

Determining the Information-Seeking Strategies of Registered Nurses in General Hospitals of Jigawa State

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ABSTRACT

The paper investigates the information-seeking strategies of nurses in Dutse General Hospitals in Jigawa State, Nigeria. The main objective of the study is to determine the information-seeking strategy of registered nurses in the state. A cross-sectional survey research design was adopted. The population of the study comprised all (384) registered nurses in the general hospitals in Jigawa state. Total enumeration technique was used. A questionnaire was used to collect data. Three hundred and eighty-four (384) copies of the questionnaire were administered, and 352 (92%) copies were returned and found useful for analysis. The data collected was analysed using descriptive and inferential statistics on SPSS Software. The finding reveals that the registered nurses rely heavily (74.0%) on their professional colleagues while seeking information. The study also reveals that professional colleagues are the most common information sources used by nurses, followed by e-books, e-journals, newspapers/magazines, and CD-ROMs. Other information resources used by the nurses for searching electronic information are Google and Yahoo. The study concluded that medical libraries should be established in the hospitals, and the nurses should be trained on how to improve their information-searching skills for enhanced healthcare delivery.

Key Words: Information Seeking Strategy, Health Information, Nurses, General Hospital, Dutse.

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Introduction

In Jigawa State, Nigeria, where health information resources are limited amidst diverse patients' needs, registered nurses face numerous challenges in staying informed about the latest developments in healthcare. Investigating the information-seeking strategy of health professionals such as nurses is crucial for effective healthcare delivery. The ability of the nurses to search for health information sources will help them to make informed decisions about the care of their patients.

Information-seeking strategies focus on the ability of information users to identify and evaluate information sources to satisfy their information needs. Information-seeking strategies do not refer to seeking information alone, they also involve identifying the possible information sources where a user can find information for making informed decisions. Information-seeking strategy involves two processes: a) identify the possible sources of information, and b) select the best sources from the various sources of information identified. In view of the foregoing, Mandu et al. (2020) opined that nurses need to seek information vastly due to their professional activities. This is important as nurses work with doctors and other healthcare professionals to manage the health condition of their patients using informed decisions.

Based on the nature of their work, training, and scope of practice, nurses could be considered to be different from other health professionals. Nurses interact directly with patients more than any other health professionals. Hence, nurses usually stay in the wards with patients even in the absence of medical doctors. Therefore, nurses need to have skills in how to search for medical information both

from print and non-print resources provided by medical libraries across Nigeria (Popoola et al., 2020). Nurses' search skills are important in searching for current and relevant information. Therefore, amidst the information resource deficiency in Jigawa State, Nigeria, it is important to investigate the information-seeking strategies adopted by nurses in the state to fulfil their information needs.

Jigawa State, situated in Northern Nigeria, hosts several general hospitals catering to the healthcare needs of its populace. Within these hospitals, registered nurses operate at the intersection of patient care, medical knowledge, and technological advancements. However, little is known about the information-seeking strategies employed by nurses to effectively fulfil their professional responsibilities. This study aims to explore the information-seeking strategies of registered nurses in General Hospitals in Jigawa State, Nigeria.

Research Objectives

This study was designed to investigate the information seeking strategy of registered nurses in general hospitals in Jigawa State, Nigeria. Specifically, the study's objectives are to:

1. investigate the information-seeking behaviour of registered nurses in General Hospitals in Jigawa State;
2. identify the information sources used by registered nurses in general hospitals in Jigawa State;
3. determine the information resources used by registered nurses in general hospitals in Jigawa State; and
4. identify the search engines used by registered nurses in general hospitals in Jigawa State.

Literature Review

Information-seeking Strategy of Health Professionals

Information-seeking strategies among health professionals encompass a wide array of methods and approaches utilised to access, evaluate, and apply relevant information in their practice. These

strategies are crucial for staying updated with current medical knowledge, making informed clinical decisions, and providing high-quality patient care (insert citation). Health professionals frequently conduct studies to gather evidence-based information sources. These studies help practitioners stay abreast of the latest research findings, treatment guidelines, and best practices in their respective fields. In addition, health professionals often seek advice and consult with their peers, mentors, or subject matter experts to obtain insights, discuss complex cases, and exchange knowledge (insert citation). Peer consultation provides an opportunity for collaborative learning and sharing of practical experiences.

