Information needs and knowledge sharing as correlate to knowledge utilization among Medical Practitioners in selected Teaching Hospitals in the South-West, Nigeria

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ABSTRACT
The paper examined the relationship between information needs, knowledge sharing and knowledge utilization among medical practitioners in selected Teaching Hospitals in South West, Nigeria. Descriptive survey research design was used for the study and pre-tested and validated questionnaire was employed as research instrument. The paper was discussed under the following sub-headings; Knowledge management life cycle in organizations and information needs. By extension, the paper strongly argued that there is a great nexus between information needs and other sub-sets of knowledge management vis-a-vis knowledge creation, knowledge sharing, storage of knowledge and knowledge utilization.
The paper was guided by three objectives, three research questions and two hypothesises. It was discovered that information needs, knowledge sharing and knowledge utilization of the respondents were very high and that there was significant relationship among all the tested variables. The paper recommended that management in Nigerian Teaching Hospitals should create knowledge bank that will enhance information accessibility, knowledge sharing and knowledge utilization among staff as this will go a long way of improving health care service delivery.

Keywords: Information needs, knowledge sharing, Knowledge utilization, Knowledge management, Nigerian Teaching Hospitals.

1. Introduction

1.1 Knowledge management life cycle in organizations

In today's competitive environment, knowledge has gained recognition more than other factors of production as a critical factor to enhance effectiveness in

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all facet of life. Thus, makes knowledge management an indispensible mechanism in organizations. Available literatures on knowledge reveal that data leads to information and information in turn leads to knowledge. Thus, the three are inseparable. Dalkir (2011) cited by Belavkin (2013) identified three stages of knowledge management cycle as follows: Knowledge capturing and/or creation, Knowledge sharing and dissemination and Knowledge acquisition and application. However, a critical examination of knowledge management life cycle will reveal that for knowledge to become an organizational asset, it must be stored for present use and future use. Going, by this inclusion of storage, one may then conclude that knowledge management life cycle goes beyond the three as identified by Dalkir (2011). This had prompted Adewuyi (2015) to define knowledge management as a set of proactive activities that involves the creation, storage, sharing and utilization of knowledge. In the issue of knowledge management all these sub-sets are very important as they are all interwoven.

For knowledge management life circle to be completed, the knowledge that had been created must be shared and stored for present use and future use. This is the only way information vis-à-vis knowledge can gain its full value. Adewuyi (2015) studied knowledge utilization in Nigerian University Libraries and concluded that knowledge utilization of the respondents was very high and these had positive effect on their organizational effectiveness in the service delivery to the public. Therefore, neither information needs nor knowledge creation nor sharing are of value unless information/knowledge shared is put into use in a way that will improve personal and organizational development.

Knowledge sharing is perhaps the most important aspect of knowledge management life cycle. Çapar (2005) cited by Sagsan (2013) itemized the ways and tools for effective knowledge sharing as formal social communication network, informal social communication network, teamwork, communities of practices, organizational learning, rumour, and formal structured technological communication networks (e-mail, mobile communications, teleconferences, videoconferences. Knowledge sharing is carried out by social and technical communication channels, and as Çapar (2005) cited by Sagsan (2013) argued, in order to construct these channels effectively, it depends on the stability and durability of organizational infrastructure. The successful sharing of knowledge largely depends on suitable organizational infrastructure. These involve constructing viable social communication infrastructure and technical communication infrastructure. Riege (2005) described knowledge sharing as a key element in the fruitful and effective knowledge management programmes. Knowledge sharing in organizations causes individuals and organizations to learn faster, develop creativity and improve individual and organizational functionality. Lin et al (2009) cited by Abbas et al (2013) defined knowledge sharing as a social interaction involving the exchange of employees' knowledge and skills in organization. By sharing knowledge, knowledge is overtly and

covertly being created (Adewuyi, 2015). Stressing the importance of knowledge sharing within the knowledge management, Aziz, Wahba and Sagheer (2013) warned that to successfully achieve effectiveness in knowledge management practice, knowledge sharing should be the most important consideration.

1.2 Information needs and information accessibility

However, in addition to these sub-sets of knowledge management, there is also a close relationship between information needs and each of the sub-set of knowledge management. There must be a need for particular information before sharing of any knowledge can occur, appreciated and consequently put to use. Okogwu and Nnam (2013) stressed that people consciously or unconsciously seek information for different needs such as education, professional development and recreational purposes. People seek for information with a view to satisfy a particular goal. Cogdill (2003) studied information needs of nurse practitioners in North Carolina and discovered that nurse practitioners needed information related to drug therapy and diagnosis, and the mostly used information resources include consultation with colleagues, drug reference manual and textbooks. Similarly, Adekanye (2014) carried out a study on information needs of textile market women in Nigeria and reported that there was a relative influence of information needs, seeking and use on the socio-economic empowerment of the respondents.

