than any group of health professionals through the reading of library textbooks and Medline use.

Oyefeso (2013) studied the use of information resources by medical doctors in Olabisi Onabanjo University Teaching Hospital. The findings show that medical doctors perceive the library to be very relevant source of information and the internet as the major source of information. A very high percentage of the respondents sourced information with a very high frequency in attending to patients. The study by Kutu and Olajide (2020) examined the level of information resources availability, utilization and job performance in selected university libraries in North-Central Nigeria. The finding of the study showed relationship between level of information resources utilization and academic librarians job performance.

In similar study, Westbrook, Coiera and Gosling (2005) assessed the impact of clinicians' use of high-quality evidence from online information sources beneficial in solving clinical problems and enriching their capability in their performance in answering clinical questions. The result of the findings showed that online information resources use resulted in a 21% improvement in clinicians' performance in answering clinical questions within a defined time period. The use of online information resources significantly improved the quality of answers provided by clinicians to typical clinical problems. The study by Okoro and Okoro (2009) examined the use of Internet and electronic information resources in accessing medical information for providing patient care with emphasis on gender and status. According to the authors, medical information is very essential to medical doctors especially in credible discharge of their duties. Medical practitioners need adequate and quick health information to possess knowledge and core technical skills to be competent and knowledgeable in clinical practices for efficient practice of medicine. The results indicated that among the male resident doctors, the most common reason for searching medical information was for examination preparation. Updating knowledge was the most common reason for both the male and female consultants, followed by research, for teaching and publication.

The performance of doctors involves use of medical information resources and information technology. They use MIR to acquire skills and to gather information to create new knowledge for quality patient's management, care and decision making. The University teaching hospitals management will have to stock and equipped the medical libraries with the right, current and relevant MIR to ensure optimal performance and quality delivery of healthcare services in the discharge of their duties. This will make them to compete with their counterparts both nationally and internationally in terms of professional practices and medical research. In view of this, Wu (2011) affirmed that a worker uses documents to understand a task's related topics and solve specific problems. When medical practitioners begin their clinical and professional duties, they use MIR for information that will help them in day-to-day activities. Using MIR will support them in answering clinical questions, clinical care of patients and updating of knowledge which will help medical practitioners to contribute meaningfully to their job functions. MIR can enable medical practitioners to perform well in their work schedules, make informed professional decisions and guide them in the right directions to choose from the best available evidences from medical information resources.

OBJECTIVES

The specific objectives of the study are to:

1. examine the influence of extent of use of medical information resources on the job-specific task proficiency of medical practitioners in South-West, Nigeria.
2. determine the influence of extent of use of medical information resources on the non-job-specific task proficiency of medical practitioners in South-West, Nigeria.

Research Hypotheses

The study sought to provide answers to the following research hypotheses:

1. There is no significant influence of extent of use of medical information resources on the job-specific task proficiency of medical practitioners in South-West, Nigeria.
2. There is no significant influence of extent of use of medical information resources on the non-job-specific task proficiency of medical practitioners in South-West, Nigeria.

METHODS

The study used the descriptive research design to investigate the job performance of medical doctors in university teaching hospitals in South-West, Nigeria. The population of this research consisted of 2,913 medical doctors in University Teaching Hospitals in South-West geopolitical zone of Nigeria. Southwestern Nigeria is one of the six geopolitical zones and made up of six states are Lagos, Ondo, Osun, Ogun, Ekiti, and Oyo. The university teaching hospitals in the region are: University Teaching Hospital, Ado Ekiti, Lagos University Teaching Hospital, Idi-Araba, Lagos, Olabisi Onabanjo university Teaching Hospital, Sagamu, University of Medical Sciences, Ondo, Obafemi Awolowo University Teaching hospital, Ile-Ife and University College Hospital, Ibadan. The sample size of the study was 391 medical doctors, based on Taro Yamane sampling size determination formula. A 3-stage sampling technique comprising purposive, proportionate stratified and accidental sampling methods were adopted for the study. The research instrument indicated a reliability index of 0.788, signifying that the research instrument is reliable. Out of the 391 copies of questionnaire administered, 390 copies were retrieved for data analysis which constituted 99.7% of the response rate. Inferential statistics (simple linear regression) was used to answer the research hypotheses.

