

Experiences of Silent Suffering on Chemical Injured of Iran-Iraq War: A Phenomenological Study

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ABSTRACT

Aims The use of chemical weapons by Iraq against Iran leads to the death of thousands of civilians, and it left hundreds of thousands of wounded and chemical injured that most of them still suffer from its side effects and to show themselves a strong man, they suppress their physical and mental symptoms. This study aimed to explore the experiences of the silent suffering on the chemical injured of the Iran-Iraq war.

Participants & Methods This qualitative research was conducted in 2019 on 16 chemical casualties in Amir Al-Momenin Hospital, Isfahan, Iran. 16 chemical injured that had the login characteristics of the study were selected by purposeful sampling method and for data collection of deep unstructured interviews. The interviews were analyzed by the Colaizzi method.

Findings Generally from 16 interviews, 345 primary codes, 28 primary concepts, one sub-themes of 5 main themes of ideals, gradual disintegration, and blame were extracted.

Conclusion Experiences of participants show the experience of silent suffering of war. Physical, psychological, and spiritual support in these victims is one of the important factors reducing their silent suffering.

Keywords Chemical Victims; Phenomenology; Suffering

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Introduction

Weapons of mass destruction, including nuclear weapons and chemical and biological warfare agents, are considered a major threat to the world because of their destructive properties. The world is witnessing the use of chemical warfare agents even before the birth of Christ [1]. The Spartan army used sodium vapor against the Athenian army during the Peloponnesian War in 400 BC. Later, chemicals were used repeatedly and in various forms during military operations. The highest number of victims of chemical warfare was during World War I, between 1914 and 1918. Of the 85,000 soldiers killed, more than 1.2 million were permanently blinded, burned, or mentally ill [2]. Chemical weapons are cheap and can cause many casualties. The production of these weapons is relatively easy even in developing countries and has been used in many conflicts of the twentieth century [3]. Most chemical attacks in the world took place despite the 1925 Geneva Protocol in the Eight-Year War between Iran and Iraq (1988-1980). Iraq's use of chemical weapons against Iran killed thousands of civilians and left hundreds of thousands wounded [4]. In this war, more than 40,000 people have been exposed to factors such as mustard gas and are suffering from its effects [5]. Exposure to various hazardous chemical agents, especially gases, may lead to acute and chronic medical consequences. For example, the side effects of mustard gas include pulmonary, ocular, cutaneous, neurological, gastrointestinal, endocrine, hematologic, and other complications [6]. In addition; In chemical attacks, the damage caused by psychological stress is more evident than anything else, such as lack of identity and security, emotional arousals and difficulty concentrating, long-term mood disorders, anxiety disorders, and post-traumatic stress, and some responses From stress [7]. Also, chemical casualties are less adapted and have lower mental health due to fear of disease complications and thinking about deteriorating physical condition [8]. The quality of the experience of dealing with the damage caused by chemical weapons can be debilitating. Early and progressive psychological involvement confirms this fact [4] and suggests that chemically injured people suffer from various diseases and irreversible health [7] and usually have physical symptoms because they appear to be strong human beings.

Furthermore, suppress their psyche. When a person suffers from a problem and a reality, feels mentally ill with or without physical symptoms but does not show symptoms, it is called "silent suffering or suffering." This person only knows internally that he is suffering [9]. This inner suffering continues because of the possibility of social rejection due to disability. "I am fine, and I have no problem," he says. It makes itself seem strong if the suffering is internal and continuous. A person may cry secretly in a corner, and no one notices his suffering [10].

Silent endurance and deep loneliness are key components of socio-emotional suffering. As a result, it exerts intense stress on the individual to protect himself/herself from social attitudes and behaviors [11]. Suffering is a phenomenon that influences the different dimensions of the experienced person, family members, and professional of the health care provider [12]. Therefore, it is important for nurses and all members of the health team to know what patients care about and how they experience it [13]. Since environmental factors affect people's experiences of life and illness and a person's perspective on a subject is influenced by these factors, conducting qualitative research will help nurses recognize these factors [14]. Qualitative research is a systematic and abstract method that allows the researcher to explain the nature of phenomena [15].