1.3 Research questions

The study is anchored on the following research questions:

a) What is the level of knowledge utilization of medical practitioners in the studied Nigerian Teaching Hospitals in the South-West?
b) What are the information needs of medical practitioners in the studied Nigerian Teaching Hospitals in the South-West?
c) What is the level of knowledge sharing of medical practitioners in the studied Nigerian Teaching Hospitals in the South-West?

1.4 Hypotheses

Ho1: There is no significant relationship between information needs and knowledge utilization of medical practitioners in the studied Nigerian Teaching Hospitals in the South-West.

Ho2: There is no significant relationship between knowledge sharing and knowledge utilization of medical practitioners in the studied Nigerian Teaching Hospitals in the South-West.

2. Data analysis and interpretation

Survey research design was adopted and copies of a pre-tested and validated questionnaire were served on 1250 respondents consisting of medical doctors,

dentists, physiotherapists, pharmacists and nurses in the selected Teaching Hospitals of the above geo-political zone in Nigeria.

From the 1250 copies of the research instrument administered, 951 copies were returned but after screening 91 copies were considered not valid for analysis as a result of either not properly filled or completely filled and those copies were eliminated before analysis was done. Thus, 860 copies were found suitable for analysis and the results subsequently presented below are based on the usable 860 copies of the research instrument. Data were analyzed using frequencies, percentages, mean, standard deviation, Pearson Moment Correlation and multiple regression (R2) analysis. Major finding of the study is that information needs, knowledge sharing and knowledge utilization of the respondents were very high and that there was significant relationship among all the tested variables.

2.1 Demographic Information of Respondents

The study revealed that 470 (54.65%) of the respondents were male while 390 (45.35%) were female. The study revealed further that 316 (36.74%) of them were Medical Doctors, 74 (8.61%) were physiotherapists, 102 (11.86%) were Dentists while 138 (16.04%) were pharmacists. The study also revealed that majority of them 348 (40.47%) of them were between the age bracket 31-40 years, 232(26.98%) were in the age bracket 41-50years.

Thus, it can be concluded that more males responded to the questionnaire more than the female counterparts, and that majority of them being in the age bracket of 31-40 years revealed that majority of the respondents were in the active productive age. The study revealed further that majority 700 (81.40%) of the respondents were aware of knowledge management practices. The respondents were further asked to indicate the extent of their awareness and majority 406 (47.21%) acknowledged that their level of awareness was “very well”, while a very insignificant of them stated they were not aware of knowledge management practices. Thus, it can be concluded that knowledge management practice has gained ground in Nigerian Teaching Hospitals.

2.2 Research Question 1: What is the level of knowledge utilization of medical practitioners in the studied Nigerian Teaching Hospitals in the South-West?

Table No 1: Level of knowledge utilization in the selected teaching hospitals in the south west Nigeria

S/N	VARIABLES	SA	A	D	SD	U	Mean	S.D
1	I apply knowledge gained to enhance my clinical experience	596 69.30 %	210 24.42 %	22 2.56 %	8 0.93 %	24 2.79 %	4.57	0.83
2	I apply knowledge gained to improve on my research skills	390 45.35 %	354 41.16 %	62 7.21 %	16 1.86 %	38 4.42 %	4.21	0.98
3	I apply knowledge gained to improve on the usage of electronic information resources	368 42.79 %	378 43.95 %	60 6.98 %	22 2.56 %	32 3.72 %	4.20	0.95
4	I apply knowledge gained to improve on my computer literacy skills	348 40.47 %	394 45.81 %	58 6.74 %	22 2.56 %	38 4.42 %	4.15	0.97
5	I apply knowledge gained to improve on my socialization	340 39.53 %	394 45.81 %	52 6.05 %	38 4.42 %	36 4.19 %	4.12	1.00
6	I apply knowledge gained to enhance my skill in the application for grant and fellowship	312 36.28 %	300 34.88 %	146 16.98 %	28 3.26 %	74 8.60 %	3.87	1.19

Table 1 above revealed the knowledge utilization of respondents in the selected Teaching Hospitals in the South-West, Nigeria. The study revealed that majority 596 (69.30%) of the respondents apply knowledge gained to enhance their clinical experience with the highest mean score of (X=4.57, SD=0.83). This was closely followed by the application of the knowledge gained 390 (45.35%) to enhance their research skills with the mean score of (X=4.21, SD=0.98), while 368 (42.79%) of the respondents apply knowledge gained to enhance their usage skills of electronic information resources with the mean score of (X=4.20, SD=0.95). However, less than half of the respondents 312 (36.28%) with the mean score of (X=3.87, SD=1.119) apply knowledge gained in developing their skill writing application for grant and fellowship.

