



Religious, Cultural, and Social Beliefs of Iranian Rural Women about Breast Cancer: A Qualitative Study

Iman Ghaderi^{*a,b}, Ahmad Kaviani^{b,c}, Elham Fakhrejehani^{b,d}, Neda Mehrdad^b, Narjes Hazar^e, Mojgan Karbakhsh^e,

^a Department of Surgery, University of Arizona, Tucson, USA

^b Iranian Academic Center for Education, Culture and Research, Breast Cancer Research Center, Tehran, Iran

^c Department of Surgery, Tehran University of Medical Sciences, Tehran, Iran

^d Department of Breast Surgery, Kyoto University, Kyoto, Japan

^e Department of Community and Preventive Medicine, Tehran University of Medical Sciences, Tehran, Iran

ARTICLE INFO

Received:
22 November 2013
Revised:
9 February 2014
Accepted:
11 March 2014

Key words:

Culture,
religion,
qualitative research,
community surveys,
health care system,

ABSTRACT

Background: The purpose of this study was to examine religious, cultural, and social beliefs of healthy women about breast cancer in rural settings in Iran.

Methods: In the present study, 16 in-depth interviews with health care leaders, social and religious experts and 11 focus group discussions were conducted with 79 women in the rural areas near the capital city of Tehran, Iran. Grounded theory model was used to analyze the data.

Results: Some women believed that religious customs and rituals, such as praying, taking a vow, or going on a pilgrimage to a holy place, might have healing effects if performed in addition to seeking medical care. Many believed that God intervenes in the entire course of any illness, from occurrence to cure. Although few had fatalistic views toward cancer, the majority believed that patients could try to change their destiny. With respect to the relationship between moral behavior and disease, 4 types of opinions were identified; good people suffer, evil people get punished, evil people do not suffer, and everything has a scientific explanation. Participants believed that self-perception, their husbands, deficiencies in the health care system, and financial concerns influence breast cancer outcome.

Conclusions: Our study showed that many participants were not aware of any available support in the healthcare system. They generally believed in the healing effect of prayers, only when it is sought in parallel with medical care.

Introduction

Breast cancer is the first leading cause of cancer worldwide and the most frequent cause of cancer

and the most frequent cause of cancer death in women in both developed and developing countries.¹ According to the most recent Iranian cancer registry report, breast cancer is the most prevalent cancer among Iranian women.² Iranian women are diagnosed with breast cancer about a decade younger compared with women in developed nations.³

Cultural, spiritual, and religious beliefs and values are increasingly being recognized as important determinants of cancer prevention

Address for correspondence:

Iman Ghaderi
Address: Department of Surgery, University of Arizona,
College of Medicine, 1501 N Campbell Ave, PO Box
245066, Tucson, AZ 85724-5066
Tel: +1 520 626 2635
Fax: +1 520 626 1411
Email: Iman.ghaderi@gmail.com



behaviors and outcomes following cancer diagnosis and treatment.^{4,7} Culture powerfully shapes what people think about cancer and how to explain the incidence of cancer. Therefore, it might determine community beliefs about what can be done toward cancer. For instance, among some groups, cancer is viewed as getting a death sentence or God's punishment, and it is believed there is very little one can do to prevent cancer.^{8,9} This can potentially influence a patient's intention to seek treatment and ability to cope. A survey in Qatar showed that women were significantly less likely to participate in breast cancer screening, if they believed that breast cancer is related to God's punishment or bad luck.¹⁰

The spiritual needs of patients are often neglected and not addressed.^{11,12} Moreover, most of the studies in this field have been performed in western countries among women with breast cancer and not among healthy women.¹³ Optimum care for breast cancer requires an in-depth understanding of spiritual, religious, cultural, and social aspects of the disease to enable health care professionals to best address the needs of patients and their families. The aim of this study was to examine religious, cultural, and social beliefs of healthy Iranian women about breast cancer in rural areas.

