New Review of Information Networking, 17:108–119, 2012

ISSN: 1361-4576 print/1740-7869 online
DOI: 10.1080/13614576.2012.724300

Routledge
Taylor & Francis Group

Examining Patterns of Information Behavior Among Healthcare Professionals: A Case Study on Health Psychologists

P. A. KOSTAGIOLAS
Department of Archive and Library Science, Ionian University, Corfu, Greece

F. SAMIOTI
Hellenic Open University, Faculty of Social Sciences, Patras, Greece

G. ALEXIAS
Panteion University of Social and Political Sciences, Athens, Greece

N. KORFIATIS
Department of Computer Science, Institute for Informatics and Mathematics, Goethe University Frankfurt, Frankfurt am Main, Germany

D. NIAKAS
Hellenic Open University, Faculty of Social Sciences, Patras, Greece

Psychologists are an understudied population in terms of information needs and information seeking behavior. This article provides theoretical analysis accompanied with some empirical evidence drawn from a nationwide survey of psychologists working in the Greek National Healthcare System (GNHS). The empirical study was conducted during the spring of 2011, through a specially designed questionnaire distributed to all psychologists within GNHS. Psychologists seek information for patient consultation purposes and for knowledge updating; they prefer using their personal library, internet search engines, and their colleagues as information sources, while the main obstacles they face include the lack of hospital libraries. This research identified the need to more strongly

We would like to express our gratitude to all who participated in this research including those who cooperated in the final formulation of the questionnaire.

Address correspondence to Dr. P. A. Kostagiolas, Ionian University, Department of Archive and Library Science, Ioannou Theotokis 72, Corfu 49100, Greece. E-mail: pkostagiolas@ionio.gr

link hospital library services to health psychologists on the grounds of their information needs and behaviors.

KEYWORDS information needs, information behavior, health psychologists, Greece, survey

INTRODUCTION

Information and knowledge are considered to be essential factors for communication and decision-making in healthcare and there is no doubt that ready access to medical information has become a vital asset for healthcare professionals. The growth of innovative information and communication technologies (ICTs), the expansion of the internet and Web 2.0 technologies and services then offer new roles for medical librarians. The work of healthcare professionals and their direct contact with patients has turned access to updated medical knowledge into an urgent necessity in order to cope with the advancements of healthcare profession, as well as the demand for information interchange with their colleagues and patients.

Within this context of significant changes, hospital professionals, just like society members, need to utilize the international scholarly communication environment and new information seeking practices. This procedure is not effortless and requires an adaptation period so that healthcare professionals can achieve a comprehensive acceptance of novel information seeking practices. Psychologists need to constantly upgrade their knowledge and integrate it into everyday practice so as to improve decisions and promote healthcare quality within interdisciplinary medical teams. The particular nature of their work, which relates to the evaluation of the patient's psychological condition, requires constant updating on continuous changing research data. Mental illness, as opposed to physical illness, largely depends upon subjectivity and personal singularity and, thus, the work of psychologists relies upon the production and dissemination of new knowledge. Determining the information needs and behavior of psychologists is a rather challenging issue linked to specific professional and social roles, settings and operations within the healthcare environment.

An overview of the education, associations and profession of medical psychologists in Greece is provided by Marci (2001). Due to the rapidly evolving nature of the field over the last three decades, a number of professional issues have emerged both internationally and in Greece. At the moment, there are four university departments of psychology in Greece where health psychology has been formalized for both the Greek National Healthcare System (GNHS) and the private sector. In GNHS, in particular, public and university hospitals as well as mental healthcare centers around Greece are rather understaffed in terms of health psychologists.

Approximately two hundred physiologists work for the GNHS and are represented by the Hellenic Association of Hospital Psychologists. Most psychologists in Greece, however, are employed in private institutions or are self-employed and represented by the Association of Greek Psychologists (AGP).

As a matter of fact, psychologists in Greece as well as internationally have received little attention as far as their information needs and behavior are concerned. Among others Wilson (1997), Dorsch (2000), and Martzoukou (2005) reviewed information behavior models and demonstrated different dimensions. The following dimensions are common to all information behavioral models:

1. Information needs, that is, the motives that lead to information research including treatment, constant alertness for the patient's condition, and ongoing education and research;
2. information sources, which may include colleagues, journals, scientific books, databases, and so forth;
3. the frequency of use of information sources; and
4. obstacles to information access, such as lack of time, lack of access or skills, and so forth.

