Trauma Monthly 2021; 26(5): 235-243

10.30491/TM.2021.261998.1210

Trauma Monthly

Original Article

The Experiences of Chemical Weapon Victims: Pain as A Pleasant Sensation

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Received 2020-12-14; **Accepted** 2021-08-16; **Online Published** 2021-08-30

Abstract

Introduction: Multiple physical problems and psychosocial issues among chemical injured patients can be a source of stress. They often use mental strategies to cope with their problems. The aim of this research was to assess these issues and problems experienced by chemical warfare victims and how they cope with it.

Methods: This qualitative study was conducted in 2017 using content analysis. Seventeen chemical weapons victims were selected based on purposeful sampling from veteran's recreation referral to therapeutic and training center in Chaboksar (A city in northern of Iran). Data were collected through conducting in-depth semi-structured interviews and making filed notes. Data analysis was performed according to the proposed steps by Granhym & Lundman.

Results: During the data analysis, one main theme (Coping with pain in the shadow of values), four categories and twelve subcategories including physical pain (acute pain and chronic pain), psychological discomfort (nightmare, depression and misconception), unsuitable social context (feeling abandoned, fearing from an unforeseen future and stigmatization) and coping (coping because of patriotism, religious coping, family coping and coping by force) emerged from the interviews.

Conclusion: Coping might be a way for facing to pain but it is certainly neither easy nor joyful. Putting to suffer the necessary facilities, social and family support and changing the culture beliefs for decreasing the social stigma are the most effective ways of their treatment.

Keywords: Content analysis, chemical victim, perspectives, pain, coping.

Introduction

The Iran–Iraq war began after Iraq attacks on 22 September 1980 and continued until 1988. Iraq is started to use chemical warfare poisons in 1982[1, 2]. More than 100,000 Iranians have been injured by sulfur mustard (SM) and long term complications of exposure are still remaining in majority of them. Severe long-term effects on various organs may appear or continue for decades after exposure.[3]

Extensive studies show that late complications of chemical warfare exposure affect injured patients with chronic diseases, furthermore, many changes are irreversible. Most of the survivors are suffering from physical and psychological disorders that significantly effect on their life qualitative.[4]

Pain is probably one of the widest experienced and expressed phenomena in nursing [5] and nurse's perspective is a holistic view to pain. The pain on people can be divided into categories which determine how the pain is defined by patients, treated by expertise and responded by society.[5, 6] Wilson 's study (2014) showed that meaning of pain includes; personal and unpleasant experience, dominate the force and goes throw the time.[7]

Pain is the most frequent nursing diagnosis and common problem for which patients in the clinical setting seek help.[8] Studies have showed that unrelieved pain can affect the quality of life of the individual, cause physical and emotional consequences, impact on family, as well as increasing the costs for individual, health care and the society.[9] Thus, pain is a critical problem in the health care system.

Coping includes behavioral and cognitive events, permitting a prescription for learning by the patient, and helps to distinguish successful from unsuccessful treatment.[12] Coping reflects a process and includes active involvement over a period of time.[13] It is not only a way of facing problems emotionally, but has an interpersonal meaning, depends on its interactional context. In the medical field coping has a mediating function for participating and sharing medical decisions taken in health-care processes.[14] Coping is a reflection of interaction with others or being satisfied of person's responsibilities. This coping is based on the patient's personality, culture and family.[15]

Nurses are easily accessed into a patient's private territory during the disease period, and because of this, they should be able to engage in coping matters.[6] Understanding and exploring the patient with coping strategies can help to improve the caring of the nurses. Therefore, it depends on nurses to have an appropriate understanding of the patients' experiences in order to fulfill their role adequately, respond to their needs, and provide holistic care. The nurse's duty is to visit and follow up them after releasing from therapeutic center. Nurses should cover all the aspect of caring, although, their view should be holistic to phenomena care. Getting the meaning of pain and coping in patients with chronic illness can satisfy them, help them to participate more and have a calm mind. With all of these cares, we can have a better society. Chemical injured veterans are forgotten in health care provider's mind as their chronically illness has a great influence over their life.[2]

The most of the accessible literature have quantitative focused on physical consequences or the diseases resulted by mentioned injuries, while they have paid less attention to the challenges of a life with chemical warfare injury. Given that a qualitative study can provide significant data about the phenomenon[16]. Moreover, the healthcare providers will be able to find better resources for understanding the thoughts of their patients about the subject, recognizing their challenges, and providing more efficient service at the end.[17] Therefore, this study is conducted to explain the life experiences and the challenges of chemical warfare victims.

