

Body-Mind Healing Strategies in Patients with Cancer: a Qualitative Content Analysis

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Abstract

Background: Cancer is a major health problem around the world. The use of coping strategies among patients with cancer depends on several issues. This study was conducted to determine coping strategies used by patients with cancer in south-east Iran. **Methods:** This study is a conventional, qualitative content analysis with a descriptive explorative approach. Data saturation achieved after interviewing 13 participants in 15 interviews. Using an in-depth individual semi-structured approach the participants were asked to narrate their experiences of strategies that they used to cope with cancer. The following were considered: unit of analysis, meaning unit, condensation, code, sub-category, category, and main category. **Results:** Data analysis led to extraction of two main categories of body-mind healing strategies: being connected to the body and mindfully reconnected to the self. The first category was explained with reference to two sub-categories, being aware of intelligence and body nurturing. The second category was explained with the three sub-categories of using embodying knowledge, living for the moment, and being connected to nature. **Conclusion:** According to the results of this qualitative study, it is possible to form discussion groups with peers or to have self-reflective practice learning groups to reflect patients' questions and strategies that they use for body-mind healing.

Keywords: Body-mind healing strategies- coping- cancer- content analysis- nursing

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Introduction

Cancer known as a major health problem. It considered as a factor influencing families as well as economy and psychology of societies worldwide (Biniiaz et al., 2014; Borji, 2017; Borji et al., 2018). This disease characterized by changes in natural shapes of the cells and loss of cell differentiation. After cardiovascular diseases, it is the second most common cause of death in less-developed countries. As a developing country, the burden of cancer is increasing in Iran; thus, the prevalence, mortality, and costs are anticipated to rise/increase in the coming years (Iranmanesh, 2012; Iranmanesh et al., 2010; Mousavi et al., 2009).

People with cancer experience negative health outcomes. Cancer causes physical problems such as fatigue, loss of muscle strength, and weaknesses (Dehghan et al., 2017). It also causes psycho-social problems such as depression, anxiety, mood disorders, stress, loss of self-confidence, social isolation, sense of loneliness, and work-related (Bugental, 1978; Yang et al., 2010). Patients thus experience hopelessness, sense of frustration, vanity, self-blame, anxiety, death distress, and challenges regarding their self-consciousness

(Borji et al., 2018; Yang et al., 2010). Physical and psychological problems emerged from cancer negatively affect patients' quality of life. The quality of life of patients may be affected by the way the patients choose to cope to their situations (Joulaei et al., 2012). Coping can be defined as the methods that human beings follow to challenge and overcome the negative experiences they face (Al Omari et al., 2017). The use of coping strategies among patients with cancer is different and depends on several issues, such as the stage of the cancer, type of therapy, the individual's culture, and perceptions about disease (Hajian et al., 2017).

There are several studies that indicated how particular coping strategies, such as emotional expression (Brandão et al., 2016; Esser et al., 2017), positive reappraisal as well as positive thinking (Ruthig and Holfeld, 2016; Silva et al., 2012), social support (Paterson et al., 2016), and religious rituals (Prouty et al., 2006) are beneficial to the emotional and physical well-being of cancer patients in general. In the Iranian context, there are some researches that found a majority of patients used optimism, acceptance of reality, efforts towards treatment, seeking social support, self-distraction, and intentional absent-mindedness,

escape and avoidance, and self-control to adapt with cancer (Dehghan Nayyeri and Jalali Nia, 2010; Khalili et al., 2013). According to the earlier studies conducted in Iran, a large number of patients with cancer used religion and religious beliefs as a major coping strategy (Ghahari et al., 2017; Goudarzian et al., 2017; Rezaei et al., 2017).

