

Comparing Health Information Channels between Male and Female Users of Iranian Public Libraries

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ABSTRACT

Nowadays people are seeking health information to raise their awareness. They use many ways to get this information. This study examines the health information channels used by users of public libraries. The population of the present survey consisted of 461 users of public libraries throughout the country, randomly selected in a two-stage cluster sampling method. The questionnaire data were analyzed using SPSS. Cronbach's alpha value was obtained as 0.89. Friedman test showed that there is a significant difference between the preferred channels of women and men for getting health information. Most health information was obtained through TV and the Internet channels. Most of the health knowledge was gained by users through parents, family members and self-study. Libraries played a second role after parents, schools, experiences of visiting doctors and self-study. Users preferred printed materials in the libraries to get health information. Television and the Internet were the most-used information channels. The public library as one of the channels of getting health information can provide reliable updated information to the users. Strengthening the print resources in the health field and introducing and evaluating scientific updated databases must be performed.

Keywords: Health information; Public library; Users; Iran

INTRODUCTION

Information has noticeable effects on awareness and increasing of knowledge in people. The need for health information had led people to look for it so that they can deal with illness by increasing awareness and promoting health literacy. Health information needs such as information about chronic diseases and access to high-quality health information are critical. Health Information includes a wide range of information such as diseases, follow-up, early treatment, prevention, and drugs [1, 2]. Studies have shown that the main obstacle in training of people with chronic diseases is low health literacy [3].

Necessity of obtaining health and self-care information has always been emphasized at the international level in recent decades. In Iran, many organizations and institutions such as the Ministry of Health, Treatment and Medical

Education are responsible for public health and do activities to prevent the spread of diseases day and night. In addition, cultural and educational centers such as public libraries can help improving and training over health [4,5]. They can even act as a site for screening some illnesses such as cardiovascular diseases [6]. It is worth mentioning that a high cost must be paid to prevent further spread of a disease. Spreading health information to the community may be the best way to prevent diseases and make savings in financial and human resources. Those who care about their health and self-care try to obtain health information and warmly accept it [7], and consequently incur less cost [8]. People receive health information through various ways. One of the most used health information channels is the Internet and its websites. In several studies, the Internet is

known as the primary source of health information channel [9-12]. In the "Pew Project" quoted by Murray, it was found that 45 percent of those surveyed were faced with serious health problems, and about half of them had used the Internet to find health information, while 13% referred to public libraries. Although the Internet can provide a timely and appropriate way to find information for the patients, people are faced with a wide range of accredited and non-accredited health information at the same time [4]. This study aims at finding out how the updated, valid, and safe health information is provided to the public. Previous studies have shown that controlling the quality of health information on the Internet is very difficult and librarians in public libraries can provide credible health information for their users [13]. On the other hand, people who suffer health problems are less likely to access health information technologies and may even be unable to understand the concept of such specialized information [6, 14, 15]. During the past decade in Iran, the Internet has been widely used as a source of information on health issues [16]. At the same time, a set of information resources for health care are provided to people including books, websites, TV programs, magazines, CD-ROMs, DVDs and movies. Studies in medical journals show that the new generally visual methods on TV news programs refer to health care [6]. The most common health information channel is reported as TV [2]. Individuals actively and purposefully or randomly and inactively obtain information through watching TV programs or reading newspapers [17]. It was stated in a relevant research that the educational level of people played an important role on the use of health information channels. Use of written information (such as newspapers, magazines, books, brochures, pamphlets, etc.) was low in this study. Those with higher levels of education used written notifying devices in the health field more than those with average or low levels of education [18]. The results of another study showed that about 83% of women used the web to search for health information. The most important motivation for women to seek health information on the web was

deciding how to deal with diseases [1]. They found in a study that health information-seeking behavior could assist planners and officials as an effective tool, and libraries played an important role in promoting health literacy of citizens [19]. In another study, 80% of people sought medical subjects on the Internet, 34 percent read the experiences of others, and 25 percent watched movies and videos related to medicine. 23% of these people transferred their experiences in the field of medicine and 15% followed any other health information [20]. They showed in a study that health information is one of the most popular requests that public librarians are faced with, including a wide range of topics such as the human body, medical conditions, and nutrition. By identifying health information channels of users, we can find out which channel has the greatest impact on health awareness among people, and which individuals, resources, or centers they prefer to get help for their health questions. Recognizing health information channels can be effective in educating community members and enhancing health literacy.