As the researcher in the study of various texts and scientific articles came to the fact that some of the chemical warfare veterans have depression and grief that sometimes do not manifest it easily, he was faced with how to experience silent suffering in the wounded. Because conducting research based on principles and gaining a deep understanding of clients' experiences can be the basis of the performance of the health care team [16], this study aimed to explain the experiences of silent suffering in the chemical casualties of the Iran-Iraq war and recognizing silent suffering and its causes and sources; however, the researcher believes that the root of many sufferings, it can be caused by bio-social conditions, not necessarily the effects of chemical injuries, more importantly, it is an experience that these people have of their current situation, in which they experience life and describe their emotional suffering.

Participants & Methods

This qualitative research was conducted in 2019 on 16 chemical casualties in Amir Al-Momenin Hospital, Isfahan, Iran that were selected by purposive sampling method. Participants were selected from the chemical casualties admitted to the internal ward of Amir Al-Momenin Hospital who were interested in expressing their experiences and were able to convey the material.

After obtaining the license from the Vice Chancellor for Research of the Islamic Azad University, Khorasgan Branch of Isfahan, the researcher referred to the research environment and obtained the consent of the eligible people to enter the study interviewed and recorded their talk is on cassette tapes. During the interview, the researcher first tries to gain the participants' trust and create a safe environment to express their experiences. Each of the interviews was followed by an in-depth interview and conversation. The interview begins with a general question, and then, with guidance and direction, additional questions are asked to

encourage and explain further. Each interview began with a general question such as "there are things that have upset you that you have broken down into yourself and not told anyone and if there is, how you experienced it. It was also said that you could explain more or more clearly or give an example in this regard.

Data collection and analysis were performed simultaneously, and this process continued until the study's end and achieved data saturation. After performing the two stages of analysis of the first interview, the next interview was conducted. After saturating the information, the interview was completed, and the final stage of analysis was performed. To ensure the reliability of the data, the review of observers and participants was used, and necessary changes were made if necessary. At the end of each interview, the recorded materials and notes in the field were converted into written text. Data collection was continued until data saturation was achieved. Klaizi's phenomenological analysis method is a guide for researcher activities in data analysis of the present study. In qualitative research, the phenomenological approach based on the Colaizzi method uses the following seven steps:

All the descriptions provided by the participants in the study are read to get a feeling and get acquainted with them. 2-Each text is reviewed, and important phrases are extracted. 3-The meaning of each important sentence is received, and the meanings are formulated. 4. Put the above steps for each iterative protocol in clusters of themes (main topics), and by referring to the main protocols, the validity of the clusters is examined. At this stage, there may be differences between or within multiple clusters. It should be noted that these data or themes seemingly inappropriate should not be ignored. 5-Combining the results in a 6-Comprehensive description of the phenomenon under study is a clear statement of its basic structure. 7-By referring to each of the participants and conducting a single interview or conduct multiple interview sessions ask participants for their views on the findings, and final validation of the findings is conducted ^[17]. Based on the first stage of the analysis, the participants' recorded statements were read several times and placed verbatim on the pages of the paper, and the results were carefully reviewed several times and compared with the recorded audio. The researcher tried to better understand and feel with the participants by reading the interviews accurately and frequently and describing them. For example, participant number 1 stated: "I live with a lot of suffering and pain, which means that unfortunately, they did not inform me about the chemical. The day I went to war, I rubbed everything in my heart to destroy it, to be blind, to be torn to pieces, another war, but my children were not supposed to be involved in this case when we came, there was no information that the chemical

warfare veteran did not marry or have children. I was chemically treated twice, once in Sardasht, which was a catastrophe. "Haman Roshan affected. I had a son. My son turned 22. At the age of 22, his lungs became blistered. He coughed from the day he coughed until the day he fell to the ground and died."

In the second stage of Claysian analysis, we went back to each explanation and identified the sentences and phrases directly related to the phenomenon by linearization.