According to Iranmanesh (2015) The majority of Iranian people consider themselves religious and religious beliefs are often, in an explicit way, integrated into their views and behaviors, especially on their health beliefs and behavior (Iranmanesh et al., 2015). The subjective nature of coping leads to individual, cultural, and religious factors determining the vocabulary used to describe and interpret the experience. Qualitative research is one way of studying phenomena within a culture. The latent content analysis seeks to focus on a person's experience, previous understanding and knowledge, which embedded in culture and religion. Using qualitative content analysis, this study was conducted to determine the coping strategies used by patients with cancer in south-east Iran.

Materials and Methods

Study design and setting

This study was a conventional, qualitative content analysis with a descriptive explorative approach. The aim of content analysis research is to attain a condensed and broad description of the phenomenon (Graneheim and Lundman, 2004). Content analysis can be performed with various degrees of interpretation. They stated that in each text, there are manifest messages vs. latent messages although both messages require interpretations which may vary in depth and level of abstraction (Iranmanesh et al., 2010). People of different ethnicities live in Iran (Azeri in the northwest, Kurdish in the west, Arabs in the south and southwest, Fars in the center, Turkmen in the northeast, and Baluch in the east). They have different cultures, lifestyles, and socio-economic status (Iranmanesh et al., 2015).

Sample size and sampling

As in qualitative research, no absolute rules determine the estimated number of participants, sampling was continued until data were saturated and no new information was extracted. In the present study, the saturation was achieved after interviewing with 13 participants in 15 interviews. Two participants were interviewed two times. To capture rich and diverse information, individuals (patients, family members, and nurses) with different and rich experience about the research concept were invited to do the interviews. In addition, individuals with different characteristics such as age, role, and work experience were chosen by the second researcher to provide a wide range of information. A purposive sample of participants, who had experience of cancer (leukemia, Non-Hodgkin's Lymphoma, colon, pancreas and breast cancers) participated in the research. They refer to three hospitals affiliated with Kerman University of Medical Sciences for undergoing treatment from autumn 2016 to spring 2017. In total, 10 cancer patients, 1 family member of a cancer patient (mother of one cancer patient) and two nurses

who worked in oncology department, were interviewed. On average, the participants had 9 months to 4 years' experience of cancer. The mean age of participants was 45.7 years (Table1).

Data collection

In-depth individual semi structured interviews were conducted with participants at their preferred time and place. The participants were asked to narrate their experiences of strategies that they used for coping with cancer. Clarifying and encouraging questions used, such as 'Please, explain more about your strategies for body-mind healing?', 'what do you do when you encounter other people's judgments', 'How can you relieve your pain without drug therapy', 'Can you provide an example'? The interviews were tape recorded, transcribed verbatim and analyzed by the first author. The interviews lasted between 40 -110 minutes.

Data analysis

To perform conventional qualitative content analysis, the following concepts were considered important: unit of analysis, meaning units, condensation, code, sub-category, category, and main category (Graneheim and Lundman, 2004). The qualitative content analysis is based on the unit of analysis. According to Graneheim and Lundman (Graneheim and Lundman, 2004). In our study, each interview considered a unit of analysis. After determining unit of analysis, the text divided into meaning units. Each meaning unit consists of words, sentences, or paragraphs containing aspects related to each other through their content and context. In the next step, we condensed the meaning units, while still preserving the core. The condensed meaning units then labeled with a code and sub-categories created. The next step was to create categories that are the core feature of qualitative content analysis. A category is a group of codes that are similar in a manifest level. A main category is a recurrent thread of underlying meaning running through codes and categories; it can be seen as an expression of the latent meaning of a text (Graneheim and Lundman, 2004). Although the analysis process was systematic, it was a back-and-forth movement between the whole and parts of the text. Table 2 gives an overview of the analysis process executed on each text (Table 2).

Ethical consideration

This paper is a part of a nursing PhD thesis. The thesis approved by the ethical committee center of Kerman University of Medical Sciences (Ethical Code: ir.kmu.rec.1395.580). The study explained to the participants and they informed that they could withdraw at any time. Confidentiality guaranteed as no names or facts stated in data.