Methods

Design

The qualitative study was used in this study in 2017 at the veteran's recreation, therapeutic and training center in Chaboksar, Gilan province, Iran.

Participants

A purposive sampling technique was used for 17 chemical weapons victims. The inclusion criteria were volunteering to participate in the study, having ability to understand Persian language, expressing the understanding, experiencing regarding the studied concept. Suffering from the consequences of chemical poisoning during war, participants should be in a reasonable during our interviews.

Exclusion criterion was withdrawing from the study at any time during the study.

Data collection

Face-to-face, semi-structured and in-depth interviews were held comfortably in quiet locations, specifically at the manager's office with total privacy for participants. \ The data were recorded by an audio recorder and gathered using an interview guide. Our major center concepts of the questions from patients in the interviews including:

1- How will the chemical injured handle the SM poisoning consequences?

2-what factors can help for less pain during treatment?

In addition, probing questions were asked to follow the participants' thoughts and clarify their responses during the interview. All interviews were continued until data saturation.

Data analysis

Data analysis was performed using conventional content analysis method based on Graneheim and Lundman16 through the seven following steps: 1- Formulating of the research questions to obtain answers; 2- Sample selection and sampling; 3- Describing of analyzed training draft and the coding process; 4- Coding process implementation; 5- Defining of the classes; 6- determining the validity and 7- Analyzing the results of

coding procedures. No software was used for coding process, and manual coding applied.

Researchers were avoided employing the pre-determined categories and allowed the categories be excluded from data. Based on the relationships between subcategories, some of them were mixed and organized in new categories and their relations were developed into a schematic tree based on hierarchical structure to develop reorganizing.[18] The additional comments, suggestions, and the reviews of the interviews were used to confirm and improve the accuracy of data and extracted codes .[19]

At first, all the interviews were held by the first author with supervision of two supervisors who were experienced in qualitative studies. The interviews were done word for word, and analyzed during data gathering, while immersing into the data during data analysis. The first author read the data word by word several times to emerge data. The authors focused on the recorded words and phrases that used repeatedly by participants, and also highlighted areas that captured key meaning units expressed by them.

The codes came straight from the data in the first level of coding. Words, phrases or sections were noted and analyzed in context within the documents. As the next step the aforementioned multiple codes were grouped based on their content and shared ideas, and led to create categories.

As an advantage of this categorization, the data came from the participants were not predetermined.[18] After going over the categories, they were relabeled and defined one by one, while each was illustrated to support quotes. By sharing the results with the senior investigator and supervisors, agreement and further suggestions were achieved. There were so many identical data, therefore, one of them was referred.

Rigor

To achieve trustful data, credibility, transferability, dependability, and confirmability were used.20 Several techniques such as prolonged engagement, peer checking, time triangulation and member checking were employed to make this study credible enough. The information about researchers, studied population, sampling and coding were used to make sure about the transferability of the study. Audit trails helped the researcher to establish dependability and conformability of the research. The dependability was gained from reviewing the research process that resulted in professional, legal and moral research. The confirmability was achieved by working with another researcher to reach consensus on the interpretation of the findings.

Ethical consideration

The study was approved by the student research committee of the school of nursing and midwifery, Iran university of medical sciences, Thran, Iran, with the approval code 178. The study was started after getting permission from the head of recreation center (designed for handicap).

All the participants were informed about the study's purpose and method. They were informed that participating in the study is voluntary, and they could refuse to participate or withdraw from the study at any time. They were signed to accept freelance participating. Moreover, they were assured that responses would be kept confidential and identifies of them would not be revealed at any stage of the study. Finally, written consent was obtained from those participants who willingly accepted to participate in the study.

Results

The data analysis was resulted to 209 codes, 25 Primary categories, 12 sub categories, 4 categories and 1 main theme (Table 1).

Physical pain

According to participants, physical pain (acute and chronic pain) and the side effects like insomnia and fatigue are the most common difficulties.

"*Mostly my lung infected. I have hemoptysis and must use medicines every day. I am always sick. Most of the times I ever can't breathe. When I start coughing I cannot get asleep and at the end, understand that I have been poisoned by chemical weapons.* "

Psychological discomfort

Horrified incident experiences from war and observing the painful events such as friends and comrade's death, seeing them in blood, and death of defenseless people and children was their main factor to have nightmare in our participants.