The following are the most important phrases extracted from this statement:

"I live with a lot of suffering and pain, that is. Unfortunately, they did not inform me about the chemical. The day I went to war, I rubbed everything in my heart to destroy it, to be blind, to be torn to pieces, another war, but the children were not supposed to. I was involved in this case. There was no information that the chemical warfare veteran did not marry or have children when we came. I was chemically treated twice. Once in Sardasht, which was a catastrophe. I had a baby; my baby had a clear effect, I got a boy, my son turned 22 years old, at the age of 22, his lungs became blistered, he coughed from the day he coughed until the day he fell asleep and died, 63 days became one I have a disabled girl."

In the third stage of Klaizi analysis in this research, raw information was reviewed several times to become abstract and general concepts, and we tried to understand what meaning it can be extracted. To perform this step, according to Klaizi, the researcher tried to conceptualize and formulate the extracted meaning. In this step (initial codes), important sentences related to the phenomenon in question, identified by the underlining method, were extracted, examples of which were mentioned below.

Extracted source codes:

- Life with pain and suffering
- Lack of knowledge about the chemical effect on the next generation
- Preparation for martyrdom in time of war
- Unprepared to infect children
- The crying state with memories of chemical attacks
- Causing blisters and cough in a child at the age of 22
- Death of a child due to chemical effects
- Girl disability due to chemical effects

After the third of the seven stages of Claysian analysis, the researcher coded the concepts extracted from the participants' interviews. According to Klaizi's theory, after repeated reading of the codes and repeating the third step, the researcher placed the formulated concepts into thematic categories and clusters, and thus the second level conceptual codes were obtained. In the fifth stage of Claysian analysis, everything was collected in a comprehensive explanation of the subjects studied. In the sixth stage of Claysian analysis, an attempt was made to explain the

phenomenon under study in an unambiguous statement comprehensively. The accuracy of the content was confirmed, and the necessary changes were made if necessary. Also, the findings are based on the participants' experience, and the objectivity of the findings is emphasized.

Findings

The researcher had reached information saturation after interviewing 16 participants. The age of the participants was between 48 and 60 years. Their education range ranged from elementary to doctorate. The majority were self-employed.

Based on the first stage, "important statements" related to the studied phenomenon of silent suffering were extracted from each interview, of which a total of 345 initial codes were obtained from 16 interviews. Then the underlying meaning of each of the 28 important statements was obtained as "formulated meaning" or sub-concept. Similar basic concepts were organized into broader concepts, and six sub-themes were obtained. Finally, four main themes were extracted to achieve a more accurate meaning of the concept of care. The main themes were described, and the participants' statements were expressed in main sentences on each topic.

Ideals

The first theme is derived from the experiences of chemical casualties, inferred from two sub-themes of "ideal effort and forgetting". This suggests that nurses and health planners should address these issues when caring for chemical casualties. Study participants share their experience of their ideals:

As an example, the 16th participant said: "All suffering is sweet because we defended our honor, the honor of 60 million people of my country, if they were safe they arrived in Shiraz, in Isfahan, they took over everywhere, the issue was my country, the issue was my religion, all pain we are suffering, all taunts we are hearing, God knows I never give up. In all of my hardships, my hope is God, and my joy is that God sees my hardships and will give me a prize for this suffering; therefore, I do not show my suffering".

Alternatively, participant No. 5 said: "We are suffering and then say sorry that we stayed and saw this; I wish we were martyred that we did not see this suffering now. I swear to God, those guys who went to the front were boys at the age of 14 to 17 years old, who fought bravely" As the concept of forgetting, participants raised concepts such as neglect and isolation, which was considered as the concept of forgetting. They stated that the victims and injured are forgotten among their families and society, And the current generation has not been aware of the conditions and problems of their lives, and this lack of awareness causes a lot of mental and psychological harm and suffering, and it makes them isolate and break away from others. In this respect,

participants expressed their own experience as follows:

Participant No. 7: "what can I say? I go to my mother's house and say I'm sick, she says it doesn't matter to me. She had some inheritance and gave them to my siblings; I asked him, why don't you give me too? She said: you do not have any life anymore, do you want to take this from us? Aren't these pains? It's really hard."

