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The Psychological and Spiritual Dimensions of Covid-19 Patients: A Qualitative Study

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Abstract

The Covid-19 pandemic has been on the rise all over the globe during the last two years and numerous cases are being reported positive on the Covid-19 diagnostic test daily. Patients dealing with this disease experience special emotions and psychological conditions. The aim of this study is to understand and describe the lived experience of these patients and their psychological and spiritual dimensions. This study was carried out through a qualitative method following a descriptive phenomenological approach. Data gathering was performed via 14 semi-structured interviews with COVID-19 patients from different cities in Iran. The selection of the sample was started with purposive sampling in 2020, and continued with the selection of more samples through the snowball sampling method till data saturation was achieved. Data analyses were performed by a qualitative method based on the Colizzi approach, leading to the extraction of 8 major classes and 24 themes. The classes of negative reactions to the diseases included fear and anxiety, hopelessness, anger and hatred, depersonalization and de-realization, and obsessive-compulsive disorder. The post-disease classes of attitudinal and spiritual evolutions included increased spirituality, modified interpersonal relationships, and evolved self-concept. have achieved unique spiritual experiences and growth dimensions in their life upon dealing with the pandemic. This study can greatly help psychologists, medics, and medical managers to identify therapeutic approaches to treat anxiety and improve peace in the Covid-19 patients.

Keywords: Covid-19, Quarantine, Qualitative method, Spirituality.

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Introduction

On December 31st, 2019, an epidemic of atypical pneumonia due to outbreak of the Covid-19 dominated Wuhan, China, and has still continued to this day (Abachizadeh *et al*., 2020). Many people are struggling with this disease at this moment. As of writing this article (September 5th, 2020), the number of infected people in the world has reached 27,720,415, patients of which 900,803 individuals have lost their lives. In Iran, the very first case of infection was reported in Qom in February 2019, and since then, the number of infected people has increased to 384,666 patients, with 22,154 casualties (World Health Organization, 2020; Worldometer, 2020).

Resembling the previously discovered severe acute respiratory syndrome (SARS), the new Covid-19 is caused by a species of corona virus called the SARS coronavirus 2 (SARS-CoV-2). Early symptoms of the disease include pneumonia, fever, muscle aches, olfactory, and digestive problems, with a definitive drug yet to be clinically approved for this disease. With only few vaccines developed so far, the most practical way to break the chain of the outbreak and prevent the infection has been the observation of proper hygiene procedures by the general public as well as taking social distancing measures (Farnoush *et al*., 2020).

Once outbroken, any disease can impose particular psychological and social hazards to the patients, not limited to the physical issues. With the Covid-19 being a relatively new disease, the number of research works investigating the patients' experiences of this disease is still very limited. The global outbreak of the disease, problems associated with quarantine, loneliness, and, in some cases, unexpected death of the patients are among the consequences of the disease.

The research works performed in the psychological investigation of the Covid-19 can be categorized under three general categories; these have focused on (1) healthy individuals dealing with home quarantine and social distancing, (2) nurses and patients' caregivers, and (3) patients infected by the virus.

In a study by Brooks (2020), the negative psychological impacts on the individuals in home quarantine were reported in the form of, for example, incident stress symptoms such as confusion and anger. These were reportedly caused by such stressors as longer quarantine durations, fear of infection, frustration and stigma, boredom,

insufficient information, and financial losses. In another study performed in the early stages of the outbreak in China, Wang *et al.* (2020) investigated the people in home quarantine and found out that more than half of the people were suffering from psychological problems associated with the outbreak, including anxiety, tension, and depression at moderate to severe levels.

In their study, Sun *et al.* (2020) described the lived experiences of nurses and caregivers to Covid-19 patients who were serving the patients under such special conditions. Indeed, the caregivers should adhere to the particular hygiene principles while taking care of the patients suffering from extraordinary problems or even losing their lives. In this research, the caregivers' psychological experiences were expressed under three categories: (1) negative emotions, including sadness and helplessness, fear and anxiety, and tension for the patient as well as his/her family members, (2) coping styles including adaptation, altruism, team support and rational cognition, and (3) growth under pressure including increased affection and thankfulness, developed professional responsibility, and self-reflection.

Focusing on a group of Covid-19 patients, a study using the mixed methods research approach was performed on 103 patients. The results showed that the Covid-19 patients, as compared to other patients, were more susceptible to depression, anxiety, and incident stress, with the female patients scoring even higher than the men in this respect. Other psychological consequences of this disease, including fear and senses of guiltiness, helplessness and shame, were also reported (Guo *et al.*, 2020).

