

## Necessary Information of Afghan Immigrant Women with Breast Cancer in Iran in the Field of Health and Sanitary and the Way to Access it

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### ABSTRACT

**Introduction:** This study was aimed to identify the sanitary and health-oriented and information needs of Afghan immigrant women with breast cancer who are being treated and coping with their disease in health centers and hospitals in Iran.

**Method:** The present study is a survey and applied in terms of purpose. The study population consisted of 72 Afghan immigrant female patients with breast cancer. A researcher-made questionnaire was used to collect information divided into 6 sections and had 65 questions. Kruskal-Wallis, Mann-Whitney U tests, and SPSS statistical software version 20 were used to analyze the data.

**Findings:** The results showed no significant difference between the health information needs of immigrants based on age, marital status, literacy rate, occupation, treatment stage, manner and place of residence, and other demographic characteristics. "Achieving a healthy life" has been identified as the most critical information need (with a mean of 4.14), and "lack of familiarity with traditional sources related to sanitary and health" has been identified as the most crucial barrier (with a mean of 3.99) in accessing sanitary and health information.

**Conclusion:** Paying attention to the information needs of cancer patients, especially immigrants and refugees with cultural differences and many social gaps with the host community (Iran), seems inevitable. As a result of being aware of the health information needs of these people in different stages of treatment and providing appropriate information by health professionals, informants, doctors, nurses, and medical staff, the situation will provide for better and more effective treatment of these patients in addition to reducing mental anxiety and psychological security in patients.

**Keywords:** Immigrants, Sanitary information, Health information, Cancer, Breast cancer, Health information search, Health-oriented information seeking, Information behavior, Seeking-information behavior, Information needs, Women, Afghanistan, Iran

**INTRODUCTION:**

Breast cancer is the most commonly known malignancy in women in the world [1]. Statistics show that over 1.15 million breast cancers are diagnosed worldwide each year and that half of all people die from the disease [2-3]. This type of cancer is a multifactorial disease caused by genetics, hormonal factors, and the interaction between the person and the environment [4]. It accounts for a large percentage of deaths due to cancer. In the Middle East and the Islamic Republic of Iran, breast cancer is the most common cancer among women [5-7], and according to the Islamic Republic of Iran's Ministry of Health, it accounts for about 25% of all malignancies [8]. The patient's life is changed since the diagnosis. Although breast cancer patients now live longer and the term "cancer" is no longer synonymous with death [9], there are still growing concerns about the problems of people with cancer and their families. Various research evidence shows that people with cancer suffer from a wide range of psychological disorders in the early months after being diagnosed with the disease [10-12]. Many of them face significant difficulties in adapting to their disease. In the meantime, one of the basic needs and factors that will make cancer patients more compatible with their disease is awareness, cognition, and acquisition of information about the disease, health status, as well as cancer-related treatment and health care. In fact, it should be noted that information plays a vital role in helping, supporting, and enhancing social health care for this group of people (cancer patients). With the growth of electronic information and the increasing availability of sanitary and health-related information, the idea of "informed patient" has become more critical [13-14]. Also, the approach of health systems towards cancer in developed countries of the world is focused on timely, understandable, and relevant information for such patients and their caregivers to provide quality and accessible information to them, to improve their quality of life, and also help to better deal with the disease and achieve success in the treatment process.

With all the emphasis and requirements to provide infor-

mation and enable access to information for all groups and individuals as well as cancer patients and their families (especially sanitary and health information, which is one of the most important indicators of health and wellness in the world today), but some groups and people, especially vulnerable and deprived people in society, face many difficulties in searching, accessing, achieving and even using relevant information [15-16]. Accessing and achieving health information related to the treatment of diseases and consequently accessing health services is one of the most basic needs of all people in the world today and foreign immigrants in other countries face many restrictions and even prohibitions for various reasons, primarily cultural, linguistic, social, economic, individual differences, etc. with the host society [17]. Also, lack of access to public health education, the impossibility of proper access to basic health services, higher health costs in the host country, legal problems in using health services such as insurance, family doctor, etc., lack of proper and adequate support of international health centers and organizations from immigrants and refugees in other countries, lack of effective communication with health professionals and managers in the host country and several other factors are among the most critical problems of immigrants and foreigners in the field of health and advances in new information and communication technologies have not been able to help them much [18-19]. In addition, foreign immigrants are not in standard and normal conditions in terms of site and residence in the host country (especially in developing countries and the Third World) and are often marginal and live in poor health conditions [20].

