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Assessment of information literacy competency among students of College of Nursing and Midwifery, Kafanchan, Kaduna State, Nigeria

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This study investigates the level of information literacy competency among students of College of Nursing and Midwifery School Kafanchan, Kaduna State, Nigeria. The study focuses on three basic skills namely: Identification, accession and evaluating skills. A survey research method was employed for this study. The study was based on the data collected through questionnaire tagged information literacy questionnaire (ILSQ). The reliability of the instrument was determined through Cronbach's Alpha coefficient statistic and the obtained value was established at r=0.73. Frequency count and percentage were used to analyze the data. The result obtained revealed that most students lacked ability in the identification, accession and evaluation of information resources. The study recommends that information literacy programme be incorporated and should be a two credit units course into the school curriculum of the school.

Key words: Information, information literacy, competency, evaluation skill, accession skill identification skill.

INTRODUCTION

In recent times, information is recognized as a crucial factor in all aspects of human endeavor; it is a major commodity (Hadimani, and Rajgoli, 2010). In our day to day activities, information is being used for decision making, planning and for tasks accomplishment. However, not all information is relevant, accurate, and reliable for information needs of information users, especially students. Besides, because of the information explosion, students are faced with a lot of information that it becomes difficult to filter and access the needed information from the avalanche. Because of the difficulties associated to accessing the needed information, Hazrati et al. (2014) contended that students

and researchers must be equipped with basic information skills such as: ability to determine nature and extent of information, ability to evaluate information needs, ability to access needed information and its source, ability to use information effectively and ability to understand the legality linked to the information. It is in this light that this study is aimed at investigating the information literacy competence of the students of College of Nursing and Midwifery, Kafanchan, Kaduna State.

The concept of information literacy has been variously defined by different experts in the field. It could be seen as a set of abilities that an individual should possess so that he or she can recognize when information is needed

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and also have the potentials and skills of locating, evaluating and the effective and efficient use of the required information not only ethically, but legally. Information literacy (IL) is a set of abilities required by students to identify, retrieve, evaluate and use information to solve problems. It expands students' knowledge and shapes their thought, provides opportunity for self-direction, for learning, and forms a foundation for students to achieve academic success (Mealey, 2014), it is an essential factor for achieving a lifelong learning (Soleymani, 2014). Information skills and abilities enable medical students to retrieve the right information without wasting much time, (Lata and Sharma, 2013). Arguably, for students to cope with independent learning in an information overload environment it requires students in higher education system to be information literate so that they can be able to extract the appropriate information from the sea of information in the shortest possible time (Santharooban, 2016).

The general aim of medical education in Nigeria is to produce competent physician capable for improving and saving life (Alakpodia, 2014). It is based on this comprehension that College of Nursing and Midwifery, Kafanchan was built in 1977 with the first enrollment of 47 students. The total intake is noted to be on the increase since the inception of the College alongside with estimated 5% yearly increment of library resources. As at 2018 the total population of students raised to 421.

Once students are admitted, they are exposed to a basic information literacy programme usually carried out by the librarian of the school during a two weeks orientation exercise. Also, a one credit unit course on library science is being offered in the first semester of the first year of the school programme. This is an attempt to equipping students with information skills to enable them easily access, retrieve and use information resources to enhance their research work. Regrettably, despite these efforts, it is observed that students find it difficult in accessing their information needs from the available information resources.

Problem statement

It is not in doubt that information literacy competence plays important role in providing students with necessary skills and ability to access, evaluate and use information to perform given tasks. Hence, students are expected to be information literate in order to be relevant in the present era of information age. Unfortunately it is noted that students of Nursing and Midwifery, Kafanchan spend so much time in an effort to access their needed resources, they resort in consulting library staff for most of their searches for information resources. Most students are observed to have deficiency in the clear understanding of the reliable and appropriate information

resource to be used for their research activities.

The problem that prompted this study was lack of adequate information skills required to access information resources by students of the area under study and the frustrating condition of the students while trying to access information resources to improve and facilitate their learning. Preliminary study has shown that students of the College of Nursing and Midwifery are facing a strong challenge and difficulties in accessing their information needs within a short time. This is in line with the observation of Lata and Sharma (2013) that medical students find it difficult to find relevant resources within a short span of time.

Regrettably, based on the literature available, nobody has ever investigated the information literacy of students in the present area under study. The situation is worrisome and requires to be addressed; It is in the light of this the study sets to investigate in-depth the level of information literacy competence among the students of College of Nursing and Midwifery Kafanchan, Kaduna State, Nigeria.

Study objectives

The broad objective is to determine the level of information literacy competency among students schooling in the Kaduna State College of Nursing and Midwifery, Kafanchan. The specific objectives are to:

(1) Ascertain ability to locate information resources among students of College of Nursing and Midwifery Kafanchan, Kaduna State.
(2) Determine the students' ability to identify appropriate and relevant information resources.
(3) Determine students' ability to evaluate information resources they need.

