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Identification of patients' rights to benefit from consumer health information services: A Delphi study

Hasan Ashrafi-rizi, Leila Shahrzadi, Zohreh Dehghani-Champiri¹

Abstract:

INTRODUCTION: Patients have different rights, one of which is their right to access health information. The aim of this study was to identify patients' rights to benefit from consumer health information services using a qualitative method.

MATERIALS AND METHODS: The research method was qualitative using a Delphi technique. The statistical population consisted of 12 specialists in the field of medical library and information science and researchers and healthcare professionals. Eight dimensions and 42 items of patients' rights were identified and were approved by Delphi panel.

RESULTS: Regarding patients' rights to benefit from consumer health information services, eight dimensions including the right to health knowledge, the right to access to health information, the professional behavior of medical librarians with patients, content richness, information seeking skills, awareness of new services and products, the ease of using health information centers, and the professional behavior of healthcare professionals with patients were identified and approved.

CONCLUSION: Decreasing the gap between the health literacy of healthcare professionals and patients is one of the duties of medical librarians and health information professionals. Establishing of patient rights in the area of utilizing health information services is an important step in improving the quality of services received by patients.

Keywords:

Code of ethics, consumer health information services, health information professionals, librarians, patients' rights, professional ethics

Department of Medical Library and Information Science, Health Information Technology Research Center, Isfahan University of Medical Sciences, Isfahan, Iran,
¹Department of Software Engineering, Faculty of Computer Science and Information Technology, University of Malaya, Kuala Lumpur, Malaysia

Address for correspondence:

Mrs. Leila Shahrzadi,
Department of Medical Library and Information Sciences, Health Information Technology Research Center, Isfahan University of Medical, Sciences, Isfahan, Iran.
E-mail: shahrzadi@mng.mui.ac.ir

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Introduction

Health has always been the highest priority for people; however, nowadays, people are more willing to be involved in health subjects and pay significant attention to their own health and even their family members' health.^[1] The healthcare "triple aim" of enhancing outcomes, yielding better patient care, and cost decreasing can be obtained by utilizing the patients' involvement in health subjects.^[2] In fact, patients require to be exposed to the adequate and opportune information which influences healthcare^[3] in order to:

- Understand the current situation and treatment of their own health as well as their families
- Take over the responsibility of coordinating health care and decreasing duplication of services while multiple healthcare is involved
- Provide a long-term personal health record which displays their health conditions and care services received over the time.^[2]

According to Article 19 of the Universal Declaration of Human Rights, access to the information is considered a universal right, and access to the health information is also considered a prominent method to enhance health and improve the life quality.

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By the beginning of 1970s, an important portion of the American Hospital Association statement on a patient's bill of rights (1973) was the patients' education which indicates patients' rights to access to the whole current health information such as diagnosis, treatment, as well as prognosis in an understandable way and adequate information that can help them to make better decisions on their health care.^[4]

Due to the rapid development of online technologies, information seeking process and its tools change dynamically, and consequently, they influence the way people access, use, and interact with healthcare information.^[5] In this situation, it is necessary that the medical librarian take over considerable responsibilities to consumer to delivery of health information according to their skills and competencies.^[1]

In various studies, access to health information services, including the rights of library customers, has been taken into consideration. According to Zahedi and Zahedi, provision of various information resources based on the needs of library customers, helping them to use information resources, creating free access to information resources, respecting the rights of library customers, and providing accurate and authentic responses to their information requests are among library customers' rights, which have been mentioned in the ethical codes for librarianship.^[6] Patients and recipients of health services are a special group of library customers. Some of the most important and common issues in the ethical codes of library and information science and standards for hospital libraries in different countries, and in the IFLA Code of Ethics, related to information recipients are as follows: respect for the right to free access to information,^[7-10] confidentiality and privacy of received information,^[7-15] fair and equal access to information,^[8,9,11,13,15,16] the highest level of access to library services with organized, useful, reliable, and unbiased resources,^[11] training users regarding information retrieval and using library services,^[13] respectful behavior by information service providers,^[7] promotion of information literacy and client information skills and continuing training and lifelong learning for all users, especially patients and their families,^[9,17-19] assurance of customer satisfaction, and continuous assessment of current and future information needs.^[17]

As it is evident, most codes of ethics of library and information science in different countries have considered general users and have not paid particular attention to patients. Now, considering the specific conditions and needs of this group, their level of health literacy, and the information gap existing between them and healthcare professionals, it seems necessary for medical librarians and health information professionals to identify patients'

special rights to benefit of health information services and to compile and implement them. Hence, the aim of this study is to identify patients' rights to benefit from consumer health information services.