The Islamic Republic of Iran is no exception to this rule, and as the western neighbor of Afghanistan annually has witnessed the influx and arrival of thousands of Afghan refugees and immigrants and war-torn within its borders and over the past 4 decades has seen the presence of several million Afghan refugees and displaced who have entered the country legally and illegally. Internal conflicts, occupation of Afghanistan by Soviet, Taliban, US invasion to Afghanistan, ethnic, tribal, and religious tensions, Islamic centers, weak central government,

extremist and jihadist groups, and many other factors including political, economic, social, poverty, drought has made [21-23] Afghanistan one of the most insecure, dangerous, poorest and most stressful countries in the world and has turned millions of citizens and civilians into refugees and migrants. Afghan migration has been one of the largest migrations in the post-World War II years in recent decades. Statistics show that more than one-third of the people in this country have been forced to leave their homeland and migrate internally and externally for various reasons. According to UNESCO, the United Nations and the World Bank, half of the internally displaced persons and migrants are women who do not have a high level of education and, consequently, have low health literacy [24-26].

A look at the conducted studies and research shows that a combination of personal, environmental, cultural, political, economic, etc. factors have caused immigrants, especially Afghan women in Iran, to face serious problems in accessing information, and this is for patients who struggle with breast cancer and refer to health centers and hospitals in Iran [27]. In fact, it should be noted that in many developing countries, even the citizens and patients of that country do not have access to accurate, correct, complete, and comprehensive information in health and disease. Other research results have shown that the knowledge and awareness of Afghan immigrants in Iran in health are low, and no prevention and care program can help create a healthy immigrant community. A review of related studies on immigrants has also shown that foreign immigrants and refugees, and IDPs (internally displaced persons) struggling with various diseases, including cancer, face more significant health deprivation and gaps than their country citizens [28]. In addition, the results of studies have shown that there is a positive and significant relationship between health literacy and the health status and general health of immigrants, and the more accessible health information they have, the more stable their health status will be [29]. Other studies have emphasized the importance of factors influencing information needs and access to information by migrants and refugees. Study results aim-

ing to identify the information needs of cancer patients showed that most participants cited lack of information at home [30], information about physical activities, information about the method and lifestyle to treat the disease [31]. In another study related to cancer patients, cancer patients' most important information needs were identified as knowing disease's symptoms, medication information, treatment methods, general health information, lifestyle, and anatomy-physiology [32-33]. In another study, four basic concepts and components of information needs were identified: treatment models, care and treatment sites, medications used (and their side effects), and diet [34]. In another study on breast cancer patients, it was found that inadequate participation in information seeking and lack of recognition about the disease and its effective management leads to poor care outcomes, unrealistic expectations, confusion and mismanagement of the disease, anxiety, and frustration, lack of proper exercise as well as delay in seeking treatment and inappropriate self-care [35-36].

According to the contents mentioned, and given that so far no study has been conducted on the information needs and health-oriented information seeking behavior of Afghan women migrants in Iran, and since more than 1.5 million Afghan women (nearly 2% of the population of Iran in 1400) live in Iran [37-38] and breast cancer is relatively common among them and according to available statistics, its rate is higher than Iranian women, so recognizing the information needs related to breast disease, ways to obtain and access the required information, as well as their obstacles and challenges in seeking accurate and purposeful information can help promote the improvement of information methods as well as provide them with better health services. As a result, this study was aimed to identify the sanitary and health-oriented information needs of Afghan immigrant women with breast cancer who are treating and dealing with their disease in health centers and hospitals in Iran. In addition, since similar and comprehensive studies have not been conducted internationally on women with breast cancer and their health-oriented information needs and demands, this study can be a prelude to similar studies

and more attention to the needs and shortcomings of immigrants with cancer in all over the world.

