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INFORMATION NEEDS OF DOCTORS: RESEARCH TRENDS

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ABSTRACT

Information needs and other aspects of information which motivates doctors to seek clinical information is one of the areas which have been explored in this paper providing the current research and to describe the clinical information sources of primary care doctors in the district of Hyderabad Karnataka, India.

KEYWORDS: *Information needs, seek clinical information, clinical information sources.*

1.1 INTRODUCTION

Under the constitution of India,

health is mainly responsibility of the provincial government, except in the federally administrated areas, public health care and delivery system function as an integrated health complex that is administratively handled at a district level. Presently, Basic Health Units (BHUs) and Rural Health Centers (RHCs) are forming the core of the primary healthcare structure in the remote areas. An enormous network of primary health care enters exist throughout the country, which comprises, 5334 BHUs and Sub Health Centers, 560 RHCS, 4712 Dispensaries, and 905 MCH Centers. At present BHUs cover around 10,000 people however RHCs

cover around 30000-45000 people (Indian economic survey, 2012-13).

Information specialists should design and develop health information resources that are appropriate for basic mobile phones since these devices are ubiquitous in low- and middle-income countries (LMICs). Health information content should be text based mostly since most healthcare personnel in India still use basic mobile phones. Librarians and information specialists must consider the information needs, preferences and availability of technologies for health professional in resource-limited settings. Continuing Medical Education courses should include regular training on health information resources in order to update physicians of new and emerging healthcare application.

There are many sources that can affect or set the information seeking behaviours of doctors. One of the things that affects on doctors' information seeking behavi-

our is the rapid growth of literature. With this huge amount of growth in literature, it is impossible for doctors to keep abreast with all the latest and updated information in the context of patient management, thus doctors can enhance their knowledge to keep abreast by utilizing various information sources. Multiple types of information sources exist which provide information, but the most important to determine which types of the sources are formal and informal sources; formal sources include print and electronic sources and informal sources are used mostly by the doctors rather than just identifying the type of sources in order to understand the information need and seeking behaviour of the doctors. India is a developing country. Much of India's rural population lives in nucleated villages, which most commonly have a settlement form described as shapeless agglomerate. It is assumed that their health gets compromised because doctors in remote areas have no access to current clinical information sources.

1.2 INFORMATION NEEDS OF DOCTORS: CURRENT RESEARCH

The ways physicians and surgeons use information has been well documented in the literature (1-3). Studies have focused on why clinicians seek information (4-6). In Davies' 2007 review of the international literature from 1996-2006, she described the type of information needs clinicians have, barriers they encounter, and which sources were used (7). She found that, even then, traditional face-to-face communication and use of print sources was still prevalent among qualified medical staff in the clinical setting. Again in 2007, Ely described the kinds of patient care questions physicians can't answer (8). Also in 2007, Gonzalez reviewed 3500 patient consults in Spain to identify the most frequent questions asked by physicians there (9). The cause of a certain symptom was the most frequently asked question according to their study. They also found that only one in five questions was followed up. In 2009, Hughes looked at the use junior physicians made of web 2.0 for information seeking (10). He found that Google and Wikipedia were used by 80% and 70% of respondents, respectively, and that their credibility risks were mitigated by cross checking. Also in 2009, Prendiville found that web-based pediatric resources were increasingly significant in this area of medical practice and that many paediatricians believed that patient care depended on these resources (11).

This paper provides a narrative review of the available literature from the past 10 years (1996-2006) that focus on the information seeking behaviour of doctors. The reviews wide ranging it would seem that the traditional methods of face-to-face communication and use of hard-copy evidence still prevail amongst qualified medical staff in the clinical setting. The use of new technologies embracing the new digital age in information provision may influence this in future. However, for now, it would seem that there is still research to be undertaken to uncover the most effective methods of encouraging clinicians to use the best evidence in everyday practice. The information-seeking Behaviour of Doctors: A Review of the Evidence: (Davies, 2007).

According to the result of one questionnaire survey, this article describes the use of computer-based systems for clinical tasks, knowledge in eight health informatics topics, skills in using specific hardware and software applications. Also comparison of reported skills between senior and junior staff; proportion of doctors identifying specific training needs. All but one (1%) of the responding doctors used a computer regularly. Over three quarters of respondents reported they were semiskilled or fully skilled in basic office applications, though the juniors scored significantly more highly than the seniors for some applications. However, 44% of doctors reported no skills in database software, identifying this as a training need. Around half of the doctors were unaware of health informatics topics, including electronic patient records, the Caldicott report and data protection law. In each case the senior doctors were significantly more aware than the juniors of the topic in question. The conclusion offers several suggestions for doctors, and both junior and senior doctors have basic computer literacy, but nearly half of this population identify the use of data software as training need. In addition, there are several health informatics topics of which a large proportion of doctor. A survey of the information management and technology training needs of doctors in an acute NHS trust in the United Kingdom (Nicola Devitt and Jeannette Murphy 2004).

