Positive changes after breast cancer: A qualitative study

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ABSTRACT

Introduction: Traumatic events such as breast cancer along with negative effects on patients also have positive effects. These cases have been studied less in Iran. Therefore, this study was conducted with the aim of explanation of positive changes after breast cancer by using a qualitative approach. Materials and Methods: This qualitative study was conducted in 2012 in one of the specialized centers for cancer affiliated to Isfahan University of Medical Sciences. In this study, it was interviewed with 19 women with breast cancer about positive changes after cancer by using individual, open and deep methods. The interviews were analyzed with conventional content analysis method. Results: The titles of the three major categories were included as behavioral changes to maintain and promote health (acquisition of health information and adopting promoting health behaviors), spiritual development (attention to the God and sense of meaning in life, revising the values and priorities, strengthening moral and behavioral traits) and personal growth and flourish (feeling empowerment, confidence and efforts to achieve the goals and desires). These three categories have led to emerge themes in this study as the "Awakening after cancer." Conclusions: The results of this study indicated positive changes after breast cancer. Considering such changes while providing care and consulting to patients with breast cancer in addition to facilitate and accelerate positive changes will be prompted to provide care and proper and influential consulting to promote patient health.

Key words: Breast cancer, cancer, Iran, positive changes, qualitative research

INTRODUCTION

Some of life events such as life-threatening illnesses are traumatic events with great stressful experiences and encompass a wide range of psychological reactions in patients.^[1] However, evidences suggest that

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confrontationwith these events in some people have made growth and positive changes in life. [2,3] These positive changes are called post-traumatic growth, stress-related growth or profit-finding[4] with a concept beyond returning to the level of performance before the illness in many aspects of life, and the individual finds a higher level than before in this regard. [5] Unlike to the past that negative consequences of traumatic events were noted, in the recent few decades, positive effects of these events have been of interest to researchers and its effects in conformity with the disease process. For example, Siegel and colleagues (2001) have examined the positive effects of the disease in contaminated women with HIV. The results showed that the disease despite its negative effects has had positive consequences such as changes in behavior, greater attention to religion and spirituality and change of how to look at life and goals. [6] Breast cancer is one of these traumatic events. This type of cancer is the most common cancer after the skin cancer and the second leading cause

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of death in women after lung cancer in the United States of America. Also, one woman out of every eight women in the United States of America has faced this disease. [7] In Iran, unfortunately, this disease is the most common cancer in Iranian women and its incidence is even higher than the incidence of skin cancer including 32% of all cancer cases in women. [8] In this disease, by getting affected of identity and femininity in patients with breast cancer, physical and psychological negative effects of this cancer and its treatments were increased. [9-11] Negative effects of breast cancer in physical, mental and social dimensions have been shown very well in several studies.[12-16] Identifying and attention to the negative effects of breast cancer are essential to help the patients. However, only paying attention to the negative effects can ignore the possible positive effects with this disease. Ignoring the positive effects will be induced orientation in having proper understanding compared with the reactions after breast cancer. Because, in order to have a comprehensive understanding and complete definition from reactions after trauma, all aspects should be considered including positive and negative effects.^[5] Patients' reports about receiving positive changes after breast cancer in recent decades have been brought the attention to conduct researches regarding to review the positive effects of these traumatic events.^[17,18] More than 80% of women with breast cancer had experienced beneficial effects following this disease. [19] Perihan study (2010) reported about self-perception changes, sense of empowerment, more gratitude in life and changes in interpersonal relationships in women with breast cancer. [20] Patience and greater compatibility with stresses and problems are among the other positive results, which have been reported after breast cancer. [21] Awareness of positive changes has clinical application, because these changes are associated with mental health and patient survival, [22] stress reduction, [23] depression, [24,25] anxiety and general health status improvement, [26] positive mood^[27] and life satisfaction.^[28] These changes can be used as a base for future treatments[29,30] for therapeutic purposes. [5] In addition, awareness of these changes could be used in the training of the patients with breast cancer by the health care providers. Therefore, these health professionals in facing with patients will be able to have realistic expectations of them and just do not pay attention to one aspect of positive or negative effects of illness.[31] Awareness of the positive changes after breast cancer is important for designing rehabilitation programs for these patients too. [32] Due to above reasons and besides studying the negative effects of traumatic events such as breast cancer, checking out their positive effects is a priority. In recent years, several studies have been carried out in this area. However, most of them have been conducted, edited or evaluated in Western countries^[20] by using Western cultural tools and they have been translated in the studied countries.[33] However, because culture is influential on the attitude of people about health, disease and strategies for coping with the disease, perhaps these tools are not applicable in other cultures including Iranian-Islamic culture. [34] Hombre et al. (2010) in examining the growth after cancer in India pointed out that health system and cultural and religious contexts of this country have been affected the experience of harsh conditions in several ways. Determinants of these experiences by health system have been included less access to specialized cancer care compared to lower levels of care, socio-economic and geographically significant disparities for accessing to the treatment, lack of common support systems and on the other hand, some aspects of Indian culture such as strong relationship and religious beliefs may have been a facilitator for growth after cancer in this country. [35] Thus, although the experience of positive changes and post-traumatic growth in breast cancer have been shown in some studies, but it is necessary to be reviewed in different contexts. However, the experience of researchers in relation to patients with breast cancer indicated positive changes after breast cancer in Iran, but there was only one study in this area, but without proper and needed responses. Considering the lack of research works and information in this regard in Iran, personal experience of breast cancer and associated changes, [29] performing a qualitative research was the most appropriate method for this study. To extract accurate and detailed understanding of patients' experiences and related changes, less structured methods are to be used such as semi-structured and in-depth interviews like dialogues. In this method, change, either positive or negative, has not been inspired to the patient and the participants state their personal and unique experiences.[36] However, in quantitative methods such as questionnaires, the patient is forced to choose one of two preset options for positive or negative changes.[37] Therefore, this study was conducted with the aim of explaining positive changes after breast cancer by using the qualitative method.