Methods

This qualitative study had two phases. In the first phase, 16 individual interviews were performed with leaders in the health care system, health professionals, medical specialists, and social and religious experts. Based on the data obtained in the first phase and literature on women's health, the primary items for the focus group discussion (FGD) were gathered. The study was approved by the research ethics Committee of the Iranian Centre for Breast Cancer.

In the present study, 11 FGDs were conducted with 79 women using purposive sampling. FGD took place in rural health centers affiliated with one of the medical universities in Tehran, Iran.¹⁴ Verbal consent was obtained from all participants before each session. Participants were recruited from women who lived in rural areas near the capital city of Tehran. Women with breast cancer were excluded. Each group consisted of 5 to 11 participants and sessions were between 60 and 90 minutes. All FGDs were conducted by a female physician (EF). At the beginning of each session, the study and its objectives were described to the participants. Interviews were audio-taped and transcribed. Through an inductive process, grounded theory was used to identify analytical categories as they emerged from the data to develop hypotheses.¹⁵ Content analysis was performed on the transcripts to identify recurring themes. Passages were then organized by themes. FGDs were reviewed and analyzed. During the data analysis, refinements were

made to the theory; this interim analysis was developed where questions were refined and new hypotheses were developed. New themes were discussed in the following FGDs. Validation strategies were used to feed the findings back to the new participants to see if they regarded the findings as a reasonable account of their experience.¹⁶ The data was coded into schemes and results were compared and discussed. Consensus on the final schemes was reached through theme saturation. Particular attention was paid to outliers or negative cases.^{17,18}

Results

The mean age of participants was 31.2 years (range: 19-52 years). All women, except one, were married. Regarding educational status, about 56% of women had high school diploma or less, 34% had high school diploma, and 10% had university degrees. Of participants, 62% were housewives without any income, 24% were housewives with a source of income from working inside the house, and 14% had a job out of the house (e.g. teacher, worker, etc.)

Some of the women believed that religious customs and rituals, such as praying, taking a vow, or going on a pilgrimage to a holy place, might have healing effects. They emphasized that a "person's purity is pivotal" in the healing process; "If God does not answer people's prayers, it could be due to their impurity." Some of them believed that attending religious gatherings would lift a patient's spirits and change their mood. Moreover, other women would pray for the patient in these gatherings; "Praying is more effective, if done by others".

Many women believed that there is compelling scientific evidence that religious rituals and prayers improve the illness. Most of them stated that even though they believe in medical sciences and doctors, one should also rely on God, the prophet, and his descendents for cure; "God almighty is the most powerful and doctors are only agents who carry out his will". Meanwhile, belief in the healing power of prayer did not seem to be an impediment to seeking routine medical care; "Prayers are effective, only if one seeks medical treatment in addition to praying".

With respect to causes of cancer, the role of God, destiny, and impact of behaviours on occurrence of diseases were frequently mentioned. There was no general consensus on the role of God in the course of diseases. Most of them believed that God would intervene in the entire course of any illness, from occurrence to cure.

With regard to destiny, two types of beliefs were identified; those who had a predetermined (fatalistic) view and others who did not. Those with the predetermined view believed that breast cancer was due to fate and could not be changed: "Our fate is in God's hands. Your fate is written on your



forehead and you cannot change it...Science cannot prevent our fate". The majority, however, believed that patients could try to change their destiny: "Our fate is in our hands...you should seek treatment and do your best. But you will heal only if God wants...God doesn't wish us to sit by and wait for him to determine our fate...Even though you cannot change your fate, we must take preventive measures and rely on God's will".

From FGDs, 4 different opinions about the relationship between behaviours and disease were identified; good people suffer, evil people get punished, evil people do not suffer, and those who believed that everything has a scientific explanation.