This study reviews of how doctors and nurses search for online information are relatively rare, particularly where research examines how they decide whether to use internet-based resources. Original research into their online searching behaviour is also rare, particularly in real world clinical settings. This review

collates some of the existing evidence, from 1995 to 2009. To establish whether there are any significant differences in the ways and reasons why doctors and nurses seek out online information; to establish how nurses and doctors locate information online; to establish whether any conclusions can be drawn from the existing evidence that might assist health and medical libraries in supporting users. Articles were excluded where the main focus was on patients searching for information or where the focus was the evaluation of online-based educational software or tutorials.. The relevant articles are outlined, with details of numbers of participants, response rates, and the user groups. Results shown there appear to be no significant differences between the reasons why doctors and nurses seek online internet based evidence, or the ways in which they locate that evidence. Reasons for searching for information online are broadly the same. There is a lack of awareness of the library as a potential online information enabler. The conclusion offers several suggestions libraries need to examine their policy and practice to ensure that they facilitate access to online evidence based information, particularly where users are geographically remote or based in the community rather than in a hospital setting. Librarians also need to take into account the fact that medical. Internet-based information-seeking Behaviour amongst Doctors and Nurses: A short Review of the Literature Paula Younger(2010).

Doctors involve in various types of patient's treatment and management on a regular basis which gives rise to information need. According to Belkin and Vickedy's (1985) recognizing a gap in knowledge gives rise to information needs. Doctors face several challenges such as patient care, management and treatment choices in their daily clinical practices. These challenges could lead them to discover the amount of information and knowledge, they have in their minds is inadequate. Doctors realize that there is a gap between knowledge they have and the available external information sources. Therefore, they ought to seek clinical information by using various sources particularly databases and websites. Doctors also frequently consult to seniors in order to seek clinical information to fill the gap in their knowledge. Although Case (2007) has not expressed the idea of gaps in knowledge explicitly, he defined information needs as, the acknowledgment of knowledge inadequacy in order to fulfil the objectives. The recognition of gaps in knowledge gives rise to information seeking behaviours. In order to provide better treatment to patients, doctors need latest clinical information. According to Klein, Ros, Adams, and Gilbert (1994) usefulness of care is influenced by treatment and diagnostic decisions which depend on the accessibility of adequate current information from the most recent literature. Wensley (1999) elaborated key points at 5th National Rural Health Conference that primary care physicians should be given reliable and quick access to information sources for 24 hours a day and difficulty to information access for rural locations should be addressed. Bennett, Casebeer, Zheng and Kristofco (2006) identified that without the best information, patients care gets compromised, physicians raise questions but they pursue only few of the questions, Kapiriri and Bondy (2006) discovered in a research study that health planners and professionals suffer inadequate relevant information for decision making. Revere et al. (2007) reported that quick access to the latest information in order to support vital decisions for patient health cannot be disputed. The information should be ample, synchronized and accessible to meet the need of primary care doctors.

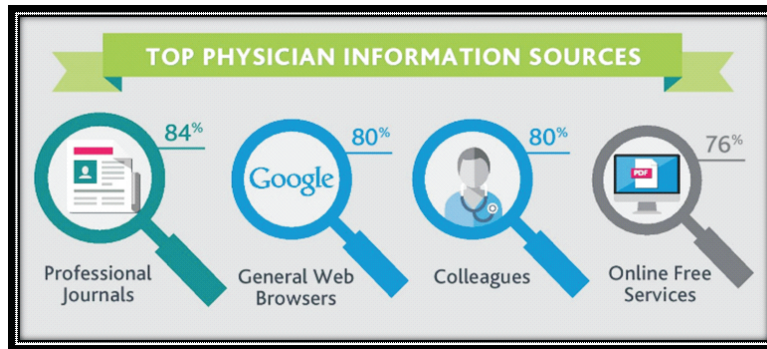
Table 1: Summary of studies that have investigated the information needs of doctors.