Participant No. 5 has expressed as follow: "No one in the family understands us, for example, I say my lungs are injured, fried and spicy foods are bad for me, but they don't care, and I can't say anything, and if I say, they will say it's your problem."

Participant No.15 said: "We're going to the community and see people look at us badly. It suffers us too much. I can't go to a party; my child comes crying and says, let's go to my grandma's house, my aunts are there with their husbands, but we sit lonely and sad in a corner. So this is suffering me, but I can't go there is no one to understand us in the community."

In this study, blame is the second theme obtained from the experiences of chemical victims, which has been derived from two sub-themes: distress and remorse. By examining the transcript of the participants' interviews in this research, experiences such as; Depression, concern, financial problems, the issues of children, and the life-suffering memories of war were obtained as these were under the concept of distress.

In this regard, the participant Not Found five has mentioned to loneliness and carelessness of others as distress and stated: "when one comes to meeting other guys I tell myself that look, they come to see him, but I don't have a visitor, so I suffer in this way."

Furthermore, participant No. 7 stated that: "My wife has some expectations, she is right, she says why we don't have a house, and well I can't go work, when I go to agriculture, I have to work for others and give half of it to them. It also costs money; I can't do it myself, and if I want to get a worker, no money is left for myself, and I have to say nothing."

Participant No. 3 said: "Well, what's wrong with my wife and children? They are suffering, their husband is disabled, if the rights of these people who were at war are cut off, they will become beggars who have to begin the streets. Moreover, when I say I am a veteran, help me; they say go and get help from the government. All their fingers are on the government."

Participant No. 10 stated, "I was mentally harassed in a few years, and I got depressed. I did not know that the chemical veteran becomes dishonor one day. I ask God for my death; I can't breathe; I have hard days, I decided to suicide several times. It's really hard."

Participant No. 13 said: "we endured hardships

during the war, there isn't cold water to drink at all, and there were barbed wire and tanker. The cups that were used were dirty up to 10cm. We used this kind of water and cooled it. Young people and teenagers have not understood these issues."

Remorse

Remorse is one of the concepts derived from this study that was seen in most participants in the form of unconsciousness, secrecy, self-blame, wishing for death, the sense of liability to the wife, and unsuccessful compatibility. In this regard, participant No. 1 stated that: "there was a veteran who has died 20 days ago it was very painful. He used Morphine, it's not a joke, and each of his legs weighed 200 kilograms, everyone who passed looked at him. One day he told me to pray for my death; please, people's glance bothers me."

Participant No. 15 stated that: "I'm aggressive, and I get angry quickly, I hit and break a glass, and it's not at my disposal at all. I get angry with the smallest thing. My children are annoyed because of me, and I'm sorry about that. A few years ago, my daughter was making crafts. She was making noise; I told her don't make noise, but there was still noise. I got angry broke the glass of the door. I was suffocating her. Neighbors helped and saved my daughter. I am indebted to my wife. My wife takes care of me. For example, at night, when I cough, she comes near me. I'm ashamed of her."

Participant No. 16: "My wife has to wake up several times every night to check me on. She must be careful that I don't suffocate. Therefore, my wife can't sleep; she wakes up four or five times during the night, which bothers me. Our bedroom has been separated for ten years so that my wife can rest, but finally, she bothered."

Gradual vanishing

The main concepts that were obtained from the experiences of most participants in the research were "gradual vanishing" as the third main theme, that "the disease-progressive" and "annoying behaviors" were its sub-concepts. The progress of the disease was experienced in all participants; they suffered from many physical and mental illnesses and experienced death, and subsequently, there were many problems with the course of the disease and their treatment. In this regard the participant No. 13 described it as follows: "I have many pains that I can't talk about them, for example, I suffering from sexual issues. I lost my sexual powers; the relationship between my wife and me is similar to a brother and sister; all my body is sick and involved in chemical materials. My skin is wound, and I have blisters on it. I have heart disease, on the other hand. 50% of my lungs have been disabled."