Materials and Methods

The research method was qualitative using a Delphi technique. Delphi is a method used to get experts' opinions on a given subject.^[20] By systematically refining the answers of those participating in the study, this method seeks to reach a consensus of opinions.^[21] From among the applications of a Delphi study is the identification and discovery of factors creating a topic, as well as formulation of policies and regulations.^[20] In this study, these issues have been dealt with.

At the first step in the present study, we prepared a questionnaire based on literature review, which led to the identification of 7 dimensions and 36 items. To increase the participation of the panel members, we explained the research purpose, the usefulness of its results for them and for the beneficiaries of the research, as well as the confidentiality of their information at the beginning of the questionnaire. We also mentioned the number of possible rounds existing in the sent questionnaire. These considerations are also emphasized by Feizi and Irandoost.^[20] Moreover, in addition to the main dimensions and items, a table was predicted for possible items, which might be proposed by participants. The questionnaire was foreseen based on a 10-point Likert scale (from 1 to 10), and experts determined the importance of its items (from very important to very unimportant). The panel members were selected based on a nonprobabilistic, purposeful sampling method (12 people). This research was conducted in accordance with the Declaration of Helsinki. All research procedures and protocols including participant recruitment materials were reviewed and approved by Ethics Committee on Medical Research, Deputy of Research and Technology at Isfahan University of Medical Sciences, Isfahan, Iran. The participating individuals provided consent.

Those participating in the study had one of the following characteristics:

1. Researchers with research experience in the field of consumer health information services
2. Faculty members in the medical library and information science departments and library and information science departments, who had experience in teaching or research in all or some dimensions of this study.

From among 12 people participating in the first round of the Delphi panel, 10 people had professional Doctorate Degrees, one was a professional doctorate student, and

one had a Master's Degree. Meanwhile, there was only one no faculty member among all panel members.

These individuals were selected from 10 universities affiliated to the Ministry of Health and Medical Education, as well as the Ministry of Science, Research and Technology, and were qualified through searching their scientific background in databases. In fact, two main groups are involved in providing health information services: medical record specialists and medical librarians and health information professionals. Studies have already been carried out regarding health information services from the viewpoint of medical records specialists; however, the role and duties of medical librarians have not been taken into account. Therefore, in the present study, the individuals in Delphi panel included medical librarians and health information professionals so that the role of these individuals in protecting the patients' rights in using health information services can be specified. The observation of these rights by librarians has been particularly pointed out in the librarians' ethical codes and standard of hospital libraries. However, these rights are general and they need to be investigated in more detail.

Feizi and Irandoost mentioned this number to be 10 to 18.^[20] It took about two weeks to answer the first stage. After the questionnaires were returned, the data of the questionnaires were entered into the SPSS software and were analyzed. In a Delphi study, the level of consensus among experts was chosen by researchers. Thus, in this study, mean values of 8 and higher were considered to be levels of consensus. Feizi and Irandoost emphasize that determining the level of consensus makes it possible to repeat the research and to compare the levels of consensus.^[20] After data analysis, from among the dimensions and items foreseen at the end of the first stage, only the mean value of one item was less than the level of consensus; therefore, the item was excluded. However, we proposed a new dimension (the professional behavior of healthcare professionals with patients) with eight items. We added an item to the dimension content richness. We also edited some items in terms of writing. Therefore, the questionnaire of the second stage consisted of eight dimensions and 43 items. We sent the second stage questionnaire to the panel members and asked them to send back the completed questionnaire by the scheduled date. In addition, at the beginning of this questionnaire, we explained changes made in this questionnaire in relation to the first stage, as well as the mean values for each item and dimension obtained at the first stage. In other words, to inform the panel members of the proposed dimensions and items, we placed them in a table separate from the main table so that they can be identified and monitored by the panel members.

