



People with High Irritability; A Qualitative Study on Patients with COVID-19 in Iran

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Abstract

Introduction: Recognizing the emotional responses of patients who have suffered from COVID-19 can lead to the possibility of better confrontation with the disease, and decrease psychological distress throughout their illness. The aim of the present study is to describe the lived experiences of patients who have recovered from COVID-19 about emotional responses during illness.

Methods: This qualitative study was conducted in 2020. The data collection method was semi-structured in-depth interviews. Participants were patients who had recovered from COVID-19 and were willing to share their experiences. Sampling was done from 3 cities of Gachsaran, Basht and Noorabad with a purposeful sampling approach. Data were analyzed by content analysis method. The extracted codes were managed through MAXQDA software version 10.

Results: A total of 15 interviews were conducted, involving 8 women and 7 men aged 23 to 58 years. Analysis of data resulted in the identification of 368 codes that were classified into 3 main categories including: “reaction to trauma”, “depression”, and “anxiety”, and 13 subcategories. Two subcategories of preoccupation and irritability appeared in this research.

Conclusion: According to the results of this research, nurses and relatives of these patients must pay more attention to the emotional response to irritability. Relatives should not only display kindness but also be mindful of their own behavior when interacting with patients. Creating a hopeful environment and ensuring that patients are not exposed to frustrating news through vigilant supervision are essential. It is recommended that patients and their relatives receive mandatory telephone consultations with a psychologist to address these emotional concerns.

keywords: COVID-19, Corona disease, Emotional responses, Qualitative Study, Irritability, Trauma

Introduction

Corona disease has both physical and psychological consequences (1). Some of the most

widespread psychological consequences of the new coronavirus include fear of death, depression, and anxiety, reduced social activity, a sense of



isolation or abandonment by their community, strained relationships with family and relatives, and the stigma associated with being labeled as a COVID-19 patient by themselves and their families (2, 3). Other consequences include experiencing ambiguity, encountering positive emotional experiences, dealing with emotions related to family members, and emotions derived from quarantine (4). Quarantine conditions themselves encompass a spectrum of both positive and negative consequences. Among the negative consequences are significant limitations on activities that involve external interactions (5). Quarantined individuals often experience serious concerns, including fear of death, feelings of anger and fear of loneliness. Being in quarantine deprives individuals of the opportunity to engage in both personal and social relationships, as well as participate in traditional ceremonies. The distressing emotional experiences encountered during quarantine can hinder the recovery process and add to the psychological burden alongside physical suffering (4). In addition, psychological-social consequences lead to more decrease in the overall quality of life for individuals in quarantine (2). Sun et al. classified psychological experience of COVID-19 patients into 5 categories including their attitudes toward the disease responses of body, the major source of stress, and mental responses, and supportive factors (6). In Iran, there is a notable absence of research that specifically addresses the emotional responses of individuals who have recovered from the disease during their illness. We believe that people's emotional responses can vary across different cultures. The aim of the current research is to describe the experiences of individuals who have recovered from COVID-19 regarding their emotional responses during the pandemic.

MATERIALS AND METHODS

This is a qualitative study with a content analysis approach. Ethical approval for the study was obtained from the Research Ethic Committee of Islamic Azad University, (code IR.IAU.IAUG.REC.1399.023). Sampling was performed from July to October 2020 in 3 cities of Gachsaran, Basht and Noorabad in Iran. Semi-structured in-depth interviews were used to collect information. Participants were selected based on purposive sampling among individuals who recovered from COVID-19 and met the inclusion criteria such as a willingness to share their emotions and proficiency in the Persian language). The sampling continued until data saturation.

Two interviewers, one a midwifery B.A. student and the other a midwifery M.A., conducted the interviews by telephone to ensure the interviewers' health and safety. Prior to the research, the interview guide, methods of receiving verified data and ways to concentrate on research questions were reviewed. The interview time varied from 30 minutes to 70 minutes in 1 or 2 sessions. Participants were informed of the goals of the research. Participants were informed about the research's objectives, and interviews were recorded with their consent. Participation and withdrawing from the study was voluntary.

The transcripts of each interview was reviewed several times and the related phrases that described or conveyed participants' experiences were selected and summarized, leading to the extraction of codes. The extracted codes were managed through MAXQDA software version 10. The primary categories were extracted and the themes were placed in appropriate classes and by changing and moving the themes, integrating overlapping themes, and modifying misplaced themes, the basic themes appeared. The researchers sought the input of experts and specialists to review and validate the initial

classifications, ensuring the appropriateness of the categorization.

