

# Iranian Women's Motivations for Seeking Health Information: A Qualitative Study

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**Background:** Today empowerment of women by health literacy has become a necessity. Researchers have shown that women are active seekers of health information and seeking behaviors are driven by various motivational factors. Paying attention to women's motivations for seeking health information could facilitate evidence-based policy making in promotion of public health literacy. As health information seeking develops within personal-social interactions and also the health system context, it seems that a qualitative paradigm is appropriate for studies in this field.

**Objectives:** The aim of this study was to explore Iranian women's motivations for seeking health information.

**Patients and Methods:** In this qualitative content analysis study, data collection was conducted considering the inclusion criteria, through purposive sampling and by semi-structured interviews with 17 women, using documentation and field notes, until data saturation. Qualitative data analysis was done constantly and simultaneous with data collection.

**Results:** Five central themes emerged to explain the women's motivation for health information seeking including: a) dealing with fear and uncertainty b) understanding the nature of disease and diagnostic/therapeutic procedures c) performing parental duties d) promoting a healthy life style e) receiving safer health care.

**Conclusions:** It seemed that respecting client's concerns, providing comprehensive health information, as well as risk management and promoting safer health care is necessary.

**Keywords:** Health Information Seeking; Women; Motivation

## 1. Background

The dominance of the age of information and communication followed by the potential increase in the amount of available information have led to information seeking behaviors in patients and their empowerment for acquiring, processing and understanding basic health information as a greater focus for health systems (1). Gaining information literacy followed by reforms in health information is an objective for healthy people of the US to be attained by 2020 (2); as for the Islamic Republic of Iran, the promotion of health information, is considered as part the health system priorities as dictated by the country's strategic document on health system policies.

Scientific reports show that health information seeking, especially in chronic conditions through the promotion of individuals' health knowledge (3, 4), can improve their relationship with health care professionals (5), medical adherence (6), capacity for self-care (7, 8) ability to participate in medical decision-making (9, 10), familiarity with resources for management of stressors (11), performing of preventive behaviors (12) and lifestyle changes (13, 14).

Although health information seeking tendencies vary

based on individuals' personal/social characteristics (13), in most cases, the content of information sought is reported to vary based on the seekers characteristics. In general, however, there is limited information explaining the motivations behind information seeking in people. Some texts note that obtaining health information is intended to empower patients and create a balance of power between the patient and the physician (15). Some others claim that it has more to do with confronting particular medical conditions (16). In fact, information seeking is a response to a need for information rooted in feelings of uncertainty and confusion (17).

Paying attention to women's motivations for seeking health information could facilitate evidence-based policy making for promotion of families health status and consequently public health literacy and achieving optimum health outcomes. In Iran, a few studies have been conducted on information seeking motivations (18). Given that patients' health information seeking behaviors are formed in the context of personal/social interactions and also the health system, applying a qualitative paradigm

for their study appears appropriate. This study focuses on women's motivations for seeking health information because various reports have presented women as active seekers of health information (13, 19, 20), who, in addition to protecting the family's health, also have a critical role in taking care of the family members' health and determining their lifestyle. They are also more sensitive than men towards their health and pay more attention to taking care of their health and following preventive measures (21-23).

## 2. Objectives

The present study was designed to explore Iranian women's motivations for seeking health information to help health care providers offer information based on the perceived motivators, preferences and needs of women, for the achievement of optimal health outcomes.

## 3. Patients and Methods

This study was conducted with a qualitative approach, using conventional content analysis. Qualitative content analysis is an appropriate method to obtain variable and reliable results from textual data (24).

The present study was part of a large study based on the grounded theory. This study included 17 women, who were purposefully selected from rural and urban health centers, organizations associated with women's affairs, parks and offices of the Rafsanjan city of Iran. The inclusion criteria were as follows; middle-aged married Iranian females with the ability to communicate well, and the desire to take part in the study, with favorable physical, mental, and cognitive conditions for sharing their experiences. Generally, participants were selected from a diverse range of age groups, education levels, occupations, places of residence (rural and urban), health statuses etc. For purposive maximum variation sampling, the researchers approached good informant women who could provide broad insight regarding the research question; these cases were selected from friends, colleagues and health care providers. Women who couldn't concentrate on the research subject, and discuss within the subject of the question, were excluded from study. One of the participants was excluded.