### Research Method:

The present study was applied in terms of purpose and conducted by cross-sectional survey method in the summer of 1400. The study population consists of 72 Afghan immigrant women treated in 18 Tehran's health centers to improve their health and fight against breast cancer. A researcher-made questionnaire was used to collect information related to health information needs and health-oriented information behavior. This questionnaire is prepared in 6 sections and 65 questions based on a 5-point Likert scale (very low to very high). The first part of the questionnaire is related to demographic information (10 questions), the second part is related to the risk factors and symptoms of breast cancer (14 questions), the third part is related to the health information needs of the surveyed migrants (15 questions), the fourth part related to migrants' desire to know the information related to their disease (5 questions), the fifth part was related to the stage and treatment model (9 questions) and the final part was related to the challenges and barriers

to accessing health and sanitary information (12 questions). The opinions and suggestions of 14 experts in the field of health information and health information management have been used to confirm the validity of the questionnaire. Cronbach's alpha coefficient was used to determine the reliability of the questionnaire, which was 0.81, 0.92, 0.77, 0.84 and 0.80 for the 5 relevant sections, respectively. Descriptive statistics (mean and standard deviation) as well as inferential statistics (Man Whitney, Kruskal-Wallis and Friedman tests) were used to analyze the data via SPSS software version 21.

### Findings:

Table 1 shows the demographic and contextual characteristics of the study population. The mean age of the patients was 58.3 years and ranged from 41-69 years. Also, the mean presence of immigrants in Iran has been nearly 16 years. According to the results of "U Mann Whitney Test" and "Kruskal-Wallis" test, because the level of significance in all cases (age group, marriage, level of education, employment status, place and way of life, connection with Iranian citizens as well as the underlying and inherited disease) is greater than 0.05, so there is

**Table 1.** Personal characteristics of Afghan female immigrants with breast cancer

Education	Job Status	Age Category
Elementary Education: 12 (16.67%)	Employed: 10 (13.89%)	33-45: 2 (2.77%)
Secondary Education: 38 (52.78%)	Housewife: 62 (86.11%)	45-54: 23 (31.94%)
Diploma: 16 (22.22%)	Has an Underlying and Inherited Disease	55-64: 39 (54.17%)
College Education: 6 (8.33%)	Yes: 13 (18.05%)	65 and more: 8 (11.11%)
Location	No: 59 (81.95%)	Marital Status
Tehran: 3 (4.17 %)	Family presence in Iran	Single: 9 (12.5%)
The outskirts of Tehran: 44 (61.11%)	Yes: 57 (79.17%)	Married: 63 (87.5 %)
Other provinces: 25 (37.72 %)	No: 15 (20.83%)	Connection with Iranian Citizens
	Life Style	Yes: 13 (18.05%)
	Alone: 7 (9.72 %)	No: 59 (81.94%)
	With Family: 65 (90.27 %)	

no significant difference between the health information needs of cancer patients according to demographic and contextual variables.

Findings from the migrants showed that increasing age, as well as the presence of breast lumps as the most important risk factors and symptoms among Afghan women, played a role in their breast cancer (Table 2).

The highest number of female immigrants with cancer (35 people, i.e. 48.6%) cited achieving a healthy life as the most important sanitary information related to their health. This factor with a mean of 4.14 has the highest importance from the perspective of studied immigrants (Table 3).

Also, three-quarters of the studied women (54 people) tended to know the name of their disease (Table 4), and of these, more than 70% were in the phase of “starting treatment” “or” during treatment “(Table 5). Also, 25 of

them needed to receive information related to the treatment model, and 32 of them considered the information related to the disease care a priority of their information needs (Table 6).

