



The Relationship between Cancer and the Patients' Religious Beliefs

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Authors' contributions

This work was carried out in collaboration between all authors. All authors read and approved the final manuscript.

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ABSTRACT

Aims: Religious beliefs can help the patients with cancer to cope with the physical and mental sufferings following diagnosis and treatment of the disease. The present study aimed to investigate the effect of cancer on the patients' religious beliefs.

Study Design: Descriptive cross-sectional.

Place and Duration: Namazi Hospital, Shiraz University of Medical Sciences, November 2012- July 2013.

Methods: This study was conducted on 200 cancer patients referred to oncology, hematology, and chemotherapy of Namazi hospital in Shiraz. The age range of the patients was 30-45 years old and they took part in the study voluntarily. The instrument used in this study was Bastami questionnaire (2008). The questionnaires were filled out by the patients and analyzed in SPSS. A p value less than 0.05 was considered as statistically significant.

Results: There were significant differences between relationship with God, reliance on God, and obedience to God's commands before and after the disease; the mean scores of the above-mentioned domains before the disease were lower than those after the disease. However, there was no significant difference in the patients' belief in God's presence before and after the disease.

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Conclusion: Cancer, as a chronic and troublesome disease, can affect the patients' religious beliefs and enhance their relationship with God.

Keywords: Reliance on god; cancer; hope; treatment; beliefs.

1. INTRODUCTION

The occurrence of cancer is one of the inevitable afflictions of mankind. Thanks to the medical advances, today patients with cancer have more life expectancy, so they will be faced with further mental problems and adaptation disorders. However, most of the medical interventions for such patients aim at treating their physiological problems. In fact, little attention is paid to their mental and psychological needs [1,2].

In cancer, the cells' DNA tends to multiply unusually due to genes mutation and is transferred to other parts of the body through lymph and veins. Also, due to producing and transferring poisonous chemical substances to all parts of the body, unfavorable consequences will result. American Cancer Society defines cancer as "a disease in which cells start to grow out of control. The cancer cells keep on growing and making new cells. They crowd out normal cells. This causes problems in the part of the body where the cancer started" ([3], p.2).

Some cancer patients believe that the disease is a punishment for something they did or failed to do in the past. Still some others wonder if they did something to cause the cancer. They often go through a time of grief and sadness when they first recognize they have cancer. They grieve their sickness and the loss of certainty in their lives. Grieving – feeling sadness, fear, anger, or going through crying spells – is a normal, healthy reaction to learning of a serious health concern. It usually doesn't last a long time, and is a normal response to a profound change in a person's life. About 1 in 4 cancer patients becomes really depressed. This causes difficulty following their treatment plan because of very low energy, decreased drive to do things, trouble making decisions, and feeling useless or helpless [3].

This disease is one of the threats to human life and since survival is an essential aspect of life, these patients require mental support in different stages of the diseases, i.e. before and after it, during treatment, immediately after treatment, and during the 5 years after the recovery. These patients are constantly afraid of the recurrence of the disease [4,5]. Cancer causes personal, family, and social problems for approximately all the afflicted patients. It leads to a feeling of dependence on another person, and reduction of self-esteem, and increases the feeling of confusion, breakdown, pain, physical symptoms and suicidal thoughts. All these negatively affect daily and social activities and reduce the individuals' affairs, responsibilities [6,7].

Cancer diagnosis and subsequent treatment modalities such as chemotherapy and radiotherapy will cause fear and apprehension for the patient as the result of failure in controlling pain and suffering, suspicion and suspension. Such issues contribute to reduction or loss of hope in these patients [8], thereby affecting their religious beliefs.

Cancer, as a chronic disease, affects both physical and psychological wellbeing of the patient (i.e. loss of hope, fear and so on); however, the patient's religious beliefs and spirituality enhance hope and helps him/her to cope with sufferings. Researchers have

suggested some feelings and approaches help cancer patients not to lose their beliefs and have relationship with God as before their disease. One of these approaches is increasing their hope which, as revealed in a study, is essential in the life of cancerous patients and greatly impacts their adaptation to the consequences of the diseases such as pain and deprivation. It adds to these patients' quality of life and different stages of the diseases [9].