In summary, an inference can be made that level of knowledge utilization in the studied Teaching Hospitals is very high with the average mean score of 4.19

2.3 Research Question 2: What is the level of information needs of medical practitioners in the studied Teaching Hospitals in the South-West?

Table No 2: Level of information needs in the selected teaching hospitals in the south west Nigeria

S/N	Variables	SA	A	D	SD	U	Mean	S.D
1	To enhance my professional medical skills	650 75.58%	178 20.70%	10 1.16%	12 1.40%	10 1.16%	4.68	0.68
2	To improve my research skills and publication outputs	542 63.02%	272 31.63%	24 2.79%	12 1.40%	10 1.16%	4.54	0.73
3	To improve my skills on the usage of electronic information resources	492 57.21%	320 37.21%	32 3.72%	4 0.47%	12 1.40%	4.48	0.72
4	To improve possible research collaboration with others	476 55.35%	356 41.40%	8 0.93%	4 0.47%	16 1.86%	4.48	0.72
5	To improve my teaching skills	474 55.12%	304 35.35%	66 7.67%	0	16 1.86%	4.42	0.79
6	To improve my proposal writing skills for grants and fellowship	460 53.49%	332 38.60%	48 5.58%	2 0.23%	18 2.09%	4.41	0.79
7	To improve my computer literacy skills	482 56.05%	290 33.72%	52 6.05%	2 0.23%	34 3.95%	4.38	0.92
8	To increase my	472 54.88%	310 36.05%	30 3.49%	12 1.40%	36 4.19%	4.36	0.94

	knowledge about current affairs							
9	To increase my clinical experience from colleagues abroad	402 46.74%	358 41.63%	20 2.33%	32 3.72%	48 5.58%	4.20	1.05

Table 2 above revealed the information needs in the selected Teaching Hospitals in the South-West, Nigeria. The study revealed that majority 650 (75.58%) of the respondents need information to enhance their professional medical skills with the highest mean score of (X=4.68, SD=0.68). This was followed by the quest to improve on their research skills and publication outputs 542 (63.02%) with the mean score of (X=4.54, SD=0.73). It can therefore be concluded that the respondents' prime information need is the quest to improve their medical practice and research skill/publication output and thereby improving effective medical services to the public.

In summary, an inference can be made that information needs of the respondents in the studied Teaching Hospitals is very high since all the items raised were rated very well having the average mean score of 4.44

2.4 Research Question 3: What is the level of knowledge sharing of medical practitioners in the studied Teaching Hospitals in the South-West?

Table No 3: Level of knowledge sharing in the selected teaching hospitals in the south west Nigeria

S/N	Variables	SA	A	D	SD	U	Mean	S.D
1	About new trends in medical practice	458 53.26%	303 35.81 %	72 8.37%	12 1.40 %	10 1.16 %	4.39	0.79
2	About management of patients	424 49.30%	368 42.79 %	46 5.35%	14 1.63 %	8 0.93 %	4.38	0.74
3	About clinical experiences	384 44.65%	390 45.35 %	58 6.74%	12 1.40 %	16 1.86 %	4.30	0.81
4	About research and publication	362 42.09%	368 42.79 %	98 11.40 %	20 2.33 %	12 1.40 %	4.22	0.84
5	About meetings and conferences	316 36.74%	404 46.98 %	112 13.02 %	18 2.09 %	10 1.16 %	4.16	0.81
6	About use of electronic resources	320 37.21%	354 41.16 %	154 17.91 %	18 2.09 %	14 1.63 %	4.10	0.88
7	About research collaboration	314 36.51%	352 40.93 %	150 17.44 %	22 2.56 %	22 2.56 %	4.06	0.93
8	About grants application and fellowship	262 30.47%	306 35.58 %	216 25.12 %	50 5.81 %	26 3.02 %	3.85	1.02

Table 3 above revealed the knowledge sharing pattern of respondents in the selected Teaching Hospitals in the South –West, Nigeria. The study revealed that majority 458 (53.26%) of the respondents shared knowledge on new trends in medical practice with the highest mean score of (X=4.39, SD=0.79). This was closely followed by sharing knowledge about management of patients 424 (49.30%) with the mean score of (X=4.38, SD=0.74). however, a very insignificant of the respondents 262 (30.47%) do share knowledge about writing application for grants and fellowship. By inference, it can be concluded that even though the respondents were sharing knowledge about the new trends in the medical practice and management of patients but it is important that they also intensify their efforts in sharing information about proposal writing for

grants and fellowship as this will go a long way to add value to their medical practice by attending additional training and conferences.
However, the study indicates that knowledge sharing pattern in the studied Teaching Hospitals is very high with the average mean score of 4.18.