Good people suffer: Some of the women believed that: "Good people get cancer at a younger age and die and go to God's presence. So, they [do not get old and] won't stay in this life."; "When God likes one of his devout believers, he gives them pain, poverty, and illness to make them pray to him all the time."; "People who are closer to God, get sick more often."

Evil people get punished: One woman stated that "If you have done evil, you will get cancer", and "Curse and prayer have effects". Most of the participants believed that we are somehow punished in this life to cleanse our souls from sins before we die: "If God does not like a person, he punishes that person in a way that she gives up and asks God to take her life".

Evil people do not suffer: A few participants stated that "cruel people are healthier".

Everything has a scientific explanation: There was a group of women who did not believe in any relationships between diseases and behaviours: "In the past, because there was no information about the cause of diseases, people believed that cancer was due to the influence of an evil eye. Everybody is at risk of getting cancer and there is no difference between people...It has nothing to do with fate; we die in one way or another". These participants stated that one day there will be scientific explanations for breast cancer. One stated: "Since science has not come up with any definite explanations for the cause of cancer, some believe that it is related to divine retribution". Another stated: "It is like the Islamic religious laws (*sharia*) about lawful (*halal*) or prohibited (*haram*) acts. We do not know the wisdom behind many of them. Maybe in the future, science will be able to tell us what to do to avoid cancer."

Regarding cultural and social factors, participants believed that multiple factors influence women's health in Iran. Participants mentioned self-perception, husbands, gender of physician, and financial concerns.

Self-perception: Participants mentioned that their perceptions about the value of a woman depended upon the woman's level of education, knowledge, and the extent of their social interactions. Some

participants stated: "Women are important because of their key role at home as housewife and manager"; "Men think that women should stay healthy to serve and deal with their responsibilities at home"; "If the wife gets cancer, the family falls apart"; and "Women naturally put their family first and do not think about themselves".

Husbands: Most women stated that they had a very close relationship with their husbands and found them very supportive during difficult times. Therefore, they felt comfortable discussing their health issues with them: "We are important to our husbands and they encourage us to seek treatment, if necessary". Few women preferred to talk to their mother, sisters, or close female friends. When they were asked if they would need to get permission from their husband to seek medical care, they said that their husband's agreement was important but they would put their health first, if their husband opposed their decision. Only one said: "some husbands cannot cope with such diagnosis and divorce their wives". The participants stated that another reason they had to inform their husbands about their health status was to get financial support. It was stated that: "income is a key issue in every Iranian family and men are the primary source of income."

Women's preference for gender of their physician:

Participants believed that seeing a male physician was not against their religious values: "Even though any unnecessary social interactions between unrelated men and women is prohibited in Islam, a male doctor can examine any part of a woman's body". They stated that due to modesty, embarrassment, and their husband's preference, they would prefer to see female physicians: "A female physician has a similar body and I feel more comfortable...Female physicians understand our feelings and emotions better than male doctors...I feel uncomfortable when a man examines my body...Most husbands prefer that their wives see a female physician". There were only a few women, however, who stated that modesty or religious reasons were not an important issue when it came to their health.

Some women were doubtful about the honesty of people who do not make their health a first priority: "One might pretend that she would follow religious rules and go to female physicians, but for a genuine believer in God, her health is more important". Others believed that male doctors, due to their experience and confidence, were better than their female counterparts.

Deficiencies in the health care system: Two issues that emerged from the FGD pertaining to the health care system were lack of awareness about the referral system and the cost associated with the health care. Most of the participants were not aware of any referral system. The majority of them stated



that they did not have family physicians to refer them to an appropriate specialist. Many women complained about the expensive medical services and the lack of health insurance. They stated that due to the direct financial relationship between doctors and their patients in Iran, most patients could not always trust their doctors for fees they would request for the provided services.