Research Questions

1. What factors are effective in receiving health knowledge among the statistical population?
2. What are the preferred channels for getting the needed health information among the research population?
3. What is the priority of channels among men and women of the population for getting health information?

METHODS

This survey is conducted among study population consisting of users of public libraries across the country including men and women. Due to the scope and geographic distribution of public libraries in the country, the two-stage cluster sampling was used. In the first stage, following geographic clustering of provinces of the country, a total of eleven provinces were selected for the study: Provinces of Golestan, East Azarbaijan and Khorasan-Razavi from the North, Northwest and Northeast; provinces of Bushehr, Khuzestan from the South and Southeast; Sistan & Baluchestan from the Southeast, Isfahan and Fars provinces from the Center; Ilam and Hamedan

provinces from the West and Tehran as the capital. In the second stage, according to the number of library users in each province and with an equal ratio, members visiting the library were selected using available random sampling. According to the latest figures at the time of the study, a total of 937,216 people were the registered members of public libraries of the selected provinces. After computations, the minimum required sample size was 384. Due to the possibility of non-collaboration of some sample members, non-response, and cancellation of some questionnaires, or lack of full cooperation by some libraries, the sample size was increased by 20% to 461. A questionnaire was used as the research tool. The questions were a mixture of open and closed questions using the Likert scale (ranging from 1 as very low rating to very high as 5). In the questionnaire, the following criteria were measured: the need for resources in the field of health, the role of various factors in

providing medical information, and the preferred channels for receiving health information.

Validity of the questionnaire was evaluated based on the results and the derived variables. In order to ensure the validity, the questionnaire was given to the venerable professors, advisors, and a number of experts and was used after applying their corrective comments. In this study, Cronbach's alpha coefficient was used to verify the questionnaire validity and was obtained as 0.89.

In the present study, conventional methods of descriptive statistics such as frequency, mean indexes as well as inferential statistics such as Friedman nonparametric test were used to describe the data.

The questionnaire was distributed with permission of Public Libraries Institution with a letter number 53/9526 .

RESULTS

Results in Table 1 shows that among the 447 sample members, 58.4% were female and 41.6% were male. In terms of age structure, most of the subjects were young such that about 71 percent of the library members were up to 30 years of age and 18.8% were between 31 and 40 years old. In terms of education level, 34.6% of library

members had diploma or lower degrees, 39.8% had a bachelor's degree and 25.7% held PhD degree or higher.

The findings in response to the question "how much did any of the following items contribute to your medical information and health?" are shown in Table 2.

Table1. Frequency distribution of demographic characteristics of the library members

	Gender			Age					Education							
	Female	Male	Total	≥20	21 to 30	31 to 40	41 to 50	51 ≤	Total	Less Than Diploma	Diploma	BA	Ms	PhD	Total	No reply
Freque	261	186	447	109	208	84	37	9	447	29	123	175	100	13	440	7
Percent				24.4	46.5	18.8	8.3	2.0	100	6.6	28	39.8	22.7	3.0	100	

Table 2. Frequency distribution of the role of different channels in increase of the knowledge of library members

	Very low	Low	partly	High	Very High	Total	No reply
Parents or other family	15	21	167	132	98	433	14
	3/5%	4/8%	38/6%	30/5%	22/6%	100%	
Schools (University)	36	75	148	101	58	418	29
	8/6%	17/9%	35/4%	24/2%	13/9%	100%	
experiences of visiting different doctors	37	69	168	92	59	425	22
	8/7%	16/2%	39/5%	21/6%	13/9%	100%	
According to experiences of friends	31	61	217	82	40	431	16
	7/2%	14/2%	50/3%	19/0%	9/3%	100%	
Personal study of different health resources	38	36	135	127	76	412	35
	9/2%	8/7%	32/8%	30/8%	18/4%	100%	
Public libraries and information centers	66	81	127	51	42	367	80
	18/0%	22/1%	34/6%	13/9%	11/4%	100%	

