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Dastani, Meisam; Mokhtarzadeh, Milad; Nasirzadeh, Amir Reza; and Delshad, Ali, "Health information seeking behavior among students of Gonabad University of Medical Sciences" (2019). *Library Philosophy and Practice (e-journal)*. 2545.

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Health information seeking behavior among students of Gonabad University of Medical Sciences

Meisam Dastani¹, Milad Mokhtarzadeh², Amir Reza Nasirzadeh³, Ali Delshad⁴

Abstract

Introduction: Nowadays, the need for health information has grown all over the world, and this information often changes behavior and health decisions. This research was conducted with the aim of investigating the seeking behavior and health information channels in students of Gonabad University of Medical Sciences.

Methods: In this Analytic-descriptive study, 115 individuals from health department, 110 individuals from nursing department, 93 individuals from medical department and 112 individuals from paramedical department were randomly selected and analyzed. The data collection tool was a questionnaire whose validity and reliability were obtained in previous studies. Collected data analyzed using SPSS 20.

Results: The findings show that more students are seeking information about the type of sickness with a mean of 3.29 and their treatment with an average of 3.20, and internet resources and doctors are the most commonly used among students. There is a significant difference between the use of different sources of health information seeking among students ($P < 0.05$). There was also no significant difference between the use of different sources of health information seeking among students at different faculties ($P > 0.05$).

Conclusion: The results of this study provide a clear picture of the health information seeking behavior in students of Gonabad University of Medical Sciences. According to the goals of seeking for health information and resources, It can be said that the results of seeking for students can affect their decision making and choice in treating sickness and promoting their health. Therefore, improving the health literacy of students can have a positive effect on their health promotion.

Key words: Health Information search, Information Seeking Behavior, Health Literacy Students, Gonabad University of Medical Sciences

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Introduction

The need for information has always existed from the beginning of human life to the present. Information is the main part of people's lives in information societies. Finding information is a human work that is essential for survival and affects decision-making. The community and people without the necessary information will not be able to advance towards their goals and even their daily lives. One of the information needs of people in everyday life is the need for health information. Health information includes a wide range of information, including information about sicknesses, how to prevent them and their initial treatment, which is one of the main concerns for many people(1). Having information is the first step to achieve health, health information is a continuous relationship between health education and health promotion. so access to health information helps train health care and choose healthy lifestyles. Supporting society's access to health information causes a change in the philosophy of health care that leads to the national development of health (2). Health customers are faced with several challenges when seeking health information, with numerous challenges such as the complexity of the health system, the increased incidence and incidence of chronic sicknesses, the need for participation in care and the increase in information available. Individuals should be able to accept new roles in information seeking, protection for rights and privacy issues, understanding responsibilities, assessing and monitoring health, making decisions about insurance and choosing their care. Health literacy is the amount of individual capacity for the acquisition, interpretation and understanding of basic information and health services that is appropriate for decision making. Finding health information is a method that many people use as a means of coping and reducing stress. Increasing the incidence of certain diseases, inadequate knowledge and limited time that health care professionals spend on the patient, are among the factors that stimulate patients to seeking health information apart from the health care system(3). Currently, the seek for health information is considered as a widespread means by individuals through information on health, sicknesses, health promotion, and the risks of health (1). The set of activities one person performs to meet his or her own information needs is called information seeking behavior. Information seeking behavior includes the purpose of information search, the search method, the search problems, and the factors that influence it (4), and the essential pillar in information seeking behavior is the information need; that is, a question within the mind that manifests himself in order to find an answer. And the individual, in the process of finding the answer to this inner need, manifests itself in a behavior that is known to be

information seeking (5). The importance of information refers to the amount of information that is valuable to the individual and what the individual's beliefs about the results of the information search are. These four factors (population, experience, significance, and beliefs) are used as a principled requirement for following health-related questions and motivating individuals to demonstrate information needs (6). In addition, it should be stated that with the advent and development of modern information and communication technologies as well as the complexity of the nature of information in the present era, the understanding of the need for information and health information seeking behavior is needed in order to find the right strategies for finding and managing Appropriate health information was obtained by the people (7, 8). Health information is any relevant health and health related information (9). Today, Medical information is increasingly available and individuals play a major role in managing their personal health (10), as well as information requirements and content related to health in the last decade around the world, and this information often changes behavior and decisions related to health (11, 12). Studies show that people living with certain diseases and even caregivers and followers use non - medical sources to seeking for health information (13).