MATERIALS AND METHODS

This qualitative study was conducted by using the method of conventional content analysis. In performing this procedure, data is received from the studied participants without imposing predefined categories or previous theoretical perspectives. The generated knowledge in this way is based on the unique perspective of the participants from the context of real data. In other words, in this method, codes and categories are extracted directly and inductive from the raw data.^[38] This study was a part of a larger approved study by the Isfahan University of Medical Sciences (No. 391304) conducted in 2012. During this period, the researcher by attending in the specialized hospital for cancer affiliated to Isfahan University of Medical Sciences purposefully invited for interview the women with breast cancer who had been referred for treatment and follow-up after treatment and were eligible for inclusion in this study. The inclusion criteria included lack of experience of other stressful events since the time of diagnosis up to now except breast cancer and its treatment, no history of recurrent disease or metastatic disease and lack of mental – psychological problems recorded in the patient's records' file. Sampling was carried out with maximum variation in terms of age, level of education and occupation. Ethical issues were considered in the study such as informed consent, keep anonymous, privacy policy and leaving the study whenever they request. After obtaining written informed consents from the participants, interviews were conducted individually in a quiet place without the presence of others and in terms of time and space, whenever they want and in a relaxed place. The researcher tried to communicate with the participants by using effective interaction and guiding the patients towards the desired topic to obtain rich information about positive changes in women with breast cancer. At the end of interviews, by asking a few open questions, the interview was ended with some questions such as: Do you think that there is something to be said? Or is there something else? It should be noted that during or at the end of each interview with restatement, highlighting the top points or a summary of the responses of participants, the researcher tried to obtain the accuracy of the data in case of ambiguity in the perceptions, asked the participants to clear the given responses with further modifications. Sampling continued until data saturation and on this basis, 19 patients participated in the study. In-depth and individual base interviews were used for gathering the data. The interview began with questions like: Tell us more about your life after breast cancer. Has cancer affected your life? What differences are appeared in your life, before and after cancer? Based on the patient's descriptions, more questions were asked to explore positive experiences after the illness. Interviews were recorded with the consent of the participants. Two interview sessions were held with 5 patients and one session was held with other 14 patients (with a total of twenty four interviews). The duration of interviews was ranged between 30 and 90 minutes. Simultaneously with data collection, data analysis was performed according to the proposed procedure of Graneheim and Lundman as follows: 1 - Writing the entire interview, immediately after each interview, 2 - Reading the entire text of the interview to achieve a general understanding of its content, 3 - Determination of the units of meaning and initial codes, 4 - Classification of initial similar codes in broader categories and 5 - Determination of the latent content of the data. [39] Therefore, in this study, immediately after the interview, the handwritten text was typed and was called for several times. Initial codes were extracted and then, they were merged and classified based on similarities and finally, the latent concepts and contents were extracted. In addition to close relationship with the participants, for increasing data credibility, the researcher used member checks and external checks. Thus, for member checks, after coding, the interview transcripts were returned to the participants to ensure about the accuracy of the codes and interpretations. The codes, which were not represented the participants' comments were corrected. For external checks, the extracted codes and categories were given to several faculty members. After investigation, there was a great acceptance between the extracted results. Also, it was tried to have a maximum variation in participants in terms of age, occupation and educational level. Member checks, external checks and sampling variation were indicative of data confirm-ability.