<i>Study</i>	<i>Subjects</i>	<i>Types of information needed</i>	<i>Source of answers</i>
Strasser 1978 ¹	258 practising doctors	New development in Specialty 1 st Drug information 2 nd Cancer 3 rd	Papers in journals 1 st Colleagues 2 nd Books 3 rd
Stinson et al 1980 ²	402 Health professionals (309 physicians)	NA	Medical literature regularly Or often 93% Colleagues regularly or often 77%
Northup et al 1983 ³	293 Medical students and doctors	Disease related 49% Drug related 23% Procedure related 19%	Book 36% Colleagues 33%
Covell al 1985 ⁴	47 primary care doctors	Treatment 31% Diagnosis 25% Drug related 14%	Another doctor 29% Other health professionals 24%
Timpka et al 1989 ⁵	84 general practitioners	General medicine 48% Dermatology 11%	Colleagues 38% Textbook 37% Library 12%
Williamson et al 1989 ⁶	492 Primary care doctors 90 opinion leaders	Drug related 38% Laboratory testes 25%	NA
Woolf et al 1989 ⁷	42 Professors , 25 house staff	Treatment 77% Differential diagnosis 75% Drug related 64%	Textbook 64% Colleagues 60%
Osheroff et al 1991 ⁹	24 doctors and medical students	Specific patient 61% Treatment 25%	Patient record 42% Hospital information system 39%
Ely et al 1992 ¹⁰	34 family physicians	Treatment 73% Drug related 49% Diagnosis 27%	Colleagues 29% Physician's desk reference 27%
Gorman et al 1994 ¹¹	49 Doctors	NA	Colleagues 46% Textbook 41%
Bowden et al 1994 ¹²	442 doctors	Treatment 34% Diagnosis 28% Drug related 18%	Books and journals 85% Colleagues 75%
Guisse et al 1994 ¹³	7 health professionals	Treatment 24% Drug related 18%	Electronic online 87% Paper sources 13%

1.3 Types of Information Requirement for Doctors

Doctors are specialized in nature and their information sources are also unique as they spend most of the time in clinics and access to information is very important. For them, Medical Representatives are the most useful source of information. The different information sources for the doctors are:

- Library
- Personal Collections
- Internet
- Personal PDA's and Laptops
- Medline Databases
- Freemedicaljournals.com
- HELINET Consortia e-resources
- Print Text books and reference sources



Source: <http://hitconsultant.net/>

1.4 CONCLUSION

With this huge amount of growth in literature, it is impossible for doctors to keep abreast with all the latest and updated information in the context of patient management, thus doctors can enhance their knowledge to keep abreast by utilizing various information sources. Multiple types of information sources exist which provide information, but the most important to determine which types of the sources are formal and informal sources are required for doctors. Thus, the role of library is very significant in meeting the current information needs of seeking behaviour of the doctors.

REFERENCES

1. Kosteniuk J, Morgan D, D'Arcy C. Use and perceptions of information among family physicians; sources considered accessible, relevant and reliable. *J Med Libr Assoc.* 2013; 101(1):32-7. Doi: 10.3163/536-5050.101.1.006.
2. Karen Davies, *Journal of Health Information- and Libraries*.vol24;No2;Year2007.78-94
3. Younger P. Internet-based information. –seeking behaviour amongst doctors and nurses; a short review of the literature. *Health Info Libr J.* 2012;29(3):233-41. Doi: 10.1111/j.1471-1842.2012.00993.x.
4. Case D. *Looking for Information. A Survey of Research on Information Seeking Needs and Behaviour.* Amsterdam: Elsevier/ Academic Press; 2007. P. 423.
5. Nicola Devitt; Jeannette Murphy; *Journal of Health Information and Libraries*; Vol21;No3;Year 2004. 164-172.
6. Gorman PN. Information needs of physicians. *Journal of the American Society of Information Science.* 1995;46:729-36.
7. Davies K. the information-seeking behaviour of doctors; a review of the evidence. *Health Info Libr J.* 2007;24(2):78-94.doi: 10.1111/j.1471-1842.2007.00713.x.
8. Ely J. Patient care questions physicians can't answer. *Journal of the American Medical Informatics Associations.*2007;14(4):407-14. Doi:10.1197/jamia.M2398.
9. Gonzalez- Gonzalez. AI, Dawes M, Sanchez-Mateos J, Riesgo-Fuertes R, Escortell-Mayor E, Sanz-cuesta T, Hernandez-Fernandez T. Information needs and information-seeking behaviour of primary care physicians. *Ann Fam Med.* 2007;5(4):345-52. doi: 10.1370/afm.681.
10. Huges B. Joshi I, Lemonde H, Wareham J. Junior physician's use of web 2.0 for information seeking and medical education: A qualitative study. *Int J Med Inform.* 2009;78(10):645-55, doi: 10.1016/j.ijmedinf.2009.04.008.
11. Prendiville TW, Saunders J, Fitzsimons J, Information seeking behaviour of paediatricians accessing the web, *Archives of Disease in Childhood,* 2009;94(8):633-5.doi:10.1136/adc.2008.149278.
12. Paula Younger; *Journal of Health Information and Libraries*, Vol 27; No1; Year 2010.2-10.

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