Trustworthiness

Four issues are normally used to describe various aspects of trustworthiness: credibility, confirmability, dependability, and transferability (Guba and Lincoln, 1989). Several techniques used to enhance trustworthiness of the following study. The second researcher's supervisors

(the first and third researchers) have done peer checking. The research team tried to collect data from different people with different experiences and different socio-demographic characteristics. Through frequent sessions between the second researcher and the supervisors, the study's progress and process reported and discussed. Member checking completed with some of the participants for validation of interpreted findings (codes and categories). Some of the faculty members checked the encoding process and accessed categories (external checks). In addition, a clear and detailed description of culture, context, selection, and characteristics of participants, data collection, and process of analysis provided.

Results

Main category, categories, and sub-categories

The data analysis led to extraction of a main category of "body-mind healing strategies" with two categories: 'getting connected to the body' and 'mindfully reconnected to the self'. The first category is explained with two sub-categories that include "being aware of the intelligence organism", and "body nurturing". In addition, the second category is explained with three sub-categories including: "using embodying knowledge", "living in the moment", and 'being connected to the nature'. Table 3 gives an overview of all subcategories, categories, and the main category (Table 3).

Getting connected to the body

Participants in the present study stated that their bodies and their cells endowed with a tremendous intelligence. They believed that their institutionalized healing power helped them better face their illness and treatment. They used different strategies to strengthen their body such as doing exercises, following a healthy lifestyle, and modifying nutrition.

Being aware of the intelligence organism

Based on the experiences of the participants, some of them stated that they chose a way to communicate with their body through understanding the intelligence and the consciousness of the body cells. In their own words, they did not know about the intelligence of the cells prior to cancer, but developing the disease caused them to attend to their bodies more often. They selected a quiet place to focus for communication and talked to that part of the body affected with the disease with no intermediaries. These efforts led to a deeper and more beautiful relationship with their body. In some participants, this strategy helped them to reduce the need for sedatives.

"When I was taking a shower, I used to talk to my body. I used to touch my chest and pat it. I paid more attention to it like a child in my arms. I used to express my love and interest. I said to myself: you get better day by day. You will become healthier again." (Participant No. 3).

Body nurturing

Participants experienced show that they tried in different ways to reinforce their body. They believed that exercises could promote the excretion of toxins from the body. Using exercise, they would be able to compel their mind to focus on body movements and therefore, the mind would be free from harmful thoughts. In addition, participants used massage to gain more peace of mind when they suffered from pain. Another way selected by the participants to cope with their physical challenges, was choosing healthy nutritional methods. They also tried several substances that had greater effects on weakening cancer cells and destroying them in order to reinforce their own recovery.

"I used to ask my mother to give me body massages when I felt bad or I had severe bone pain. This massage could lessen my pain, decrease my impatience" (Participant No.1).

Mindfully reconnected to the self

To relieve their soul, participants tried to adopt strategies to absorb more energy that is positive. Sense of responsibility was among the most important factors playing roles in choosing the way to fight against the disease. This strategy made them try to avoid others' judgments and sense of compassion. Walking in nature and seeing the beauty of it that had not noticed before, enabled them to increase their inner tranquility through communication with nature and enjoy the moments. This category includes three subcategories of 'using the embodying knowledge', 'Living in the moment', and 'Being connected to nature'.

Using the embodying knowledge

According to participants experiences, sense of sense of responsibility allowed the individuals to fight against the disease more easily, try to learn from their peers' experiences and death, living with their own willpower, and not embrace death; in other words, they choose to stay alive. Present study showed that participants who were more dependent on their close relatives suffered much more from disease and pains and had less willingness to fight with disease compared to those who were less dependent on their families.