Following approval of the project by the Research Deputy of Kerman University of Medical Sciences (No. 93/10/60/24158), semi-structured interviews were conducted by a research team member, familiar with interviewing techniques. Sampling continued until saturation of data. Saturation was diagnosed without the emergence of new categories and until enrichment of emerged categories. This occurred by the 15th interview after performing two extra interviews. All participants who were invited for the interview accepted the invitation, and continued participating for the entire duration of the study. The interviewer and interviewees agreed on the time and place of the interviews, and consent of eligible participants was obtained in

an intimate and relaxed setting. Before the interview, the researcher explained the study objectives and reasons for their selection of the participant, and clarified the benefits of the study for the participants and nurses, and how they could access the final results. Next, according to the study objectives, the subject of the research questions and the adopted approach, the researcher proposed several possible questions according to interview guidelines. To correctly direct the research, and according to previous interviews, the interview guidelines were changed after each interview. Each interview lasted between 45 minutes and 120 minutes. Interviews were conducted at home or at the workplace of either the researcher (School of Nursing and Midwifery, Rafsanjan) or the participant. Interviews were transcribed immediately after completion. To that end, recorded interviews were listened to, several times, and then typed verbatim in Microsoft Word®, which led to researcher's immersion in data. Along with interviews, participants' states and characteristics were noted. Furthermore, the researcher attended Rafsanjan's public library, and reviewed ten copies of local and national newspapers, family magazines, and columns on medical topics, and used them as data. Contents of these topics focused mostly on women's questions and answers about health issues. The researcher also attended health centers and studied educational booklets, pamphlets, CDs, brochures, and used them in the data analysis.

Data were analyzed with an inductive approach by the research team, using the constant comparative method, in the following order: transcribing recorded interviews in the Microsoft Word® software and determining meaning units, which included women's statements in interviews and materials obtained from observations, documentations, and field notes on barriers of women's health information seeking; coding and labeling meaning units; review of codes with interview text and information obtained from other sources; revision and comparison of codes in terms of similarities and differences; merging similar codes and categorization; development of categories according to similarity and suitability; revision and comparison of categories according to data to ensure rigidity of codes; and finally, identification of themes associated with women's motivation for seeking health information (25, 26).

To ensure accuracy and reliability of qualitative data, standards for scientific rigidity were applied including credibility, dependability, transferability, and confirmability, as proposed by Guba and Lincoln (27).

### 3.1. Ethical Considerations

This study was conducted with the permission of the Ethics Research Committee of Kerman University of Medical Sciences; code No 93/133. Principles of ethics in research included informed consent, anonymity, confidentiality, and participants' rights to withdraw from the study. Moreover, study objectives, confidentiality of data, and recording of

interviews were explained to the participants prior to interviews, and their verbal consents were obtained.

#### 4. Results

A total of 17 married women, aged 25 to 60 years participated in this study, of which five were housewives, ten were employees, and two were self-employed. Six women lived in villages and the rest were city dwellers. Six participants had known diseases and were receiving treatment, and the rest appeared healthy. Two interviews were held at the participants' private homes, one at the researcher's home, two at the participants' workplace, and twelve at the researcher's office at Rafsanjan School of Nursing and Midwifery. Table 1 presents characteristics of participating women. In analyzing data, five themes were identified as women's motivation for health information seeking, including: a) dealing with fear and uncertainty, b) understanding the nature of disease and diagnostic-therapeutic procedures, c) performing parental duties, d) promoting a healthy life style, e) receiving safer health care. Box 1 presents category and sub-categories.

##### 4.1. Dealing With Fear and Uncertainty

Along participants who reportedly avoided receiving

information on cancer and refractory diseases and believed that receiving such information could disturb their own and their family's peace and tranquility, some participants noted that feelings of fear, anxiety and uncertainty were major motivations for their seeking of health information. Exposure to risk factors and the possibility of being afflicted with refractory diseases such as cancer were expressed as the main factors causing fear. Participant number 13 noted on this issue, "I was told that one of the factors for the development of breast cancer is having lazy ovaries and since I was diagnosed with this condition on the grounds of my infertility problems for a while and since I'm also fat, I thought I'm more inclined to being afflicted with such a disease, that's why I'm so scared, and so, whenever I can, I ask about the disease".