In his study, through using a qualitative content analysis approach, Dehkordi (2020) analyzed the psychological problems experienced by eight Covid-19 patients The researcher referred not only to the negative social consequences, but also negative emotions experienced by the patients, including fear, depression, anxiety, sense of guiltiness, job-related concerns, and hopelessness of future, among others.

In fact, psychological studies have shown that most of the people who have gone through the crisis have experienced symptoms of psychological and physiological pressures (e.g., fear, phobia, stress, etc.), psychological reluctance (states of collapse and confusion and senses of inadequacy and helplessness), anxiety, thinking disorder (isolationism, mental preoccupation, denial of facts, avoidance of thinking or talking about the crisis, apostasy, desensitization toward

personal affairs and life, and exhibiting excessive tendency towards dreams and imagination), and depression (sleep disorder, eating disorder, suicidal ideation, recurrence of injuries, and pseudobulbar affect (PBA)) (Elms, 1975; Parker, 2013; Fromm, 2014).

Under a crisis, a major support to any human being is his/her spiritual and existential thinking structure. The spiritual growth in a human is a dynamic process that occurs over a period of time. In the course of this process, the individual finds out, increasingly, meanings to the life's goals and value (Rahimnia and Rasulian, 2006). Spirituality is an extensive concept that is bound with the wisdom and compassion (Miller and Nakagawa, 2002). As an inherent capacity used for achieving excellence through sanctities (above and beyond the self) (Yust *et al.*, 2006), Spirituality covers a virtually infinite spectrum of concepts stemming from spiritual health as an essential dimension of a human's perceptions of life and the universe (Zibad *et al.*, 2016). The spiritual health represents a unique force that harmonizes the physical, mental, and social dimensions, making it no less than a requirement for adapting to the disease condition (Marques *et al.*, 2005). Yusefi *et al.* (2019) showed that the higher the level of one's spiritual health, the lower his/her susceptibility to mental disorders. This finding implies that spiritual health can serve as a strong predictor of successful coping with mental crises. When coupled with increased religious beliefs, spiritual health can alleviate the level of anxiety in individuals (Salaripoor *et al.*, 2018) and positively moderate the negative impacts of painful experiences on one's life (Hodge, 2009) while contributing to improved innate safety (Smith an McSherry, 2004) and psychological health (Dailey and Stewart, 2007; Hodge *et al.*, 2013).

In Iran, to the best of our knowledge, only one study has elaborated on the spiritual-existential evolution of individuals under the effect of the Covid-19 pandemic. The results of the study of Moosapoor *et al.* (2020) showed that such themes as survival challenges, semantic challenges, and inter-personal challenges are all indicative of some perceptual process that serve as leverages to ease the adaptation to the crisis-related conditions.

Accordingly, given the importance of investigating the Covid-19 patients in terms of the resultant negative emotions that they experience, the scarcity of research in this field especially when it comes to qualitative studies to analyze the emotional impacts of the

Covid-19 disease and their significance, and acknowledging the largely-neglected positive spiritual outcomes of the disease, the present study reports a qualitative research that aimed at unravelling the psychological and spiritual dimensions of the Covid-19 disease among the Covid-19 patients.

Methodology

Procedure: The present study describes a qualitative investigation that was performed through a descriptive phenomenological approach. This qualitative study presents a systematic yet subjective approach to describe and interpret some lived experiences of individuals, making a path toward attaining insights by exploring the meanings, *i.e.* a particular enhancement of perceptions of a whole. It can also serve as a tool to deeply explore rich and inherently complex phenomena (Dowling, 2007; Cozad, 1989). Here we sought to explore lived experiences of the patients infected by the SARS-CoV-2 virus to recognize how they perceived and conceptualized particular phenomena (Colaizzi, 1987).

The subjects were men and women living in Qom, Tehran, Bijar, Tabriz, an Urmia (Iranian cities). The statistical sample was formed through using purposive and snowball sampling techniques, ending up with a sample of 14 individuals whose infection with the Covid-19 was proven by an expert physician in the domain of infectious diseases based on CT-Scan images and PCR blood tests. Based on the subjects' consent, interviews were performed with them and continued until data saturation happened so that no more new data was attained. In a phenomenological investigation, the sampling should be continued until saturation happens about the concept in question; this refers to a situation where any further increase in the sample size leads to no significant new information (Marx, 1974). Semi-structured or deep interviews were conducted. With each interview session taking 40 – 60 minutes, a total of 640 minutes of interview was performed in this study. The data collection was started from April 25th, 2020 and lasted to May 15th, 2020 (20 days).