RESULTS

All 19 participants were married, educated and seven women had college education. Their ages were between 35 and 60 years with a mean of 43.57 years. Among the participants, there were 12 housewives, 6 employees and 1 retired. All of them underwent mastectomy. Fifteen cases completed chemotherapy and radiotherapy. Treatment of one patient was completed only with chemotherapy and without radiotherapy. There were also two subjects on chemotherapy and one person was on radiotherapy. The results showed that patients after breast cancer had experienced some positive changes. These positive changes have been the result of the final theme of this study as "Awakening after cancer." The final theme of the study was obtained according to three main categories under the titles of behavioral changes to maintain and health promotion, spiritual development and personal growth and flourish [Table 1]. The cause of all these positive changes and categories was in fact a kind of "awakening." These cases were caused awakening and paying more attention to the surrounding world after breast cancer: Confronted with unexpected events in conflict with their plans, struggling with hardships, feeling of the imminence of death and temporary or permanent loss of some beauties. Here, each of these categories is described along with the corresponding sub-categories:

1 - Behavioral changes to keep up and promotion of their own health and others

This thought that cancer may have been due to bad lifestyle habits in the past and if they had better adherence to proper nutrition and greater mobility, they were not suffering from cancer have led the participants to be more serious on relevant topics to retain health promotion and prevention of other diseases in themselves and others in the future. They were not only enthusiastic about the information in this field and even complained from the lack of related information, but also they were seeking information about appropriate nutritional habits, ways to control weight and proper exercises. The rate of their information was not comparable to its level before the breast cancer. The related categories are described as follows:

Table 1: Main theme of categories and sub-categories of positive changes after breast cancer

Main theme: Awakening after cancer	
Category	Subcategories
Behavioral changes to maintain and promote the health of self and others	Acquiring health information
	Adoption of health promoting behaviors
	Promoting health behaviors
Spiritual growth	Attention to God and a sense of meaning
	Revising the values and priorities
	Reinforcing moral and behavioral traits
Personal development	A sense of power and confidence
	Efforts to achieve goals and dreams

1-1: Earning health information: Participants stated that before the disease, they did not pay much attention to earn and increase information on topics related to health and they were not worried about it. Previously, they did not even pay much attention to the informed information from various sources, but after breast cancer, they greeted training programs to help them in creating a healthy lifestyle. In some cases, they were proactive to search for this information.

"As long as you're healthy, really you don't care about these things, but, when you get sick, you just know that these things, which were said about health, have been important. But now, wherever they are talking about these cases such as television and radio, I listen very well and every time that I see a book about it, it attracts me to itself."

1-2: Adoption of health promoting behaviors: Change in the path of health was not only limited to adoption of information, but also it was serious in their behaviors and lives. There were positive changes in their nutritional diet such as consuming less solid oil and animal fats, increasing the consumption of vegetables and fruits and avoiding fast foods and canned foods. The mentioned items were frequently used in the participants' statements. Exercise, reduction and weight control were also considered more. Participants gave more importance to feed their children and management of their nutrition and mobility.

"From that time until now, I didn't even touch the loved pizza, because people should restrain themselves a little more, so it is worth not to be bombarded with these drugs."

"Previously, something that was very important to me was that the food should be delicious and you know, fatty foods, filled with oil and salt were more delicious. But now, healthiness of foods is more important for me. Now if it was not delicious, okay, you'd be accustomed to it."

1-3: Promoting health behaviors: The participants, in addition to themselves, were trying to have health-promoting behaviors; they tried to remind others in different situations. They desired to submit the earned information to others.

"To my kids, or my friends, swear to the God, to everyone, to anyone that I can, I tell them about bad things for breast cancer. At least, it helps them not to be faced and suffer from cancer."