Discussion

This study was performed to determine Iranian women's religious, social, and cultural beliefs about breast cancer. This type of research in the field of breast cancer helps us understand how women in the general population perceive this disease, how we can encourage favorable changes in beliefs, and how to frame disease prevention and management in potentially acceptable ways according to cultural, social, and religious beliefs that lead to earlier diagnosis and treatment and better outcome.¹⁹

A limited number of researches have been done to investigate healthy women's beliefs about this disease, especially among middle eastern women. Most studies have employed "the deficit in knowledge" approach in which investigators compared respondents' knowledge with existing biomedical information. In contrast, we did not make a priori assumptions regarding knowledge and attitudes. Instead, we allowed the women to inform us about these issues in their own terms. This method has been successful in measuring knowledge deficits compared with the benchmark data.²⁰

We used a qualitative focus group method. This method is particularly suited to the study of attitudes and experiences and can be used to examine not only what people think, but also how they think and why they think in a particular way. The idea behind the focus group method is that group processes can help people explore and clarify their views in ways that would be less easily accessible in a one-on-one interview.¹⁵

It has been shown that spirituality and religion are very important aspects of Asian American women's experience with breast cancer.¹³ Yet, most authors who studied the role of religious and spiritual beliefs and practices in this field have surveyed breast cancer patients and not the general population.⁵

A large population-based survey, in two counties in Eastern North Carolina on 1500 women in the year 2000, sheds light on some cultural and religious beliefs of the general population about breast cancer in the US. In that study, more than 90% of women believed that God would work through doctors and nurses to cure cancer. In addition, 22% of white women and 65% of African American women believed that if they were told they had breast cancer, the strength of their own faith in God would determine if the cancer would be cured. According to the majority of responders, praying every day for

cure was considered a must for a breast cancer patient. Nevertheless, only less than 4% of women believed that cancer would be induced because one had sinned against God.²¹

In another published research by Bailey *et al.*, the interrelationship between cultural beliefs and mammography utilization was studied, and then, the perceived cultural barriers were successfully utilized to develop cultural intervention strategies for improving mammography utilization.²² In the study by Gall and Cornblat, the role of spiritual factors was studied in long term adjustment to breast cancer among the surviving patients. Religious/spiritual theme categories identified in the writings of these breast cancer patients were interesting and relevant to our findings: relationship with God (reliance on him for support and guidance, usually without expecting specific miracles); meaning (why they had been diagnosed with cancer, who is to blame, divine purpose of this disease, a part of God's plan); life affirmation/growth; social support; and religious coping activities (most commonly prayer, both personal, and intercessory).⁵

In a survey, more than 90% of physicians who were practicing in Tehran, Iran, said that they had been asked -at least occasionally- to pray for their patients.²³ In our study, women generally believed in the healing effect of prayer, comparable with seeking medical care. Although most of the participants were not aware of any available support in the healthcare system, they acknowledged that practicing religious traditions is not a substitute for seeking medical care. In addition, very few of them had a fatalistic view towards breast cancer and the majority believed that it is important to take care of one's health. Based on our results, it does not seem that religious beliefs prohibit people from seeking medical care.

Some studies on the association between belief in destiny and cancer screening practices, comparing Latinos to white patients, have shown that Latinos are more likely than whites to believe in predetermined and unchangeable fate and assume that little can be done to prevent cancer.^{9,24} In contrast, in another study of Latina women, participants generally viewed God as an all-loving figure that restrained from punishing humans. The themes related to acceptance, such as "what God sends, one has to accept", were more dominant than fatalism in that research.²⁵

In a study on coping with breast cancer in newly diagnosed Iranian women, authors coined the term "spiritual fighting" when many patients viewed cancer as a test by God; an exam that they need to fight and win with pride.²⁶ Another study on older women with newly diagnosed breast cancer showed that belief in divine control and a feeling of shared responsibility with God enabled them to actively cope with the cancer diagnosis, rather than being passive and fatalistic.²⁷



There was an evident sense of self-value in all participants. We did not encounter anyone who thought that women's health is not as important as their husbands. This shows that this group of women, who lived in rural areas near the capital, believed that women are as valuable as their husbands.