"As I saw patients were dying near me, I thought that,

Table1. Characteristic of Participants (n=13)

| Participant work (years) | Job/relative to patient | Gender (male/ female) | Age (years) | Marital status (single/ married) |
|--------------------------|-------------------------|--------------------------|----------------|-------------------------------------|
| Patients | | 3/7 | 29-70 | 2/8 |
| Family member | | 1 | 68 | 0/1 |
| Nurses | | 0/2 | 34-38 | 1/1 |

Table 2. Example of Qualitative Content Analysis Process

| Meaning unit | Condensed meaning unit | Code | Sub category | category | Main category |
|--|---|--|--|-------------------------------------|-------------------|
| “I felt that human body cells were intelligent. Our body cells are also intelligent and they can keep millions of memories, so we can take advantage of their capabilities of conductivity and ordering. I could benefit from such capabilities and made progress in improving my disease.” (Participant No.3) | I felt that human body cells were intelligent. I could benefit from such capabilities and made progress in improving my disease.” | Understand the cell's intelligence Contact with the body to improve disease | Being aware of the intelligence organism | g e t t i n g connected to the body | Body-mind healing |

Table 3. Theme, Sub-themes, Categories, and Subcategories

| Main category | Category | Sub- Category |
|-------------------------------|------------------------------------|---|
| Body- mind healing strategies | Getting connected to the body | ·Being aware of the intelligence organism ·Body nurturing |
| | Mindfully reconnecting to the self | ·Using the embodying knowledge ·Living in the moment ·Being connected to the nature |

I need to live in this world the way I want instead of letting the world decide my life for me. I myself made decisions for my life; I became stronger and overcame everything.” (Participant No.7).

Some participants used religion and spirituality as the most important strategy to cope with the disease. Putting the affairs into the hands of the omnipotent as well as having reliance on God considered as one of the strategies participants used to reduce stress. Therefore, they relied on the fortified source of faith in order to achieve a state of peace and security.

“I gradually made better relationships with the Holy Quran, one night; I cried after prayers and said: Dear God, I am grateful because you selected me. If it was due to my sins, I am grateful. I would not be in such condition; I hope to get rid of my sins and be prepared to meet you.” (Participant No. 8)

Another strategy of participants was being in the circle of friends, following others as well as behaving based on values, criteria, and norms by others could prevent humans from changing. They reached the conclusion that keeping away from others’ judgments was a strategy to avoid their negative energy. The participants considered such changes in their appearance as a factor changing the attitudes of those around them. Some of the participants tried to hide such changes to avoid such looks. They believed that others’ conduct was largely dependent on their own behavior.

‘It’s important for patients to be understood by others with a non-compassionate look (Participant No. 11, an oncology nurse).

“When I went for chemotherapy, I went to the end of the oncology department and sleep on a bed. I used to use a privacy curtain and did not interfere in others’ diseases. I never wanted to know about something that would make me feel bad.” (Participant No.10) .

Living in the Moment

Participants tried to consider disease as a trigger to their mind that compelled them to give up their routines and habits they had spent years doing, sinking into the past, and worrying about the future, and consequently move forward. They needed to enjoy their current pure moments. They changed their lifestyle and set aside concerns about the future. They chose living in the moment as their own strategy. For example, one of the participants said that:

“My worldview changed towards disease. Before the disease, I used to think I could live for 80 years, and I had my own way of living, but now I think differently. I need to live, having fun, eat, and dress up in the moment. There is no need to worry about the future at all.” (Participant No.5)

Being connected to the nature

Participants stated that staying at steady environment of home caused participants to feel more pain, think about the disease as well as its complications, and suffer from amplified restlessness. Going out of the home diverted thoughts to a greater focus on nature rather than pain. Nature was an effective way to get rid of negative thoughts. Interacting with nature, walking in nature and see its beauty, and talking to the nature all cause participants to avoid unpleasant thoughts. Moreover, dreaming such as visualizing oneself in nature took them far away from painful experiences so they never considered chemotherapy as a tough experience.

“I feel better when I go out. Last night, my wife insisted on going out for a short time. The energy I got from nature was added to the energy in my body and it was soothing.” (Participant No.2).