Nightmare

The war pictures are always in my mind, even at night.

" *If I could wipe them out of my mind, I become calm Sometimes my dreams are about my friends who set to pieces in front of my eyes. These nightmares will never leave me alone and will never let me rest*."

Depression

Depression was a common psychological sign and an important factor for making our participants isolated from social activities.

"*I don't know the meaning of the laugh, as I am sad all the time. I am anxious. I am not the same person as I used to be. Life is dark for me. I am like the sea wave, sometimes good and sometimes sad*."

Misconception

Chemical injured individuals are worried about the probability of passing the illness to their children. Our participants believe that their family has been affected too.

"*My son is a little anxious because I am chemical injured. I think my illness has affected my wife during her pregnancy. She was ill for seven or eight years. She was respiratory infected*."

Unsuitable social context

After more than 23 years, there are not enough motivation to search facilities and dividing the facilities for these kinds of people in the country, it made the feeling of the chemical injured bad.

"*Even if there are facilities, they are not available for us. I must travel to Tehran to visit my respiratory specialist, but traveling is stressful for me, and finding a place to rest in Tehran is very hard*."

The other problem our participants have mentioned is some problems with insurance. The health insurance doesn't include some imported medicines.

"*The Janbazan foundation must pay all of our treatment expenses, but now we must pay by ourselves. One of my medical test costs 300/000 to 400/000 rials, I must pay by myself and wait for the Janbazan foundation to give me a part of it later.*"

Feeling abandoned

They feel abandoned and left by the government because of becoming aged and being fatigued from several treatments. They aalso tired of the burden of the problems.

"*I will be eliminated from the governor's mind. Most of my injured friends have died, and I will die soon too*."

Fearing from an unforeseen future

unforeseen future because of the poisoning effects was the another important concern of our participants.

"*I am worried about what would happen to me later. I don't know my child would help me, if I become blind. I don't know how my wife would behave if I become blind. I am concerned about my future. I don't know how to deal with my problems.* "

Stigmatization

Fear of social stigma to their selves and children and symptoms of SM toxicity may lead to feeling stigmatized in the community. People have a bad mind about chemically injured individuals and try to be away from them because of a wrong belief of transmitting their illness. Our participants said that they saw bad behaviors by people and this behavior was because of the wrong belief. The symptoms of poisoning by mustard gas are cough, itch, and hemoptysis that these symptoms can bring bad behaviors and stigma along.

Participants believed that they were treated unfairly by the members of the community who perceive that they have a contagious infectious disease. Symptoms of SM toxicity such as hemoptysis, coughing, and feeling itchy may lead to feeling stigmatized in the community.

"*When I cough in ceremonies or parties, some people get upset, and others say that this man has a strange illness. I hate myself when I have to itch my skin, I am ashamed of itching in front of people in a ceremony because they may think wrongly about me*."

Although the patients were upset because of social stigmas and thought their zeal had never been important for others. they believed that people have this right to show these kinds of reactions.

"*I become unhappy when I saw that people show strange behaviors and try to be away from us. I say: Oh Gosh! I am chemical injured. I have sacrificed for this country. Although I gave the right to them.* "

Coping

Chemical injured individuals had different reasons for repelling the tensions and coping with physical, psychological, and social problems. Their main motivation was to be sacrificed and dedicated for the country, this was their desire, and they did not complain about it.

Coping because of patriotism

Our participants count their illness as pride and knew defending from their country as the main reason for becoming a soldier. They know taking part in the war is an opportunity that God has given to them to save their country.

"*Being injured in war is such a pride for me. I am proud because I have defended from my country. I was a volunteer for becoming a soldier because the country needed us then. It has been my wish and now I am injured. I haven't any complaints about it. I think it has been a present from God*."

"*I'm proud of defending from my country and scarifying. I have been able to keep my country safe by losing my health*."

"*I have never had any goal to have a governmental job, and I didn't defend my country for reasons like this. I became a soldier for the satisfaction of God, and I think becoming a chemical injured was my destiny. I'd rather be at my people's service*."

Religious coping

Religion could be effective in creating a sense of hope, feelings of closeness to others, emotional serenity, opportunities for self-actualization, a sense of comfort, a sense of nearness to God, and the ability to solve their problems. Religion was an important factor for adaptation to stresses of life.