The second stage questionnaires were received after about 2 weeks (12 people delivered their questionnaires). Eventually, patients' rights in the field of consumer health information services obtained 8 dimensions and 42 items (one item was excluded). In addition, as in the first stage, each dimension and item with a mean value of 8 or higher was selected at the second stage, too. The statistics in this study were of a descriptive type (frequency, percentage, and mean), and SPSS version 16 (USA, Chicago, SPSS Inc.) was used for data analysis.

Results

The review and conclusion of the dual rounds of Delphi showed that the experts reached a consensus. In fact, the first round questionnaire had seven dimensions and 36 items, but after sending it to the experts, one item was excluded, and a new dimension and eight new items were proposed. Ultimately, the second round questionnaire, containing eight dimensions and 42 items, was approved.

According to the result obtained from the first round of Delphi, the highest mean value was 9.83, belonging to "access to up-to-date, valid, and reliable health information," and the lowest mean value was 7.67, belonging to "avoiding any censorship in the preparation and presentation of scientific content" (Item 20). The latter was excluded because it was less than the level of consensus (the mean value was 8). Therefore, 35 items were approved at the end of this round. In the first round, the highest mean value was 9.30, belonging to the dimension "the professional behavior of medical librarians with patients," and the lowest mean value was 8.38, belonging to the dimension "ease of using health information centers" [Table 1].

Based on the results obtained in the first round of Delphi, the second round questionnaire was prepared and sent to the panel members. After they were returned, dimensions and items with mean values higher than 8 were selected; and eventually, eight dimensions and 42 items were finalized. In fact, the highest mean value among the dimensions was 9.34, belonging to "content richness," and the lowest mean value was 8.66, belonging to "the professional behavior of healthcare professionals with patients." Meanwhile, from among the items, the highest mean value belonged to "access to up-to-date, valid, and reliable health information" which was 9.77, and the lowest belonged to "provision of information about the disease to patients or their eligible companions" which was 8.46. Meanwhile, the items "collaboration and agreement between the physician and other healthcare professionals" and "provision of services by health information professionals" were excluded from the items due to their obtaining scores <8 [Table 2].

Table 1: The mean of dimensions and items related to patients' rights benefiting from consumer health information services in the Delphi first round questionnaire (mean value higher than 8)

Dimensions	Items	Mean
The right to health knowledge Mean=9.07	The right to receive health information	9.50
	Knowing the benefit produced by health knowledge	8.75
	Patient freedom and authority of information choice and usage	8.96
Right to access to health information Mean=9.14	Fast access to the health information	9.67
	Access to various types of information (printed, electronic)	8.50
	To receive the consumer health information services with the lowest possible cost	9.17
	To receive the consumer health information services in any place any time (7 days of week and 24 h)	9.33
	The possibility of receiving personalized consumer health information services	8.58
	The acquisition of the required IT infrastructure for the access of patients with disabilities (disabled people, elderlies) to health information	9.25
	To receive the health information matching/corresponding to the patients' needs, awareness, and knowledge	9.50
The professional behaviors of medical librarians with patients Mean=9.30	To consider the patients' privacy (such as disease information and identification)	9.50
	Considering the patients' distinctions (such as race and ethnicity)	9.58
	Appropriate and respectful behavior by medical librarians and medical information specialists	9.33
	Justice in presenting consumer health information services (type, amount, and cost)	9.67
	To receive correct and complete responses to information needs requests	9.50
	Considering the patients' preferences in consumer health information services	8.58
	Providing trust in patients about the scientific and professional abilities of medical librarians	9.08
	Providing responses to the patients questions at the minimum possible time	9.42
	Attention of medical librarians to the principle of serving and avoiding personal gain	9.08
	Content richness Mean=9.12	Avoiding any censorship in the preparation and presentation of scientific content
Not receiving incorrect and misleading information		9.50
Access to up-to-date, valid, and reliable health information		9.83
Access to a variety of health information items (in the stages of prevention, diagnosis, treatment, and rehabilitation of patients)		9.42
Access to easy to read health information		9.67
Regular identification of patients' information needs and effective action to make them accessible		9.33
Attractive texture and content of health information resources		8.42
Patient's confidence in the accuracy of the provided information		9.17
Information-seeking skill Mean=9.04	Information service providers' sufficient skills in providing correct information	9.33
	Training and upgrading the level of information-seeking skills of patients (search, evaluation, and effective use of information)	8.75
Awareness of new services and products Mean=8.95	Receiving consumer health information services through new methods and tools	9.08
	Rendering continuous information to patients on new services and facilities of libraries and health information centers	8.83
The ease of using of health information centers Mean=8.83	Ease of using health information centers (registering, browsing, downloading, and information storing)	8.92
	The existence of facilitating/easy rules for using libraries and health information centers	8.75
	The convenience of using libraries and health information centers (physical facilities)	9.08
	Providing free access to reliable resources of information	8.42
	Facilitating communication with health information service providers (telephone, face-to-face, email, etc.)	9.00