Participant No. 11 explained as follows: "I'm suffering during 24 hours of a day my wife also suffers with me. My body is itchy, and my physical strength declined; I don't have sex because my penis and testicles are blisters."

Participant No. 1 stated, "I feel bad, I have severe shortness of breath, my wounds turn and open and infection and blood come out of it. I must go to the hospital and be hospitalized and take medicine according to the doctor, I won't be well, but there are for recovery. I will be hospitalized for about 20 days, and strong antibiotics are injected into me. I finally have an almost comfortable life for about two months. Nevertheless, by comfortable, I mean don't feel suffocated."

Annoying behaviors

One of the experiences acquired by most participants of this research is annoying behaviors that contain annoying behaviors of their wife, social annoying behaviors, behaviors of authorities, the look of their children, and injustice. Participant No. 1 described as follows: "the first day that my wife understood I am a veteran said I proud to be a veteran's wife. But after a few years when she realized I don't have some abilities that should have, she became immoral. In a way that I cannot criticize anything at home because she becomes aggressive quickly. These are the things that hurt me." Participant No. 10 stated that: "A few days ago, I wanted a glass of water to take my pills. My daughter didn't accept bringing me a glass of water. She said her mother was asleep, tell mom to bring water for you whenever she gets up." ... "My children do not come to me because my wife does not come to me. One day, I had credibility. Ask others who were Mazrooei. But I can't breathe now, I need an oxygen capsule and spray. My children say your room is full of germs. If I say give me my cellphone, they say it maybe has rays because of your coughing."

Discussion

This study examines the experiences of silent suffering of chemical casualties in the Iran-Iraq war. The findings of this research are in 3 categories of ideals, blame, and gradual decline. Arman's experience in the participants of this study shows that they were present on the front during the war using the culture of martyrdom and esoteric beliefs, and the war meant to them the defense of the country, the defense of the people, and the creation of a better tomorrow. They endured many hardships and were eventually injured by chemical warfare agents. Some of the characteristics that formed the spirit of resistance of warriors during the holy defense were martyrdom, prayer, and religious concepts, prayer, self-sacrifice, sincerity, not being afraid of war and the enemy, minimal use of facilities, purity, piety, and honesty of commanders, dirt, and purity^[17]. Sharifinia's research found that a strong relationship with God and spirituality is associated with higher life expectancy. In other words, a strong relationship with God can remove any feelings of anxiety, stress, and despair and give life a new meaning. In addition, this factor can create

a sense of security in people, and they can rely on a force that keeps them safe in the event of problems. Therefore, people with chronic conditions will have more life satisfaction due to having a strong relationship with God [18]. According to the religious culture in Iranian society and the beliefs of this particular group, the four main categories of religion, patriotism, family support, and attitudes toward disease concerning each other make the chemical injured more compatible [19]. The injured in the study have been struggling with the effects of chemical injuries for at least 21 years, and some have said their picture of the country's future is different from the current picture. Izadi's findings and one of the important sources of the suffering of the chemically injured was the society's departure from Islamic values and the ideals of the revolution and the diminishing value of the culture of martyrdom among the people of the society [20]. Participants in this study described the experience of suffering and gradual extinction due to the physical and mental complications caused by injuries and, consequently, heavy and long-term treatments, frequent hospitalizations, economic problems, and so on. The injured stated that all moments of their lives are accompanied by pain and suffering and have a low quality of life. Some of them pointed out that mental suffering torments them more than physical suffering. In their opinion, their suffering is indescribable and unspeakable, and only those involved with the injury and its complications can understand it.