Moreover, religious beliefs were enumerated as important mechanisms in adaptation to crises. Our participants knew religion as a reason for their survival. They felt calm when they prayed or requested help from god. They forgot many of their physical, mental, and social problems when they prayed. They knew religion as a factor that makes them satisfied from all of their bad conditions.

"*I have lots of physical problems. I am alive by several pills. I trust in God and request help from him. I know him as an observer in my life. Maybe it has been a gift from God that I became injured.* "

Family coping

Supports of the families were another main reasons for the chemical injured to cope with consequences of poisoning MS. They belief that they couldn't tolerate the problems without the support of their families.

"*The just individuals who came with me to the hospital were my wife and my child. My child said: I will give you a call from my eye if doctors need it. Doctors needed it, and one of them said: it is the first time I am doing this kind of surgery between a father and a son. Because most of the stem cell surgery is done between a brother and sister. All of my colleagues died and left me alone*. "

Coping by force

The patients, their families, and relatives were worried about the health and the hardships in their way because of observing the symptoms of MS poisoning such as hacking cough, hemoptysis, or itching.

As the disease progressed, the patients tried not to show their pain to others.

"*I am in deep pain now but I don't even express it to you. Only God and I know about it. I won't let others know my situation, why should I upset them? what can I do? I must deal with it."*

Table 1: Main theme, Categories, Subcategories and primary categories extracted from data analysis process.

Main theme	Categories	Sub Categories	Primary categories
Perceived health threat	Physical pain	Acute pain	Sudden and severe pain
			Short time pain
		Chronic pain	Accompanying pain
			Resistant to treatment pain
	Psychological discomfort	Nightmare	Living with horrible dreams
			Association of war incidents
		Depression	Waiting to die
			Social isolation
		Misconception	Transmissibility of the disease
			Hurt the family
	Unsuitable social context	Feeling abandoned	Not enough support
			Insurance issues
		Fearing from an unforeseen future	Family at risk
			Fear of dependence on others
		Stigmatization	Facing unfair behaviors
			Keeping distance
	Coping	Coping because of patriotism	Coping for sacrifice
			National sentiments
			Proud
		Religious coping	Opportunities for self-actualization
			Sense of closeness to God
		Family coping	Financial support
			Companionship
		Coping by force	Shedding pain
			Living in difficult conditions

Discussion

The results of this study showed that the pain could be a pleasant feeling based on the participants' point of view. It means that a chemical weapon victim would get along with pain, physical and psychological problems, and unsuitable social conditions due to different reasons, including spiritual values he believes in. They coped with the pain and mentioned it as a pleasant feeling. On the other hand, findings indicated that exposure to SM can put the health of the patient in severe condition because of chronic consequences and the progress of the illness. So there were multi-dimension problems, which made coping harder than usual.[15]

Living with a chronic illness can result in pain, emotional distress, changes in self-identity, suffering, and decreased quality of life.[21] Common challenges for health care professionals supporting people with a chronic illness include understanding symptoms and taking suitable actions, using medications effectively, managing complex self-management regimens, adjusting to difficult lifestyles, and developing strategies to deal with the psychological consequences of the illness.[17]

Physical pain, psychological discomfort, unsuitable social context, and coping were the main achieving themes in this study. Physical problems among these people were their major problems. Balali-Mood in the study referred to physical problems such as lung (95%), peripheral nerves (77.5%), skin (75%), and eyes problems (65%).[22]

Most of the participants had referred to becoming tired after any activity and suffering from dyspnea.

Most of them were physically disabled and didn't take part in social activities. The chronic problems were physical limitations, strange therapeutic regimens, the side effects of medicines, and the cost of treatment, that made them weaker during the treatment.[9] Paying attention to their needs and preparing facilities were two important factors that must be attended by healthcare providers to help the patients cope with the illness and make a healthier society.

One of the main problems of our participants was to find and buy imported medicines. The international sanctions were the main reason for it; victims of these sanctions were different social groups, including individuals who had tried to save their country, not the government particularly.[23]

The nightmare was one of the problems of our participants. Reminding the pictures of their friends' death, and the effects of the war were the main reasons for the nightmares. Ebadi (2008) demonstrated that %93 of chemical injures couldn't sleep well. Lung problems and physiological disorders cause sleeping problems. The nightmare of the war had decreased their life quality.[15]

Depression, anxiety, and hopelessness were common psychological discomforts in chemically injured individuals. Suffering from physical, psychological, and social chronic pains were the most important reasons for depression in these people.[24, 25] Loneliness, hopelessness to future, treatment rate, and mental involvement were bothering our participants. They knew impatience and being away from the social stigma as the reasons for not participating in social activities.[26]

