A Survey on Information Seeking Behaviour of Nurses at a Private Hospital in Greece

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Abstract. The paper deals with the investigation of the information seeking behavior of nursing staff of a private hospital in Greece. It is assumed that the information seeking behavior has an effect on the nursing care and practices. A survey was conducted through a specially designed questionnaire distributed within 2013 to registered nurses of a major private Hospital in Athens. Nonparametric descriptive statistics have been carried out through SPSS version 20. The information needs of nurses are related to their work role and include information for nursing interventions and hospital infections control. The online scientific content is considered as the main source of information, while lack of time is considered as the main obstacle when seeking information. Regarding the effects of information, nurses believe that information quality and availability influences nursing care as well as nursing practices. Development of appropriate information services and information literacy skills for nurses is required.

Keywords. Information behavior, information needs, information sources, information barriers, survey

Introduction

Nurses share many characteristics with other medical professional as far as their information seeking behaviour concerns. Indeed, their information needs are associated with their intensive work role and nursing practices, patient care, continuous education, professional development, and administration. Earlier research shows that the main motives that drive nurses to seek information include patient care, nursing practices and administration procedures [1]. Nurses mostly use colleagues (e.g. doctors) as sources of information as well as general search engines (e.g. Google) at the internet and less scholar databases such as CINAHL or MEDLINE [2]. This is mainly attributed to lack of information literacy skills, specifically in terms of when and how these sources should be used [3] so that they can apply evidence-based practice to the clinic [4].

Over the last decades, however, the importance of implementing scientific evidence in nursing practices and documenting nursing practices for delivering the best possible care to patients it becomes evident [5]. Indeed, an evidence-based nursing practice comprises clinical research evidence from various available scholar resources and requires a new set of information skills for nurses. These information literacy skills

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encompass the ability to seek and evaluate information effectively across a range of health online information sources [6] in order to find ways to improve patient care. This work studies the information seeking behaviour of nurses of a private hospital in Greece, i.e. their information motives/needs, the information resources, and the information obstacles. It also explores the effect of the information seeking behaviour of nurses on quality/safety of patient care.

1. Methods and theoretical construct

The data of this study were collected by means of a questionnaire survey which was distributed to 100 nurses which are more than half of all registered nurses employed in a major 252 bed private hospital in Athens, Greece. From the 100 registered nurses, the 57 completed and returned the questionnaire, i.e. a response rate of 57.0%. The survey took place between June and July 2013 and was first approved by the scientific committee of the hospital. Furthermore, the questionnaire was first pilot tested by a group of hospital and academic experts. The questionnaire was based on the theory developed by Wilson [7] which focuses on information needs and the context, i.e. the situation in which information needs arise and the barriers which may influence information seeking behaviour. The questionnaire has therefore included questions about needs/motives for seeking information [8], information resources employed and the obstacles they encountered in this process [9]. It also sought to examine the impact of health information on nurses’ everyday work practices related to the quality/safety of patient care (although this is a new questionnaire section, is based on the work by [6]).

A 5-point Likert scale was used to rate information needs/motives employment (13-items), the information resources utilization (19-items), the importance of the obstacles involved in seeking information (8-items) and the impacts of information on nursing practices and quality of care (8-items). The values assigned to the five item Likert scale were ranging from 1 which was indicating the lowest score to 5 which was assigned to the highest score. The 48-item questionnaire scales used had good internal consistency reliability with overall Cronbach alpha of 0.92 which is exceeding by far the minimum standard suggested for basic research [10]. The reliability of each subscale was as follows; “information needs/motives” = 0.878; “information resources utilization” = 0.881; “importance of the barriers involved in seeking information” = 0.875; “impacts of information on nursing practices and quality of care” = 0.875.

The analysis consisted of descriptive statistics in order to summarize the data on reported nurses’ information behaviours and the differences in reported behaviours by the nurses and their characteristics (gender, nursing specialty, age groups, and experience) through Mann-Whitney U test or Kruskal-Wallis one-way analysis of variance by ranks. Nonparametric tests are often employed for analyzing survey data of this nature, especially when the sample size of the groups and subgroups is small [9]. Statistical data analysis was performed using the SPSS for Windows (version 20) statistical software (SPSS Inc., Chicago, IL).