Table 2 shows that about 53% of users have stated that parents or other family members have contributed greatly to their medical information and about 38% stated that schools (universities) helped them much in this regard. They evaluated the effect of experiences of visiting different doctors as high as 35.5%. The effect of personal

study of different health sources was high in view of about half of the users and the effect of public libraries and information centers was low (about 40 percent).

The answer to the question "which channels do you prefer for getting your required health information?" is shown in Table 3.

Table 3. Frequency distribution of the preferred channels of library members for getting medical information

		Very low	Low	partly	High	Very High	Total	Noreply
Visiting the library	Books	36	47	110	130	107	430	17
		8/4%	10/9%	25/6%	30/2%	24/9%	100%	
	Magazines and journals	28	49	126	154	71	428	19
		6/5%	11/4%	29/4%	36/0%	16/6%	100%	
brochures, booklets, and leaflets	35	55	139	117	71	417	30	
	8/4%	13/2%	33/3%	28/1%	17/0%	100%		
Personal purchase of books and magazines	59	101	140	76	54	430	17	
	13/7%	23/5%	32/6%	17/7%	12/6%	100%		
Articles and News of Newspapers	20	61	152	129	66	428	19	
	4/7%	14/3%	35/5%	30/1%	15/4%	100%		
watching TV programs	17	35	115	152	117	436	11	
	3/9%	8/0%	26/4%	34/9%	26/8%	100%		
Find educational programs via CD or DVD	87	97	129	80	42	435	12	
	20/0%	22/3%	29/7%	18/4%	9/7%	100%		
Random search on the Internet	30	33	109	134	130	436	11	
	6/9%	7/6%	25/0%	30/7%	29/8%	100%		
Membership in health websites	74	94	105	89	69	431	16	
	17/2%	21/8%	24/4%	20/6%	16/0%	100%		
Radio	110	111	105	65	38	429	18	
	25/6%	25/9%	24/5%	15/2%	8/9%	100%		
Contact medical experts and consultants	63	86	105	96	86	436	11	
	14/4%	19/7%	24/1%	22/0%	19/7%	100%		

Table 3 shows that about 62% and 26% of the users respectively preferred highly and partly to

achieve the intended information through watching TV programs of medical and health

education. About 61% and 25% of the users respectively preferred highly and partly to achieve their intended content through random search of online content. About 55% of users highly preferred to visit the library and use books, and about 53% highly preferred to use journals, and about 45%

highly preferred using brochures, booklets, and leaflets to obtain their information. About 37% of users highly preferred to achieve their intended information in the field of health and medicine by membership in health websites.

Table 4. Friedman test results on equal priority of the users' preferred channels

Gender	Female users	Male users
Number of Respondents	219	153
Chi-square test	342/746	193/625
df	10	10
level of significance	/000	/000

For examining whether there is significant difference between the priorities of health information channels between men and women, Friedman nonparametric test was used for the two mentioned groups. The results showed that since the level of significance of

Chi-Square test was zero and lower than the test level, it can be inferred with 95% confidence that there is a significant difference between the preferred information channels of male and female users (Table 4).