Koenig et al in their book entitled as "Handbook of Religion and Health" research on the effect of religion on cardiovascular diseases came to the conclusion that there are many behavioral and psychological mechanisms used by the patients by which religious beliefs and acts may affect cardiovascular diseases [10].

Furthermore, it seems that reduction of anxiety and enhancement of hope will substantially affect their physical and mental status positively [11]. Hope is defined as an internal potential that can lead to life's enrichment and enables the patients have an outlook beyond their present pain and suffering. Lack of hope and aim in life will lead to reduction of quality of life and hopelessness [12,13]. All of these might affect the cancer patients' perspectives as to religion.

Moreover, as stated by Benzein and Saveman, hope is considered as an active concept between hopefulness and despair. Seven significant characteristics are considered for hopefulness: future outlook (orientation), positive expectations, purposefulness, activeness, realism and arrangement of internal objectives and associations [14].

As the other characteristic which might help the cancer patients retain their religious beliefs, spirituality has attracted the psychologists and mental health experts' attention in the few last decades [15]. Based on a research conducted in this field, spirituality is an important predictor of hope and mental health [16]. The results of several studies reveal that hope [17-19] and spiritual health, i.e. religion and spirituality [20,21] are meaningful concepts in life which help cancerous patients to cope with the disease, reduce their suffering, and increase their quality of life and social and mental health. Religious acts might not cure a disease but can help the person have a good feeling, prevent some health problems, and cope with the disease easily [22].

Spirituality is also a resource for psychological wellbeing. It means awareness about existence or the force beyond materialistic aspect of life, creating a deep feeling of unity or union with cosmos [23]. Religion tends to encourage the performance of daily religious acts such as prayer and fasting, while spirituality seeks new approaches beyond all functions. The majority of spiritual people are religious but the reverse is rarely possible [24]. Prayer, reading holy books, or participating in religious ceremonies are the resources through which religious people can suffer less in their encounter with life unpleasant events [25]. For end stage cancer patients, mental and religious tranquility might be more important than physical health [26]. The results of several studies have revealed that there is a relationship between spiritual health and hope in cancer patients [27]. In fact, there is a positive relationship between these two [28]. The results show that cancer patients with religious beliefs, or the faithful ones, have less agitation and anxiety toward death, relationship with others and even their disease [29]. Mental health can strongly affect the cancer patients' despair about the end of life [30]. It seems that cancer, as compared with other chronic diseases, has more effects on hope [31]. Religion helps people to grasp the meaning of life events, leading to hopefulness and a desirable satisfaction in mind. In many studies, religion has been considered as a supportive factor in reduction of mental stress, reduction in the tendency to commit crimes, and increase in satisfaction in life [32,33]. According to Zand and Rafiei,

performing religious commands is one of the influential factors in treatment [34]. As to other chronic diseases, Hemmati et al. [35] conducted a study in 2010 on diabetic female adolescents, indicating that the participants' religious beliefs enhanced their capabilities in accepting their disease; this led to their optimal adaptation to the problems of diabetes.

On the other hand, although many studies confirm the relationship between religious beliefs and acts on the suffering of the diseases, the results of some other studies reject it. In another study, Koenig et al. [36] came to the conclusion that religious acts are related to greater social support, better psychological health, and only partly to physical health. It has been indicated that spiritual distress after diagnosis of such diseases as cancer and the feeling that the patient has been abandoned by God can have detrimental effects on the patient's psychological and physical health [36,37].

Considering the fact that cancer leads to physical, psychological and spiritual problems, we aimed to investigate the effect of cancer (chronic disease) on the patients' religious beliefs.

1.1 Significance of the Study

This study is an attempt to investigate the relationship between suffering from cancer and religious beliefs of Iranian patients. The effects of religion on physical and psychological well-being of patients suffering from severe diseases have been of growing interest since twenty years; however, this study intends to make the reverse: investigating the relationship between a severe disease and the patient's religious beliefs. Moreover, most studies have been conducted on patients with Judeo-Christian background. Therefore, obtaining data in Iranian patients who are mostly of the Shiite background on the above subject will be informative. It was hypothesized that there is no relationship between cancer and the patients' religious beliefs. Based on this hypothesis, the following research question was posed:

Is there any relationship between cancer and the patients' religious beliefs?