2. Results

Most of nurses included in the survey were women (75.4%) mainly up to the age of 40 with work experience up to 5 years (56.1%), followed by those 10 years experience
The information needs most frequently utilized by the nurses are relating to patient care, i.e., “patient care skills” (mean=4.9), “hospital infection control” (mean=4.07), “patient evaluation” (mean=4.02) and “emergency patient care” (mean=3.91). On the other hand, information about drugs and treatments are utilized less frequently. Statistical significance differences have been identified between men and women difference through U-test for information needs about therapeutic interventions (p=0.001); while different age groups resulted in significant differences through Kruskal-Wallis test in information about experimental treatment (p=0.020) and finally U-test identified significant differences between the nursing specialty groups for information seeking about research (p=0.016).

The information resources which are most frequently utilized by the nurses include internet search engines (mean=3.84), other nurses (mean=3.79), scholar web pages (mean=3.77) and hospital seminars (mean=3.73) are considered to be the most popular information resources; while the hospital library (mean=1.59), the hospital education department (2.88) and the various associations of nurses are utilized less for seeking information. There were significant differences in relation to gender, education level, experience, and position in the hospital. The nurse’s position groups resulted in significant differences in using as information resource the printed healthcare journals (p = 0.028), the professional experience groups resulted in differences in using Hellenic Nurses Union (p = 0.041) as an information resource and significant differences between the nursing specialty groups have been identified for printed healthcare journals (p = 0.043) and hospital education department (p = 0.033). The perceived importance of the barriers nurses encounter when seeking information include lack of time (mean=3.53), unfamiliarity with computers, lack of skills for searching information. Significant differences have been identified for “lack of computer skills” (p=0.008) among the nurses’ age and position groups; while the nurse’s specialty resulted in significant differences for “lack of information search skills” (p=0.0022).

3. Discussion

Our study showed that nurses mainly seek information relating to patient care and they highly utilize Internet. The friendly nature of general search engines, e.g., Google, combined with their capability to mediate to large amounts of free information, offers a unique opportunity for nurses to reach guidelines, and other important documents regardless of time and place [11]. Furthermore, the digital information space at the internet allows nurses to seek clinical guidelines more effectively than in printed matter [12]. Nurses however still use their colleagues (doctors, nurses and other medical professionals) as information resources. It seems that the increased workload and often the emergency of patient care, requires nurses to be vigilant and therefore it is often rather difficult to employ Internet for seeking information at work [13]. In this study, nurses reported the lack of time as a barrier when seeking information. The nurses of our study seem to be familiar with computers and they have internet skills. The study also includes the effects of information availability on various aspects of nursing practices and profession. The nurses took part in our study perceive that information affects quality and the safety of patient care, pain management and care of chronic diseases, the relationships with doctors and the other healthcare professionals. We couldn’t find other studies in the literature that directly investigated the effects of the information availability to nurses.
4. Limitations - Further research

This research is one of the first which has been conducted with nurses in private hospitals in Greece. Although sampling included almost half of the nurses in this particular private hospital, the study sample is quite small and therefore the survey results can only be generalized with caution. Future research may incorporate surveys in both the private and in public sector as well as research based on specific work-role scenarios (e.g. acute or chronic care etc.) for a closer examination of nurses’ behaviors towards satisfying specific information needs in their everyday practices.

5. Conclusions

Nurses need to continually improve their skills and knowledge through a dynamic interaction with healthcare information space. Using efficiently and effectively the advanced information sources and the internet in order to satisfy their needs becomes a crucial skill. Their adaptation to change and their ability to utilize specific information services are important skills that nurses need to develop so as to advance their professional role and deliver high-quality care to patients. As such, it is necessary to understand their information behaviors in order to develop specialized information services as well as information literacy programs specially designed for nurses. This is a rather interesting research pathway.

References