We claim that in order for a healthcare information service to be effective, it needs to be more or less legitimized by empirical evidence on the information seeking behavior of healthcare professionals. It is the case that the development of information-based everyday practices within healthcare organizations relies upon specifying requirements for the provision of healthcare information services based on the specific information behavior of various hospital professional groups.

In this context, the literature (e.g., McKnight and Peet 2008; Younger 2010) through a wide range of both quantitative and qualitative methods is gradually covering a wide spectrum of research on the information needs and behaviors of physicians (Boissin et al. 2005; Davies, 2007), pharmacists (Kostagiolas et al. 2010), dentists (Landry 2006), and other medical staff (Cogdill 2003; Dee 2005). The information behavior of hospital psychologists, however, has not yet been investigated separately, although the health psychology profession has been evolved significantly over the last decades. Health psychology attempts to record bio-psychological factors and mechanisms that shape a patient's behavior.

Psychological evaluation and behavioral understanding focus on the patient as a subject with particular experiences, which are then analyzed on the basis of their specific perceptive and emotional abilities (Cohen et al. 2003). Furthermore, psychologists implement programs of psychological intervention (in the frame of psychotherapy or patient consultation), undertake epidemiological and clinical research, and contribute to the overall patient health. However, the most important aspect of their work is that they

evaluate the psychological condition of patients admitted to the hospital through psychological tests and clinical interviews. It is clear that the psychologist's role within the hospital environment has clinical, diagnostic, and therapeutic aspects, exceeding the mere provision of patient consultation and support. Their involvements in treatment and in dealing with hard cases create an immediate need for up-to-date psychological knowledge and information. Within this framework and due to their particular role based on personalized interventions, hospital psychologists need to have access to information services to obtain patient records (Feeney and Moran 2007), to research scientific data, to manage and diffuse scientific knowledge, and to improve the general quality of their services through effective clinical interventions.

This article studies the information needs and behavior of health psychologists focusing however in the GNHS. For that purpose, an extensive Pan-Hellenic empirical study was conducted including all public hospitals and university hospitals, as well as other healthcare units that employ psychologists and belong to the Greek National Healthcare System. The survey results are presented below followed by a discussion. Although no other specific empirical study for psychologists was found in the literature, the results should be generalized with caution due to the particularities of the Greek environment (e.g., language barriers to the international literature, a lack of properly organized hospital libraries). The discussion uses the results on the information behavior of health psychologists in order to provide evidence for hospital libraries on how to supply new service delivery models or to reassess older ones thereby allowing them to deliver targeted information services in a much more efficient manner to health psychologists.

EMPIRICAL EVIDENCE ON THE INFORMATION BEHAVIOR OF PSYCHOLOGISTS IN PUBLIC HOSPITALS IN GREECE

Methods and Material

The empirical study was based on the questionnaires also employed by Feeney and Moran (2007), Powel and Clarke (2006), and Kostagiolas et al. (2010). Prior to its distribution, a preliminary questionnaire was formally piloted with a group of highly qualified experts from both the academic and professional fields of information science, healthcare management and psychology. This qualitative information was employed as the basis for finalizing the questionnaire prior to its use it within the wider population of psychologists. The questionnaire was comprised of four sections with close ended questions and one section with an open ended question:

- The first section (Section A) includes demographic data (the respondent's workplace, gender, age, experience, and education level);
- The second section (Section B) investigates the respondents' information needs;

- The third one (Section C) records the significance of an organized medical record (Part I), the frequency at which respondents tend to use specific information sources (Part II), and the level of satisfaction from specific information sources (Part III); and
- The fourth section (Section D) studies the obstacles encountered by psychologists when seeking information.

The answers were provided through a 1–5 Likert scale for all closed questions for each different section of the questionnaire. The scale ran in the same direction for all questions, with value 1 indicating strong disagreement or insignificance and value 5 indicating strong agreement or significance. The open type question allowed the respondents to make their own suggestions for the improvement of information services for GNHS psychologists in Greece.

The sampling covered the entire population of hospital psychologists in all public hospitals in Greece and took place between April and May 2011. The president of the Hellenic Association of Hospital Psychologists approved the research aims as well as the final questionnaire. The president also provided us with information regarding the psychologists in the Greek NHS units (public hospitals, university hospitals, and mental healthcare centers). Psychologists' within GNHS were contacted by telephone or in person prior to the survey. Thereafter, the questionnaire was distributed by email to a total number of 190 full-time psychologists currently serving in GNHS and a reminder was sent to each one of them one week prior to the finalization of the survey. Ninety-four of those contacted completed and returned the questionnaire (i.e., a response rate of 49%). Basic descriptive data were collected and analyzed (mean values and standard deviation, as well as Cronbach's α (alpha) coefficients of reliability for the internal consistency of the questionnaire.