Chemical casualties, like other chronic patients, including cancer patients, experience a great deal of suffering throughout their lives. In a study, Siler *et al.* found that cancer patients experience many deficiencies in their lives that lead to suffering. These may include loss of function and personal independence, normalcy, pain, and loss. Dignity, hope, and faith create existential questions about the meaning of life, the meaning of experiencing illness, and believing in God's lack of support. This study also emphasized that pain can be excruciating if it becomes persistent and uncontrollable [21]. The experience of gradual death in this study showed that some of the chemical casualties due to high and long-term suffering from the complications of injuries such as physical illnesses and psychological, family, social and economic issues, etc., their tolerance threshold is very low, and death. They consider it a means to end all their sufferings, so they pray to God Almighty for death and the end of hardships. In the study of Soleimani and Shakir Dolagh, it was observed that anxiety and depression of death in chemical warfare victims were significantly different from non-chemical warfare victims, and this case was more in chemical warfare victims [22]. The role of psychological, social, and spiritual factors and physical symptoms in wishing for death seems to be prominent. Factors such as

self-destruction, loss of self-esteem, loss of independence, fear of the future, fear of suffering, and fear of responsibility for the work of others are among the main factors in the tendency to hasten death. The desire to die in patients with advanced disease cannot be understood outside of their suffering. However, it may vary based on one's cultural background and life experience. In some countries, this concept may be seen as a way to end suffering [23]. Meanwhile, the progress of diseases of chemical victims shows the tolerance of various physical, mental, and psychological diseases in these participants, which has covered most of their suffering. For many years, struggling with illness has been a major part of their lives. Frequent long-term hospitalization and waiting to be admitted is one of the experiences that this group faces. The incidence of long-term lung diseases and skin, eye, and nerve diseases were common in them, and the majority of patients studied were tired and did not have good mental health [24]. According to a study by Razavi *et al.*, The most common complaints are cough and shortness of breath among the injured. Major pulmonary complications have been reported among victims of COPD mustard gas, bronchiectasis, asthma, and narrowing of the airways. Treatment of respiratory patients exposed to mustard gas depends on the patient's condition (acute or chronic, upper or lower respiration). There are several treatments, but unfortunately, none of them are treatable [25]. The participants' experiences in this study showed that chemical victims suffer from mental health disorders due to multiple conflicts and express it in the form of violence and aggression against family and close people so that they have no control over their behavior and actions during aggression. After that, they suffer from remorse, and this is one of the sources of their suffering. Smith and Trunshan show that veterans have post-traumatic stress disorder, behavioral problems, and aggression after leaving military combat service [26]. Although the prevalence of post-traumatic stress disorder in chemical and non-chemical warfare victims is not much different, chemical warfare victims suffer from mental health disorders due to the long-term harmful effects of chemicalization [27]. The city of Sardasht showed qualitatively that all male and female participants in social aspects suffer from aggression disorders in social relationships, personality disorders, and reduced social interactions [7]. Some chemical victims have been reprimanded for exposing their injuries to others, which has disrupted their interpersonal relationships, while others have condemned them for not being honest in life, and these external stressors have caused them to feel bored, and He blamed himself on the person. Blaming yourself and blaming others were experiences that were seen everywhere in these people's lives, and they suffered a lot about it. Some of them had faced many

difficulties in life and now had internal conflicts in the confrontation between the ideals and lofty goals for which they had fought. Gray *et al.* state that fear is not the only or most common emotion on the battlefield, but that love, pride, and blame are also prominent. War veterans, who are asked provocative questions to challenge their thoughts and feelings of responsibility for their actions or inaction, may discover new unknown moral contradictions of betrayal of values, trust, and commitment to the country and Experience their services [28]. Self-blame as an incompatible psychological mechanism is usually formed by severe self-criticism and low self-esteem. In this case, the person is prone to take responsibility for any problems he faces [29]. What emerges from the participants' experiences in this study is that the annoying behaviors of the spouse, children, officials, and the community exist during these people's lives and cause much damage to them. They state that inappropriate behaviors are caused by a lack of understanding of their physical and mental condition and are a factor in their inner suffering. One of the experiences of chemical casualties in this study was loneliness and social isolation. Wilson & Kiernan's research shows that loneliness is common in veterans. Factors such as aging, functional limitations, number of life-threatening accidents, perceived stress, depressive symptoms, and post-traumatic stress disorder symptoms range from health. Internal and external are related to perceived loneliness and emphasize the need to consider these multiple factors when preventing or reducing loneliness in older veterans [30].