To ensure research trustworthiness, the Lincoln and Guba framework (7) was used. To enhance credibility and prevent misinterpretation, the interviewers shared their own perception of participants' quotations, and corrected them when necessary.

Throughout the study, the research team engaged in participatory contemplation regarding the emerging content at various stages. The researchers guaranteed the confirmability of this research along all its stages while maintaining documentaries. In addition, in each stage of analysis, the results were member-checked with one of the participants who was also a member of the team. Besides, the results underwent further validation by consulting with one of the COVID-19 survivors, who happened to be a psychologist. Finally, two psychologists and a psychiatrist reviewed the classifications, and made necessary adjustments to enhance the research's trustworthiness.

RESULTS:

Totally 15 interviews were conducted with 8 women and 7 men of the age 23 to 58. Analysis lead to recognition of 368 codes which was classified in 3 main categories including "reaction to trauma", "depression", "anxiety", and 13 subcategories.

1. REACTION TO TRAUMA

Shock, self-blame, feeling weakness in face of disease, preoccupation and irritability in the participants' quotations were categorized in "reaction to trauma" class.

SHOCK

The participants referred to the "immediate shock" after their diagnosis revelation. They described feeling contemplate, disbelieving, being

doubtful about the diagnosis, and investigation about cause of their illness after being diagnosed with Corona disease. One of the participants said: "A trauma occurred to me in a moment and was soon eliminated...".

Another participant said: "...the doctor mentioned Corona, but I couldn't hear his words anymore. He advised me and I just nodded my head without hearing anything".

Another participant said: "I said it was impossible... I had caught Corona and hoped that it wasn't true. Every moment I waited for another symptom to appear ...".

Non-acceptance of the diagnosis, irresponsibility about getting ill, reviewing self-sanitary behaviors, exploring for mistakes, hoping for a negative test, neglecting the disease until a positive test was reported, and finally, believing in the disease after a positive test were the stages to which most participants referred.

Self-Blame

Participants referred to feeling guilty because of becoming ill, uncertainty about one's performance when confronting the virus, and feeling guilty about infecting relatives.

One of the participants said: "I said that I was so careful... Why did I catch it who was so careful, I used a mask and hand sanitizer... I cared about safe distance ... Where didn't I obey? Was that my fault?"

One of the participants said: "When I saw my son ill, this was as the end of the world to me... I blamed myself who had made him sick...".

Feeling weak in the face of illness

Participants referred to psychological exhaustion, an unimaginable disease, the annoyance of recalling, their inability to do anything and a feeling of desperation. We classified these cases in the category of "feeling weak in the face of illness".

One of the participants said: "My body was strong, but psychologically I could not continue..."

I saw new patients who were sick and I knew what would happen to them. I gave up psychologically”.

Another participant said: “In those days when I was in the hospital, I might have slept less than ten hours because I was afraid of dreaming about all those events that disturbed me so much. This disease is so hard, unimaginable, so complicated, and unknown. It was just terrible and inexpressible.”

Preoccupation

In their conversations, participants referred to a lack of concentration, sleeplessness, mental and psychological disturbance, and rumination. These cases were put in the preoccupation subcategory.

One of the participants said: “I couldn’t even read a book or the Quran... I couldn’t concentrate on reading at all. My mind was disturbed...I kept thinking about of all the worthless things”.

Another participant said: “I recall all my past mistakes and bad memories unintentionally, even memories from 10 to 15 years ago... I dwelled on the mistakes and faults I had made, feeling like there was no time to make amends...”

irritability

Participants referred to excessive aggressiveness, bleakness about others behavior, and feeling of neglect. These cases were categorized in the stimulation subcategory.

One of the participants said: “I don’t usually get involved in arguments, but one day, when I had an argument with my spouse, I suddenly exploded like dynamite”.

Another participant said: “Anyone who talked to me or advised me, for example, to eat or do something, actually bothered me. I liked to curse them all. I felt that they all want to disturb me”. (excessive bleakness of others behavior)

And the other said: “When I got home, my sister told me to take off my clothes and go to my own room having just a spoon, glass, plate, and mask... she wanted me to bring them to my room,

and call her if I needed anything. I wondered why she was treating me as if I had leprosy. I felt I was incapable of doing anything...”.