In view of the foregoing, Saha and Jena (2020) opined that health professionals engage in ongoing professional development activities such as continuing education courses, webinars, and online modules to expand their knowledge base, acquire new skills, and maintain licensure requirements. Continuing education ensures that practitioners remain competent and up-to-date in their respective fields. Health professionals subscribe to newsletters, medical journals, and specialty-specific publications to receive regular updates on recent developments, research findings, clinical trials, and emerging trends in healthcare (insert citation). Subscribing to relevant publications helps them stay informed. Health professionals participate in online forums, social media groups, and professional networking platforms (e.g., Twitter, LinkedIn, Research Gate) to engage in discussions, share resources, seek advice, and collaborate with peers worldwide. Social media platforms offer a virtual space for knowledge exchange and networking opportunities. Health professionals utilise online resources such as UpToDate, ClinicalKey, Google Scholar, and institutional libraries to access a vast repository of medical literature, clinical guidelines, patient education materials, and research articles (insert citation).

Information-seeking strategies help health professionals to identify information sources for healthcare delivery. As such, information-seeking

strategy is practised when a user feels there is a need to search for information to satisfy his/her information needs. Therefore, information-seeking strategy can be defined as the ability of users to apply a particular skill while searching for information. In view of the above, Saha and Jena (2020), noted that people apply different techniques to obtain information which are influenced by different factors.

In another submission, Wanyingi (2018) revealed that the information-seeking strategy in the nursing profession is a method used in obtaining health information resources to satisfy information needs. Different health professionals may use different information resources to access health information to meet their varied information needs, although Ota, Azuma, and Nishimura (2017) reported as popular use of search engines among healthcare professionals

Therefore, information-seeking strategy in healthcare settings can be defined as the ability of health professionals to use different skills to search and use health information resources that will help them manage the health condition of their patients.

Information Sources and Resources Used by Nurses

To obtain timely, relevant and current information, various sources need to be consulted. Information source is where information in any format can be obtained, which includes human sources and printed or non-printed sources. In the context of this study, Adebayo et al. (2017) found that health workers utilise several health information sources, such as medical teams, medical textbooks and medical journals, to satisfy their information needs. Thus, health workers such as nurses use various sources of health information such as textbooks, library resources, and medical journals to provide quality healthcare to their patients

Health professionals, including nurses, rely on a variety of information sources and resources to support their clinical practice, enhance patient care, and stay updated with the latest developments in healthcare. Nurses frequently consult medical literature and academic journals to access evidence-based information, research

findings, clinical guidelines, and best practices relevant to their speciality or area of practice (insert citation). Journals such as Nursing Research, Journal of Nursing Scholarship, and Journal of Advanced Nursing are commonly referenced for scholarly articles (insert citation). However, textbooks and reference materials specific to nursing practice, anatomy, physiology, pharmacology, and other healthcare disciplines serve as valuable resources for nurses. These materials provide comprehensive information on disease processes, treatment modalities, nursing interventions, and patient care protocols.

According to Mandu et al. (2020), nurses utilise Electronic Health Records (EHRs) within healthcare facilities to access patient information, document care interventions, review medical histories, and collaborate with interdisciplinary care teams. EHRs serve as centralised repositories of patient data, facilitating efficient information retrieval and communication among healthcare providers. Nurses access nursing-specific databases and online libraries such as CINAHL (Cumulative Index to Nursing and Allied Health Literature), PubMed, MEDLINE, and Nursing Reference Centre to search for peer-reviewed articles, research studies, systematic reviews, and nursing-related literature (insert citation). These databases offer a vast collection of scholarly resources tailored to the nursing profession.

Nurses participate in continuing education programs, workshops, webinars, and online courses to expand their knowledge base, acquire new skills, and fulfil licensure or certification requirements. Continuing education opportunities provide nurses with access to up-to-date information, evidence-based practices, and professional development opportunities. However, nurses engage with professional nursing organizations, associations, and societies such as the American Nurses Association (ANA), National League for Nursing (NLN), and specialty-specific organizations to access resources, networking opportunities, educational events, and advocacy efforts. Professional organisations offer support, guidance, and

resources tailored to the needs of nurses within specific specialities or practice settings.

On the other hand, information resources are those materials containing information. In the context of this study, health information resources are those resources commonly found in medical libraries and information centres, which are in both print and non-print formats. Therefore, health information resources can be defined as resources such as e-resources, books, magazines and so on. However, Asl et al. (2017) found that 54% of the respondents used textbooks and the Internet to obtain health information for healthcare delivery, while 46% of the respondents used e-resources, e-journals, the internet, social media, and medical databases. Therefore, this study aims to identify information resources and sources used by the registered nurses in general hospitals of Jigawa State, Nigeria.