“Lack of familiarity with traditional sources related to health” with a mean of 3.99 and “Lack of mastery in searching for and finding sources of information related to the disease” with an average of 3.83 was identified as the most important and fundamental challenge facing Afghan women with breast cancer in accessing the health information they need.. The legal problems and citizenship of the migrants had the most negligible impact with a mean of 2.99 (Table 7).

### Discussion:

Health and sanitary information are a global issue. According to the reports of the World Health Organization

**Table 2.** Risk factors and symptoms of breast cancer in Afghan women

Variable (risk factors)	Yes	No
Age Increasing	65 (90.28 %)	7 (9.72 %)
History of chemotherapy and radiotherapy	19 (26.39 %)	53 (73.61 %)
History of breast cancer in relatives	24 (33.33 %)	48 (66.67 %)
Menstruation under the age of 12	2 (2.78 %)	70 (97.22 %)
Menopause 55 years old	3 (4.17 %)	69 (95.83 %)
First pregnancy over 30 years	4 (5.56 %)	68 (94.44 %)
No breastfeeding	11 (15.28 %)	61 (84.72 %)
Postmenopausal Female Hormone (HRT) Consumption	2 (2.78 %)	70 (97.22 %)
smoking	4 (5.56 %)	68 (94.44 %)
Variable (Warning signs)		
Nipple Retraction	6 (8.33 %)	66 (91.67 %)
View of Orange peel skin on the breast	2 (2.78 %)	70 (97.22 %)
Asymmetry of two breasts	4 (5.56 %)	68 (94.44 %)
Milky or bloody discharge from the nipple	8 (11.11 %)	64 (88.89 %)
Existence of a mass in the breast	52 (72.22 %)	20 (28.78 %)

**Table 3.** Health Information Needs of Afghan Female Immigrants with Breast Cancer

Items	Very Low	Low	Medium	High	Very High	Average	SD
Disease control and management	5	7	8	21	31	3.91	1.861
Side effects of prescription drugs	6	6	11	19	30	3.85	1.551
Good news about the disease	11	9	13	17	22	3.42	1.362
Active acquisition of information in the field of health	11	10	11	20	20	3.39	1.332
Methods of treatment of the disease	13	10	8	17	24	3.40	1.604
Diet tailored to the disease	5	6	14	20	27	3.81	1.512
Information on treatment models	3	6	15	22	26	3.86	1.9.31
Your laboratory and clinical tests	4	4	12	22	30	3.97	1.131
Achieving a healthy life	3	2	12	20	35	4.14	1.380
Psychological support information	10	12	13	19	18	3.32	1.993
Advantages and disadvantages of treatment methods	7	6	9	23	27	3.79	1.243
Care and treatment facilities	6	7	12	20	27	3.76	1.182
Improve the disease	6	6	11	19	30	3.85	1.803
Coping with illness	9	8	12	20	23	3.55	1.763
General health information	7	6	13	18	21	3.26	1.782

**Table 4.** The desire of Afghan women with breast cancer to find out about the disease

Treatment stage information	Number of Afghan Women	Percentage
Do you want to know the name of your disease?	54	18%
Do you want to know the diagnosis of your disease?	33	54.17%
Do you want to know about the spread of your disease?	29	59.72%
Do you want to know the causes of your illness?	41	43.06%
Do you want to know about controlling your illness?	48	33.33%

**Table 5.** The treatment phase of Afghan female immigrants with breast cancer

Treatment stage information	Number	Percentage
Start treatment	16	22.22%
Initiate treatment	21	29.17%
During treatment	30	41.67%
Follow up on previous treatment	5	6.94%

**Table 6.** Treatment model of Afghan female immigrants with breast cancer

Treatment stage information	Number	Percentage
Therapeutic model information	25	34.72%
Information about radiotherapy	5	6.94%
Information about chemotherapy	7	9.72%
Information about hormone therapy	3	4.17%
Care information	32	44.44%