LITERATURE REVIEW

Many investigations have been carried out on IL Skills leading to several findings. Lata and Sharma (2013) studied information literacy among students of postgraduate institute of medical education and research, Sharma University of Health Sciences. The data used were collected through questionnaire. They discovered that majority of respondents had high skills in accessing electronic resources. In the same study, majority of students were said to have good skills of evaluation. In a similar investigation conducted by Omeluzor et al. (2013), they discovered that most of the respondents have the ability to identify their information needs. Issa et al. (2015) studied IL competency of undergraduate students of the University of Ilorin, Kwara State, Nigeria. The result revealed that most students had difficulties in the identification of appropriate information resources.

Likewise, Ilogho and Nikiko (2014) observed that majority of students had deficiency in the aspect of identification of information resources needed. In another related research carried out by Dorvlo and Dadzie (2015) on the IL level among students of Ghana University. They noted that students had no adequate evaluation skill, unskillful in search strategies and search tools.

Hazrati et al. (2014), in their comparative investigation, revealed that academia had higher level of retrieving information and evaluating skills than skills of using information ethically. Their findings are in agreement with that of Leichiner et al. (2013) who observed that IL level in evaluation of information resources among psychology students was good. However, the findings of Malliari et al. (2014) showed that students lacked ability to evaluate information resources of their choice. Igun and Odafe (2014) discovered that students were able to recognize, access and use information resources effectively. Notwithstanding, in the same study they discovered that students had no good knowledge of evaluation. Santharooban (2016) analyzed IL of the medical Students University of Sri Lanka. He discovered 47% respondents had ability to locate information needs. He therefore concluded that the locating skill level possessed by the students of the Medical school was satisfactory.

Theoretical framework

Several studies have been undertaken on IL competence and different theories were applied as the basis for such studies. The present investigation is guided by the five standards of information literacy of higher education prepared by the America Library Association presidential committee and was approved by the America College of Research Libraries (ACRL) in 2000.

According to the five information literacy Standards; Standard one contended that for a student to be considered as information literate he should be able to determine the nature and extent of information needed. Standard two explained that information literate students should access needed information effectively and efficiently. Standard three states that information literate student evaluates information and its sources critically. Standard four states that information literate student, individual or as a member of a group uses information to accomplish a given task. Standard five states that a student or an individual with information literacy uses information ethically. This study was built on these standards because they explained what should be the performance of information literate students and which is the focused of the present study.

METHODOLOGY

Descriptive survey method was employed for the study; this is because of its convenience for data collection through the use of questionnaire (Osuala, 2005). The choice of the method for this study was based on the fact that it allowed collection of the data from relatively large number of respondents (Ikeh, 2003). Also, the method was employed for the study because it is observed to be one of the best available methods to the researcher who is interested in collecting original data for the purpose of describing a population (Ejifugha, 1998).

The population for this study was the entire Students of College of Nursing and Midwifery, Kafanchan totaling 421. A sample size of one hundred and sixty four respondents were proportionately sampled through randomization from second and third year students of Nursing and Midwifery schools of the College. Note that these groups of students were considered appropriate for the study because they were already being exposed to information literacy. The decision of sampling a sample size of 164 for the study was in line with Krejcie and Morgan (1970) who recommended for the minimum of 20% of the population to be a sample size for behavioral research such as this particular study.

Structured questionnaire tagged information literacy questionnaire (ILSQ) was used for the collection of the data. The questionnaire contained twelve items. Four statements were framed with multiple options for each research question. In the questionnaire, items 1, 2, 3 and 4 attempted to find out students' ability to locate resources from the abundance. While items 5, 6, 7 and 8 attempted to find out the level of students' ability in identifying appropriate or relevant resources that facilitate access to information needs. Lastly, items 9, 10, 11 and 12 determine students' ability to evaluate the information resources in terms of accuracy, authenticity and relevancy. The questionnaire was first pretested on few students who could not take part in the actual study. This was so in order to ensure face and content validity of the instrument.

Cronbach's Alpha coefficient statistics was used to find the reliability of the questionnaire, thus the value was established at r = 0.73. Copies of the questionnaire were self-administered to the sampled respondents. A total of one hundred and sixty four copies of questionnaire were self-administered to the sampled respondents, which helped in guiding the respondents on how to properly complete the question presented and for clarification were needed. The distribution of the questionnaire to the respondents was done in their classes and in the library. However, the researchers were able to collect back 160 copies and were used for this study. Descriptive statistics of simple percentage was used to analyze all the stated research questions.