Methods

The study was conducted at the nine General Hospitals of Jigawa state, which are Birnin-Kudu, Birniwa, Dutse, Gumel, Hadeja, Jahun, Kafin Hausa, Kazaure, and Ringim General Hospitals. The population of the study comprised three hundred and eighty-four (384) registered nurses working at the Hospitals. A self-developed questionnaire was used as the instrument for data collection. A total of 384 copies of the questionnaire were distributed, and 352 copies were completed, returned, and analysed. The total enumeration sampling technique was used. Thus, the entire population of the study was used because the number of respondents was manageable. The data collected was analysed using descriptive statistics and inferential statistics.

Results and Discussion

Table 1: Demographic Profile of the Respondents

		Frequency	%
Gender	Male	275	78
	Female	77	22
	Total	352	100
Years of working experience	0-5	64	17.2
	6-10	201	53.4
	11-15	46	12.2

	16-20	37	9.8
	21and above	28	7.4
	Total	352	100
Highest qualification	Nursing	216	61
	BSc	80	23
	MSc	30	9
	Others	26	7
	Total	352	100

Table 1 indicates that the majority, 275 (78%), of the respondents were male, while 77 (22%) were females. The table also shows that about half of the respondents had 6-10 years of work experience in the hospitals under study. The study further reveals that about half (216; 57%) of the respondents had Nursing Certificates, followed by 80 (23%) who had BSc Certificates, while 30 (9%) had Master's degrees, and only 26 (7%) had other health-related certificates. This implies that male nurses were more in number than their female counterparts.

Search strategies deployed by nurses

Table 2 reveals that the majority, 260 (74%) of the respondents, strongly agreed that they used Ask Colleagues to search for information. However, slightly more than two-thirds (62%) of the respondents subscribed to Medical Journals for information, and more than half of 190 (54%) of the respondents used the internet to search for information. The results also show that the nurses do not search for information through index browsing, accessing medical databases, and medical subject headings. This result contradicts the study of Nobert and Iwoga (2013), who revealed that health professionals seek information from printed sources and e-resources. This implies that the nurses rely heavily on their professional colleagues while seeking information for healthcare delivery.

Information Sources used by nurses

Table 3 indicates that the majority, 225 (63%) of the respondents, strongly agreed that they used Radio/TV as their information sources. Two-thirds, 215 (61%) of the respondents, strongly agreed that they used Family/Friends. Slightly less than three-quarters, 260 (74%) of the respondents strongly

agreed that they used Social Media and the Internet, respectively. This implies that medical libraries are not among the major information sources used by the nurses in General Hospitals of Jigawa State.

Information Resources used by nurses

Table 4 reveals that 218 (62%) of the respondents strongly agreed that they used

Newspapers/Magazines. The majority, 225 (64%) of respondents, strongly agreed that they used CD-ROM, and 260 (74%) of the respondents strongly agreed that they used e-journals and e-books, respectively. This shows that medical textbooks and print journals are not used frequently by nurses. This implies that the nurses used limited information resources for healthcare delivery.

Table 2: Search Strategies Employed by Nurses

SEARCH STRATEGIES	SA	A	D	SD	Total
I used Ask Colleagues to search for information	260 (74%)	40 (11%)	52 (15%)	0 (0%)	352 (100%)
I subscribed to Medical Journals for information	220 (62%)	80 (23%)	0 (0%)	52 (15%)	352 (100%)
I used index browsing to search for information	228 (65%)	35 (10%)	45 (13%)	44 (13%)	352 (100%)
I used medical subject headings to search for information	90 (26%)	40 (11%)	52 (15%)	170 (38%)	352 (100%)
I used the internet to search for information	190 (54%)	52 (15%)	110 (31%)	0 (0%)	352 (100)
I used medical databases to search for information	68 (19%)	40 (11%)	52 (15%)	192 (55%)	352 (100)

Table 3: Information Sources Used by the Nurses

INFORMATION SOURCES	SA	A	D	SD
Medical Library	90 (26%)	52 (15%)	80 (23%)	130 (36%)
Medical Databases	60 (17%)	40 (11%)	90 (26%)	162 (46%)
Radio/TV	225 (63%)	45 (13%)	45 (13%)	37 (11%)
Medical Colleagues	40 (11%)	52 (15%)	90 (26%)	170 (48%)
Family/Friends	215 (61%)	90 (26%)	47 (13%)	0 (0%)
Social Media	260 (74%)	40 (11%)	52 (15%)	0 (0%)
Internet	260 (74%)	0 (0%)	52 (15%)	40 (11%)