IT=Information technology

Discussion

Based on the results obtained from the second round of Delphi, we identified and approved 42 final items and eight dimensions including the right to health

knowledge, the right to access to health information, the professional behavior of medical librarians with patients, content richness, information-seeking skills, awareness of new services and products, the ease of using health information centers, and the professional

Table 2: Mean of dimensions and items related to patients' rights benefiting from consumer health information services in the Delphi second round questionnaire (mean value higher than 8)

Dimensions	Items	Mean
The right to health knowledge Mean=8.97	The right to receive health information	9.46
	Knowing the benefits produced by health knowledge	8.75
	Patient freedom and authority of information choice and usage	8.71
Right to access to health information Mean=9.17	Fast access to health information	9.54
	Access to various types of information (printed, electronic, etc.)	8.96
	Receiving consumer health information services with the lowest possible cost	9.08
	Receiving consumer health information services in any place any time (7 days of week and 24 h)	9.38
	Possibility of receiving personalized consumer health information services	8.54
	Acquisition of the required IT infrastructure for the access of patients with disabilities (disabled people, elderlies) to the health information	9.30
	Receiving the health information matching/corresponding to the patients' needs, awareness, and knowledge	9.42
The professional behaviors of medical librarians with patients Mean=9.31	Considering patients' privacy (such as disease information and identification)	9.60
	Considering the patients' distinctions (such as race and ethnicity)	9.61
	Appropriate and respectful behavior by medical librarians and medical information specialists	9.45
	Justice in presenting consumer health information services (type, amount, and cost)	9.33
	Receiving correct and complete responses to information needs requests	9.39
	Considering the patients' preferences in consumer health information services	9.04
	Providing trust in patients about the scientific and professional abilities of medical librarians	9.22
	Providing responses to the patients' questions at the minimum possible time	9.10
	Attention of medical librarians to the principle of serving and avoiding personal gain	9.07
	Establishing a special team to identify the needs, resources, and desirable health information to patients under the supervision of medical librarians	8.61
Content richness Mean=9.34	Not receiving incorrect and misleading information	9.32
	Access to up-to-date, valid, and reliable health information	9.77
	Access to a variety of health information item (in the stages of prevention, diagnosis, treatment, and rehabilitation of patients)	9.38
	Access to easy to read health information	9.61
	Regular identification of patients' information needs and effective action to make them accessible	9.16
	Attractive texture and content of health information resources	9.53
	Patient's confidence in the accuracy of the provided information	9.36
Information-seeking skills Mean=9.32	Information service providers' sufficient skills in providing correct information	9.52
	Training and upgrading the level of information-seeking skills of patients (search, evaluation, and effective use of information)	9.12
Awareness of new library services and products Mean=8.95	Receiving consumer health information services through new methods and tools	9.07
	Rendering continuous information to patients on new services and facilities of libraries and health information centers	8.84
The ease of use of health information centers Mean=8.94	Ease of using health information centers (registering, browsing, downloading and information storing, etc.)	8.99
	Existence of facilitating/easy rules for using libraries and health information centers	8.91

Contd...

Table 2: Contd...