Fear and worry about possible pain and suffering or about imposed costs on the family and disturbance of their peace and comfort were other factors that motivated women to seek health information. Participant number 9 said, "I got worried for a second there. For my family, for my job, they were somehow at risk. I didn't want to be a disabled person who regularly takes sick leaves. My concern was that I would lose some of my abilities. I thought I wouldn't enjoy life anymore".

**Table 1.** Characteristics of Participants in the Study

Participant	Age	Education	Health Status	Occupation	Place of Residence	Interview Location
P1	50	Illiterate	Patient	Housewife	City	Participant's home
P2	47	Master's	Healthy	Employee	City	Researcher's workplace
P3	40	Bachelor's	Healthy	Employee	City	Participant's home
P4	25	High school diploma	Healthy	Housewife	City	Researcher's workplace
P5	50	High school diploma	Healthy	Employee	City	Researcher's workplace
P6	40	Associate diploma	Healthy	Employee	Village	Researcher home
P7	30	High school diploma	Healthy	Housewife	Village	Researcher's workplace
P8	60	Religious education	Patient	Housewife	Village	Researcher's workplace
P9	51	Bachelor's	Patient	Employee	City	Researcher's workplace
P10	55	High school diploma	Patient	Self employed	City	Researcher's workplace
P11	35	Bachelor's	Healthy	Employee	City	Researcher's workplace
P12	37	Religious education	Patient	Housewife	Village	Researcher's workplace
P13	50	Associate diploma	Healthy	Employee	City	Researcher's workplace
P14	38	Bachelor's	Healthy	Employee	City	Researcher's workplace
P15	52	Bachelor's	Patient	Self employed	Village	Researcher's workplace
P16	51	High school diploma	Healthy	Employee	City	Participant's workplace
P17	35	Master's	Healthy	Employee	Village	Participant's workplace

**Box 1.** Emerged Category and Sub-Categories of the Study

#### Motivation for Health Information Seeking

##### Dealing with fear and uncertainty

##### Understanding the nature of disease and diagnostic/therapeutic procedures

##### Performing parental duties

##### Promoting a healthy life style

##### Receiving safer health care

#### 4.2. Understanding the Nature of the Disease and Diagnostic/Therapeutic Procedures

According to a vast majority of women, facing conditions of a health crisis such as being afflicted with a disease was the starting point for seeking health information. Participant number 12 said, "Perhaps when my family's or my own health were in danger, that was the main period I started to seek information".

It was after feelings of threat to their health that women sought information from available resources in order to understand the cause of a disease, its symptoms and different diagnostic and therapeutic procedures. Participant number 10 said, "My son had tonsil problems, I was searching a lot to find out if there were non-surgical options".

Some women claimed that they sought information about different treatments. For example, participant number 10 said, "My son had tonsil problems, I was searching a lot to find out if there were non-surgical options".

#### 4.3. Performing Parental Duties

Interest in maintaining and promoting the health of their family, especially their children, was an important motivating factor. The concepts within this theme included information related to children's growth, development and illness, their education and nutrition and taking care of the fetus health during pregnancy.

This motivating factor was so intense that some women declared they got familiarized with health issues concurrently with their first child's birth. They even believed that sometimes their permanent obsession with issues and information related to their children's health acted as a cause for neglecting their own health. For instance, participant number 7 said, "My daughter's birth sparked in me a serious interest in health issues and that was when they came to occupy a greater place in my thoughts". Participant number 10 said, "When something happens to my kids, I forget about myself".

Some mothers believed that performing maternal tasks depended on their health information, and if they did not have enough health information, they reported experiences of feeling inadequate.

#### 4.4. Promoting a Healthy Lifestyle

Another motivating factor for women seeking health information was the desire to provide a healthy life for themselves and their family members. Looking to find ways for improving physical health, some women sought forms of physical activity. Participant number 9 said regarding this issue said, "I was looking to improve my health status. This made me take exercise classes". Some women thought that knowledge about preventive measures was a motivation for seeking health information. Participant number 6 said, "I'm interested in nutri-

tion counseling programs on TV. I like to know what diet we should follow to prevent our blood pressure from soaring".