2. MATERIALS AND METHODS

This is a cross-sectional descriptive study on cancer patients (leukemia, stomach, liver, lung, breast, prostate, thyroid, intestine, osteocarcinoma, and brain tumors) referred to oncology, hematology and chemotherapy of Namazi hospital in November 2012- July 2013.

2.1 Participants

At first 246 patients were selected randomly to take part in the study. 46 patients did not complete the questionnaires; finally, 200 cancer patients (132 females= 66% and 68 males=34%) participated in this study. 19% of them were single and 81% were married; also, 99% of them were Shiite and 1% Sonni. Their age range was 30-45. As to the type of cancer, there were 9 leukemia patients (4.5%), 7 stomach cancer (3.5%), 3 liver cancer (1.5%), 19 lung cancer (9.5%), 87 breast cancer (43.5%), 5 gynecological cancer (2.5%), 23 prostate cancer (11.5%), 2 thyroid cancer (1%), 26 intestine cancer (13%), 2 osteocarcinoma (1%), and 17 brain tumor (8.5%). They were volunteers to participate in this study. The inclusion criteria were confirmed diagnosis of cancer, awareness about their disease and willingness to be enrolled in the study. The exclusion criteria were the patients' disagreement with participation in the study and the co-incidence of other diseases.

2.2 Instruments

The data collection tool was a questionnaire on relationship with God which was previously made by Bastami [38] It is an ad hoc questionnaire containing 15 questions with 5 point Lickert scale (from completely disagree to completely agree). The reliability of the questionnaire was validated by Bahrami Ehsan [39] to be .96% using Cronbach alpha which is a reasonable measure. The validity of the questionnaire was determined by a group of theology and psychology experts as the academic staff of the university. The collected data were analyzed in SPSS, version 15. The significance level was set at <0.005.

The questions in the questionnaire are categorized under 4 main headings each containing some sub-items; they include belief in the presence of God (items 1,3,8,14), relationship with God (items 2,4,10,11), presence of God (items 7,9,12,13) and obedience to God's commands (items 5,6,15). (See the Appendix) The patients were informed about the purpose of the study and the confidentiality of their responses before they voluntarily take part in the study. The ethics committee of Shiraz University of Medical Sciences approved the study to be conducted.

3. RESULTS AND DISCUSSION

To answer the study's research question, the questionnaires were distributed and the results were analyzed descriptively. The patients' beliefs about the presence of God, relationship with God, reliance on God and obedience to God's commands before and after the diseases are displayed in Table 1.

Table 1. The patients' religious beliefs before and after the disease

Religious beliefs	Mean scores before the illness	Mean scores after the illness	P value
Belief in the presence of God	4.5100±9.59	4.5500±0.57	0.433
Relationship with God	4.400±0.66	4.5300±0.62	0.038
Reliance on God	4.2400±0.74	4.3900±0.63	0.023
Obedience to God's Commands	1.600±0.77	3.9300±0.77	0.000

In this study, $p < 0.05$ was set as the statistical significance. The mean scores of the 4 above major items before and after the disease were compared. According to the results, as to the relationship with God, reliance on God, and obedience to God's commands there was a significant difference between these dimensions before and after the disease ($p < 0.005$). The mean of intimate and desirable relationship with God before the disease was 4.400 ± 0.66 while after the disease it was 4.5300 ± 0.62 which is obviously more than that of before the disease ($p < 0.038$). Also the mean of reliance on God to overcome the disease problems was 4.2400 ± 0.74 and 4.39 ± 0.63 before and after the disease, respectively. So, the mean score of their reliance on God is more after the disease ($p < 0.023$). The mean of obedience to God's commands before the disease was 1.600 ± 0.77 while after the disease it was 3.9300 ± 0.77 which is more as compared to before the disease ($p < 0.000$). However, as to the belief in the presence of God, there was no significant difference between before and after the disease ($p < 0.433$).