FINDINGS

The respondents' analyzed demographic data are shown in Table 1

Table 1. Respondents' demographic information

Demographic Variables	Frequency (n)	Percent (%)
Gender		
Male	255	65.4%
Female	135	34.6%
	390	100.0%
Age		
Below 30 years	117	30.0%
30-40 years	156	40.0%
41-50 years	97	24.9%
51-60 years	17	4.4%
Above 60 years	3	0.7%
	390	100.0%
Years of experience		
1-10 years	242	62.1%
11-20 years	101	25.9%
21-30 years	35	9.0%
31-40 years	9	2.3%
41 years and above	3	0.8%
	390	100.0%
Highest educational qualification		
MBBS	225	57.7%
MSC	98	25.1%
PHD	67	17.2%
	390	100.0%
Professional qualification		
FRCS	213	54.6%
FRCP	85	21.8%
FMCS	75	19.2%
FMCP	5	1.3%
FWACS	7	1.8%
FWAC	5	1.3%
	390	100.0%
Area of specialization		
Community medicine	22	11.7%

Table 1. continuation

Internal medicine	17	9.0%
Paediatrics	28	14.9%
Surgery	37	19.7%
Obstetrics and gynaecology	52	27.7%
Haematology	30	16.0%
Pathological science	2	1.1%
	188	100.0%
Job position		
Medical officer	106	27.3%
Senior medical officer	68	17.5%
Registrar	113	29.1%
Consultant	101	26.0%
	388	100.0%

Source: Researcher's Field Survey, 2021

The result of the study on gender is shown in Table 1. Table 1 revealed that two hundred and fifty-five respondents (n=255, 65.4%) were males while 34.6% (n=135) of the respondents were females. This suggests that there are more male medical practitioners than females in the University teaching hospitals in South-west, Nigeria. Hence, the University teaching hospitals in South-west, Nigeria is male-dominated profession. The result on age revealed that 70.0% of the respondents (n=273) were below 40 years of age. These are usually the active working ages. From the result, it could be concluded that many employees in the medical sector under study were still in their prime age, young and energetic. Therefore, most members of the medical work force are within the productive age, which encourages efficient, effective and productive performance. Sixty-two percent (62.1%) of the medical personnel in the University teaching hospitals had 1-10 years' work experience while those with 41 years and above were 0.8%. This result showed that many of the participants in the study area have worked in the medical sector for quite a while. By implication, the tacit knowledge and job experience of the medical practitioners can be vital in achieving organizational effectiveness of the University teaching hospitals.

Table 1 indicates that medical practitioners with MBBS (57.7%, n=225) have the highest educational qualification while PhD is the least at 17.20% (n=67). This type of result is expected since as university teaching hospitals will more likely give higher priority to employing people with basic qualifications than others. The very few participants that possess doctorate degrees indicate the need for medical doctors to upgrade their qualifications, a situation which the National Universities Commission has constantly complain about. Table 1 indicates that medical practitioners with 54.6% (n=213) possessed FRCS while FWAC is the least at 1.3% (n=5) and FMCP (N=5, 1.3%). This shows that most staff in the University teaching hospitals, Nigeria have the basic professional qualification in medicine. Obstetrics and gynaecology unit had the highest number of staff, 27.7% (n=52) while Pathological science (1.1%, n=2) was the least. This result also suggests that the sample cut across the various units in the University teaching hospitals under study. Twenty-nine percent (29.1%, n=113) of employees in the study were registrars while the senior medical officers were 17.5% (68). This suggests that registrars participated more in the study. This result could also imply that the University teaching hospitals under study are largely dominated by registrars.

Hypothesis 1: There is no significant influence of extent of use of medical information resources on the job-specific task proficiency of medical practitioners in South-West, Nigeria.