Studies also show that today individuals and searchers use the Internet and the web to seeking their health information (1, 3, 14, 15). This increase can be largely due to (1) the high frequency of online information resources (16), decision making (17), and web health programs (18), (2) the increasing prevalence of illnesses in society (19), and (3) the learning and availability of technology Information in the daily life of humans (15, 20). In this regard, Riahi 2016 concludes in his study that consultation with family, friends and relatives is one of the most important channels for obtaining health information for immigrants in Iran (21). Also, people who use the Internet to seeking for health information prefer to seeking their health information through search engines such as Google or Yahoo for their ease of use and access to up-to-date information (3, 22). Studies also emphasize the important role of print sources in raising awareness of the health promotion of individuals and searchers (23). Baker 2011 study showed rural women in Malaysia mainly use mass media such as newspapers, magazines, TV and radio for their health information (24). In another study, Zare Gavgani et al. 2013 showed that users of public libraries in Qazvin showed the most resources to search for health information "TV" and "consult with others" (22). LaJoie et al., 2009, on student information seeking behavior showed that students often get their information from friends, then the media and especially the internet (25). Dart 2008 has shown in its research that health-related information sources used by different social and economic strata are different, and those with a lower societal and

social status of most TVs and educated people have more use the Internet as a source of information on the health and prevention (26). Given that in the present age, young people are increasingly exposed to a wealth of channels and digital devices such as television and mobile technologies, determining how they develop their information search skills and how their cognitive tendencies are sought it is important to influence their information (27). Health literacy is a concept that affects its health and its fields and affects one's ability to act on health information and better control of individual, family and community health, thus, not only an individual, but also a determinant is a key public health concern (28). The WHO considers health literacy as the main determinant of health, and, because of its importance and emphasis, as well as monitoring and coordinating health literacy promotion activities, the establishment of a community is recommended globally (29). As a result, it can be stated that finding information about health is one of the most important and essential requirements for health literacy and, consequently, personal and social health. Therefore, this research aims to investigate the information seeking behavior of health and how to search health information in students of Gonabad university of Medical Sciences.

Methods

This study is descriptive survey and its statistical society is composed of students of Gonabad University of Medical Sciences. Data were collected using a questionnaire consisting of 23 questions, whose validity and reliability were confirmed in previous studies (30). The five-point Likert scale was collected for each of the items (very low, low, medium, high, and very high with a score of 1 to 5) and were collected over the course of 6 months from September 2017 to April 2018. The data were then coded and analyzed using appropriate tests in SPSS version 20 software. To get the sample size, the following formula was used and 384 people were selected as sample size, with 430 samples selected for probable loss.

$$n = \frac{Z^2 \cdot P(1-P)}{d^2} = \frac{(1.96)^2 \times 0.5 \times 0.5}{(0.05)^2} = 384$$

According to the statistical population, the sample size of the Faculty of Health was 115, nursing 110, medical 93, and 112 paramedical.

Findings

The findings of this study about health information seeking goals in students of Gonabad University of Medical Sciences, according to Table 1 show that students more direction notify

of the type of sickness with the mean 3.29 and treatment method with an average of 3.20 to seeking health information.

Table 1: Health Information Seeking Goals in Students

Row	Goals	Average	Standard deviation
1	Notify of the Methods Treatment Sickness	3.2047	1.04891
2	Notify the type of Sickness	3.2977	0.96790
3	Notify of methods Sickness prevention	3.1395	1.04851
4	Notify of status health	2.9828	1.06371

Table 2 also shows that students of each faculty are seeking health information for more. According to Table 2, more students of the School of Health with a view to informing about the prevention of sickness with a mean of 3.13, more nursing school with the aim of knowing The sickness treatment method, with an average of 3.37, in the Faculty of medicine and paramedicine, with an average of 3.51 and 3.15, is seeking health information seeking information on the sickness.

Table 2: Goals of Health Information Seeking in student to Differentiation College

Row	College	Goals	Average	Standard deviation
1	Health	Notify of the Methods Treatment Sickness	3.1304	1.15866
		Notify the type of Sickness	3.2	1.00664
		Notify of methods Sickness prevention	3.2087	1.03021
		Notify of status health	3.0348	0.96364
2	Nursing	Notify of the Methods Treatment Sickness	3.3727	1.00329
		Notify the type of Sickness	3.3636	0.85378
		Notify of methods Sickness prevention	3.1091	1.11984
		Notify of status health	3.0348	0.96364
		Notify of the Methods Treatment Sickness	3.2473	1.11955

3	Medicine	Notify the type of Sickness	3.5161	1.00664
		Notify of methods Sickness prevention	3.1290	1.14423
		Notify of status health	2.8925	1.15591
		Notify of the Methods Treatment Sickness	3.0804	0.89179
4	Paramedicine	Notify the type of Sickness	3.1518	0.93201
		Notify of methods Sickness prevention	3.1071	0.91393
		Notify of status health	2.9643	1.08161

The results of Friedman's test in Table 3 show that there is a significant difference between the use of different sources of health information seeking among students ($P < 0.05$), and internet resources and doctors have the highest number of referrals among students.

Table 3: Friedman test results on comparing the use of different health information seeking sources among students

Group	Average	Chi-square	df	P Value
Physicians	3.35	1043.041	5	0.000
Print sources	2.73			
National Media	2.48			
Internet Resources	3.52			
Social Networks	2.92			

Table 4 shows that students are referring to each type of resource for health information, this table shows that the most frequent referrals to websites were with a mean of 3.12 and a telegram with an average of 2.96.

