



Understanding Cancer Patients' Lived Experience of Pain through Metaphors: A Qualitative Study

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Authors

Fateme Raiisi^{1*} PhD
Mina Riyassi¹ PhD

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¹ Cognitive science of language department, Cognitive Science. Institute of Cognitive Science Studies. Shaid Chamran Bulv, Cognitive science Bulv; Edalat Sq, Phase 4 of Pardis City, Tehran, Iran.

* Correspondence

Address: Cognitive science of language department, Cognitive Science. Institute of Cognitive Science Studies. Shaid Chamran Bulv, Cognitive science Bulv; Edalat Sq, Phase 4 of Pardis City, Tehran, Iran
P.O.Box: 1658344575
Tel: 0098 21 76291130
Fax: 0098 21 76291140
Email: elhamaraiisi@gmail.com

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ABSTRACT

Aims: The purpose of this study was to investigate the lived experience of pain metaphors in cancer patients.

Method and Materials: The method of this study was qualitative with hermeneutic phenomenological approach. The study population included all cancer patients in Tehran in 2021-2022 who experienced pain from cancer and its treatment. According to the theoretical saturation rule, 20 cancer patients in stages 2 and 3 of the cancer were selected by purposive method and interviewed in-depth and semi-structured manner. The interview lasted from 40 to 90 minutes. The time and place of the interviews were determined by the participants. Questions with a general question as to what you analogized your experience with cancer and its treatments. After each interview and recording it, the content of the interview was written in fully. The extracted data were analyzed using the method of hermeneutic analysis of Diekmann et al. (1989).

Findings: According to interpretive hermeneutic analysis; lived experiences of pain in cancer patients are 4 main themes including; the metaphor of lived war, the metaphor of lived scheduled pain cage, the metaphor of living in dark future with pain and the metaphor of lived with overload pain.

Conclusion: To conclude, metaphors have important role in pain expressions. Researchers suggest cognitive therapies to change metaphors of pain.

Keywords: Pain Metaphors, Lived Experience, Cancer Patients.

Introduction

Pain is a concept that can be studied from various dimensions like psychological aspects as quality of life and self-efficacy and other instances [1,2]. As pain intervenes in all aspects of life, it can be examined from different viewpoints according to gender, illness and age groups [3]. Today, interdisciplinary perspectives have become prevalent in the field of pain and pain management [4]. A relatively new field in the study of pain is conceptual metaphors [5]. Conceptual metaphors are one of the most important and fundamental concepts of cognitive linguistics and is rooted in George Lakoff's Theory [6]. According to Lakoff, we live with cognitive or conceptual metaphors and they are our thinking capacities [7]. From this view-

point, what is important is that abstract concepts such as time [8], pain [9], and life [10], are based on our physical characteristics. In other words, we need physical experience to understand metaphorical concepts, and this can be done by mapping between the two domains of source and target [11]. This phenomenon is called embodiment, because our experiences are similar and so our thinking container as well as conceptualization through metaphors is similar [12].

Studies demonstrated we express our pain and living with kinds of pain through different metaphors. For example, in a qualitative study in women with endometriosis, results showed women express their pain as force, physical damage, and an

external attacker^[13]. In another study about pain of Covid-19, results demonstrated experiences such as human body parts, battling, hitting, weight, temperature, spatialization, motion, violence, light, and journeys^[14]. Woodgate et al. demonstrated the lived experience of pain in young people living with an anxiety disorders and found the main category as "anxiety is very much about pain."^[15] Results of a study demonstrated metaphorical expression of lived experience with cancer pain can affect the physician's understanding of the patient's condition^[16]. In Iran, Raiisi^[9] found Persian patients use object, causation, path and direction, human, place, taste, container, force and circle to articulate their kinds of pain.

Cancer patients experience unique and severe pains. Their pain is sometimes uncontrollable and they cannot manage it^[17]. There is corpus of literature about the pain of cancer and its treatment as chemotherapy and radiation therapy^[18]. One study showed; people who experience the pain of severe cancer often feel frustrated, anxious and unable to manage their pain^[19]. Another study showed; the pain of cancer patients is related to psychological states and spiritual factors^[20]. In Iran, results of a study showed; people who survived cancer had experiences like body image distortion, mood swings, uncertain future, and choosing an isolation in their lifestyles^[21].