RESULTS AND DISCUSSION

The findings of the study were presented in a form of table for easy interpretation. One of the skills this study focused on was "locating Skill'. To achieve this, four statements were raised with multiple options from which respondents were asked to choose the appropriate answer (Table 1). The appropriate answer is (a. abstract) and was chosen by only few respondents 34 (21.3%). Majority of the respondents 48(30%), 65 (40.6%) and 13(8.1%) respectively selected wrong answers. From Table 2, the correct answer is (C. Call number). This answer was affirmed by only few respondents 32 (20%). While, the majority 43(26.8%), 56(35%) and 29(18.2%) respectively picked the wrong answers. From Table 3, majority of the respondents 72 (45%) chose the correct option (b. index page). Meanwhile, 34**(**21.2%) respondents expressed that they do not know the

Table 1. Testing students' ability to locate resources.

The most appropriate source to be used to locate an article from a journal is:	No. of respondent	Percentage
Abstract	34	21.3
Index	48	30
Catalogues	65	40.6
All of the above	13	8.1
Total	**160**	**100**

Table 2. Testing students' ability to locate resources.

From the catalogue, you discovered the following content: call number, author, title of the book, subject, and place of publication. The most suitable content of the catalogue to consult that quickly directs you to the position of the require book (s) on the shelf is:	No. of respondent	Percentage
Author's name	43	26.8
Title of the book	56	35
Call number	32	20
Place of publication	29	18.2
Total	**160**	**100**

Table 3. Testing students' ability to locate resources.

For you to speedily identify a note-worthy term or concept contained in a book, you should browse through:	No. of respondent	Percentage
Table of content	23	14.4
Index page	72	45
Cover page	31	19.4
I don't know	34	21.2
Total	**160**	**100**

Table 4. Testing students' ability to locate resources.

In an event you are searching for information resources on a given concept but you got too few search result. For you to access plenty search result one of the Boolean operators bellow is the most appropriate to be used	No. of respondent	Percentage
"OR"	32	20
"AND"	54	33.8
"NOT"	11	6.9
I don't know.	63	39.3
Total	**160**	**100**

answer. Other few respondents 23(14.4%) and 31(19.4%) selected wrong answers.

In Table 4, the appropriate answer is ("OR") and was chosen by only 32 (20%) respondents. Most respondents 63(39.3%) indicate that they are not conversant with Boolean operators. Some respondents 54 (33.8%), and 11(6.9%) selected answers considered to be wrong "AND" and "NOT".

The total average score of the respondents to the four statements meant to test their location skill is 26.8%. Based on this result it is an indication that most students could not differentiate functions of the retrieval tools of

Table 5. Testing students' ability to identify appropriate or relevant resources.

The most suitable resources from the following that you should use for definition of a medical concept or term is:	No. of respondent	Percentage
Medical encyclopedia	26	16.3
Medical dictionary	84	52.3
General dictionary	33	20.6
All of the above	27	16.8
Total	**160**	**100**

Table 6. Testing students' ability to identify appropriate or relevant resources.

The most appropriate tool you should use to locate a book (s) from a library, if the author, title or the subject is known is:	No. of respondent	Percentage
Library catalogue	27	17
Book index	58	36.3
Abstract	63	39.4
All of the above	12	8.6
Total	**160**	**100**

Table 7. Testing students' ability to identify appropriate or relevant resources.

You were given a research topic titled "Traditional Method of Treating Malaria Fever" it happens that you have only few resources available. Which of the following tools you should use to find other resources or documents on the given topic?	No. of Respondent	percentage
Bibliography	23	14.4
Index	58	36.2
Glossary	67	41.9
All of the above	12	7.5
Total	**160**	**100**

the library; most students are unaware that Call numbers are used to classify materials and tell them locations of materials on the shelves. It also shows that most students lacked knowledge of the function of Boolean operators as it is a tool being used to narrow or broaden search result of any needed information. Majority of the students find difficulties in the selection of appropriate retrieval tools. This finding implies that most students find difficulties in accessing the needed information resources.

The present finding is not in agreement with the second information literacy standard of ACRL (2000) which argued that "The information literate student accesses needed information effectively and efficiently. The performance indices according to ACRL (2000) argued that the student is expected to have the ability to select appropriate investigative methods or information retrieval systems and search strategies. The present finding also does not corroborate with Santharooban (2016)'s finding that indicated the ability skill of Medical students of Sri

Lanka University is satisfactory. The implication of this finding is most students depend on library staff to access their information resources.

In an information overloaded environment it is important for students to have the ability to identify the appropriate information sources for their information needs. To test the students' level of "identification Skill", four statements were framed alongside with options from which respondents were asked to select the appropriate answer. The appropriate answer from Table 5 is (b. medical dictionary) for the statement and was affirmed by majority 84 **(**52.3%) of the students. While, the remaining respondents 26**(**16.3%), 33(20.6%) and 27(16.8%) selected incorrect answers.