Similar to the study by Lannin *et al.*, on beliefs of healthy American women about breast cancer, some of our study subjects believed that breast cancer patients are more likely to get support from female friends and family. The study by Lannin *et al.* also showed the role of husbands in coping with the disease; only 2-7% in that study said that dealing with breast cancer is a woman's problem and the husband does not need to be involved.²¹ In that study, other concerns such as divorcing women due to getting breast cancer and becoming less attractive after breast cancer surgery were more commonly reported by African Americans than white women.

Although our participants preferred to see a female physician if they needed medical care, they stated that the gender of a physician would not be a limiting factor. Our results are contrary to some studies that have shown that preserving modesty and physical examination of intimate body parts might be a barrier to health care, particularly for Latino and Asian women.^{10,28-31}

There is no well-established national system for cancer care in Iran and most patients have to find their own physicians (self-referral).³² Furthermore, most physicians do not spend enough time explaining the necessary procedures to the patient.³³ It would be reasonable to assume that patients' compliance with recommended treatment will improve, if physicians spend adequate time to talk to patients about the diagnosis and offer appropriate consultation before any surgical procedures. The majority of our participants believed that many patients could not always trust their doctors due to the direct doctor-patient financial relationship. This can be better understood when considering the fact that the direct economic cost of breast cancer is very high in Iran and people have to pay more than 55% of their health expenses themselves.^{34,35} Lack of trust in the health system was also reported by Asian-American breast cancer survivors in the study by Tam *et al.*¹³ This is not in accordance with the findings of the study by Lannin *et al.* which reported that about 80% of white Americans believed that doctors and health professionals are the ones they would trust most to decide how to treat cancer (once they get the disease).²¹

Due to lack of widespread and adequate health insurance coverage and their high costs many patients cannot afford the expense of hospitalization and surgical procedures.^{35,36} As a result, it is quite acceptable for women to choose more affordable alternatives to appropriate medical care and health management. Improvements in insurance coverage

in order to cut the direct financial relationship between doctors and patients can improve trust and also access to essential treatment.³⁷

Our study had some limitations. Scheduling each session at health centers of rural areas was difficult, as at each meeting some of the participants were absent. Some women were not interested in participating in FGDs. The likely cause of their disinterest may have been their responsibilities at home and out of the house, such as family and/or duties inside and out of the house. Most of the participants worked with their husbands in gardens, farms, and small family businesses. Another possibility might have been that the sessions were held in rural health centers. Rural women are usually encouraged to participate in educational classes in rural health centers and sometimes women find these classes to be repetitive or not interesting. They could have assumed that our study session was one of those educational classes and refrained from attending.

Some issues discussed in other papers, such as body image, intimate relationship, employment, and neighborhood issues, which are among social aspects of the disease were discussed in surveys on breast cancer survivors but did not seem relevant to our subjects.¹³

Our study identified religious, social, and cultural beliefs that may influence patients' attitude towards the health care system and their health related behaviors. The clinicians' knowledge about these issues would allow them to understand and address the issues that may prevent patients from seeking medical care. Further studies are required to investigate if the key findings of this study can be extrapolated to other Iranian women, i.e. those residing in urban areas.

Funding source

This project was supported by the Iranian Institute for Health Sciences Research. The fund was used to supply various materials, including tape recorders, and pay for travel expenses. All phases of the present work, including design and conduct of the study; collection, analysis, and interpretation of the data; and preparation, review, and approval of the final manuscript, were done independent of the funder.

Conflict of interests

The authors have declared no conflicts of interest.

Ethical approval

The investigation fully complied with the declaration of Helsinki for medical research involving Human subjects. The study was approved by the research ethics board of the Iranian Centre for Breast Cancer. In addition, verbal consent was obtained from all participants before each session.