Pain is a lived experience in different diseases that may be different from one person to another^[22]. what is important, is how this lived experience is expressed by patients with cancer through metaphors. Conceptual metaphors can display a crucial role in pain experiences communicating. Because metaphors lead to mental frameworks or schemas and exacerbate the conditions of treatments for patients. This process is subconscious and acts as a defective circuit.

In another word, the importance of studying the lived experience with the metaphors of pain in people with cancer is due to the fact that the use of metaphors is also useful in diagnosis, treatment and health care. According to these issues, the aim of this study is to highlight the way in which pain metaphors is a central experience for cancer patients.

Method and Materials

The method of this study was qualitative with hermeneutic phenomenological approach. The study population included all cancer patients in Tehran in 2021-2022 who experienced pain from cancer and its treatment. According to the theoretical saturation rule, 20 cancer patients in stages 2 and 3 of the cancer were selected by purposive method. In another word; the sampling and interviewing process continued until data saturation or until new information was not obtained. The criterion for entering the sample was being in stage 2 or 3 of the cancer and undergoing chemotherapy or radiation therapy. Participants were interviewed in-depth and semi-structured manner. The interview lasted from 40 to 90 minutes. The time and place of the interviews were determined by the participants. Demographic data were the age, gender, academic level, stage of cancer and kind of cancer. Questions with a general question as "what you analogized your experience with cancer and its treatments" was began. After each interview and recording it, the content of the interview was written completely. Follow-up questions were also asked during the interview to obtain richer information and delve deeper into their experiences of the phenomenon. For example, can you explain more about this? Do you mean that? What metaphorical self-talking makes you worse? What does cancer and its treatments mean to you?. In this study, two criteria of

reliability and transferability were used to prove the accuracy and robustness of the research data.

The extracted data were analyzed using the method of hermeneutic analysis of Diekelmann et al. [23]. In this approach, not only are the researcher biases and assumptions not bracketed or discarded, but these biases and assumptions are within the interpretive process and are part of it. Here, the researcher is expected to reflect on their experiences of expressing metaphorical pain and then to articulate the various gaps that their experiences related to the subject under study. Therefore, the final result of the research, including the assumptions of the researcher and the philosophical foundations, is that the interpretation is derived from it [24]. Therefore; The purpose of selecting a participant in hermeneutic phenomenological research is to select participants who have lived experience that is the focus of this particular study and which participants want to talk about their experiences. In addition, these participants should be as different from each other as possible in order to be able to access rich and unique narratives about a particular experience [25] as metaphorical pain. Based on this, the study method was such that the contents were first written on a piece of paper, then reviewed several times to obtain a general understanding of it. An interpretive summary was written for each of the interview texts and the metaphorical meanings hidden in it were understood and extracted. In the next step, finding topics, interpretations and patterns also took shape. Explicit and implicit meanings were extracted from the interview texts that these meanings are not in fact the simple metaphorical expression of the participant; It also covered the atmosphere and emotions of the interview and how the person answered the questions. Finally, two experienced and

proficient health professionals in the field of qualitative research were asked to study the various aspects of the research and express their corrective opinions, which were finally approved by the research process.

Findings

In this study, 20 cancer patients (11 females and 9 males) cancer patients were participated. Mean age of participants was 43.37 years old (SD=1.94). Based on demographic information, 9 patients were in 3rd and 11 patients were in 4th stage of cancer. Other demographic variables of students are shown in Table 1.

Cancer-related pain and its treatment can be lived metaphorical like the metaphor of lived war, the metaphor of lived scheduled pain cage, the metaphor of living in dark future with pain, the metaphor of lived with overload pain. As mentioned above there are 4 main themes of pain experiences that cancer patients experience in their lives. The frequencies and percentages of lived experiences of metaphorical cancer pain expressed by patients in different terms are shown in Table 2.

The metaphor of lived war: fighting together.

One of the cases that appeared in the answers of most patients in different forms was fighting with pain in a period of time or all time. Pain is enemy. An attack of unbearable pain. For example; a patient said:

"... it just feels like someone fight me in my mind and body. "Every moment a new pain threatens me"

One of them said: "The pain was shooting in my head." or "It was impossible to escape from this pain."

- The metaphor of lived scheduled pain cage. Most patients felt they were in a trap or prison planning for pain and treatment. A painful trap. For example; a patient said: Another one said: I am trapped in a container full of pain from which it is impossible to

escape. It will kill me.”