Table 4: The rate of use of health information seeking sources and types of resources in students

Source	Source type	Average	Standard deviation
Physicians	Doctors specialist and super specialist	2.7651	1.14789
	General practitioners	2.6977	1.06294
	Traditional medicine practitioners	1.9419	1.02367
Print sources	Book	2.4395	1.04884
	Brochures and related catalogs	2.2395	0.97082

	Medical or health magazines	2.2	1.10603
	Public journals	2.0186	0.99632
	Newspapers	1.8326	1.04663
National media	Television	2.2465	1.04878
	Health Professional Network	2.2093	1.07218
	Radio plans	1.6047	0.83455
Internet	Websites	3.1233	1.29412
	Valid Scientific Journals	2.3372	1.08401
	Weblogs	2.3395	1.20839
	Internet newspapers	2.2744	1.17036
Social Networks	Telegram	2.9628	1.22846
	Whats App	1.6163	0.95308
	Instagram	2.3163	1.30535
	Other social networks	2.1721	1.21112

Regarding to the fact that the use of information seeking resources was normal ($P = 0.352$ and $P > 0.05$), one-way ANOVA was used to compare the use of various sources of health information seeking among colleges. The results of this test in Table 5 show that there is no significant difference between the uses of various sources of health information seeking among students at different faculties ($P > 0.05$). Accordingly, Table 6 also shows that there is no significant difference in the rate of use of various sources of health information seeking among different faculties with regard to the results of analysis Scheffe post hoc in ANOVA test.

Table 5: One-way analysis of variance for comparing the use of health information seeking sources among colleges

Group	Average	The standard deviation	F	P
Health	11.54879	55.5217	1.654	0.176
Nursing	12.61342	57.3727		
Medicine	10.74544	53.9462		
Paramedicine	11.31222	56.6250		

Table 6: Results analysis of Scheffe post hoc test

Group	Group	Difference in Averages	P
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	Nursing	-1.85099	0.699
Health	Medical	1.57550	0.814
	Paramedicine	-1.10326	0.916
Nursing	Medical	3.42649	0.224
	Paramedicine	0.74773	0.973
Medicine	Paramedicine	2.67876	0.440

Discussion

The results of this study show that more students seek health information with the aim of knowing the type of sickness and its treatment. Students are looking for more health information on Internet resources, especially websites and doctors, especially specialist and super specialist doctors. Afterwards, they also seeking for social networks, national media, and then print resources. Zare and colleagues from 2017 showed that students from Razi University of Kermanshah are also seeking health information (30) for information on treatment and type of sickness. Other studies have shown that the purpose of the seeking and use of further information to improve the sickness (31, 32), self-care and treatment (33), and decision-making on how to deal with the sickness (1), which confirming the findings of this study. Also, people usually seek health information aimed at: (1) ensuring health, (2) reducing uncertainty, and (3) helping improve their health status (34, 35). Also, with the spread of information technology and the epidemic of using the Internet and the ease of using health websites, the Internet has become a primary source for the seeking for health information of various sections of the population, which has also been confirmed by past studies (1, 3, 14, 15). Okhovati et al., 2016, also found that people would prefer to seeking their health information through modern methods such as the Google search engine for ease of use and access to the current information, rather than the traditional way of referring to books and libraries (3). Zare et al., 2017, also identified the most important health information channels among Razi University students as specialist and super specialist physicians, books, TVs, websites and the social network of telegrams (30). Tennant et al. 2015 looked at health literacy and web2 research among adolescents and young people. Results showed that 90 percent of respondents on the Web2, such as Facebook, Twitter, and ... used their health information (14). Also, there was no difference in the rate of referral to a variety of sources for health information among the students of different disciplines and faculties of Gonabad University of Medical Sciences.

Previous research has also shown that the seeking behavior of health and resources used by them in different groups of people (26) and with characteristics of gender, age, education and education (36-39) are different.

Conclusion

The results of this study provide a clear picture of the health information seeking behavior in students of Gonabad University of Medical Sciences. The results suggest that students seek health information with the aim of knowing the type of sickness and the way they treat it, and in order to seeking for their health information rather than traditional and print sources, they tend to be more accessible to Internet sites and social networks. It can be said that the results of seeking for students can affect their decision making and choice in treating sicknesses and promoting their health. Obtaining health information through the Internet may provide many benefits for patient-physician relationships, including better understanding of patient health information, patient active involvement in health, and active and preventive responses to health problems. But the same use of the Internet may result in inaccurate information that would endanger the health of individuals and consumers by ill-health. It may also affect the patient-physicians relationship, so that patients will henceforth consider and treat physicians as a source of medical issues. Given that level of electronic health literacy and get reliable health information from the internet in many people is low or moderate(40), Therefore, it is imperative that the relevant institutions and organizations, particularly the Ministry of Health and Medical Sciences Universities, take appropriate measures to establish training courses for validated medical information channels and to improve the health literacy of students as well as the various classes of society.

Appreciate

This article is a preview of the research project approved by the Student Research Committee of Gonabad University of Medical Sciences with the code approved in 41-96. Researchers need to know that they would like to thank the vice chancellor for research and technology who sponsored the project, as well as all those who have contributed to this research.

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