One of the participants said: “Your most intimate relatives turn away from you in order to protect themselves... I believe most of the relatives could use gloves, mask, come closer for greeting, and talk, but unfortunately, there was not any culture about this...”.

2. DEPRESSION

Participants referred to feelings of life meaninglessness, death desire, suicidal thoughts, grief, and hopelessness which we classified in the “depression” category.

LIFE MEANINGLESSNESS

Life meaninglessness concept was exploited as life waste, being fed up with life, having a bad sense of life and loss of feeling about life.

One of the participants said: “All my relatives are talking and laughing, however, I don’t feel anything... I was not a happy person and I’ve got even worse now...”

DESIRE FOR DEATH

Participants referred to cases such as “I desired anyone kill me because of pain”, and “I liked to cut my waist with a knife”.

One of the participants said: “I thought I was not going to survive. Even in the ICU, I asked them to end my life. I wanted them to pour something in my serum to make me die!”.

SUICIDE THOUGHTS

Some of the participants referred to having thoughts about suicide. For example, one of the participants said: “I wanted to kill myself, but didn’t know how...”

GRIEF

Participants referred to a bad psychological feeling, a desire to cry, feelings of depression, the absence of reasons for happiness, and sadness.

HOPELESSNESS

Some participants pointed to hopelessness during illness. They mentioned these cases as causes of hopelessness: mental thoughts and involvements, losing mood of hopefulness, bad feelings, and frustrating conversations with physicians.

One of the participants said: “I had the feeling of hopelessness and despondency in life and thought that my life would come to an end, and didn’t have any hope. Other patients with Corona died. I went to watch them, took videos, and thought that I might die, too...”

3. ANXIETY

Participants pointed to the cases of concern for others, stress, and fear which we classified under the “anxiety” class.

MINDING FOR OTHERS

Participants pointed to concerns about others’ judgment and their relatives’ health. One of the participants said: “What do others think about me? Do they think that I have not observed hygiene? I am known as someone who does not keep hygiene in the family or among my coworkers...”

Another participant pointed to concern about their relatives’ health, saying: “The only thing I could think about was what should I do with my children. My wife touched me now and then, washed my feet, and fed me... The doctor said your wife might have been exposed and asked me not to worry about the children...”

STRESS

Participants pointed to stress in the working environment, severe anxiety and worry, the stressful nature of the disease, media role in increasing stress, and stress elimination with diagnosis confirmation. One of the participants pointed to stress as the reason for increasing pain. One of the participants said: “We started wearing masks from the moment the media announced it on the news. They talked so much about it and made people afraid. We said it is good for us to use masks and hand sanitizer, however, we still felt fear...”

One of the participants said: “When it was confirmed that I had COVID-19, I was relaxed... I thought that I had already caught that. We will die or stay alive. I was just worried about my children...” (stress elimination with diagnosis confirmation)

CONCERN AND FEAR

Participants pointed to their concerns and fears including worries about their children living alone, concerns due to relatives’ insistence on going to the hospital, fear of reinfection, increased fear due to strict regulations, the fear of death and choking during sleep, increasing fear with seeing an ill patient or seeing someone’s death, concerns about getting infected in the workplace.

One of the participants said: “My sister was diabetic. We were very afraid. I even thought about my sister’s death. I was wondering what to do and did not feel well. It felt like we were dealing with an incurable disease, and we didn’t expect to live until the next month.”

In addition to the above cases, participants mentioned certain feelings related to being in quarantine, such as hopelessness, boredom, feelings of being rejected, and loneliness.

Participants believed that over time, their fear would decrease. They found that frequent exposure to COVID-19 patients and becoming familiar with the disease helped reduce their fear.

DISCUSSION

In a general view, our results resemble those reported in other research (3, 8-10). Severe stress disorder, PTSD, substance abuse and dependence, irritability, anxiety, sleeplessness, weak performance, emotional numbness, and depression were reported as the consequences of coronavirus disease. However, none of our participants reported substance abuse and dependence.

REACTION TO TRAUMA

The procedure of accepting the disease is the main stage for patients with COVID-19. Patients face confusion and disbelief at first. However, they accept the disease at last. It seems that the initial reaction to the disease is not influenced by cultural factors, as similar results were reported in a study conducted in China. In this research, attitudes toward the disease during its early stages included fear, denial, and stigma, which in the later stages of the disease gradually evolved into acceptance (9). Another attitude was uncertainty about the disease and the expectation of diagnostic results that are confirmed in our research.