Table 2. Simple linear regression analysis of use of medical information resources and job specific task proficiency of medical practitioners

Predictors	B	Beta (β)	T	P	R ²	Adj. R ²	F	ANOVA (Sig.)
(Constant)	2.142		20.338	.000	0.211	0.209	101.607	0.000*
Use of MIR	.363	.459	10.080	.000				
Dependent Variable: Job specific task proficiency Predictor: (Constant), Use of MIR DF (F-Statistic) = 1, 380 DF (T-Statistic) = 379								

Source: Field Survey Results, 2021

Table 2 shows that use of medical information resources (MIR) significantly influenced job specific task proficiency of medical practitioners in University teaching hospitals in South-West, Nigeria ($R^2 = 0.211$, $\beta = 0.459$, $t(379) = 10.080$, $p < 0.05$). The model shows that use of medical information resources explains 21.1% ($R^2 = 0.211$) variation in job specific task proficiency of medical practitioners. This means that use of medical information resources predicts job specific task proficiency of medical practitioners in University teaching hospitals in the study area. Hence, the null hypothesis which states that use of medical information resources will not significantly influence job specific task proficiency of medical practitioners in University teaching hospitals in South-West, Nigeria was rejected. By implication, utilization of medical information resources by medical staff is vital to enhancing the job specific task proficiency of medical practitioners in the University teaching hospitals. The regression model generated from the data in Table 2 is:

The regression model generated from the data in Table 2 is:

Regression Model:

$$JSTP = 2.142 + .363 U + u \dots\dots\dots \text{Model 1}$$

Where:

JSTP = Job specific task proficiency

U = Use of MIR

u = Disturbance term (All uncaptured variables that can influence JSTP but not included in the model)

The result of the regression model 1 indicates that, holding use of MIR to a constant zero, job specific task proficiency would be 2.142, implying that in the absence of use of MIR, medical practitioners in the University teaching hospitals in South-West, Nigeria would still be proficient in their job specific task based on the reason that other factors (denoted by *u*) not investigated in the study can still influence job specific task proficiency. In addition, the model shows that when use of MIR is improved by one unit on a measurement scale, there will be corresponding 36.3% (0.363) increase in the job specific task proficiency of medical practitioners. This result suggests that use of MIR is a strong predictor of job specific task proficiency of medical practitioners.

Hypothesis 2: There is no significant influence of extent of use of medical information resources on the non-job-specific task proficiency of medical practitioners in South-West, Nigeria.

Table 3. Simple linear regression analysis of use of medical information resources and non-job specific task proficiency of medical practitioners

Predictors	B	Beta (β)	T	P	R ²	Adj. R ²	F	ANOVA (Sig.)
(Constant)	2.527		23.124	.000	0.141	0.138	62.221	0.000*
Use of MIR	.295	.375	7.888	.000				
Dependent Variable: Non-job specific task proficiency Predictor: (Constant), Use of MIR DF (F-Statistic) = 1, 380 DF (T-Statistic) = 379								

Source: Field Survey Results, 2021

Table 3 shows that use of medical information resources (MIR) significantly influenced non-job specific task proficiency of medical practitioners in university teaching hospitals in South-West, Nigeria ($R^2 = 0.141$, $\beta = 0.375$, $t(379) = 7.888$, $p < 0.05$). The model shows that use of medical information resources explains 14.1% ($R^2 = 0.141$) variation in non-job specific task proficiency of medical practitioners. This means that use of medical information resources predicts non-job specific task proficiency of medical practitioners in university teaching hospitals in the study area. Hence, the null hypothesis which states that use of medical information resources will not significantly influence non-job specific task proficiency of medical practitioners in university teaching hospitals in South-West, Nigeria was rejected. Therefore, the utilization of medical information resources by medical staff is vital to enhancing the non-job specific task proficiency of medical practitioners in the University teaching hospitals. The regression model generated from the data in Table 3 is:

The regression model generated from the data in Table 3 is:

Regression Model:

$$\text{JSTP} = 2.527 + .295 U + u \dots\dots\dots \text{Model 2}$$

Where:

JSTP = Non-job specific task proficiency

U = Use of MIR

u = Disturbance term (All uncaptured variables that can influence JSTP but not included in the model)

The result of the regression model 2 indicates that, holding perception on MIR to a constant zero, non-job specific task proficiency would be 2.527, implying that in the absence of use of MIR, medical practitioners in the University teaching hospitals in South-West, Nigeria would still be proficient in their non-job specific task based on the fact that, other factors (denoted by u) not investigated in the study can still influence non-job specific task proficiency. Also, the model shows that when use of MIR is improved by one unit on a measurement scale, there will be corresponding 29.5% (0.295) increase in the non-job specific task proficiency of medical practitioners. This result indicates that use of MIR is strongly connected to non-job specific task proficiency of medical practitioners.