2 - Spiritual growth

Most participants talked about spiritual development and strengthening religious beliefs after cancer. According to their sayings, this experience was a live session for many spiritual teachings and theology for them. Among the subjects who had referred to this change, there were a few people talking about cluttering in their religious beliefs and spirituality system at the beginning of diagnosis. However, with the passage of time, the challenge was leading to strengthen this system. Sub-categories of this category are as follows:

2-1: Attention to the God and sense of meaning. Many participants described their feeling about being closer to the God and spirituality pleasure. They had experienced this attitude following the feeling of a strong need to seek the God, prayer, praying, praising God, believing in death, feeling the closeness of the death and feeling the need for the God's help to pass this period of time.

"You know, like what I want to say, like what? Cancer is like a U-turn in a highway. It seemed that I got away from the God. At first, I was worse than before, because I didn't expect it from the God, but I went to his house. Later, always when I took away from the God, a problem or something happened, this time it is really the God, who corrects and completes, haa."

"I felt a very good experience when I prayed during those difficult moments of chemotherapy. This feeling was never repeated. It was a strange feeling. The God was very close to me. However, my connection was stronger afterwards, but those days were something else."

After having a greater sense of the God's presence in life and closeness to the God, the illness had been meaningful and intelligible for most of them. They have interpreted their conditions in the shadow of the presence of the God and the divine wisdom. This sense of meaning had spread to other aspects of life. They looked at the whole life more targeted compared with before and with less sense of emptiness and frustration. They stated that nature and events made them to think more than before with a different deeper vision of these cases.

"Cancer has certainly its own wisdom. Perhaps, the God wanted this way for me to become closer to God or I don't know, anyhow, certainly it is considered to be fitted this way. Anything in this world is not in vain and without certain programs, all things are considered".

2-2: Revising the values and priorities. In the participants' statements, there were phrases, which indicated their valuation system and consequently change in their priorities after the illness. Having a sense of the God's presence in the life, sense of meaning, temporary or permanent loss of what they had such as beauty and wealth had been led to this change in valuation and adjustment of goals and priorities, and their relationships with others. Based on the new values, many previous important problems had lost their importance to create worries after the disease. If prior to the illness, superior socio-economy levels of the individuals had a decisive role to establish relationships with others, these were less important after the disease. They tried to choose someone for relationship who would be more helpful to them in finding the meaning of life after experiencing cancer. Due to their statements, they paid more attention to things, which could be stored for them in another world. Measurement of values was generally satisfaction with the God or even non-financial matters.

"Look, you see your hairs are falling, the eyelashes shed, you have no eyebrows, very easy, you lose your breasts, If you look at your situation, you'll be destroyed and also... How should I tell? You'll understand things that they're too hard to talk about. You just have to understand them. At least, you'll know that your value and others' values do not depend on these things."

"Previously, I'd much importance to wealth and the power of glamour. For example, I was subconsciously attracted to jewelry shops, or similar. However, at the present time, I've not a certain sense about them. They make no sense for me now. I'm not greedy for them anymore. These short lives have no value to cling to these things. We should seek those things, which will be useful for the grave and resurrection."

2-3: Strengthening the moral and behavioral traits. Helping to fix other people problems, forgiveness, empathy, generosity, patience and humility were characteristics that they were reinforced after the disease. In the participants, it seemed that these characteristics had a two-way relationship with the sense of meaning in life. Moral and behavioral changes for them had purpose and meaning and a sense of meaning in life would strengthen these traits. Participants expressed that although previously, by participation in religious meetings and programs made positive changes in themselves, but these changes were usually temporary. However, this change was more stable after the illness.

"It is interesting that you were faced with all these hard tasks, but it seems that really, your passion grew more. It is very strange. Now, the suffering of others most distresses me. It seemed that I didn't see these things, previously."

"You know, now I do not insist on a lot of things. Many things have no value to be insisted on them. For example, if someone said something that I was upset, I'm not looking forward it anymore, and I say to myself: Let them whatever they want to say."

"Right now, however, the disease was too expensive for me and you know my financial situation, but I give things to others so much more comfortably. There's a draw, in the same forum and I won a TV, but I said that please give it to someone who does not have a TV. I have an old TV and it's enough for me."

3 - Personal growth and flourish

All participants expressed that they feel that they are internally stronger after illness. They did not have courage and boldness to take the necessary actions for achieving their semi-finished goals or dreams, previously. But now, some sort of incentive and a powerful inner force made them to move and effort. This category has the following sub-categories:

3-1: Feeling empowerment and confidence. Overcoming physical hardships and mental toughness, disease and its treatment gave the feeling of empowerment and confidence to the patients. They saw themselves more ready than before to confront hardships and future problems. They found themselves stronger and more experienced compared with

non-patient people with the same age and had a good feeling in this regard.