Table 5. Ranking results of the preferred channels for female and male users

		Mean	Mean rank
Female users	Random search content on the Internet	3/9315	7/53
	TV medical and health education	3/8219	7/37
	Visiting the library for books	3/6895	6/89
	Visiting the library for Magazines and journals	3/6119	6/82
	Visiting the library for Brochures, booklets & pamphlets	3/5479	6/59
	Articles and News of Newspapers	3/4292	6/20
	Contact medical experts and consultants	3/1826	5/60
	Membership in health websites	3/0959	5/32
	Personal purchase of books and magazines	3/0776	5/03
	Find educational programs via CD or DVD	2/8676	4/72
	Radio	2/5297	3/92
Male users	TV program medical and health education	3/6536	7/55
	Random search content on the Internet	3/4575	7/06
	Visiting the library for books	3/3072	6/87
	Visiting the library for Magazines and journals	3/2157	6/63
	Articles and News of Newspapers	3/3137	6/63
	Visiting the library for Brochures, booklets & pamphlets	3/0523	6/13
	Contact medical experts and consultants	2/9673	5/75
	Membership in health websites	2/7451	5/30
	Personal purchase of books and magazines	2/5882	4/76
	Radio	2/6078	4/70
	Find educational programs via CD or DVD	2/5948	4/61

The results in Table 5 shows that women respectively preferred the following channels: Random content search on the Internet, TV programs of medical and health education, visiting libraries, and studying books. In this

regard, men respectively preferred TV programs of medical and health education, random search of content on the Internet, visiting the library and studying books as the three preferred channels for getting their information.

DISCUSSION

Each person acquires a lot of experience and knowledge from various sources in his life. The point in this study is the main channels these experiences are learned from in the field of health care (formal or informal). In the study of Zare-Gavvani and et al², the most important ways for obtaining health information were TV and asking close friends and acquaintances. The library as a center for health information was in third place. TV, family, and books were the resources most used by individuals.

This study showed that studying different sources and potential power of libraries is effective in increasing medical information and knowledge of users. As indicated in Table 3, users highly prefer to use print resources of libraries. These findings confirmed the study results of obtaining health information by Gavvani, Arding et al^{2,13}. However, it is not consistent with the results of the research by Akhavan-Tabib and et al¹⁸. The reasons for this difference might be the difference in population and lack of resources in the field of the disease. In this study, a quarter percent of users evaluated the effect of public libraries and information centers in increasing the knowledge of users as high and less than half of users evaluated it as low. In general, the role of libraries was less important than the role of parents, schools, experiences of visiting doctors, and personal studies. The results indicated that generally, more than half of the library members and users had a favorable view towards the library and preferred to visit the library to find their desired information. Therefore, it can be concluded that public libraries can be referred to as a valid channel in providing health information. As stated in studies Daley, Chobot and Arding^{5,6,13}, public libraries can provide authoritative medical information by empowering themselves.

In the present study, it was shown that more than half of users use the internet randomly. In the literature, the most used method of access to the health information was through internet which is increasingly growing^{10,12}.

In this study, about half of the users had some or very little preference to use the internet health websites to find their desired information in the field of health and medicine. This could be due to the lack of necessary skills for using websites or the small number of reputable websites for public health, or lack of public awareness of existence of such websites. In the present study, it was shown that

female users respectively used random content search on the Internet, medical TV programs, and books to obtain health information.

The results of the study were in line with that of Bigdeli and et al¹ which showed that women generally seek information on websites. This study showed that there is a significant difference between preferred information channels of male and female users. As shown in the results, most women users prefer to obtain health information, first via the Internet and then through the TV, while men users did this with a low difference. Moreover, women users use radio with the lowest mean but men use CD and DVD mostly. In the study of Lalehzarian and et al¹⁷, there was also a significant difference between the component of information-seeking behavior of men and women. These results suggested the effect of gender in selection of health information channels.

CONCLUSION

According to the literature and this study, it can be concluded that the mass media such as television has a strong role in providing health information. Strengthening the related resources in this regard can be effective in raising awareness and health literacy of the community. Educating people on the use of internet in the field of health, control and update of the publications on the web provides reliable sources to the public.

Since public libraries are centers regarded by users, enriching the health print resources should be seriously considered.

ACKNOWLEDGEMENTS

This article is adopted from the PhD thesis of knowledge and information science. All those who cooperated with us on this study are truly appreciated. "The authors declare no conflict of interest"

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