DISCUSSIONS

Hypothesis one investigated use of medical information resources and the dimensions of job performance job specific task proficiency of medical practitioners in University teaching hospitals in South-West, Nigeria. The finding shows that use of medical information resources (MIR) significantly influenced job specific task proficiency of medical practitioners in University teaching hospitals in South-West, Nigeria. This finding is consistent with previous study of Oyefeso (2013) on the use of information resources by medical doctors in Olabisi Onabanjo University Teaching Hospital found a very high percentage of medical doctors sourced information with a very high frequency in attending to patients. Likewise, the study of Phua and Lim (2007) on the amount of time the residents and interns at the National University Hospital spent on using various medical information resources to answer clinical questions and how useful they perceived these resources to be also supported this finding. The doctors use the information resources to frequently to update their knowledge, answer clinical questions as well as maintaining adequate patient's management and care. The finding also corroborates D'Alessandro et al (2004) on usage of computer resources at the point of care. The general paediatricians used computer resources including digital libraries to seek answers for clinical queries at the point of care as they are effective and more time-efficient in search of information. The result revealed that the use of computer resources had positive effect on physician decision making.

Hypothesis two revealed that use of medical information resources (MIR) significantly influenced non-job specific task proficiency of medical practitioners in University teaching hospitals in South-West, Nigeria. This finding supports Marshall et al (2013) described research conducted in a web-based survey of physicians, residents, and nurses. Three quarter of the respondents suggested that they had definitely or probably handled aspects of the patient care situation differently as a result of the information they received from the library. Among the reported changes were pieces of advice given to the patient (48%), diagnosis (25%), and choice of drugs (33%), other treatment (31%), and tests (23%). Almost all of the respondents (95%) agreed that the information resulted in a better-informed clinical decision. Respondents' reports suggested that the information allowed them to avoid the following adverse events: patient misunderstanding of the disease (23%), additional tests (19%), misdiagnosis (13%), adverse drug reactions (13%), medication errors (12%), and patient mortality (6%). Similarly, the finding supports Gatero (2010) who conceived that the aim of investigating the availability and utilization of information and communication technology is for accessing health information by medical professionals in Kenya. The motivation for seeking information by medical faculty is the need to understand and perform tasks related to patient care/clinical information, pharmacological information, current approaches to treatment, current practices in medical and clinical trials. In the course of their clinical practice, the main findings of the study were that medical professionals continuously needed knowledge. Clinical governance, care of patients and professional updating on the current medical practices were the main reasons for needing and using information. The result also corroborated Marshall et al (2014) who discovered that 75% of health care personnel admitted handling patients care differently as a result of the information accessed from the library.

CONCLUSIONS

The study concludes that the use of medical information resources (MIR) is a strong predictor of job-specific and non-job-specific task proficiencies of medical practitioners in the university teaching hospitals, South-West, Nigeria. However, in the absence of use of MIR, the medical practitioners would still be proficient in their job and non-job specific tasks based on the reason that other factors not investigated in the study can still influence job and non-job specific task proficiencies. Therefore, the paper recommended that, the management of the teaching hospitals in the study area should improve the utilization of medical information resources by medical staff as this is vital to enhancing the job specific and non-job task proficiencies of the medical practitioners in the University teaching hospitals. Nonetheless, the management must bear in mind that the medical practitioners can still be proficient in their job and non-job specific tasks even when they do not utilize medical information resources.