The results of the analysis of the patients' responses that 19% of the patients believed that after affliction with cancer they could still have a good feeling, as compared to that before the disease. Moreover, 64% of them were hopeful about recovery and their survival. 95% of the participants believed in Gods' contribution in their treatment. Also, 51% of them showed to have expanded their association with others.

According to the results of this study, the null hypothesis posed was rejected. The findings revealed that patients with cancer have enhanced their relationship with God after the disease as compared to before it (4.400 ± 0.66 vs. 4.5300 ± 0.62), have expanded their reliance on God (4.2400 ± 0.74 vs. 4.3900 ± 0.63), and have obeyed the religious commands more (1.600 ± 0.77 vs. 3.9300 ± 0.77). However, there was no significant difference between their belief in God's presence before and after the disease (4.5100 ± 9.59 vs. 4.5500 ± 0.57).

The patients suffering from physical injuries after the illness tended to further move towards religious beliefs. This is in the same line with the result of Tracy's study who concluded that religion helps them endure the pain and suffering as the result of the disease [40]. In fact, the patient's religious beliefs helped him/her to accept and cope with the disease [41]. So there is a relationship between these two factors as, concluded by Seyedfatemi et al. indicating that religious beliefs contribution leads to mental and psychological tranquility in patients [42]. Although the two above studies confirm this relationship, the results of some other studies reject our findings. It has been indicated that spiritual distress after diagnosis of such diseases as cancer and the feeling that the patient has been abandoned by God can have detrimental effects on the patient's psychological and physical health [36,37].

According to a study conducted in Iran, the patient's reliance on God for return to normal life is confirmed [43]. Moreover, the results of Pourghaznein et al.'s study [31] carried out on cancer patients' hope in Mashhad in 2000 showed that the patients obey God's commands more than before their illness; this result is in the same line with that of the present study. Their research revealed that there was a significant difference between the level of their hopefulness and conducting religious commands [31]. These results confirm the findings of the studies by Sajadian et al. [44], Raleigh [45], Ballard et al. [46] and Lindvall [47].

Moreover, based on the results, the patients' reliance on God in those with cancer has increased after their illness. This is in the same line with the finding of Sajadian et al. [44] and Hayati et al. [48]. They conducted a study on breast cancer patients, revealing that confidence and reliance on God lead to tranquility in patients.

Considering the obtained results, cancer patients under the study enjoyed a desirable level of religious health (i.e. the individual's conception of health in life when associating with a superpower). Although spirituality is different from religious beliefs, it is somehow related to religion. Therefore, the results of the present study somehow accords with Razi et al.'s finding. In their study on cancer patients under chemotherapy, it was shown that spirituality has a significant role in adaptation to stressful condition of chronic diseases [49,50].

In this regard, Fallah et al., in their study on breast cancer patients, also concluded that one's beliefs act an important means in breast cancer patients [51]. Simon et al. [52] point out that spirituality influences important cognitive assessments in the process of adaptation to the disease, targeting the patients' beliefs, attitudes and helps the patient to regard negative occurrences in a different way and create a more potent control in himself/herself.

4. CONCLUSION

Cancer, as a chronic and troublesome disease, can affect the patients' religious beliefs and enhance their relationship with God.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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APPENDIX

The following questions are about your relationship with and belief about God. Read each question and choose the item which best fits with you.

Completely agree	Agree	Neither agree nor disagree	Disagree	Completely disagree	
					1. I feel the presence of God.
					2. Sometime I remember God and burst into tears out of affection and love.
					3. I believe God is sensitive to my problems and challenges.
					4. My relationship with God make me feel happy.
					5. I take part in religious rituals as praying, gathering, etc..
					6. I try to obey God's commands
					7. I can overcome my problems through reliance on God.
					8. I believe that The universe is governed by a compassionate God.
					9. I try to do things just for God's satisfaction.
					10. I have a personal and satisfactory relationship with God.
					11. I do not feel alone due to my relationship with God.
					12. I enjoy God's support and energy for life.
					13. I rely on God in all my affairs
					14. I feel God's favor and kindness in my own life.
					15. I start my day by remembrance of God and end it by thankfulness.

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