**Table 7.** Barriers to accessing health information among Afghan female migrants with breast cancer

Items	Very Low	Low	Medium	High	Very High	Average	SD
Individual factors	5	9	18	18	22	3.60	1.09
Lack of support for international centers related to immigrants	13	8	17	18	16	3.22	1.14
Linguistic differences	5	9	7	34	17	3.67	1.11
Cultural differences	3	12	21	16	20	3.53	1.12
Social factors	6	22	15	14	15	3.14	1.08
Economic factors	7	17	9	27	12	3.28	1.16
Background and structural factors	4	8	17	18	25	3.72	1.09
Lack of familiarity with new technologies related to health and wellness	10	6	14	19	23	3.54	1.07
Lack of familiarity with traditional sources related to health and wellness	2	6	15	17	32	3.99	1.05
Access to health information centers and health professionals and informants	6	9	16	22	19	3.54	1.10
Lack of mastery in searching and finding sources of information related to the disease	4	5	11	13	21	3.83	1.17
Legal and citizenship problems in accessing information and health resources	10	15	26	8	13	2.99	1.22

and related organizations, there is a unique role in health inequalities in different countries, communities, individuals, and groups. Given the increasing importance of access to health and sanitary information and its key role in promoting the level of knowledge and awareness of migrants and refugees (as one of the marginalized and deprived groups in society) [39].

Most of the information needs of patients participating in the present study were related to the information to achieve a healthier life and disease control. Among these two factors, nutritional information needs, physical activities, and pharmacological information had the highest impact from patients' perspectives. Study results by James-Martin and et al (2014) and Cha and et al (2012) showed that despite realizing the importance of diet, cancer patients were not fully aware and confident of their diet due to inaccurate and inconsistent information [39-40]. Also, in another study by Mayer (2017), the need for information related to achieving a healthy life has been identified as the main information need of cancer patients [41]. Its results are consistent with the present study's findings. The findings of several other studies have also shown that "disease control and management" has been one of the most important and basic information needs of cancer patients [42]. In addition, this study showed that except for two components (disease treatment methods and psychological support information), other needs of patients were at high and very high levels. In general, the mean information needs of immigrant women with cancer was high with an average of 3.69. On the other hand, it should be noted that the patients under study made great efforts to seek information, efficient information to meet their information needs. Also, people who have more stable health have received a lot of information aides from friends, family, doctors, and other health professionals to return to normal life and manage their health (depending on their social and economic conditions).

The findings of this study indicated the variable information behavior affected by time, socio-economic conditions, and health status of Afghan migrant women. While understanding their information needs, cancer

patients continue to strive for long-term life management with cancer. The findings also showed that the need to be aware of the "side effects of prescription medicines" with a mean of 3.85 is at a high level, and this indicates the great attention of immigrant women to medicines, how to use them, and the side effects of their use. These results are in line with the findings of studies Fletcher and et al (2017) and Zhao and et al (2017) [43-44].

The present study also showed that a significant proportion of the immigrants under study wanted to know the name and type of their disease. About two-thirds of them needed to receive information about "controlling their disease". Requesting information to promote health and the need to decide on medications, requesting information on specific symptoms and prevention, and controlling and spreading breast cancer are among the most important information needs of Afghan migrant women under study about their disease. In other similar studies, it has been stated that incurable patients and cancer patients are looking for the required information and medicinal products to relieve symptoms and know the type of disease. As the results of this study and other previous studies have shown, many of the motivations for seeking information by cancer patients are due to living in poor health conditions for this group of people; because the occurrence of this disease in people has led to new responsibilities, new obligations, and roles, as well as exceptional attention to treatment and awareness of their health status so that they can be diligent in maintaining their health by knowing the type of disease, diagnosis and spread of it.