Discussion

Analysis conducted in this study led to the main theme of 'body-mind healing strategies' consisting of two categories including 'getting connected to the body' and 'mindfully reconnected to the self'. Participants experienced that the healing powers placed within humans and they could use this intelligence and lead it to a successful treatment by talking with their body. In agreement with present study, Dehghan et al., (2017) showed that patients has used other mental-spiritual strategies including speaking with different parts of her body. In addition, the body talking strategy understood as Body Awareness Therapy. Body awareness involves attention on and awareness of internal body sensations.

Participants in this study said that they could make efforts and have perseverance in nurturing their body. According to Turner (2010) and Borji (2017), good physical health is when persons experience less stress, which may lead to them having a stronger immune system.

According to the text, individual independence was a way participants choose to cope with the disease. Heidegger (2008) claimed that the most stable self, the one that is most independent or autonomous is the self that is a consistent, stable, and coherent integration of thrownness and projection (McManus, 2014). According to Breitling et al., (2008), congruence in cancer survivors experienced as self as priority, independence, freedom, and self-worth. Personal freedom means to be whom one is, to do as guided from within and extends to the freedom from opinions of others and societal expectation as to how life "should" be lived.

Several participants in present study concluded that communicating with peers and learning from their experiences could provide them with some solutions. They believed that people who did not experience the disease were not able to understand them. Consistently, Rahnama et al., (2012) study claimed that source of hope and helpful resources for the participants is their relationship with other patients. Ussher et al., (2006) reported that patients who experienced self-help groups, self-learning programs, being in support groups, and patients who interacted with peers had better empowerment better empowerment and coped with cancer more effectively.

According to participants' experiences, they tried to live in the moment. Kierkegaard believed that the thinking about the focus on self-preservation might have a reductionist effect by making life appear more primitive, mechanical, and linear. Life understood as being nonlinear and lived out with intentionality (Pitchford, 2009).

Interacting with nature, talking to nature, and keeping away from unpleasant thoughts were strategies that participants in this study use for avoiding Intellectual ruminations and led to the attraction of more positive energy. Krishnamurti (2010) believed that going out for a walk is very important for decreasing anxiety for all persons. Studies of Alitajer and Mostaghimi, (2016) show some evidence of the influence of the landscape on people's health and discuss theories on the mechanisms behind health benefits. They believe that nature as a "distraction" actually reduces anxiety and distraction

of patients from pain and causes feelings of relaxation and anxiety.

A group of participants also adopted the attitude that they could rely on superior power. Symonds et al., (2011), Nourmohammadi et al., (2018), and Any thing believed that spirituality is one of the human aspects that gives meaning to life and goals, and has an important role on better life quality, satisfaction and recovery feeling of the patients (Dehghan Nayyeri and Jalali Nia, 2010). In the study of Rahnama et al., (2012), and Nejat et al., (2017) it was also reported that relationship with God, having faith and trust in God and obeying God's orders were defined as spirituality in the viewpoint of their participants. Studies defined spirituality as a deep relationship with a superior power (God or the Holy Spirit), faith, synonymous to religious beliefs, and something comprising immortality and eternity.

In conclusion, the results of this study showed that the most important body-mind healing strategies are getting connected to the body and mindfully reconnecting to the self. In addition to the issues mentioned, it is important to note that the results of the present study are in line with the majority of studies in this field. However, in one strategy participants in present study were different from other researches. The research team found few studies about body talking strategy to cope with cancer. It can be an important strategy for these patients, and can be a way for further studies. It is important to pay attention to such needs of patients with cancer and to provide appropriate care for them. But the main problem is that there is no institute in Kerman providing palliative care to cancer patients in order to present these results and provide psychological counseling in the field of some protocols and strategies that are fundamental issues for patients with cancer. In addition, according to the results of present qualitative study, it is possible to form discussion groups with peers or have self-reflective practice learning groups to reflect these coping strategies. In this way, participants can express themselves, share their experiences, and learn how to behave in front of their disease.

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