Results

Based on the results of the first section of the questionnaire, the profile of the respondents can be described as follows: almost half of the responding psychologists (42.6%) work in a public hospital, 31.9% work in Mental Health Centers, 20.2% work in University Hospitals, and 5.3% in other healthcare institutions. Moreover, most of the respondents are women, 80.9%, while only 19.1% are men. The regional distribution of the completed questionnaires is representative covering healthcare units from all around Greece (i.e., 58 psychologists from GNHS units in Attica, 11 psychologists from Thessalonica, and 25 psychologists from the rest of the country). Most respondents are younger than 40 years old, 46.8%, with 38.3% being 40–50 years old, and 14.9% being 50–60 years old. As regards experience, 54.3% of the respondents have been working for over 10 years, with 29.8% working 0–5 years, and 16% working 6–10 years. Finally, about half of the

psychologists (48.9%) included in this study hold a Master's Degree relating to their work and 9.6% hold a Ph.D. on the subject.

The results of the second section of the questionnaire (Table 1, Section B), demonstrate the frequency of specific needs that make public hospital psychologists seek information. According to the results, the respondents are more likely to be motivated to seek information for psychotherapeutic interventions (mean value = 3.99), knowledge updating (mean value = 3.98), and therapeutic interventions (mean value = 3.97); while other information needs follow further down the list, with epidemiology (mean value = 3.17) and patient informational material (mean value = 3.15) presenting the lower mean values. In Section C-Part I (Table 1), in relation to medical records, therapeutic intervention ranks first (mean value = 4.48), while accessing details of former diagnosis ranks last (mean value = 4.24). We should, however, note that all the different elements of this particular set of questions are considered to be rather important (mean values around 4.0) for hospital psychologists. Section C-Part II of Table 1 demonstrates that hospital psychologists mainly use their personal library (mean value = 4.12) followed by search engines (mean value = 3.99), advice from colleagues (mean value = 3.94), and search on scientific databases (mean value = 3.90). The hospital library (mean value = 2.50) and medical guidelines/scientific protocols (mean value = 2.51) rank last among their preferences. This can be explained due to the fact that hospital libraries are available only in a small number of hospitals; while in the majority of hospitals in Greece the libraries are inactive or significantly underdeveloped. The respondents' satisfaction (Table 1, Section C - Part III) as regards the use of information sources seems to be high for communication with colleagues (mean value = 3.89) and scientific databases (mean value = 3.82) and rather low for hospital/medical libraries (mean value = 2.55).

The next section of the questionnaire (Table 1, Section D) aimed to identify the obstacles to accessing scientific information. Most respondents identify cost as their main obstacle (mean value = 3.55) followed closely by the lack of suitable information services (mean value = 3.50). There are less significant obstacles identified in the "not important" category such as insufficient knowledge of how to use PCs (mean value = 1.84) and distrust of electronic information (mean value = 1.87). The last part of the questionnaire included an open ended question which attempted to collect respondent suggestions regarding current information seeking resources and practices. The open ended question was answered by 24 out of 97 respondents (i.e. 25.5% of the respondents), and the most common suggestions (41.78%) included the development of specific electronic databases, improvements to hospital libraries, and the organizing of seminars for improving information seeking skills.

TABLE 1 Empirical Results for the Information Needs and Behavior of the Psychologist Employed in the Greek National Healthcare System