"I didn't think at all that I could overcome the illness. First time that I went for chemotherapy, I told them that it was the last time to come here. It was very difficult, but I went up to the end of it. Now, instead, hardships made me anti-hit".

"Like soldiers who are training very hard to be prepared for war, cancer was the same for me. I say that it was even harder than them. This experience was a real war".

3-2: Trying to achieve the goals and demands: A lot of participants after the illness found that they should use the present tense to achieve their goals. While earlier for achieving these goals, they were waiting for the right opportunity. Understanding the value of present tense and the feeling of empowerment and mentioned motives had given them the courage to take action. Many of them had reached to their demands or put them on the route of trying to be realized.

"Always, I wanted to continue my education. Do you believe that immediately after finishing my treatment, I sat down, studied, tested and I was accepted. Right now I'm studying".

"I always said that I know how to make and cook sweets, Jam and other things like that. I wished I'd my own income by this way. At the same time that I was under-chemotherapy, I had financial problems. However, in that bad condition, I started working. Now, I'm already too busy, if I was not sick, perhaps I still didn't start".

DISCUSSION

The purpose of this study was the explanation of positive changes after breast cancer. This led to the formation of three categories: Behavioral changes to maintain and health promotion, spiritual growth and personal growth and flourish. The main theme of this study as "Awakening after the cancer" was determined after the formation of categories. The studied participants reported behavioral changes to maintain and improve their health. Wang and colleagues (2012a) performed a study for assessing changes in lifestyle of 235 patients with cancer before and after the disease. They found that there was a significant difference in terms of lifestyle in patients with breast cancer before and after the disease. [40] These researchers in another study (2012b) concluded that continuous exercises and following a healthy diet could improve health status and quality of life in women with breast cancer.[41] In Catherine and colleagues study (2009), more than half of the women after breast cancer reported positive changes by diet and exercise. [42] These positive changes in diet as an adaptation strategy were to maintain good health and hoping to decline the recurrence of cancer. [43-45] There is a disagreement about the impact of lifestyle on patient's survival. However, most studies so far have confirmed the association between lifestyle and the survival of the patients. [46,47] Adopting a healthy lifestyle in these patients caused the reduction of associated complications like other cancers, cardiovascular disease and diabetes.^[48] Studies have shown that despite the willingness of many survived people from cancer for health-promoting behaviors, but most health care providers do not pay attention to this opportunity to teach the people. [49] According to the results of this study and similar studies, it will be better that health care providers pay more attention to the positive effects of the disease. They should take advantage of provided opportunities to facilitate patients' health-promoting behaviors. Another category of this study was spiritual growth. This finding, however, has been observed in other studies, but it was more highlighted and emphasized in this study. Ideas of other researchers about the deepening of religious beliefs and spiritual subjects after traumas[16] such as severe disorders in this study were confirmed by forming of this category. The root of religion is in the human need for safety and protection from supernatural forces. [50] It exists naturally and innate in all human beings, but unfortunately, it is not being usually considered. When considering the human affiliation and attention is disconnected from financial affairs in the difficulties and hardships, the people feel deeply in their hearts for the need of a supplication mode. [51] Participants in this study referred to some of these feelings as the elements of spiritual growth such as deep need for the God, which was manifested in worships and solitude with the God. In Taleghani and colleagues study (2006), religious approach was one factor among important ways in coping with breast cancer.^[52] From a psychological point of view, some studies have shown that struggling with trauma had led to deeper understanding of spirituality and religious beliefs. [53-55] in such circumstances, people with stronger beliefs have established a relationship and they have understood the overwhelming presence of the God and have experienced a higher level of religious and spiritual beliefs.[56] Phenomenological study of Fallah and colleagues (2012) has been the only study in Iran about the growth after the breast cancer. In this study, it was asked from 23 women with breast cancer to respond a questionnaire with open-answer questions. The questionnaires were sent by post. Spiritual growth in a majority of women was 86.95%. [57] Perihan and colleagues (2010) in studying the growth after the traumatic events have not reported spirituality.[20] In phenomenological study of Zhai and colleagues (2010), about the growth after the trauma in patients with burns, religious and spiritual positive changes had occurred in only one patient among the ten participants.^[58] In the study of Brix and colleagues (2013), the difference between positive spiritual changes was not significant among women with breast cancer and non-infected group.^[31] Due to the majority of the Iranian people in having religious and spiritual beliefs, this difference is justifiable. Because, it has been proven that religious beliefs have a mutual relationship with post-traumatic growth. Growth after trauma has strengthened religious and spiritual beliefs. In the presence of strong religious beliefs, growth after trauma has been at a higher level. [36,57] Values and priorities of the participants after the disease had changed too much. Value benchmark and prioritizing of most of them were