All interviews were done based on previous appointments and via phone to respect the quarantine conditions and observe hygiene principles. Before each interview, some time was dedicated to establish proper communication with the interviewee to ensure that he/she would express his/her actual emotions and experiences

conveniently and on consent. Asked in the course of the interviews, 10 semi-structured questions were designed to investigate the lived experiences and deep emotions of the subjects during the disease and following the recovery from the disease. These were exploratory questions focusing on the patients' lived experience and psychological feelings and states. Examples of the questions are as follows: How did you feel when you found out that your Covid-19 diagnostic test result was positive? Tell us about the worst and most difficult moments that you experienced. What was your most significant concern during the disease? What comes to your mind when you think of your disease period? How did your attitudes and feelings change after the recovery?

The collected data was analyzed using the 7-step procedure proposed by Colaizzi (Shosha, 2012). At the first step, the recorded voices of the interviewees were listened several times to transcribe them on a word-by-word basis, with the transcriptions read multiple times to deeply perceive the lived experiences of the patients. Second, the statements and information related to the most important experiences, feelings, and phrases were identified as open codes. At the third step, we extracted, classified, and formulated the meanings and concepts out of the open codes. These three steps were repeated for every single interview. Then, proceeding to the fourth step, the extracted concepts were carefully studied and investigated, with formulating the meanings into clusters of topics. Here the researcher stuck to primary descriptions of the patients to verify the clustering performance. The fifth step was performed by describing each cluster under a general description. Sixth, a comprehensive description of the experiences was developed and then reduced to a fundamental structure that was then expressed as an explicit and clear expression. At the seventh step, the interviewees were asked to judge the agreement between the obtained findings and their experiences for us to ensure the validity of the results.

The Lincoln and Guba's (1985) criteria for trustworthiness were utilized to validate the results. For this purpose, the credibility, dependability, confirmability, and transferability of the outcomes were put on test (Cope, 2014). In order to ensure the credibility and validity of the findings, the researcher returned to the interviewee should she identify any ambiguity when analyzing the data. The credibility of the results was further assured by referring to an expert in qualitative

research and seeking feedback from the participants (Berns, 2003). In order to determine the confirmability of the results, the researcher made her best to put aside any personal feelings and assumptions during the collection and analysis of the data. Dependability (*i.e.* adequacy of the analysis) was assessed based on guidance provided by relevant experts. Transferability was ensured by diversifying the sample through taking individuals from different cities at different education levels under various sets of conditions.

Ethical considerations: Before performing each interview, each participant gave his/her consent for participating in the research and recording the relevant information. Moreover, the researcher talked to the patients and explained the research objectives, confidentiality of the outcomes, and duration of the interview, ending up obtaining their consent on recording their conversation. To respect the confidentiality of the interviewees' identities, they are herein referred to by their interviewee codes rather than their actual names. Once finished with the research, the researcher deleted the files storing the participants' voices. Depending on the physical states of the interviewee, some interviews were performed in two sessions.

Findings

According to Table 1, the participants were 14 individuals of 26 – 60 in age, with an average age of 42.9. Out of them, 11 (78.5%) were married, with the remaining 3 (21.5%) being single. Moreover, the sample was made up of 12 (86%) women and 2 (14%) men, of which 6 (42.8%) were employed and 4 (28.6%) were unemployed. Moreover, 28.5%, 21%, 28.5%, and 21% of the participants had high-school diploma, graduate degree, masters' degree, and PhD degree, respectively. Except for one individual, all of the participants had at list one child.

Table 1. The interviewees' demographic information.