Questionnaire Section B. Information Needs (Frequency)	Mean	Std. Deviation
Psychotherapeutic interventions	3.99	1.169
Knowledge updating	3.98	1.016
Therapeutic intervention	3.97	1.121
Research	3.89	1.102
Teaching-educational work/activities	3.79	1.172
Psychological evaluation information	3.73	1.228
Making a diagnosis	3.63	1.278
Emergency care management	3.56	1.372
Identifying psychological risk factors	3.30	1.343
Epidemiology	3.17	1.233
Patient information material	3.15	1.286
Questionnaire Section C – Part I: The Significance of the Medical Record for psychologists	**Mean**	**Std. Deviation**
Therapeutic intervention	4.48	0.826
Psychological record	4.47	0.786
Risk factors	4.46	0.912
Medical history	4.28	0.999
Diagnostic estimation	4.26	1.026
Previous diagnoses	4.24	0.980
Questionnaire Section C – Part II: The Frequency of Information Sources employment	**Mean**	**Std. Deviation**
Personal library	4.12	1.035
Search engines	3.99	1.112
Communication with colleagues	3.94	1.014
Scientific databases	3.90	1.304
Psychological portals / webpages	3.35	1.189
Psychology Journals and conference proceedings (DIGITAL FORM)	3.12	1.302
Psychology Journals and conference proceedings (PRINTED FORM)	3.04	1.335
Scientific protocols	2.51	1.374
Hospital / Other medical library	2.50	1.242
Questionnaire Section C – Part III: Satisfaction Level from Information Sources Employment	**Mean**	**Std. Deviation**
Communication with colleagues	3.89	1.062
Scientific databases	3.82	1.253
Search engines	3.74	1.067
Personal library	3.47	1.104
Psychological portals / web pages	3.46	1.188
Psychology Journals and conference proceedings (PRINTED FORM)	3.46	1.309
Psychology Journals and conference proceedings (DIGITAL FORM)	3.39	1.229
Scientific protocols	3.09	1.543
Hospital / Other medical library	2.55	1.404

(*Continued*)

TABLE 1 (*Continued*)

Questionnaire Section D: The Significance of Obstacles for Information Seeking	Mean	Std. Deviation
Cost	3.55	1.341
Lack of organized information services	3.50	1.366
Lack of time	3.02	1.209
Large amount of unorganized / unauthorized electronic information	2.69	1.270
Lack of skills for specialized information seeking	2.11	1.315
Language barriers	2.24	1.325
Irrelevant digital information in the internet	1.87	1.148
Inadequate familiarity with PCs	1.84	1.212

Construct validity was assessed in order to ensure that the constructs represented in each part of the questionnaire hold a certain type of validity. Cronbach's coefficients have been computed for each of the distinct groups of variables for each questionnaire section and subsection. The alpha coefficient for section A, was found to be very good with a value of 0.854; while the value of alpha was 0.757 for Section B; 0.848 for Section C-Part I; 0.771 for Section C –Part II; 0.803 for Section C - Part III; and 0.774 for Section D. All construct reliability coefficients are adequate and indicate good and very good internal consistency of the questionnaire and the questionnaire sections.

DISCUSSION

The findings clearly show that there is an unmet need for access to scientific information for the participants in our sample. Health psychologists consider knowledge updating very important and this activity in turn leads to scientific information seeking. This may be explained by the rapid advances in health psychology in a wide range of settings including primary and secondary healthcare, as well as the provision of specialized healthcare interventions such as pain and headache management, rehabilitation, women's health, oncology, and various other patient therapeutic interventions. According to the results of this research, knowledge updating is a primary requirement for health and social care professionals. This bears out similar findings in the research of Jackson et al. (2007).

The employment of psychologists within the healthcare system is expanding and they now work closely and in collaboration with physicians and other specialists in developing and implementing treatment and by helping the psychosocial adjustment of patients with considerable health problems to reduce stress and pain, with recovery and with rehabilitation. This in turn implies additional demands for information and knowledge so that psychologists may work with the patient and families, interviewing,

conducting assessment, and so forth. The empirical results presented suggest that therapeutic intervention is one of the most important reasons for scientific information seeking, a finding also demonstrated by Boissin et al. (2005), Gonzalez-Gonzalez et al. (2007), and Daly's (2007) research on physicians and psychiatrists. Furthermore, we demonstrate that the patient's medical record is considered to be important in all its aspects, i.e. past diagnoses, medical records, psychological records and interpretation, risk factors such as possible self-destructive, or aggressive behaviors. There is a very small differentiation in the evaluation of these factors, with "therapeutic intervention" ranking first. The factors that follow include psychological records, risk factors, medical records, diagnostic estimations, and, finally, psychology diagnoses. Similarly, in the research conducted by Feeney and Moran (2007), the medical record is considered to be very important in order to obtain information in emergency situations, along with risk factors, while past psychiatric diagnoses rank last. In this research too there is a small differentiation in the ranking of the different factors.