Dimensions	Items	Mean
Professional behavior of healthcare professionals with patients Mean=8.66	Convenience of using libraries and health information centers (physical facilities)	9.14
	Providing free access to the reliable resources of information	8.60
	Facilitating communication with health information service providers (telephone, face-to-face, email, etc.)	9.07
	Providing an environment to facilitate the patients' inquires/questions	8.53
	Willingness and happiness in responding to patients' inquiries/questions	9.00
	Familiarity of healthcare professionals with information facilities and guiding patients to use them	8.53
	Providing information about the disease to patients or their eligible companions	8.46
	Maintaining confidentiality in providing information to patients or unauthorized people in the treatment process	8.92
	Determining consumer health information services and patient education in the patient's electronic health record	8.55

IT=Information technology

behavior of healthcare professionals with patients. In fact, the highest mean value among the dimensions belonged to "content richness" and the lowest belonged to "the professional behavior of healthcare professionals with patients." Meanwhile, from among the items, the highest mean value belonged to "access to up-to-date, valid, and reliable health information" and the lowest belonged to "provision of information about the disease to patients or their eligible companions." In benefiting from consumer health information services, one of the patients' rights is the right to health knowledge. Patients should have freedom and discretion in choosing and using information. They should also be aware of how to use health information. The ethical codes of Croatia, the United States of America, Australia, and IFLA, too, recognize awareness of knowledge as one of the users' rights.^[7,9-11] Standard for Hospital Libraries 2007 emphasizes the importance of health knowledge awareness for everyone.^[19] Dalrymple and others consider well-informed workforce and citizens among the characteristics of a healthy society.^[22] Kazerani considers informing patients and allowing them to participate in decision-making to be among patients' rights.^[23] Increasing the knowledge and awareness of patients about their illness can help reduce costs and time, as well as increase patient self-esteem in the process of disease and improve their quality of life.

The "right to access health information" is patients' second right in benefiting from consumer health information services. The presence of a suitable platform for patients' access to health information at any time and any place regardless of physical and mental conditions is another right of patients. Regarding the importance of hospital libraries and information services, Marshall emphasizes the use of new technologies in delivering information to patients and considers patients' condition as an important factor in determining the type of

technologies provided to deliver information to them.^[24] Kostagiol and Zimeras refer to the positive effects of using the modern hospital libraries of an electronic supportive system on the quality of lifelong learning.^[25] The Hong Kong Library Association has considered facilitating access to information and satisfying the needs of library users as the most important duty of librarians and information providers.^[26] Ethical codes of Croatia, Armenia, Estonia, China, the Czech Republic, and Singapore somehow consider receiving information services regardless of nationality, race, religion, age, gender, disabilities, political thoughts, and social status to be among patients' rights.^[8,9,12,13,15,16] Canadian Library Association also considers facilitating access to information as everyone's right.^[14] Quick and easy access to information is one of the important factors in increasing the use of health information by patients. Medical librarians should provide this platform (hardware, software, workforce, and equipment) regardless of their circumstances (disability, age, gender, race, etc.). The higher the access to health information, the greater the likelihood of using the information will be. Observing these rights is one of the aspects of justice in accessing health information. The professional and ethical behavior of medical librarians with patients and their families is another right of patients and their families, which has been taken into consideration in the ethical codes of Australia, the United States of America, Hong Kong, and IFLA.^[7,10,11,26] Justice in providing services, paying attention to patients' values and keeping their secrets, as well as giving appropriate responses to patients and their families' requests for information are among the duties of medical librarians and health information professionals. The respectful behavior of librarians and information providers toward users has been taken into consideration in the statement of professional ethics of Australia, the United States of America, Hong Kong, and IFLA codes of ethics.^[7,10,11,26] The ethical codes of Singapore, Croatia,

and the Czech Republic also point out that information services shall be provided to everyone in a fair manner and away from any kind of bias.^[9,15,16]

Access to reliable, up-to-date, and understandable information is one of the patients' rights. In fact, provision of appropriate content is the basis for patients' trust in medical librarians and health information professionals. Croatian and American Library Associations also consider provision of various types of reliable, up-to-date, and understandable information resources to be the right of library users.^[9,11] IFLA emphasizes accessibility to reliable and high-quality information.^[10] In addition, the standards for hospital libraries 2007 take into account the provision of high-quality information to patients at different stages of treatment.^[19] The standard for hospital libraries in Germany considers the continuous assessment of information needs and updating information resources the duties of librarians and information providers.^[18] In fact, information quality can help reduce diseases, improve treatment process, improve self-care quality, reduce costs, and return patients to normal life quickly.