Interviewee Code	Gender	Age	Education	Job	Marital Status	No. of Children	City of Residence
1	Female	34	Masters' deg.	Researcher	Married	2	Qom
2	Female	31	Masters' deg.	Teacher	Married	2	Qom
3	Female	53	Bachelors' deg.	Teacher	Single	2	Tabriz
4	Female	43	High-School diploma	Housewife	Married	2	Qom
5	Female	50	Masters' deg.	Physician	Married	3	Urmia
6	Male	60	Ph. D.	Physician	Married	3	Tehran
7	Female	26	Bachelors'	Student	Married	1	Bijar

			deg.				
8	Male	48	High-School diploma	Shopper	Married	4	Qom
9	Female	43	High-School diploma	Housewife	Married	4	Qom
10	Female	48	Ph. D.	Psychologist	Single	2	Tehran
11	Female	55	High-School diploma	Housewife	Single	2	Qom
12	Female	34	Ph. D.	Physician	Married	1	Qom
13	Female	32	Bachelors' deg.	Housewife	Married	0	Qom
14	Female	44	Masters' deg.	Teacher	Married	2	Qom

During the disease-hit period, the subjects were all exhibiting acute symptoms of the disease, making them degraded both physically and spiritually. Out of them, 3 patients ended up hospitalized while 57% of them had managed to recover upon home quarantine under the surveillance by a doctor, of course. Out of the hospitalized subjects, 3 (21%) had experienced a short period in ICU. Furthermore, 58% of the subjects had one or more of their family members further engaged with the disease that could recover through hospitalization or supervised home quarantine. The participants reported no significant psychological disorder or strong stressor during the past year, although 3 (21%, women) had their husbands passed away or got divorced in the past, making them head of the household. Two of the subjects had lost their mothers due to suffering from the Covid-19 disease.

Table 2. Classes and themes.

Major Concept	Main class	Themes
Negative psychological reflexes during the course of disease	Fear and anxiety	Fear of eventual death
		Concerns about unknown implications and/or recurrence of the disease
		Loneliness
		Concerns about engagement of the family members with the disease
	Hopelessness	Loss of experiences of happiness and laughter
		Loss of hope to recovery
		Loss of trust on the medical treatments
	Anger and hatred	Anger on the disease vector
		Hatred for symptoms and states related to the disease
		Performance of medics and public executive agencies
	Dissociative	Depersonalization

	experiences	Derealization
	obsessive-compulsive disorder	Repetitive negative thinking about the outbreak of the virus
		Frequent use of skin and surface sanitizers
		Miscellaneous repetitive negative thinking
Attitudinal and spiritual evolution after recovery	Increased spirituality	Increased connection with God
		Appreciating every moment of life
		Prioritization of values and routing toward new life opportunities
	Evolved interpersonal relations	Altruism and empathy
		Sacrifice and forgiveness
		Love and nostalgia
	Evolved self-concept	Increased self-reliance
		Admittance of weaknesses
		Increased tolerance

The research findings were made up of 217 initial codes that were expressed in the form of 8 classes and 24 themes. The classes of psychological reflexes during the course of disease included fear and anxiety, hopelessness, anger and hatred, depersonalization and de-realization, and obsessive-compulsive disorder. The post-disease classes of attitudinal and spiritual evolutions included increased spirituality, modified interpersonal relationships, and evolved self-concept.

Negative psychological reflexes during the course of disease

All of the 14 patients declared that they have experienced undesirable psychological emotions during the course of the disease.

"Negative emotions driven by the disease hurt me even more than the physical pains",

Patient 7 stated in this respect that:

"I underwent a huge amount of spiritual pressure".

Fear and anxiety

A major negative emotion experienced by the patients was the sense of fear which was associated with the themes of "fear of eventual death", "concerns about unknown implications and/or recurrence of the disease", "fear of loneliness", and "concerns about engagement of the family members with the disease".

The results showed that 85.8% of the individuals were highly afraid of eventual death upon engaging with this disease. The fear was at its highest level when they became aware of the death of other patients, especially when the deceased individuals were among their

relatives, or when they saw their peers hospitalized. Patient 7 described this emotion as follows:

"When I got hospitalized, I observed a couple of others dying in front of my eyes, and this shocked me. A young man just passed away and I saw the nurses as they separated the medical equipment from the poor man and putting him inside a plastic bag before taking his corpse out of the room; it was terrifying. A woman on the bed beside me shouted while crying to say "all of us will die just like that!". Another woman was there to cry and moan for her deceased brother who just passed away as a consequence of Covid-19. We were overwhelmed with fear and anxiety."

As described by Patient 1:

"Some of the hospitalized individuals who seemed to be relatively alright ended up getting worse and passing away within no more than 2-3 hours. I was afraid of losing my life in hours, and this kept me from sleeping."