Suggestions for further research are:

- Investigating the experiences of silent suffering in the spouses of chemically injured people
- Investigating the suffering experiences of the children of chemical victims
- Investigating the effect of social support and religion on reducing the silent suffering of chemical victims
- Experiences of silent suffering in spinal amputees

Conclusion

Based on the findings, the experiences of the silent suffering of the chemical casualties of the Iran-Iraq war in the form of the main concepts of themes include ideals, gradual demise, and blame. The injustices that have been faced in the society, and due to the aggravation of the physical and mental illnesses and the inappropriate course of treatment they have expressed as experience, are experiencing death every day, and this process causes the gradual disappearance of these people. They feel forgotten in society because of the experience of inattention and isolation. Feelings of forgetfulness cause them to worry about their ideals. They experience the painful memories of the war at all times, all the spirituality and recourse that was in the war, for

them the concept of defending the people and creating a better tomorrow, and today they worry about their ideals, in addition to the feeling of forgetfulness in society and The people around them have caused their gradual demise. They blame themselves, and the feeling of remorse hurts all aspects of them. On the other hand, the feeling of remorse has caused their mental analysis and gradual demise. Eventually, the experience of ideals, gradual demise, and blame has caused silent suffering in these people.

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References

- 1- Goel AK. Looming threat of chemical and biological warfare agents. *Def Sci J.* 2016;66(5):443-4.
- 2- Kloske M, Witkiewicz Z. Novichoks—the group of organophosphorus chemical warfare agents. *Chemosphere.* 2019;221:672-82.
- 3- Evison D, Hinsley D, Rice P. Chemical weapons. *BMJ.* 2002;324(7333):332-5.
- 4- Ahmadi KB, Reshadatjou M, Karami GR, Anisi J. Evaluation of secondary post-traumatic stress disorder in chemical warfare victims' children. *J Milit Med.* 2010;12(3):153-9. [Persian]
- 5- Satkin M, Ghanei M, Ebadi A, Allahverdi S, Elikaei M. The quality of life of mustard gas victims: A systematic review. *TANAFOS.* 2017;16(2):115-26. [Persian]
- 6- Salari Seddigh S, Yousefimanesh H, Sarabadani J. Prevalence of chronic complications of sulfur mustard on the oral soft tissues Zahedan veterans. *Iran South Med J.* 2014;17(4):658-65. [Persian]
- 7- Molkari B, Karmian N, Farahbakhsh K, Esmaili M. Qualitative analysis of emotional and familial situations of injured victims of Sardasht chemical air attack. *Clin Psychol Stud.* 2013;4(13):107-20. [Persian]
- 8- Izadi A, Izadi-Avanji F, Masoumi A, Kafaei Atri M, Hajibagheri A, Miranzadeh S. The study of experiences of chemical victims of Iraq-Iran conflict in terms of nature and structure of suffering sources. *J Shahid Sadoughi Univ Med Sci.* 2014;22(1):858-70. [Persian]
- 9- Bien-Barkowska K, Doroszkiewicz H, Bien B. Silent strain of caregiving: Exploring the best predictors of distress in family carers of geriatric patients. *Clin Interv Aging.* 2017;12:263-74.
- 10- Kovandzic M, Chew-Graham C, Reeve J, Edwards S, Peters S, Edge D, et al. Access to primary mental health care for hard-to-reach groups: From silent suffering to making it work. *Soc Sci Med.* 2011;72(5):763-72.
- 11- Miles MS, Isler MR, Banks BB, Sengupta S, Corbie-Smith G. Silent endurance and profound loneliness: Socioemotional suffering in African Americans living with