Another dimension of patients' rights is the right to be aware of new services and products, which has been taken into consideration in the standards for German and American hospital libraries.^[18,19] Medical librarians and health information professionals must inform their customers of their new services and products through appropriate methods such as social marketing. New technologies such as websites and social media can be effective in promoting these services. Cuddy considers information and service marketing as an important element in promoting the services of hospital libraries.^[27] Dalrymple considers using new technologies such as social media and the Internet an important factor in the increased use of health information by patients.^[22] German Hospital Libraries Association considers using new technologies for the dissemination of information as well as information marketing essential for making libraries attractive to everyone as much as possible.^[18] Regarding policies for providing patients with library services, Mortensen and Nielsen state that brochures are important tools in providing library services to such individuals, and they can be available at nursing stations, physicians' offices, and public places.^[28] Briefly, patients are less likely to use health information services due to special physical and mental conditions. Thus, the medical librarians are required to refer to the patients and provide the suitable platform to deliver services to them. In this regard, depending on the patient's condition, all available facilities, including information technology (IT), should be exploited properly. Therefore, marketing is an effective factor in attracting more patients to libraries and health information centers.

The existence of facilitating and easy rules for using libraries and health information centers along with facilitating communication with medical librarians and health information professionals are among other rights of patients. In fact, medical librarians and health information professionals should facilitate using health information centers. The Association of Library and Information Professionals of the Czech Republic regards broad access to information resources, irrespective of their storage location, as being among necessary infrastructures for the provision of consumer health information services.^[16] In addition, the standard for hospital libraries in German hospital libraries considers appropriate information services subject to the provision of essential requirements (facilities, equipment, etc.) and takes lifelong learning and education under the influence of these requirements into account.^[18] Librarians should employ the capacity of existing rules, particularly in relation to patients, individuals with disabilities, etc., and provide appropriate conditions for their using health information. Moreover, it is sometimes necessary to report legal gaps to competent authorities to establish appropriate rules in this regard. Healthcare professionals should provide conditions for patients and their families to ask questions about the disease and should behave toward them cheerfully and respectfully. Meanwhile, healthcare professionals should provide them with useful and understandable information resources. In fact, healthcare professionals should place their professional behavior with patients at the forefront of their goals. Patients' confidentiality and privacy should be taken into account not only by healthcare professionals but also by librarians and information providers. Respectful behavior with patients is taken into account in most ethical codes, especially in the Australian code of ethics.^[7] Necessary information about the disease, treatment methods, risks of treatment, and legal issues should first be put at patients' disposal by healthcare professionals in plain language. However, for some reasons such as lack of time, they have left this task to other individuals such as nurses, medical librarians, and health information professionals.

Patients and their families should be able to easily identify, assess, and use resources they need, and this is among their other rights. Dalrymple mentions possessing health literacy, health information literacy, and health information-seeking skills necessities for well-informed citizens and as well as patients to have a better life.^[22] The Australian and Estonian Library and Information Associations regard assisting users in identifying information resources as a duty for librarians and information providers.^[7,13] Moreover, the professional code of ethics of Hungarian librarians states that a library should become an environment for self-study and enhancement of skills.^[29] In fact, the skill

of medical librarians in finding high-quality information is an important factor in increasing the trust of patients in their capabilities and skills, and this is a prelude to increased use of health information by the patients.

Medical librarians and health information professionals should constantly identify patients and their families' health information needs and adopt effective measures to meet these needs. Sometimes, failure to use health information is not due to lack of reliable and up-to-date information resources, but it is rather due to the inability and lack of skills to search for information and/or unawareness of the presence of these resources. Furthermore, appropriate professional behavior of medical librarians, health information professionals, and healthcare professionals would be a factor greatly affecting the continued use of health information centers. The fitting of equipment and facilities and using new technologies to help people with special needs such as the disabled and the elderly are among patients' other rights and are among the main responsibilities of medical librarians and health information professionals.