Furthermore, 64% of the subjects were concerned about possibly unknown consequences of the disease even after when they were apparently recovered from the disease. Since the virus causing the disease is relatively new, available information on that is yet to be complete and accurate. Lack of comprehensive knowledge in this respect has led the patients experience senses of ambiguity-driven anxiety. In this respect, Patient 2 mentioned that:

"I am most afraid of the unknown nature of the disease. I frequently think of possible bad implications that may end up discovered in the future, or of that I am not actually recovered from the disease completely, or what happens if it had induced damages to my body that will be recognized later?"

Patient 14 added that:

"Even now after the recovery, I am afraid of being once more engaged with the infection or the same disease recurrences again."

A unique characteristic of this disease, as compared to other complicated illnesses, is that the patients are highly likely to lose the opportunity of having a caregiver/supporter beside them due to quarantine-related limitations, making most of them experiencing senses of deep loneliness. In this regard, Patient 2 mentioned that:

"Everybody in the house was asleep and I was the loneliest in the silence of the night thinking everybody will die soon. I am always afraid of silence, darkness, and tight places."

Moreover, Patient 2 described her loneliness as follows:

"The death itself could not frighten me and I rather was afraid of the upcoming loneliness and deep silence. The loneliness was kind of torturing me and I suffered being jailed in the quarantine. I thought that the doomsday is just to come. I felt no one there though everybody was actually there."

With no exception, all of the interviewees were greatly worried about getting their family members and loved ones engaged with the disease, or losing them in death as a consequence of the disease. Focusing on this theme, Patient 1 stated that:

"My greatest passion was the health of my family, especially my children. I wondered if my husband, parents, or children were caught by the infection. I remember that my mother came to my house to see me at a distance while I refused to accept such a distant contact being afraid of possible transfer of the virus"

From another point of view, Patient 8 described the situation as follows:

"Most significantly, I was afraid of transmitting the disease to my family members, upon which occurrence they may fail to tolerate and end up dead."

Hopelessness and depression

Another class of negative emotions during the course of the disease was characterized by hopelessness, covering three themes, namely "loss of experiences of happiness and laughter", "loss of hope to recovery", and "loss of trust on the medical treatments".

Moreover, 50% of the interviewees were engaged with senses of hopelessness and depression. Lack of experiences of happiness and laughter in the course of the disease and rather experiencing a sense of sadness were examples of the hopelessness experienced by the subjects. In this regard, Patient 5 explained that:

"At the peak of the disease, everything in the world seemed null to me. When I saw somebody laughing, I thought of how much inattentive and unrealistically happy a human can be. I could no more laugh to jokes I received through messaging apps. Everything seemed merely transient to me."

On the other hand, some of the patients have lost their hopes to recover. Patient 4 expressed her hopelessness as follows:

"When I was going to the hospital, I thought that I would never return to home. I lost myself and the world faded out in my eyes.

Accordingly, I made my will to my sister saying her that: "please take care of my children as I am not going to come back"."

The fact that a definitive medicine for treating this disease is yet to be developed has added to the extent of hopelessness among the patients, and has resulted in giving up their trust in the medical treatments. Patient 8 referred to this emotion as follows:

"I suffered from intolerable pains and none of the painkillers could do anything to me. Every single point of my body was paining. I took 100 painkillers in only 15 days! I refused to go to a hospital as I knew that no definitive treatment has been developed for the disease and then the physicians can do nothing for me."

Anger and hatred

The third class of negative emotions with which the patients were engaged was the feelings of anger and hatred for "the disease vectors", "symptoms and states related to the disease", and "non-observing individuals".

The patients were so angry on those who contributed to the outbreak of the disease by failing to observe the hygiene principles and social distancing norms. In this respect, Patient 14 explained that:

"I was very angry on the cause of my disease, frequenty thinking about the way through which I was infected, which made me filled with anger on those who contributed to the transmission of the virus as they failed to observe simple hygiene protocols."

Another interviewee (Patient 9) added that:

"I was very angry on a relative of I who was known to get infected before anybody else in the family, wondering what the hell she wanted to do when she went everywhere as normal (failing to observe the hygiene protocols) though she knew that the outbreak is there. I am pretty sure that she was the one who transmitted the virus to me."

Those who were completely recovered from the disease developed an extreme hatred for the disease-driven states and the days that they lost in the course of the disease, describing their relevant experiences with words of hatred. In this respect, Patient 4 confessed that:

"The term "corona" is so disgusting to me that I cannot even express it. I feel a free fall deep into a black hole as I hear the term".