REFERENCES

- Abdel-Razek, 2011 Abdel-Razek, W.A. (2011). Factors affecting the effectiveness of the job performance of the specialists working in the youth care at Helwan University. *World Journal of Sport Sciences*, 4(2), 116-125.
- Ajuwon, G. A. (2006). Use of internet for health information by physicians for patient care in a teaching hospital in Ibadan, Nigeria. *Biomedical Digital Libraries*, 3(12), 1-9.
- Ajuwon, G.A., & Popoola, S. O. (2014). Influence of internet accessibility and demographic factors on utilization of web-based health information resources by resident doctors in Nigeria. *African Journal of Medicine and Medical Sciences*, 43(1), 61–71.
- Bassey, A. O., Ojua, T. A., Bassey, U. A., & Ottong, J. G (2012), Conflicts between line and staff employee and the achievement of organizational goals and objectives: A study of University of Calabar teaching hospital. *International Journal of Business and Social Science*, 3(6), 116-121.
- Brennan, N., Edwards, S., Kelly, N., Miller, A., Harrower, L., & Mattick, K. (2014). Qualified doctor and medical students' use of resources for accessing information: What is used and why? *Health Information and Libraries Journal*, 31(3), 204-214.
- Campbel, 1990 Campbell, J. P. (1990). Modelling the performance prediction problem in industrial and organizational psychology. In M. D. Dunnette and L. M. Hough (Eds.), *Handbook of industrial and organizational psychology*, 1, 687-732. Palo Alto, CA: Consulting Psychologists Press.
- D'Alessandro, D. M., Krieter, C. D., & Peterson, M. W. (2004). An evaluation of information-seeking behaviours of general paediatricians. *Paediatrics*, 113, 64–69.
- Dhanvandan, Esmail, and Nagarajan (2012) Dhanavandan, S.; Esmail, S. M.; & Nagarajan, M. (2012). Access and awareness of ICT resources and services in medical college libraries in Puducherry. *Library Philosophy and Practice (e-journal)*. <http://digitalcommons.unl.edu/libphilprac/750/>
- Dunn, Marshall, Wells & Backus, 2017). Dunn, k., Marshall, J.G., Wells, A.L., & Backus, J.E.B. (2017). Examining the role of MEDLINE as a patient care information resource: An analysis of data from the value of libraries study surveys. *Journal of Medical Library Association*, 105(4), 336-346.
- Gakibayo, A., Ikoja-Odongo, J. R. & Okello-Obura, C. (2013). Electronic information resources utilization by students in Mbarara university library. *Library Philosophy and Practice (e-journal)*, 869. <https://digitalcommons.unl.edu/libphilprac/869>
- Gatero, G. M. (2010). Utilizing of information and communication technologies (ICTs) for accessing health information by medical professionals in Kenya: A case study of Kenyatta National Hospital. *Journal of Health Information in Developing Countries*, 1(1), 60-87.
- Hussain, A. & Kumar, K. (2013). Utilization of information resources and services of the master schools of management library. A study. *International Journal of Library Science*, 9(3), 39-52
- Isiakpona, C. D. & Ifijeh G. (2012). Availability of electronic resources for service provision in University libraries in Ogun State Nigeria. *Samaru Journal of Information Studies*, 12 (1&2), 7-14,
- Kutu, J. O., & Olajide, O. (2020). Information resources availability, utilisation and job performance of academic librarians in selected university libraries in North-Central, Nigeria. *Library Philosophy and Practice (e-journal)*. 4084. <https://digitalcommons.unl.edu/libphilprac/4084>.
- Marshall, J. G., Sollenberger, J., Easterby-Gannett, S., Morgan, L. K., Klem, M. L., Cavanaugh, S. K., & Hunter, S. et al. (2013). The value of library and information services in patient care: Results of a multisite study. *Journal of Medical Library Association*, 101(1), 38–46. doi:10.3163/1536-5050.101.1.007 PMID:2341840
- Marshall, J.G, Morgan, J.C, Thompson C.A., & Wells, A.L. (2014) Library and information services: Impact on patient