On the other hand, cancer patients wanted more information about their situation. If patients did not find information about their situation in medical booklets and magazines, they would have no incentive to read such articles. Also, in other studies related to the present study, the need for treatment decisions and information about the type of disease was considered an essential stimulus for searching the sanitary and health-oriented information of the people, which is consistent with the findings of the present study.

The present study's findings also showed that 44.44% of



people (32 people) were looking for information about care and of the 5 people who were in the status of “following-up previous treatment”, all chose to obtain care information. Information about surgery was also considered by more than one-third of patients (25 patients), most of whom were in the phase “during treatment.” Also, 6 out of 7 people looking for information about “chemotherapy” were in the phase of “starting treatment”. These findings indicate that people’s treatment models are directly related to their treatment phase. As people enter a newer phase of treatment, their treatment model and health information needs will change. These findings align with the results of previous studies and research in this field, including Freimuth (2018), Okuhara and et al (2018) and Faller and et al (2016) [45-47]. Findings from the present study on barriers to accessing information for Afghan female migrants with breast cancer also show that “lack of familiarity with traditional health and sanitary-related resources” with the highest mean as the most effective and “citizenship and legal problems” with the lowest mean barriers were effective in patients’ access to health information. Also, the mean effective barriers to patients’ access to health information were 3.51, which is at a high level, which means that there are relatively severe challenges and impacts on patients’ access to the needed information. Individual factors are also an influential factor in accessing information after patients’ lack of control. The physical condition of patients, age, literacy rate is the most important factors influencing the individual and the context on the type and manner of accessing information among the women under study. Studies in this field have shown that removing barriers and challenges to access to information and seeking information by patients leads to the creation of hidden and overt knowledge. Still, applying such knowledge in practice requires social support and support from clinicians and health professionals, including physicians and nurses. The medical staff, especially physicians and nurses, by being equipped with specialized knowledge and skills in treatment and care, can help patients in the treatment phases and long-term health management by establishing effective communication with patients.

On the other hand, the quality of communication between patients and medical staff affects information behaviors. The motivation to seek information from other sources is raised where patients do not have easy access to their physician or do not trust the skills and expertise of medical staff. In the present study, “linguistic differences” and “lack of effective communication with physicians, nurses, etc. to receive health information” with high means and above average, were effective in the information behavior of patients. The results of another study showed that dissatisfaction with the provision of information by staff, as well as the avoidance of staff who are stressful and treat angrily and furiously in dealing with the patient, are the main stimulants for seeking information from peers and the Internet sources. Other texts cite the reason to seek information to pursue a healthy life, overcome tensions, seek support, and self-preservation. Although these reasons were not identified as a concept in the present study, it can be concluded that information-seeking motivations are related to information needs, knowledge gap, and basic life needs. Therefore, seeking information should not be considered separate from emotional, physical and psychological needs, and clinical staff in the health sector design interventions to support cancer patients and their families to independently seek health knowledge and adhere to it via understanding such motivations and needs.

### **Conclusion:**

In conclusion, it should be noted that paying attention to the information needs of sick foreign immigrants in Iran is of great importance. Making information available through legal and effective methods and channels for this group of patients, such as: holding health education sessions and workshops, distributing free health information books and resources, using audio-visual media such as radio and television, newspapers and magazines, establishing memoranda of understanding with health information centers and immigrant trustees such as the UN High Commissioner for Refugees, the World Health Organization, the Office of Citizens and Immigrant Affairs of the Ministry of Interior, embassies and other

centers that can facilitate the access process and raise knowledge and awareness of migrants, especially in the health sector can be helpful.

Regarding the importance of health and sanitary information in everyday life and since there is a positive relationship between empowering people with accessing and achieving information, policy-making and planning regarding health education for immigrants with cancer and obtaining information in this area is strongly felt. Since the population of Afghan citizens in Iran has been a positive and growing trend in recent years and given their deprivation and vulnerability in many areas, attention to educational programs, especially health and sanitary education, is felt more and more among them. Social participation and cooperation of non-governmental and people-oriented groups in improving the quality of information of sick immigrants are undeniable.

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