On the other hand, despite the dedicated service and unwavering support provided by the medics, there were a few medics who were reluctant to the patients' needs, failing to provide them with adequate

levels of support and care. Following this line of reasoning, Patient 7 stated that:

"There were working shifts during which most medics avoided us by far and provided us with no care. Some of the doctors used to check us at some distance. Once I begged a nurse to change my serum, but she never came though my vein was torn and my hand became abscessed and infected. I shouted to beg somebody to help me for a while, but no one answered."

Some were also angry on the responsiveness of the public and managerial authorities when it came to delayed announcement of the disease and failure to present true states of the new cases and fatalities related to the disease. In this regard, Patient 9 said that:

"The government could control the outbreak should it was committed to correct management practices. I am still wondering why they delayed in announcing the spread of the infection as otherwise the people had time to observe proper protocols and prevent possible infection."

Dissociative experiences

Out of the patients who experienced very severe conditions, .28% had gone through states of depersonalization and de-realization. Patient 8 described this stage as follows:

"In one night, I experienced a sense of separation of my spirit from my body, so I could see my own body from above. I looked at myself as I used to do in a mirror and just tried to touch my head but it ended up with no sensation."

Patient 7 added:

"I was so ill and started to experience some abnormal states. My soul was just separated from my body and I could observe my own body from above. At the same time, I was conscious enough to feel that my body was just going to fall down from the bed. I was so light, with no control on my own body. This was the first time that I experienced such a state."

Another patient who experienced de-realization expressed that:

"Once upon a midnight, I felt that I was stuck in the middle of a desert, losing myself completely. Being lost in the middle of nowhere, I had my forehead wet of sweat. Although it happened at night, I saw that as a day, being afraid of even looking around myself. It was like I had come back from the other world."

Obsessive-compulsive disorder

Some patients had suffered from repetitive negative thinking about the congestion of the virus. In this regard, Patient 3 presented the following explanations:

"During the course of the disease, I was constantly busy sanitizing everything as I presumably considered everything as being infected by the virus with no chance of being cleaned."

Some patients were engaged with excessive use of alcohol-based sanitizers and detergents. Patient 11 provided the following explanations in this respect:

"Although I was home alone, I still could not stop myself from washing and sanitizing everything to a point where my skin was just about to be peeled off. I tried my best not to touch anything."

Some patients declared that they suffered from repetitive negative thinking about a wide variety of things. Patient 2, for example, said that:

"Somewhere between sleeping and waking up, I was strongly hit be repetitive negative thinking. I did frequently hang on some repetitive thinking. An example of such repetitive thoughts was the name of my husband's uncle's senior son! There were also other thoughts that could find their way into my mind unwantedly."

Patient 12 added that:

"I did not want to be hospitalized and stay in my house from the very beginning moment of the outbreak. But I could not get myself rid of the doubts that I must refer to hospital and thus may simply end up dying for such negligence. I continued experiencing these thoughts until the end of the disease, making me suffer from time to time.

Post-recover attitudinal and spiritual evolutions

All of the studied patients reported positive evolutions in their attitudes and emotions upon experiencing the disease-resulted pressures. These disease-caused personal evolutions included "increased spirituality", "evolved interpersonal relations", and "evolved self-concept".

The disease-related difficulties and challenges for life have generated some deep senses of spirituality in the patients. This increased level of spirituality contained several themes, including "increased connection with God", "appreciating every moment of life", and "prioritization of values and routing toward new life opportunities". Elaborating on the increased connection with God, Patient 1 expressed:

"At those difficult moments, I started to communicate with God so that I could feel some sort of intimacy with God. Even after recovering from the disease, I felt closer to the God, have managed to say my prayers on time, and generally felt better about both myself and my God."

Patient 2 mentioned that:

"Under such tough conditions, saying prayers and talking to God were the only workarounds that could provide me with calmness. All along the night, I talked to God from time to time, relying on him for passing through the difficulties."

Upon recovering from the disease and going back to their normal lives, all of the interviewees were thankful to the god and appreciated the God-granted blessings and the moments that were presented to them for another course of living, through which they achieved a deeper perception and experience of living in the place at the moment. Patient 7 described this evolution as follows:

"Following the recovery, I started to enjoy the things that seemed pretty normal to me before the disease. When I came back home after 20 days of quarantine, I hugged my child warmly and felt a sense of returning to the life. Since then, I have tended to touch every single piece of furniture in my house and really enjoy touching the life. I walk across the house and stand at the corners for a couple of moments to re-experience the sense of my house at every single point. I touch the clothes in the closet and enjoy watching my son's room. I taste the water and food carefully to sense their essence – because I had lost my sense of tasting for a while, keeping me from ever enjoying the food."