Table 6 shows only respondents 27(17%) have chosen the correct option (a. library catalogue). Whereas, most respondents 63(39.4%), 12 (8.6%) and 58(36.3%) respectively have chosen wrong answers. From Table 7, only 23(14.4%) respondents chose the appropriate answer (a. bibliography). But 12(7.5% respondents

Table 8. Testing students' ability to identify appropriate or relevant resources.

The following Databases are available to you. As a medical student, choose the one that is more appropriate for you	No. of respondent	Percentage
Springer	17	10.6
PubMed	25	15.6
Agora	71	44.4
Ebscohost	47	29.4
Total	**160**	**100**

Table 9. Testing of students' level of evaluating skill.

9.While evaluating your information resources you are expecting to consider the following:	No. of respondent	Percentage
The author should be known in the field only	38	23.8
The publisher only	29	18.1
Up-datedness of the date of publication only	54	33.7
All of the above	39	24.4
Total	**160**	**100**

Table 10. Testing of students' level of evaluating skill.

As a medical student, the following are sources of information. Choose one from the options that provides most current information	No. of respondents	Percentage
Journal	29	18.1
Book	41	25.6
Internet	38	23.8
Dictionary	52	32.5
Total	**160**	**100**

selected "all of the above". While other respondents 58(36.2%) and 67(41.9%) preferred "index" and "Glossary" which are all wrong answers. From Table 8, most respondents 71(44.4%) indicated that the answer is agora. Meanwhile only few students 25(15.6%) selected the appropriate answer (b. PubMed). The overall average score from the four statements that were framed in respect to determine the level of identification skill was 31.36% out of hundred percent. From the result, it indicates that most students cannot differentiate functions of individual reference resources; it also shows that they are not familiar with Medical database. Thus, the study concluded that most students of the college have hitches in identifying suitable sources of information. Therefore the finding is not in consonant with the ARCL (2000) standard one. The performance of this standard clearly states that "the information literate student identifies a variety of types and formats of potential sources for information. This implies that an information literate student should be able to know the information resources that are capable of meeting his information needs.

The present finding is in conformity with findings of Issa et al. (2015) which indicated that undergraduate students of the University of Ilorin lacked identification Skills. To test the students' level of evaluating skill, four statements were raised in that regard for students to respond to. From Table 9, the appropriate answer is (d. all of the above.) and was selected by only 39(24.4%) respondents. However, most respondents 54 (33.7%), 38(23.8%) and 29(18.1%) have chosen inappropriate answers,

In Table 10, the most appropriate answer is (d. internet) and was chosen by only few respondents 38(23.8%). Whereas most respondents 52(32.5%), 41(25.6%) and 29(18.1%) picked answers that were not correct. Table 11 shows that only 26(16.3%) respondents chose the most appropriate answer (d. all of the above), whereas the rest of the respondents selected options "a", "b" and "c" which are all wrong answers.

Most of the respondents 62(38.8%) have selected "relevance". However, only 41(25.6%) respondents chose the appropriate answer (a. Currency). Some of the

Table 11. Testing of students' level of evaluating skill.

You would need to use one of the following options as an indices to evaluate your information resources:	No. of respondent	Percentage
Authority of the resources only	44	27.5
Content of the resources only	37	23.2
Arrangement of the resources only	53	33
All of the above	26	16.3
Total	**160**	**100**

Table 12. Testing of students' level of evaluating skill.

As a student of History. You are asked to write a research paper 'the Civil War in Nigeria". Which of the following criteria is not important to be considered when evaluating your resources?	No. of respondent	Percentage
Currency	41	25.6
Relevance	62	38.8
Authority	24	15
Scope	33	20.6
Total	**160**	**100**

respondents 24(15%) selected "authority" and the rest 33(20.6%) chose "scope" (Table 12). Evaluation of information resources is a critical factor that helps in ensuring the appropriateness of information resources. However, not all criteria are applicable in all circumstances. The overall average score from the four statements that were framed in order to determine evaluating skill is 22.5% out of hundred percent. Most students do not have good idea as to when to apply appropriate criteria for evaluating their information resources. They also cannot identify materials that provide current and authentic information resources.

The present finding does not agree with the standard three which argued that an information literate individual evaluates the information resources and its source. The study however affirmed the findings of Malliari et al. (2014) and Igun and Odafe (2014) in their investigation. They discovered that students lacked the ability to effectively evaluate their information resources. Students should be able to evaluate information resource for its authenticity, accuracy, currency and ease of use.

Conclusion

From the result of the findings, it was revealed that most students lacked basic skills of information literacy. Based on the result of the study, most students faced difficulties in accessing and evaluating their information resources. Therefore it is concluded that the information resources of the library are not fully utilized by the students.

Recommendation

Based on the results of the investigation, the researchers recommended that Information literacy programs should be incorporated should be a two credits unit course in the curriculum of the school and be for first and second semester of their first year school programme.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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