- HIV in the rural south. *Qual Health Res.* 2011;21(4):489-501.
- 12- Jennings B, Ryndes T, D'Onofrio C, Baily MA. Access to hospice care: Expanding boundaries, overcoming barriers. *Hastings Center Rep.* 2010;Suppl 2:3-7.
- 13- Van De Beek D, Kremers W, Daly RC, Edwards BS, Clavell AL, McGregor CG, et al. effect of neurologic complications on outcome after heart transplant. *Arch Neurol.* 2008;65(2):226-31.
- 14- Abedi HA. Applying phenomenological method of research in clinical sciences. *RAHBORD.* 2010;19(54):207-24. [Persian]
- 15- Lin CS. Revealing the essence of things: Using phenomenology in LIS research. *Qual Quant Methods Libr.* 2017;2(4):469-78.
- 16- Mohammadpour A, Parsa Yekta Z, Nikbakht Nasrabadi A, Ahmadi R, Mohammadzadeh A. Hope and fear in living with HIV/AIDS: A phenomenological study. *HAYAT.* 2014;20(2):25-37. [Persian]
- 17- Aliari S, Zareian A, Hatami Z, Aliari Shore Deli M. Explaining the experiences and spiritual memories of health care workers in the sacred defense by the method of cumulative qualitative content analysis. *J Milit Med.* 2015;17(3):179-1. [Persian]
- 18- Sharif Nia H, Sharif SP, Boyle C, Yaghoobzadeh A, Tahmasbi B, Rassool GH, et al. The factor structure of the spiritual well-being scale in veterans experienced chemical weapon exposure. *J Relig Health.* 2018;57(2):596-608.
- 19- Ebadi A, Ahmadi F, Ghanei M, Kazemnejad A. Concept and quality of life construct elements in chemical injured: A qualitative study. *J Mil Med.* 2010;12(1):7-12. [Persian]
- 20- Izadi A, Izadi Onji F, Masoumi A, Kafaie Atri M, Haji Bagheri AS, Miranzadeh P. Explaining the experiences of chemical warfare victims of the Iran-Iraq war on the nature and structure of sources of suffering. *J Shahid Sadoughi Univ Med Sci.* 2014;22(1):870-58. [Persian]
- 21- Siler S, Borneman T, Ferrell B. Pain and Suffering. *Semin Oncol Nurs.* 2019;35(3):310-4.
- 22- Soleimani S, Shaker Dioulagh A. Comparing the anxiety and depression of death between chemical and non-chemical veterans of Sardasht city, Iran. *Iran J War Public Health.* 2017;9(2):73-8. [Persian]
- 23- Rodrigues P, Crokaert J, Gastmans C. Palliative sedation for existential suffering: A systematic review of argument-based ethics literature. *J Pain Symptom Manage.* 2018;55(6):1577-90.
- 24- Abbasi S, Mehdizadeh S, Moghaddam M. The relationship between fatigue and mental health in chemical casualties with obstructive bronchiolitis. *Avicenna.* 2013;15(2):28-32. [Persian]
- 25- Razavi SM, Ghanei M, Salamati P, Safiabadi M. Long-term effects of mustard gas on respiratory system of Iranian veterans after Iraq-Iran war: A review. *Chin J Traumatol.* 2013;16(3):163-8.
- 26- Smith RT, True G. Warring identities: Identity conflict and the mental distress of American veterans of the wars in Iraq and Afghanistan. *Soc Ment Health.* 2014;4(2):147-61.
- 27- Mohaghegh-Motlagh SJ, Momtazi S, Musavi-Nasab SN, Arab A, Saburi E, Saburi A. Post-traumatic stress disorder in male chemical injured war veterans compared to non-chemical war veterans. *Med J Mashhad Univ Med Sci.* 2014;56(6):361-8. [Persian]
- 28- Gray MJ, Nash WP, Litz BT. When self-blame is rational and appropriate: The limited utility of Socratic questioning in the context of moral injury: Commentary on Wachen et al (2016). *Cogn Behav Pract.* 2017;24(4):383-7.
- 29- Malle BF, Guglielmo S, Monroe AE. A theory of blame. *Psychol Inq.* 2014;25(2):147-86.
- 30- Wilson G, Hill M, Kiernan MD. Loneliness and social isolation of military veterans: Systematic narrative review. *Occup Med.* 2018;68(9):600-9.