References

1. Ferlay J, Shin HR, Bray F, Forman D, Mathers C, Parkin DM. Estimates of worldwide burden of cancer in 2008: GLOBOCAN 2008. *Int J Cancer* 2010; 127(12): 2893-917.
2. Mousavi SM, Gouya MM, Ramazani R, Davanlou M, Hajsadeghi N, Seddighi Z. Cancer incidence and mortality in Iran. *Ann Oncol* 2009; 20(3): 556-63.
3. Harirchi I, Karbakhsh M, Kashefi A, Momtahan AJ. Breast cancer in Iran: results of a multi-center study. *Asian Pac J Cancer Prev* 2004; 5(1): 24-7.
4. Daher M. Cultural beliefs and values in cancer patients. *Ann Oncol* 2012; 23 Suppl 3: 66-9.
5. Gall TL, Cornblat MW. Breast cancer survivors give voice: a qualitative analysis of spiritual factors in longterm adjustment. *Psychooncology* 2002; 11(6): 524-35.
6. Gall TL, Miguez de Renart RM, Boonstra B. Religious Resources in Long-Term Adjustment to Breast Cancer. *J Psychosoc Oncol* 2000; 18(2): 21-37.
7. Thune-Boyle IC, Stygall JA, Keshtgar MR, Newman SP. Do religious/spiritual coping strategies affect illness adjustment in patients with cancer? A systematic review of the literature. *Soc Sci Med* 2006; 63(1): 151-64.
8. Yeo SS, Meiser B, Barlow-Stewart K, Goldstein D, Tucker K, Eisenbruch M. Understanding community beliefs of Chinese-Australians about cancer: initial insights using an ethnographic approach. *Psychooncology* 2005; 14(3): 174-86.
9. Perez-Stable EJ, Sabogal F, Otero-Sabogal R, Hiatt RA, McPhee SJ. Misconceptions about cancer among Latinos and Anglos. *JAMA* 1992; 268(22): 3219-23.
10. Donnelly TT, Al Khater AH, Al-Bader SB, Al Kuwari MG, Al-Meer N, Malik M, *et al.* Beliefs and attitudes about breast cancer and screening practices among Arab women living in Qatar: a cross-sectional study. *BMC Womens Health* 2013; 13: 49.
11. Woll ML, Hinshaw DB, Pawlik TM. Spirituality and religion in the care of surgical oncology patients with life-threatening or advanced illnesses. *Ann Surg Oncol* 2008; 15(11): 3048-57.
12. Ehman JW, Ott BB, Short TH, Ciampa RC, Hansen-Flaschen J. Do patients want physicians to inquire about their spiritual or religious beliefs if they become gravely ill? *Arch Intern Med* 1999; 159(15): 1803-6.
13. Tam AK, Padilla G, Tejero J, Kagawa-Singer M. Understanding the breast cancer experience of Asian American women. *Psychooncology* 2003; 12(1): 38-58.
14. Shadpour K. Primary health care networks in the Islamic Republic of Iran. *East Mediterr Health J* 2000; 6(4): 822-5.
15. Glaser BG, Strauss AL. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Piscataway Township, NJ: Transaction Publishers; 2009.
16. McKegane NP, Bloor MJ. On the retrieval of sociological descriptions: respondent validation and the critical case of ethnomethodology. *Int J Sociol Soc Pol* 1981; 1(3): 58-69.
17. Pope C, Ziebland S, Mays N. Qualitative research in health care. *Analysing qualitative data*. *BMJ* 2000; 320(7227): 114-6.
18. Wood MJ, Ross-Kerr J. *Basic Steps in Planning Nursing Research: From Question to Proposal*. Burlington, MA: Jones & Bartlett Publishers; 2010.
19. Stewart DE, Cheung AM, Duff S, Wong F, McQuestion M, Cheng T, *et al.* Attributions of cause and recurrence in long-term breast cancer survivors. *Psychooncology* 2001; 10(2): 179-83.
20. Chavez LR, Hubbell FA, McMullin JM, Martinez RG, Mishra SI. Structure and meaning in models of breast and cervical cancer risk factors: a comparison of perceptions among Latinas, Anglo women, and physicians. *Med Anthropol Q* 1995; 9(1): 40-74.
21. Lannin DR, Mathews HF, Mitchell J, Swanson MS. Impacting cultural attitudes in African-American women to decrease breast cancer mortality. *Am J Surg* 2002; 184(5): 418-23.
22. Bailey EJ, Erwin DO, Belin P. Using cultural beliefs and patterns to improve mammography utilization among African-American women: the Witness Project. *J Natl Med Assoc* 2000; 92(3): 136-42.
23. Sedighi J, Jahangiri A, Karbakhsh M, Maftoun F, Khodaei S, Harirchi I. Using Prayer in Clinical Practice: A Survey on Iranian Physicians' Views and Practices. *Daneshvar Med* 2009; 16(82): 67-72. [In Persian]
24. Hubbell FA, Chavez LR, Mishra SI, Valdez RB. Differing beliefs about breast cancer among Latinas and Anglo women. *West J Med* 1996; 164(5): 405-9.
25. Florez KR, Aguirre AN, Viladrich A, Cespedes A, De La Cruz AA, Abraido-Lanza AF. Fatalism or destiny? A qualitative study and interpretative framework on Dominican women's breast cancer beliefs. *J Immigr Minor Health* 2009; 11(4): 291-301.
26. Taleghani F, Yekta ZP, Nasrabadi AN. Coping with breast cancer in newly diagnosed Iranian women. *J Adv Nurs* 2006; 54(3): 265-72.
27. Umezawa Y, Lu Q, You J, Kagawa-Singer M, Leake B, Maly RC. Belief in divine control, coping, and race/ethnicity among older women with breast cancer. *Ann Behav Med* 2012; 44(1): 21-32.
28. Facione NC, Katapodi M. Culture as an influence on breast cancer screening and early