Social stigma is one of the critical factors of their irritation. The studies of Hassankhani (2010) showed that social stigma was one of the common problems in his studies. Care, treatment, and consequences of poisoning in MS, it has a different approach from dominant approaches needs. The patients were the center of attention and dealing with the symptoms that made them stronger than before. If society accepted their illness, they wouldn't be odd anymore. Management of the sickness can improve their personality for a better life in the society, and also the health care system should do the same thing.[2]

One of the misconceptions in chemical injured was the passing of the sickness to their children that it made them worried. It all came from their friends, family, and the therapeutic team that caused them to postpone their treatment process. The therapeutic team should pay attention to this significant issue.[3] Fighting with unknown future as a factor of incident psychological discomfort like anxiety and hopelessness in our participants were progressive symptoms from SM because of many problems.[9, 23] They felt disability and dependency on their family every day, and by passing the time, these problems getting worse as an alarm. If the health care system supports them and informs them about their self-care, their life quality will increase higher quality of life.[27]

Participants adapted to their pains because they knew these pains as a reason for reaching to God which came from their beliefs. So it made the pains pleasant for them. Religious coping methods may encourage adaptation more thoroughly than non-religious, traditional, or general approaches.[28] Thus, various studies demonstrated that religious attitudes had a negative correlation with depression, anxiety, and aggression.[29] In a qualitative study, religion was identified as the main factor in patients' compatibility, such as peace of mind. Most participants in this study described their disorder to divine test and providence.[30] Moreover, Iranian veterans accepted the complications of this chronic disorder as a fact of life.[17] In the nursing profession, attention to the patient's religious beliefs has been identified as an essential part of holistic care and as a way for making the patient coping with crises.31 Humanitarian sense, religious beliefs, and responsibility of their family cope with the hardships of living with a chemical injured individual.[15] This adaptation can make the patient accept his problems because it brings a sense of security and love from his family. The role of the family in the treatment can be vital because of daily care and close relation. The sense of pride and patriotism were some other reasons for coping in our participants. This finding was in the same way as the research Ebadi.[30]

In this study participants coped with their pains because of achieving their main goal which was the securing of the country from foreigners. It is necessary to defend the country against the attack of foreigners in Islam to keep the values of the religion and country.28 This action is called jihad in religious literature. The vast majority of Iran's population is

Muslim and the society is greatly influenced by Islamic culture. This study reflects that participants have benefited from their own beliefs, emotions, and religious behaviors as important adaptive mechanisms during the disorder period.[32]

Religious beliefs and patience were the main reasons for coping with loads of pain in Iranian chemical injured individuals. Therefore, they can resist the difficulties of life and control this stressful situation by their pride.[33]

Conclusion

In our participants, physical problems such as dyspnea, chronic and severe pain, consecutive cough, complex regimens, and prolonging in hospitalization were the main factors in social isolation, a decrease of the interaction of their relationship, depression, get hopelessness regarding their treatment process, and fear of the future. They knew their pain as a reason for reaching to God and coping with their multiple problems. So, their beliefs had been changed regarding the phenomena. Putting to suffer the necessary facilities, social and family support, and changing the cultural beliefs for decreasing social stigma were the most effective ways of their treatment. Sometimes there was a conflict between the patient and professional care. Therefore, a holistic view of patients and their needs can result in a positive point in the treatment. Healthcare managers and other related policymakers should review qualitative researches, interact with this relatively large group of the society to provide more efficient solutions and services.

Acknowledgments

We sincerely thank all participants in the research including chemical victims, who provided us with an unsparing cooperation. We would like to appreciate the help and cooperation of Dr. Ali Haghighatpasand and Mrs. Fatemeh Shirinkam during the study.

Conflict of Interest Disclosures

The authors declare no potential conflict of interest.

Authors' Contributions

FGH, ZF, AE, ASH; Conception and design, FGH, AE; Acquisition of data, F GH, AE; Analysis and interpretation of data, ZF, ASH, FGH; Manuscript preparation, ZF, ASH, FGH; Manuscript review, FGH, ZF. All authors read and approved the final manuscript.

Funding Sources

The authors did not receive any potential funding or support for the research.

Ethical Statement

This project was approved by the student research committee of the school of nursing and midwifery of Iran university of medical sciences, Theran, Iran.

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