Table 4: Information Resources Used by Nurses

INFORMATION RESOURCES	SA	A	D	SD
Medical Textbooks	82 (23%)	40 (11%)	80 (23%)	150 (43%)
Medical Journals	62 (18%)	90 (26%)	40 (11%)	160 (45%)
Newspapers/Magazines	218 (62%)	52 (15%)	40 (11%)	42 (12%)
Audio Tapes	40 (11%)	52 (15%)	75 (21%)	185 (53%)
CD-ROM	225 (64%)	80 (23%)	47 (13%)	0 (0%)
E-journals	260 (74%)	40 (11%)	52 (15%)	0 (0%)
E-books	260 (74%)	0 (0%)	52 (15%)	40 (11%)

Search engines used by nurses

Table 5 indicates that 260 (74%) of respondents strongly agreed that they used Google and Yahoo

while searching for information. About two-thirds, 215 (61%), of the respondents strongly agreed that they used Ask.com as a search engine. This implies that the most common search engines used by the nurses in General Hospitals of Jigawa State are Google, Yahoo, and Ask.com while searching for online information for healthcare delivery.

Reasons for information seeking by nurses

Table 6 reveals that 226 (64%) of respondents strongly agreed that they seek information for solving clinical questions, 260 (74%) strongly agreed that they seek information for clinical management of patient’s healthcare, and 216 (61%) of respondents agreed that they seek information for emerging technologies. This implies that the nurses at General Hospitals of Jigawa State seek information for healthcare delivery and professional development.

Table 5: Search Engines used by nurses

SEARCH ENGINES	Freq.	Freq.	Freq.	Freq.
I used Google as a search engine	260 (74%)	0 (0%)	52 (15%)	40 (11%)
I used Yahoo as search engine	260 (74%)	40 (11%)	0 (0%)	52 (15%)
I used Ask.com as search engine	215 (61%)	85 (24%)	52 (15%)	0 (0%)
I used AOL as search engine	27 (8%)	40 (11%)	90 (26%)	195 (55%)
I used Bing as search engine	22 (6%)	52 (15%)	88 (25%)	190 (54%)
I used Baidu as search engine	28 (8%)	49 (14%)	80 (23%)	195 (55%)
I used Excite as search engine	68 (19%)	52 (15%)	97 (28%)	135 (38%)
I used Wolfram Alpha as search engine	52 (15%)	80 (23%)	95 (27%)	125 (35%)

Table 6: Reasons for Seeking Information

REASONS	SA	A	D	SD
For solving clinical questions	226 (64%)	52 (15%)	40 (11%)	34 (10%)
For clinical management of patients’ healthcare	260 (74%)	40 (11%)	0 (0%)	52 (15%)
To know about new medical trends	37 (10%)	52 (15%)	75 (21%)	188 (54%)
The emergence of new technologies	16 (5%)	216 (61%)	80 (23%)	40 (11%)
For updating skills & practices	65 (18%)	52 (15%)	60 (17%)	175 (50%)

Summary of the Findings

The paper found that there are more male nurses than female nurses at general hospitals in Jigawa State, Nigeria, and the majority of them have a mid-career level of work experience in the nursing profession. The study also found that the nurses at General Hospitals in Jigawa State adopted information-seeking strategies by asking colleagues and subscribing to Medical Journals and the

Internet. The study further revealed that professional colleagues are the most common health information sources used by nurses. The study found that the sources of information consulted by the nurses for healthcare services are radio, TV, family, friends, social media and the Internet. The study found that the information resources used by the nurses are e-books, e-journals, newspapers, magazines and CD-ROMs. The study found that the search engines used by

the nurses are Google, Yahoo, and Ask.com. Finally, the study found that the reasons why nurses at General Hospitals in Jigawa State seek information are to solve clinical questions, for clinical management of patient's healthcare and to use emerging new technologies.

Conclusion

The study concluded that the nurses in Jigawa State, Nigeria, adopted few information-seeking strategies for healthcare services. They heavily rely on professional colleagues as the main source of information. The study concluded that nurses do not consider medical libraries as a major source of information.

Recommendations

The following recommendations are hereby made:

1. Functional medical libraries should be established at the hospitals under this research.
2. Medical libraries at the hospital should demonstrate their relevance to the nurses and work to improve their information literacy skills.

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