There were some limitations in the process of this study, some of which are as follows: the information resources used in designing the Delphi questionnaire were only in English and Persian. Therefore, other languages have not been among the studied information sources. Members of the Delphi panel were only selected from Iran. Therefore, the results have been influenced by Iranian culture and conditions. On the other hand, the Delphi technique seeks to reach a consensus on a given subject among selected experts. Therefore, the results obtained from the consensus in this study cannot necessarily be the most accurate results, and they should be generalized more carefully. Furthermore, there is a need for more extensive research into this issue; for instance, international institutions such as IFLA and Associations of Hospital Libraries should conduct research into this issue at a widespread level and compile necessary codes of ethics and standards for everyone, especially for patients.

Conclusion

Regarding patients' rights to benefit from consumer health information services, eight dimensions and 42 items were identified and approved in this study. Out of this number, "content richness" was identified as the most important component by the members of the Delphi panel. Patients and their families need up-to-date, valid, and understandable information at different stages including prevention, diagnosis, treatment, and rehabilitation. With valid and reliable health information, patients will actively participate in their treatment decisions. Part of this information is provided by healthcare professionals and most of them by medical

librarians and health information professionals. The right to access and use health information should first be recognized by health authorities, and then, a suitable basis for its realization should be provided. In fact, the asymmetry of health information between healthcare professionals and patients is one of the challenging issues in relations and interactions between them; and medical librarians play a fundamental role in reducing this gap. To realize these rights, healthcare professionals, medical librarians, and health information professionals should take necessary training courses to enhance their knowledge and change their attitudes toward this issue, and these rights should be provided in the form of a new course in the student's curriculums. They should also be installed in the form of regulations in public places in hospitals and even in hospital libraries so that they can be seen by everyone. On the other hand, patients may be less likely to use hospital libraries due to their physical and mental conditions; so, it is the duty of medical librarians to refer to patients and their families and use marketing techniques to increase their use of health information services.

This study shows that the patients' rights to benefit from consumer health information services have been less widely considered, and identifying these rights is a necessity. This study will help researchers in designing measurement tools so that other researchers using them will be able to measure these rights. In addition, medical librarians can apply these rights in policies and planning.

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Conflicts of interest

There are no conflicts of interest.

References

1. Eakin D, Jackson SJ, Hannigan GG. Consumer health information: Libraries as partners. *Bull Med Libr Assoc* 1980;68:220-9.
2. Washington L. Enabling consumer and patient engagement with health information. *J AHIMA* 2014;85:56-9.
3. MacDonald SL, Winter T, Luke R. Roles for information professionals in patient education: Librarians' perspective. *Partnership Can J Libr Inf Pract Res* 2010;5 (1): 1-15.
4. Bastable SB. *Essentials of Patient Education*. Massachusetts: Jones & Bartlett Publishers; 2016.
5. Ramsey I, Corsini N, Peters MD, Eckert M. A rapid review of consumer health information needs and preferences. *Patient Educ Couns* 2017;100:1634-42.