In a previous study (4), participants reported experiencing ambiguity about how and why they became infected, which we categorized under the 'trauma' class. Another subcategory in our research is irritability. Rahmatinejad et al. referred to feeling notorious as a code for experiencing the illness label. They mentioned boredom as a negative emotional reaction among family members as one of the subcategories experienced in relation to family members; However, in the present research, cases like these were classified as the subcategory of irritability in patients with COVID-19.

The prevalence of depression, anxiety, insomnia, avoidance behavior (8) or sleep problems (10) are reported in other research.

DEPRESSION

Depression in our study is a separate subcategory, encompassing feelings of life meaninglessness, a desire for death, suicidal thoughts, grief and hopelessness. While the subcategories in our research differ from those forming the 'hopelessness' class in another study (11), it appears that the classes identified in our research complement the findings of past research. In our study, hopelessness stems from factors such as preoccupation, the loss of hopefulness, disappointing conversations with relatives, especially physicians, and a general sense of despair. In contrast, hopelessness in the mentioned research was attributed to the shortage of drugs, a high number of deaths and infections. Additionally, thoughts about suicide emerged as another subcategory in our research.

In another research, it is noted that COVID-19 survivors may be at an elevated risk of suicide. The researchers believe that reducing suicide risks during the COVID-19 crisis is crucial and can be achieved by decreasing fears, stress, anxiety, and loneliness among these patients (12).

ANXIETY

Minding about others, stress and fear were subjects put in the anxiety class. Being anxious about others covers two subcategories: anxiety for relatives' health and worry about others' judgment. This subcategory covers all subcategories of "the emotions experienced in relation to family members" in another research (4). The code for being worried about others' judgment in the present research confirms the feeling of stigmatization as identified in mentioned research. However, it is important to note that social care and concordance are steps in the destigmatization of COVID-19 (13), and they should be given greater consideration.

In the current research, participants expressed a fear of choking when asleep. In some research,

death anxiety in patients with COVID-19 (4) was mentioned. In different research, anxiety related to COVID-19 and ways to overcome it, such as reinforcement of spirituality dimensions (14) have been investigated. Approaches such as improving of personal and spiritual growth and positive and creative relations with others, taking responsibility for one's health (15), and cognitive-behavioral treatment based on the internet (16), have all been found effective in decreasing people's anxiety. These approaches will also decrease the likelihood of depression.

Anxieties are sometimes rooted in myths that circulate throughout the community and gain strength through information bombardment. Some researchers attribute the increased accessibility of cellphones, the internet, and social media as a cause for the excessive exposure to information (17), much of which is difficult to verify for accuracy. Therefore, one of the responsibilities of medical staff is to provide consultations aimed at correcting these myths and ensuring patients have accurate information. Excessive anxiety can lead people to accept rumors more readily and even contribute to them in an attempt to alleviate their own fear and concern (13).

Our participants believed that with the passage of time, their fear would gradually diminish. Exposure to COVID-19 patients for an extended period, and even interacting with others who have the disease, contributed to a decrease in their fear. This finding aligns with the results of Sun et al., who observed that COVID-19 patients underwent emotional changes over the course of their illness, with emotional responses varying depending on the disease stage. Initially, negative emotions predominated, but these gradually gave way to a mix of positive and negative emotions. Sun et al. suggested that actively guiding psychological growth may promote both physical and mental recovery in these patients (6). Living in quarantine conditions can lead to increased

feelings of severe responsibility and fear for the health of family members (18).

Staying in long-term quarantine can have several consequences, including concerns about the prolongation of the quarantine, uncertainty about the future, fear of getting infected, and exposure to incorrect or insufficient information (19). Social isolation and loneliness are strongly associated with anxiety, depression, self-harm, and suicide attempts across the lifespan (1). In our study, participants reported experiencing feelings such as hopelessness, boredom, irritability, a sense of rejection, and loneliness during quarantine. These findings align with another study that mentioned experiences of ambiguity regarding the quarantine period and a tendency to stay in the hospital to prevent infection in others (4). Feelings of being rejected and hopeless were among the issues that participants in our research also mentioned. The limited number of participants in qualitative research, combined with data collection from only three small cities, may constrain the generalizability of the results.

CONCLUSION

In this research, subcategories of preoccupation and irritability emerged, which should be given more attention by the patients' relatives. Relatives need to create an environment filled with hope for patients who may experience hopelessness and weakness in the face of the disease. Additionally, they should be mindful of their own behavior and strive to prevent patients from encountering disappointing news. Based on the results of this research, it is essential to provide training for individuals responsible for caring for patients. These caregivers should adapt their care to the emotional state of patients with COVID-19. Furthermore, mandatory telephone consultations with a psychologist for both the patient and their relatives are crucial in addressing these challenges.