- detection. *Semin Oncol Nurs* 2000; 16(3): 238-47.
29. Hoeman SP, Ku YL, Ohl DR. Health beliefs and early detection among Chinese women. *West J Nurs Res* 1996; 18(5): 518-33.
30. Salazar MK. Hispanic women's beliefs about breast cancer and mammography. *Cancer Nurs* 1996; 19(6): 437-46.
31. Dibble SL, Vanoni JM, Miaskowski C. Women's attitudes toward breast cancer screening procedures: differences by ethnicity. *Womens Health Issues* 1997; 7(1): 47-54.
32. Pourreza A, Kavosi Z, Khabiri R, Salimzadeh H. Inappropriate Admission and Hospitalization in Teaching Hospitals of Tehran University of Medical Sciences, Iran. *Pak J Med Sci* 2008; 24(2): 301-5.
33. Rashidian H, Nedjat S, Majdzadeh R, Gholami J, Haghjou L, Abdollahi BS, *et al.* The perspectives of Iranian physicians and patients towards patient decision aids: a qualitative study. *BMC Res Notes* 2013; 6: 379.
34. Davari M, Yazdanpanah F, Aslani A, Hosseini M, Nazari AR, Mokarian F. The Direct Medical Costs of Breast Cancer in Iran: Analyzing the Patient's Level Data from a Cancer Specific Hospital in Isfahan. *Int J Prev Med* 2013; 4(7): 748-54.
35. Mehrdad R. Health System in Iran. *JMAJ* 2009; 52(1): 69-73.
36. Ibrahimipour H, Maleki MR, Brown R, Gohari M, Karimi I, Dehnavieh R. A qualitative study of the difficulties in reaching sustainable universal health insurance coverage in Iran. *Health Policy Plan* 2011; 26(6): 485-95.
37. Majdzadeh R, Baradaran SZ. How to implement clinical practice guidelines in Iran. *Iran Red Crescent Med J* 2013; 15(11): e9702.