The lack of hospital and other medical libraries within the Greek National Healthcare system is unfortunately widespread, whereas, due to the current economic crisis, existing libraries face additional organizational pressure due to a shortage of resources and staff, and so forth. This explains why our survey results overall suggested that psychologists employed in the GNHS do not consider hospital libraries as being helpful. However, it should be mentioned that those respondents working for hospitals with libraries expressed a high appreciation of the library services provided. For that reason, psychologists in university hospitals tend to make more use of the hospital/medical library and medical printed material as compared with psychologists in public hospitals, while psychologists in mental health centers ranked last. Doney et al. (2005) also recorded low percentages in the use of library services combined with an extended use of the internet for scientific information seeking. On the other hand, in research conducted (Kananen et al. 2006) on the informational needs of healthcare professionals in Finland, including hospital psychologists, the library's print collection ranks first, followed by databases and journals in digital form. It seems that the more hospital libraries and information services are developed the more their services and contributions are appreciated.

The use of the internet seems to be more satisfactory for psychologists in Greece, as compared with printed material, due to direct and fast access. Furthermore, digital resources and the internet are employed for scientific information seeking according to the respondents of this research which also, agrees with other research findings (Bryant 2004; Sahapong et al. 2009). The results also agree with the findings of Korjonen-Close (2005), who during her study on clinical researchers found that 87% of the respondents participating in her survey utilize search engines and that the vast majority of them show no significant interest in the use of traditional information sources, such as

libraries. The same research also found that clinical researchers tend to make extensive use of information obtained by their colleagues, which is in accord with similar studies (Andrews et al. 2005; Coumou and Meijman 2006; Jones et al. 2007). Greek hospital psychologists seem to be generally familiar with the use of the Internet, while their main obstacles in scientific information seeking seem to be access cost and a lack of searching skills. Finally, the psychologists within GNHS stress the need for the development of hospital libraries as well as for more seminars to improve their information seeking skills on issues of psychological evaluation, psychotherapeutic interventions and other intervention methods.

CONCLUSIONS

During the past decade, the interest of psychologists within the healthcare sector has turned towards the psychobiological aspects of health and healthcare services. Psychologists in hospitals and other healthcare institutions assess the patients' psychological condition and make their psychological evaluations through tests and clinical interviews. Thus, psychologists need to have access to an extensive amount of information concerning their patients, while at the same time they need to obtain direct information on important issues, such as changes in clinical guidelines and epidemiological research studies. The effective supply of quality mental healthcare services largely depends upon obtaining the right information. We actually ascertain that information on healthcare and mental healthcare issues should be accessible to everyone interested, have a practical easy-to-use form, and use the power of rather novel collaborative Web 2.0 services.

This study confirms a basic assumption that psychologists, like any other knowledge workers, require scientific information in order to improve psychotherapeutic interventions and other intervention/consultation methods in their everyday clinical practice. Moreover, psychologists have specific information needs, employ particular sources and appear to be quite satisfied by them. More specifically, they tend to make an extended use of their personal library, internet search engines and communication with colleagues. Given this fact, there may be value in developing at a national level, psychology-specific library services together with a social networking service for the diffusion and exchange of clinical information and experiences. Such a service might be able to improve the immediate availability of scientific information in psychological healthcare services, while preserving the patient's anonymity and respecting their personal information. Finally, the cooperation of psychologists with psychiatrists, physicians, work psychologists, nurses, and other healthcare professionals promotes interdisciplinary working and contributes to the provision of high quality psychology services. In general, the development of healthcare libraries is of paramount

importance for all healthcare and mental health professionals and, in this case for psychologists, to improve mental health services in the Greek system and, to an extent, in other healthcare systems.

REFERENCES

Andrews, J. E., K. A. Pearce, C. Ireson, and M. M. Love. "Information- Seeking Behaviors of Practitioners in a Primary Care Practice-Based Research Network (PBRN)." *Journal of Medical Library Association* 93.2 (2005): 206–212. Print.

Boissin, F., U. Dosci, and C. Bernard. "Information-Seeking Behavior and Use of the Internet by French General Practitioners: A Qualitative Study." *Health Information and Libraries Journal* 22.3 (2005): 173–181. Print.

Bryant, S. "The Information Needs and Information Seeking Behavior of Family Doctors: A Selective Literature Review." *Health Information and Libraries Journal* 17.2 (2004): 83–90. Print.

Cogdill, K. "Information Needs and Information Seeking in Primary Care: A Study of Nurse Practitioners." *Journal of The Medical Library Association* 91.2 (2003): 203–215. Print.

Cohen, L., D. McChargue, and F. Collins. *The Health Psychology Handbook: Practical Issues for the Behavioral Medicine Specialist*. London: Sage Publications, 2003. Print.