non-financial, related to the satisfaction of the God and in relation with their role in the otherworldly life. This was due to their faith on the life after death and the world hereafter. The available evidences indicated that people at the risk of chronic diseases prioritized their goals and expectations to access a level of satisfaction. [59] In the study of Horgan, the criteria of importance and prioritization had been changed in the studied participants. They used phrases such as: "From now on, I won't be worried about worthless things, including arrangement of the house or business problems" and emphasis on this fact that initially, their requirements are more important for them.^[22] In the present study, participants after the illness considered more importance to themselves and their families compared to other affairs. Perhaps, it was due to the feeling of more responsibility for themselves and their families following the religious and spiritually growth. The major difference in changing the priorities and values of the patients in this study or similar studies was that in other studies, after cancer, the patients noted more themselves and enjoying their lives, while in the present research, in addition to this finding, prioritization was focused on the effective and fruitful issues for the hereafter and the life after death. Strengthening of moral and behavioral characteristics after the disease was increased in participants due to the spiritual development and sense of meaning. Some characteristics gave meaning to the lives of participants, such as to help for fixing others' problems, empathy, generosity, patience and humility. The participants in this study expressed the sense of empowerment and confidence as the symbols of personal growth and flourish. This topic has been also shown in the surveys of Utley (1999), Coward (1990), Pelusi (1997), Bertero (2002), Arman (2001) and Horgan (2011) as well. [60-64] In the study of Horgan, the patients after breast cancer had greater ability to achieve their objectives and needs. They did not care for what others say about them. [22] In this study, efforts to achieve the goals and desires were among the cases, which the participants reminded them as positive changes. Achieving the goals and desires, in fact is somehow to appreciate the life and its optimal use. This issue has been mentioned in several studies as an important aspect of growth after traumatic events and breast cancer. [22,65,66] People with chronic disease with changing the inner standards, values, monitoring purposes and expectations tried to achieve acceptable level of quality of life despite limitations due to disease. [67,68] In other words, individuals attempted to have positive manner for the maximum use of their daily lives. [69] In many studies, it has been reported about changing relationships and enhancement of communication with others as one of the most important changes after cancer.[17,69,70] However, in this study, most participants had sought to reduce their contacts with others; a number of people hid their conditions in order to avoid compassionate behaviors in their communication with others. In those cases, which had increased these relationships for visiting and greetings, they were not mostly pleased with the relationship due to some reasons such as suffering from others or lack of consideration of the needs of the patient like the need to be relaxed. They were much more likely to

maintain relationships, which were parallel to positive reinforced changes. The same result was obtained in the study of Fallah *et al.* (2012) in Iran.^[57] Thus, it appears that cultural and social factors have played an important role in this regard. Therefore, these items need deeper and broader investigations.

CONCLUSIONS

The results of this study and awareness of positive changes resulted from it, which were among the few studies that have been done in this field in Iran, showed positive changes after breast cancer in Iranian women. Although there were some similar cases in the women of other countries, but the distinctiveness of this study was reconstruction of life based on spiritual and religion matters. This change somehow was the orientation of other changes due to religious background in these individuals. In similar studies, most of religious and spiritual matters had emerged after the onset and positive changes had been observed along with other changes. This finding was a very positive facilitator, which due to other positive changes could be used as a base in treating and caring the patients. Because, according to the performed studies, the positive changes have been associated with increasing survival, coping with illness, reducing stress, anxiety and depression, mental health and public health. Patients who experience these positive changes after breast cancer are more prepared for consultation in various mental, religious and spiritual areas and lifestyle. Hence, having knowledge and attention of health care providers and consultants about these changes will facilitate and accelerate positive changes and also will lead to more appropriate and effective care and counseling. This study was conducted with a qualitative approach and with limited purposefully selected samples. Although the samples were selected from the largest specialized cancer center, but the results are not generalizable to the entire population of the patients in Iran or Isfahan. Also, the patients who were not referred for some reasons to the mentioned center had not been examined in this study. For subsequent studies, it is suggested to choose participants from other religions and private hospitals too.

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