In addition, one of the responsibilities of the medical staff should involve providing consultations to patients and home nurses. These consultations would focus on recognizing and correcting myths and preventing patients from receiving misinformation, which can help eliminate their concerns.

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Conflict of Interest

The authors report no conflicts of interest. The authors are responsible for the content and writing of the paper alone.

REFERENCES

1. Holmes EA, O'Connor RC, Perry VH, Tracey I, Wessely S, Arseneault L, et al. Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *The Lancet Psychiatry*. 2020.
2. Eisazadeh F, Aliakbari Dehkordi M, Aghajanbigloo S. Psychological consequences of patients with coronavirus (COVID-19): A Qualitative Study. *Biquarterly Iranian Journal of Health Psychology*. 2020;2(2):9-20.
3. Ahmed MA, Jouhar R, Ahmed N, Adnan S, Aftab M, Zafar MS, et al. Fear and practice modifications among dentists to combat Novel Coronavirus Disease (COVID-19) outbreak. *International journal of environmental research and public health*. 2020;17(8):2821.
4. Rahmatinejad P, Yazdi M, Khosravi Z, Shahisadrabadi F. Lived Experience of Patients with Coronavirus (Covid-19): A Phenomenological Study. *Journal of Research in Psychological Health*. 2020;14(1):71-86.
5. Eskandarian G. Evaluating the consequences of coronavirus on lifestyle (with emphasis on cultural consumption pattern). *Social impact assessment*. 2020;2(1):65-85.
6. Sun N, Wei L, Wang H, Wang X, Gao M, Hu X, et al. Qualitative study of the psychological experience of COVID-19 patients during hospitalization. *Journal of affective disorders*. 2020;278:15-22.
7. Amankwaa L. Creating protocols for trustworthiness in qualitative research. *Journal of Cultural Diversity*. 2016;23(3).
8. Rajapakse R. Foreseeable psychological impact of COVID 19 in Sri Lanka. 2020.
9. Sun L, Sun Z, Wu L, Zhu Z, Zhang F, Shang Z, et al. Prevalence and risk factors of acute posttraumatic stress symptoms during the COVID-19 outbreak in Wuhan, China. *MedRxiv*. 2020.
10. Yang L, Wu D, Hou Y, Wang X, Dai N, Wang G, et al. Analysis of psychological state and clinical psychological intervention model of patients with COVID-19. *medRxiv*. 2020.
11. Bahonar F, Mohsen-al-Hosseini SM, Asayesh MH. Emotional Reactions of Physicians Recovered from Covid-19: A Phenomenological Study. *Culture of counseling and psychotherapy*. 2020;11(44):1-46.
12. Sher L. The impact of the COVID-19 pandemic on suicide rates. *QJM: An International Journal of Medicine*. 2020;113(10):707-12.
13. Jahangasht K. Social Stigma: The Social Consequences of COVID-19. *Journal of Marine Medicine*. 2020;2(1):59-60.
14. mirhosseini sh, nouh s, janbozorgi m, mohajer h, naseryfadafan m. The Role of Spiritual Health and Religious Confrontation in Predicting Death Anxiety in Patients with Coronavirus. *Islamic Studies and Psychology*. 2020;14(26):29-42.

15. Fathi A, Sadegi S. The Effect of Promoting Health Lifestyle Dimensions and Psychological Well-Being in Corona (Covid 19) Anxiety in Tabriz Azad University Students. *Journal of Arak University of Medical Sciences*. 2020;23:0-.
16. Johnny S, Johnny N, Rahimi p. The Effectiveness of Internet-Delivered Cognitive Behaviour Therapy on Reducing Corona-Related Anxiety in Parsabad Health Care Workers. *Quarterly Journal of Information and Communication Technology in Educational Sciences*. 2020;10(4):129-45.
17. Mokhatri-Hesari P, Moezzi B, Montazeri A. Infodemic, misinformation and the COVID-19. *Payesh (Health Monitor)*.0-.
18. Khodabakhshi-koolae A. Living in home quarantine: Analyzing psychological experiences of college students during COVID-19 pandemic. *Journal of Military Medicine*. 2020;22(2):130-8.
19. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N, et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet*. 2020.