Coumou, H. C. H., and F. G. Meijman. "How Do Primary Care Physicians Seek Answers to Clinical Questions? A Literature Review." *Journal of The Medical Library Association* 94.1 (2006): 55–60. Print.

Daly, R. "Access to Health Technology Sets Psychiatrists Apart." *Psychiatric News* 42.20 (2007): 11. Print.

Davies, K. "The Information-Seeking Behavior of Doctors: A Review of the Evidence." *Health Information and Libraries Journal* 24.2 (2007): 7–94. Print.

Dee, E. E. "Information-Seeking Behavior of Nursing Students and Clinical Nurses: Implications for Health Sciences Librarians." *Journal of The Medical Library Association* 93.2 (2005): 213–222. Print.

Doney, L., H. Barlow, and J. West. "Use of Libraries and Electronic Information Resources by Primary Care Staff: Outcomes from a Survey." *Health Information and Libraries Journal* 22.3 (2005): 182–188. Print.

Dorsch, L. J. "Information Needs of Rural Health Professionals: A Review of the Literature." *Bulleting of The Medical Library Association* 88.4 (2000): 346–354. Print.

Feeney, L., and P. Moran. "Information Sharing and Risk: A Survey of Psychiatrists." *Irish Journal of Psychological Medicine* 24.3 (2007): 94–98. Print.

Gonzalez-Gonzalez, A., M. Dawes, J. Sanchez-Mateos, R. Riesgo-Fuertes, E. Escortell-Mayor, T. Sanz-Cuesta, and T. Hernandez-Fernandez. "Information Needs and Information-Seeking Behavior of Primary Care Physicians." *Annals of Family Medicine* 5.4 (2007): 345–352. Print.

Jackson, R., W. Baird, L. Davis-Reynolds, C. Smith, S. Blackburn, and J. Allsebrook. "The Information Requirements and Information-Seeking Behaviors of Health and Social Care Professionals Providing Care to Children with Health Care

Needs: A Pilot Study." *Health Information and Libraries Journal* 24.2 (2007): 95–102. Print.

Jones, T. H., S. Hanney, and M. J. Buxton. "The Information Sources and Journals Consulted or Read by UK Pediatricians to Inform Their Clinical Practice and Those Which They Consider Important: A Questionnaire." *BMC Pediatrics* 7 (2007): 1. Print.

Kananen, J., T. Ovaska, and J. Saarti. "Collection Policy Management for the Kuopio University and Kuopio University Hospital, Finland: Detecting the Needs of Users and Developing High-Quality Collections." *Health Information and Libraries Journal* 23.3 (2006): 179–188. Print.

Korjonen-Close, H. "The Information Needs and Behavior of Clinical Researchers: A User-Need Analysis." *Health Information and Libraries Journal* 22.2 (2005): 96–106. Print.

Kostagiolas, P. A., K. Bairaktaris, and D. Niakas. "An Information Behavior Investigation of the Community Pharmacists in Greece for Developing Library and Information Services." *Health Information and Libraries Journal* 27.1 (2010): 46–56. Print.

Landry, C. F. "Work Roles, Tasks, and the Information Behavior of Dentists." *Journal of the American Society for Information Science and Technology* 57 (2006): 1896–1908. Print.

Marci, I. "Medical Psychology in Greece." *Journal of Clinical Psychology in Medical Settings* 8.1 (2001): 27–30. Print.

Martzoukou, M. "A Review of Web Information Seeking Research: Considerations of Method and Foci of Interest." *Information Research* 10.2 (2005): paper 215. Web. 24 Aug. 2012. <http://InformationR.net/ir/10-2/paper215.html>.

McKnight, M., and M. Peet. "Health Care Providers' Information Seeking." *Medical Reference Services Quarterly* 19.2 (2008): 27–50. Print.

Powel, J., and A. Clarke. "The Internet Information-Seeking in Mental Health. Population Survey." *British Journal of Psychiatry* 189 (2006): 273–277. Print.

Sahapong, S., L. Manmart, and D. Ayuvat. "Information Use Behavior of Clinicians in Evidence-Based Medicine Process in Thailand." *Journal of Medical Association of Thailand* 92.3 (2009): 435–441. Print.

Wilson, T. D. "Information Behavior: An Interdisciplinary Perspective." *Information Processing & Management* 33.4 (1997): 551–572. Print.

Younger, P. "Internet-Based Information-Seeking Behavior Amongst Doctors and Nurses: A Short Review of the Literature." *Health information and Libraries Journal* 27.1 (2010): 2–10. Print.