- care quality. *International Journal of Health Care and Quality Assurance*, 27(8), 672-83. Retrieved from: <http://dx.doi.org/10.3163/1536-5050.101.1.007>
- Monde, M. W, Akakandelwa, A., & Kanyengo, C.W. (2017). Nurses and use of research information in clinical practice: A case study of the university teaching hospital in Zambia. *Library Philosophy and Practice (e-journal)*, 1560. Retrieved from: <http://digitalcommons.unl.edu/libphilprac/1560>
- Musa, O.I., & Omopupa, K.T. (2005). Utilization of hospital library by health workers in a tertiary health institution in Ilorin, Kwara State. *The Tropical Journal of Health Sciences*, 12(1), 36-40
- Nwafor-Orizu, O. E., & Onwudinjo, O. T. (2015). Availability and use of health information resources by doctors in teaching hospitals in South –East, Nigeria. *Information and Knowledge Management*, 5(9), 102-108.
- Nwokedi, V. C., & Ogundare, T. (2005). Studies on the information needs and seeking behaviours of science based postgraduate students in a Nigerian University: A case study of University of Jos. *Borno Library, Archival and Information Science Journal*, 2(1), 232.
- Ojo, A.I. and Popoola, S.O. (2015). Some correlates of electronic health information management system success in Nigerian Teaching Hospitals. *Biomedical Informatics Insights*, 2 (7),1–9 doi: 10.4137/BIIII.S20229
- Okoro, C. C., & Okoro, I. (2009). The use of medical information in Nigeria: The influence of gender and status. *Journal of Continuing Education in the Health Professions Banner*, 29(4), 254-258. doi:10.1002/chp.20044
- Oyefeso, O. O. (2013). Information acquisition and effective performance of medical doctors: A study of medical doctors at Olabisi Onabanjo University Teaching Hospital. *Journal of Health Information (JHI)*, 1(1), 38 – 44.
- Oyewole, G. O., & Popoola, S. O. (2013). Effects of psycho-social factors on job performance of library personnel in federal colleges of education in Nigeria. *Library Philosophy and Practice (e-journal)*. 872. Retrieved from <https://digitalcommons.unl.edu/libphilprac/872/>
- Phua and Lim (2007) Phua, J., & Lim T.K. (2007) Use of traditional versus electronic medical information resources by residents and interns. *Medical Teacher*, 29(4), 400–2.
- Shariff, Bejaimal, Sontrop, Iansavichus, Weir, Haynes.... & Garg (2011) Shariff, S. Z., Bejaimal, S A.D, Sontrop, J M., Iansavichus, A. V., Weir, M. A., Haynes, R. B., Speechley, M. R., Thind, A., & Garg, A. X. (2011). Searching for medical information online: A survey of Canadian nephrologists. *Journal of Nephrology*, 24(06), 723-732.
- Torkula, T. T. (2020). Challenges in quality care delivery in tertiary health facilities in north-central Nigeria. Walden Dissertations and Doctoral Studies Collection. Walden University. <https://ScholarWorks.waldenu.edu/dissertation/8154/>
- Ukpebor, C.O. (2012). Availability and use of electronic resources in African universities: The Nigerian perspective. *PNLA Quarterly*, 76(3), 190-199. www.pnla.org.
- Westbrook, J. I., Coiera, E.W., & Gosling, A.S., (2005). Do online information retrieval systems help experience clinicians answer clinical Questions? *Journal of the American Medical Informatics Association*, 12(3), 315–321. doi: 10.1197/jamia.M1717
- Westbrook, J.I., Gosling, A. S., & Coiera, E., (2004). Do clinicians use online evidence to support patient care? A study of 55,000 clinicians. *Journal of the American Medical Informatics Association*, 11(2), 113-120. doi:10.1197/jamia.M1385.
- Wu (2011) Wu, M. M. (2005). Why print and electronic resources are essential to the academic law library. *Law Library Journal*, 97(2), 233-256.
- Xianjin Z., Jinchao Z. & Yalan Y. (2014). Exploring the effect of individual differences on user perceptions of print and electronic resources. *Library Hi Tech*,32(2), 346 –367. <http://dx.doi.org/10.1108/LHT-07-2013-009>
- Yaya, Akintayo & Uzohue, 2016) Yaya, A. J., Akintayo, A. O., & Uzohue, C. E. (2016). Emotional intelligence and productivity of librarians in public universities in Nigeria; A correlational approach. *European Journal of Education and E-Learning*, 1(1), 76-127.