The metaphor of living in dark future with pain.

Analysis of cancer patients' interviews showed that they have a fear of vague pain that may occur in the future. The intense and vague pain they have experienced depicts a bitter and dark experience for them metaphorically. For example; a patient said: Another one said: A worse pain will be waiting for me that will take me away.

- The metaphor of lived with overload pain.

Many of the participating cancer patients believed that they tolerate pain beyond their optimal tolerance. They expressed that sometimes they run out of pain and wish for death. For example; a patient said: Another one said: “This pain had taken my breath away.”

Table 1) Summary of statistical indicators related to demographic variables of the cancer patients (N =20)

| Variables | Components | N (%) |
|-----------------------|------------|--------|
| Gender | Men | 9(45) |
| | Women | 11(55) |
| Kind of cancer | Breast | 9 (45) |
| | Prostate | 7 (35) |
| | Leukemia | 4 (20) |

Table 2) Frequencies and percent of lived experiences of metaphorical cancer pain

| Lived experienc | N(%) |
|---|------------|
| The metaphor of lived war | 25 (16.48) |
| The metaphor of lived scheduled pain cage | 31 (34.07) |
| The metaphor of living in dark future with pain | 19 (20.88) |
| The metaphor of lived with overload pain | 16 (17.58) |

Discussion

The purpose of this study was to investigate the lived experience of pain metaphors in cancer patients. Because the perception of cancer pain and its treatments vary from person to person, pain can be studied through lived experience. Metaphors can act

as mental mediators and verbalize pain lived experience. Therefore, the results of the present study are consistent with previous studies. As Bullo et al [13] indicated pain as force, physical damage, and an external attacker. Deng et al [14] showed experiences such as human body parts, battling, hitting, weight, temperature, spatialization, motion, violence, light, and journeys. Woodgate et al. [15] demonstrated the lived experience of pain young people living with anxiety disorders as “anxiety is very much about pain. Raiisi [9] indicated Persian patients use object, causation, path and direction, human, place, taste, container, force and circle, to for pain metaphorical expression.

Because pain in any disease is phenomenological in nature and this feature cannot be denied [26]. Pain challenges are often internal and often subjective [27]. Cancer pain and its treatments are unique experiences that vary depending on age, gender, type of cancer, the stage of the disease and treatment [28]. Nowadays, researchers try to evaluate people's metaphorical minds in various ways, including by scales [29]. As cited before; understanding the metaphors of pain helps in diagnosis and treatment and can facilitate the relationship between the patient and the therapist [30]. Understanding and expressing metaphors also depends on individual characteristics and demographic characteristics [31].

The metaphorical description of pain as fighting, planned cage, etc.that seems to produce maladaptive schemas that are constantly repeated in the patient's mind. A study has shown; pain metaphors and metaphorical thinking about pain can increase the severity of pain [32]. In explaining this point, it can be said that the pain intensity caused by cancer and its treatments is high and severe, the metaphorical expression of pain is also high in patients, and this aggravates the patient's condition or state.

Therefore, pain metaphors play an important role in chronic pain in the cognitive schema by repeating metaphors. Cognitive-behavior therapy, an approach of psychotherapy, can affect on metaphors and improve the effects of metaphors in our schemas and thinking frameworks^[33].

The limitations of this study were; 1) Individual differences and participants' psychological states when responding could affect how they respond. 2) Due to the nature of qualitative research, the generalizability of the obtained results may not be possible. 3) Coordination with cancer patients was less in some of them due to treatment conditions. For this reason, the researchers had to interview each of the participants several times. For robust findings, more qualitative and quantitative studies are required. Due to the cognitive nature of metaphors, cognitive therapies can be used in later studies to change metaphors of pain.

Conclusion

According to interpretive hermeneutic analysis of Diekelmann, lived experiences of pain in cancer patients are summarized in 4 main themes including; the metaphor of lived war, the metaphor of lived scheduled pain cage, the metaphor of living in dark future with pain and the metaphor of lived with overload pain.

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Authors' Contribution: FR was corresponding author and wrote introduction and discussion. She designed methodology. MR wrote introduction. All authors read the final draft of the manuscript.

Conflicts of Interests: None

Ethical Permission: In this study, all ethical principles were respected. According to qualitative researches, ethical principles

were observed in all stages of the research. In the beginning, written consent was obtained from all participants and the purpose of the study was explained for them.

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