6. Zahedi R, Zahedi F. Patients' and healthcare clients' rights in professional codes of ethics of library and information sciences. *Iran J Ethics Med Hist* 2012;5:53-65.
7. Australian Library and Information Association. Statement on Professional Conduct; 2007. Available from: <https://www.alia.org.au/about-alia/policies-standards-and-guidelines/statement-professional-conduct>. [Last accessed on 2018 Jan 16].
8. Library Society of China. Code of Ethics; 2002. Available from: https://www.ifla.org/files/assets/faife/codesofethics/chinacodeofethics_libraryofsocietyofchina.pdf. [Last accessed on 2018 Jan 16].
9. The Croatian Library Association. Code of Ethics; 2002. Available from: <https://www.ifla.org/files/assets/faife/codesofethics/croatia.pdf>. [Last accessed on 2018 Jan 16].
10. The International Federation of Library Associations and Institutions. IFLA Code of Ethics for Librarians and Other Information Workers (Full Version); 2012. Available from: <https://www.ifla.org/publications/node/11092>. [Last accessed on 2018 Jan 16].
11. American Library Association. Code of Ethics of the American Library Association; 2008. Available from: <http://www.ala.org/advocacy/sites/ala.org/advocacy/files/content/proethics/codeofethics/Code%20of%20Ethics%20of%20the%20American%20Library%20Association.pdf>. [Last accessed on 2018 Jan 23].
12. Armenian Library Association. Professional Code of Behaviour of the Armenian Librarian; 2003. Available from: <https://www.ifla.org/files/assets/faife/codesofethics/armenia.pdf>. [Last accessed on 2018 Jan 16].
13. Estonian Librarians Association. The Estonian Code of Ethics for Librarians; 2014. Available from: <https://www.ifla.org/files/assets/faife/codesofethics/Estonia%20NEW.pdf>. [Last accessed on 2018 Jan 16].
14. The Canadian Library Association. Code of Ethics; 1976. Available from: <https://www.ifla.org/files/assets/faife/codesofethics/canada.pdf>. [Last accessed 2018 Jan 16].
15. The Library Association of Singapore. Code of Ethics. Available from: <https://www.ifla.org/files/assets/faife/codesofethics/singapore.pdf>. [Last accessed on 2018 Jan 16].
16. Association of Library and Information Professionals of the Czech Republic. Code of Ethics of Czech Librarians; 2004. Available from: <https://www.ifla.org/files/assets/faife/codesofethics/czech-republic.pdf>. [Last accessed on 2018 Jan 16].
17. The Canadian Health Libraries Association. Standards for Library and Information Services in Canadian Healthcare Facilities; 2006. Available from: http://www.v2020eresource.org/content/files/Library_standards.pdf. [Last accessed on 2018 Jan 16].
18. German Medical Libraries Association. Standards for Hospital Libraries in Germany; 2004. Available from: https://www.media02.culturebase.org/data/docs-agmb/AGMB_Standards-for-hospital-libraries_2004.pdf. [Last accessed on 2018 Jan 16].
19. Hospital Libraries Section Standards Committee, Bandy M, Doyle JD, Fladger A, Frumento KS, Girouard L, *et al.* Standards for hospital libraries 2007: Hospital libraries section standards committee. *J Med Libr Assoc* 2008;96:162-9.
20. Feizi K, Irandoost M. Delphi Study. Tehran: Industrial Management Organization; 2013.
21. Powel R. Basic Research Methods for Librarians. Tehran: Islamic Azadi University Scientific Publication Center; 2010.
22. Dalrymple PW, Rogers M, Turner K, Green M. Partnering to encourage health information seeking by patients in an urban clinic. *IFLA WLIC*; 2013 Jun 12; Singapore, Singapore.
23. Kazerani M. Hospital libraries. In: Horri A, editor. *Encyclopedia of Library and Information Science*. Tehran: National Library of Iran; 2007.
24. Marshall JG. Measuring the value and impact of health library and information services: Past reflections, future possibilities. *Health Info Libr J* 2007;24 Suppl 1:4-17.
25. Kostagiolas P, Zimeras S. Enhancement of hospital libraries and information services through an e-support system for lifelong learning quality methodologies and tools. *Total Qual Manag* 2008;18:20.
26. Hong Kong Library Association (HKLA). Hong Kong Library Association Code of Ethics; 2005. Available from: <https://www.hkla.org/about-us/code-of-ethics/>. [Last accessed on 2018 Jan 23].
27. Cuddy TM. Value of hospital libraries: The full campus study. *J Med Libr Assoc* 2005;93:446-9.
28. Mortensen HA, Nielsen GS. Guidelines for Library Services to Persons with Dementia. Edinburgh: International Federation of Library Associations and Institutions; 2007.
29. Board of the Association of Hungarian Librarians, the Board of the Federation of Libraries and Information Centres. Professional Code of Ethics of Hungarian Librarians; 2006. Available from: <https://www.ifla.org/files/assets/faife/codesofethics/hungary.pdf>. [Last accessed on 2018 Jan 16].