Obtaining health information on mental relaxation techniques was another motivating factor for participants seeking health information. Participant number 16 said on this issue, "I think it's better to know about psychological issues, as it can help prevent depression or other problems affecting the soul".

Finding non-pharmacological methods was another motivating factor for seeking information in this regard. Participant number 5 said on this issue, "I received a bunch of information from TV for staying healthy".

#### 4.5. Receiving Safer Health Care

Finding treatment centers that, in addition to providing high quality care, also have more advanced and accurate diagnostic and therapeutic facilities, and seeking information for choosing more experienced and skilled health care providers for medical decision-making and reducing the risk of medical errors were some other reasons for women seeking health information. Participant number 15 said on this issue, "In every center, I prefer to gather information about specialists from those who have been more in contact with them in order to find out which one has had the least amount of errors to visit that individual".

### 5. Discussion

The results of the present study provided a newer, broader insight about Iranian women's motivations for seeking health information.

Fear and anxiety of refractory diseases such as cancer motivated some of the women participating in this study to seek for health information. These findings are largely consistent with the results of previous studies (28, 29). Researchers found that, among patients with cancer, there is a positive relationship between negative emotions and the amount of time spent seeking for health information related to cancer (30 - 32). Nevertheless, Cotten and Gupta (33) reported that healthy people with positive feelings are more inclined to seek health information. In another study, people who perceived lower degrees of social support or had a greater sense of well-being sought more health information (34). Considering the results of a review study, Stavri (35) stated that emotions affect health information seeking behaviors in a way that, in conditions of health and illness and even at different stages of disease, people show different health information seeking behaviors. From a variety of available reports, it can be concluded that, due to the complexity of human behavior, deeper, more precise studies are required for a richer understanding of health information seeking behaviors.

Furthermore, results of the present study indicate that active information seeking often takes place on the occurrence of health problems. Other studies also showed



that on the occurrence of health problems, people actively seek information related to diagnoses and treatment processes (36). Previous researchers have noted that in some cultures, there is a different understanding of health and healthy behaviors (37), and that the effect and the role of equity policies in health should not be ignored on the formation of health seeking behaviors (20). These results highlight the need for stressing this issue.

In the present study, the majority of women reported that a major motivation for their health seeking behaviors was to ensure their children's health. In a study conducted by Harmsen et al. (38) parents reported that they started to seek health information immediately after the birth of their child. These results indicate a favorable context for providing health information to promote a healthy lifestyle in families. However, it should be noted that parental health information seeking behaviors vary according to the parents' personal and social characteristics and everyone seeks information based on his own style and character (39). The main task is to help parents find the best of information through the safest and easiest way.

Promoting physical and mental health and a healthy lifestyle were some other motivating factors for women seeking health information. The prominent role of health information seeking in the promotion of a healthy lifestyle and preventive behaviors has also been emphasized by previous studies (40, 41). Although information alone cannot guarantee healthy behaviors, obtaining health information can be a major motivating factor for changing health performance (42, 43).

Another motivation of women was to receive high-quality care and reduce the risk of exposure to medical errors. Clinical errors lead to at least 44,000 deaths in the US every year (44). These results show that health policies have not been fully satisfying for clients, meeting their needs and wishes and providing client-oriented services. One of the main reasons for these failures is without a doubt the inconsistency of health programs and policies with cultural values and beliefs and social structures of a given society.

Although the researchers attempted to ensure accuracy and reliability of the qualitative data, it should be noted that this study was conducted in Rafsanjan city and on middle aged married women, so despite similarity to other places in Iran, generalization of results is limited (like other qualitative studies). Thus, it is necessary to repeat the study on different groups and cultural backgrounds.

Revision of national health care programs especially in chronic disease management, seems necessary with respect to client's concerns, promoting public health literacy through comprehensive health information management and developing client's participation in health care.

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## Authors' Contributions

Tayebeh Negahban Bonabi designed the research, conducted the interviews and data analysis and prepared the first draft of the manuscript. Alireza Nikbakht Nasrabadi was the supervisor during all stages of research, especially analysis of data and also preparation of the final version of the article. Ali Ansari jaberi provided research consultation and assisted with the paper writing process.

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