Hypothesis One: There is no significant relationship between information needs and knowledge utilization in the studied Nigerian Teaching Hospitals in the South-West

Table 4: Correlation analysis between information needs and knowledge utilization in the studied Nigerian Teaching Hospitals in the South-West

Variable	X	SD	N	R	P	Remark
Knowledge Utilization Information needs	29.6628 44.5465	5.4617 5.9118	860	.351**	.000	Sig.

Table 4 above revealed that there is a positive significant relationship between knowledge utilization and information needs (r=.351**, N=860, P<.01). Hence the null hypothesis of 'there is no significant relationship between information needs and knowledge utilization' is rejected and another alternative hypothesis there is a positive relationship between information needs and knowledge utilization is accepted

Hypothesis Two: There is no significant relationship between Knowledg sharing and knowledge utilization in the studied Nigerian Teaching Hospitals in the South-West

Table 5: Correlation analysis between knowledge sharing and knowledge utilization in the studied Nigerian Teaching Hospitals in the South-West

Variable	X	SD	N	R	P	Remark
Knowledge Utilization Knowledge Sharing	29.6628 42.0698	5.4617 6.5666	860	.523**	.000	Sig.

Table 5 above revealed that there is a positive significant relationship between knowledge utilization and knowledge sharing (r=.523**, N=860, P<.01). Hence the null hypothesis of 'there is no significant relationship between knowledge sharing and knowledge utilization' is rejected and another alternative hypothesis there is a positive relationship between knowledge utilization and knowledge sharing is accepted

Table 6: Relative contribution of independent variables (information needs and knowledge sharing) on dependent variable (knowledge utilization)

Model	Unstandardized Coefficient		Standard Coefficient	T	Sig.	Remark
	B	Std. Error	Beta Contribution			
(constant)	5.739	1.428		4.02	0.000	Sig.
Information needs	.108	.030	.117	3.54	0.000	Sig.
Knowledge sharing	.340	.029	.409	11.62	0.000	Sig.
R^2=0.299; F=121.76; P=0.000						

Table 6 presents the result of multiple regression analysis showing the relationship between knowledge utilization and the independent variables (information needs and knowledge sharing). The results of coefficient of multiple determination was 0.299. This implied that the independent variables (information needs and knowledge sharing) accounted for 29% variance in the dependent variable (knowledge utilization). Also, the ANOVA results was significant ($F=121.76$; $p<0.05$). This indicated that the model is fit.

In addition, the coefficient of information needs in the model was 0.108. This implied that a unit increase in information needs with result 0.108 increase in knowledge utilization when other variables in the model are held constant. The coefficient of knowledge sharing in the model was 0.340. This implied that a unit increase in knowledge sharing with result 0.108 increase in knowledge utilization when other variables in the model are held constant.

3. Summary of findings

This study examined the influence of information needs and knowledge sharing on knowledge utilization in the Teaching Hospitals in South-West, Nigeria. It was discovered that knowledge management practices among the staff of the selected Teaching Hospitals in the South-West Nigeria is very much okay since all the variables examined were all positive.

4. Conclusions

The study has attempted to examine the relationship between information needs, knowledge sharing and knowledge utilization in the selected Teaching Hospital in South-West, Nigeria. Specifically, the study has addressed major issue that surrounds the importance of information needs in relation to knowledge sharing and knowledge utilization, respectively. By inference, researchers are of the opinion that there must be a need for particular information before sharing of knowledge can occur, appreciated and consequently put to use.

5. Recommendations

The paper recommended that management in Nigerian Teaching Hospitals should create knowledge bank that will enhance the information accessibility, knowledge sharing and knowledge utilization among staff as this will go a long way of improving health care service delivery. By extension, management in Nigerian Teaching Hospitals in particular and every organization in general must create an enabling environment such as organizational culture that will stimulate good working relationship and teamwork among staff.

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