At the critical moments, when the patient is fighting for life, non-genuine and transient goals faded to the patient, with his/her innate emotions leading him/her toward revisiting his/her actual goals and priorities for life to correct his/her path of life. Patient 10 stipulated that:

"Under tough conditions, the scales used to measure and prioritize the values change, and you start to understand what is and what is not of real significance and value to you, ending up with a new reality-based set of priorities."

Patient 12 added that:

"I started to dare simply quitting the conditions that tended to divert me out of the path toward my goals, so as to program my life

path in such a way to smooth the way toward realizing my more valuable goals."

The unique experience generated by this disease had a kind of evolved interpersonal relationships in patients. Thematically speaking, this included "altruism and empathy", "sacrifice and forgiveness", and "love and nostalgia".

The development of senses of intimacy, altruism, and empathy during the experienced crisis was so evident. Expressing this development, Patient 14 confessed that:

"When I was spiritually down, a call from a friend and his/her empathy could provide me with some peace; the friends to whom you might previously think that you are not so important. The fact that my friends were praying for me was so good. A friend of mine called me to read, just on the phone, the seventh pray of the Sahifeh Sajadieh – while crying, I repeated the words after her and this ended up making me so calm."

Following the same line of reasoning, Patient 7 mentioned that:

"The atmosphere of the hospital was filled with empathy. A nurse told me that she had just a couple of days before, but had immediately come to the hospital to serve patients. Because of her contact with the sick people, her Covid-19 diognostic test result become positive, but her illness could not let her down because of her sense of commitment to the patients. On the other hand, the patients hospitalized in the same ward tended to inspire one another. We used to tell others that they have to tolerate and this would lead them, for sure, to recovery and back to their families. A patient, who felt relatively better than the others, served the others with water and tea."

Forgiveness was also reported when it came to interpersonal issues. For instance, Patient 4 stated that:

"Now, some of the issues that I was bothered by and tended to challenge others for are largely unimportant to me. I no more emphasize on the mistakes made by others as I feel stronger powers to forgive."

Patient 8 referred to another perspective saying that:

"So many people called me during those tough days. I ended the miff to many, leaving behind the tiffs.

During the course of disease, individuals had experienced deep senses of love and nostalgia – the love that they believed had motivated them toward fighting the diseases. Patient 10 said that:

“When you challenge the death, unimportant issues are faded out (like useless mental engagements and unnecessary sense of disturbance by friends, etc.) and instead the love rises in your heart.”

Patient 11 believed that:

“I was overwhelmed by the sense of nostalgia. I missed my grandchild so much, making me cry frequently. Accordingly, I thought that I had to recover soon to revisit my grandchild – my greatest thing in the life.”

The patents had reportedly experienced an evolved self-concept. This could be seen under the themes of “increased self-sufficiency”, “admittance of weaknesses”, and “increased tolerance”.

The studied patients spoke out about their self-reliance when no one could help them more than themselves. Patient 1 referred to this as follows:

“A characteristic distinction between this disease and many other diseases was that no one could accompany you for help, leaving you deeply alone in the quarantine, in which case you had to take care of yourself. Accordingly, I had reduced my expectations of others significantly while my self-reliance was strongly improved.”

Regarding the senses of innate power and self-reliance, Patients 11 added that:

“Following the recovery, I started to experience a sense of victory as others used to say you defeated such a tough crisis and this is a demonstration of your strong power”.

According to the patients, this condition led them toward admitting their weaknesses and vulnerabilities, thereby achieving some positive obeisance. In this respect, Patient 5 told that:

“Under the toughest illness conditions, I thoroughly perceived my existential inability and poorness as I could not even simply move the blanket that covered my face or even calling for help. I frequently went unconscious and conscious again.”

Patient 6 further mentioned that:

“I started to believe that I am nothing on myself and that everything can be changed abruptly upon a simple event. It reminded me that I had to wake up out of negligence and that, as a human being, I was susceptible to demolition by a tiny virus regardless of how great and powerful I was beforehand.”

Going through tough conditions could greatly contribute to increased tolerance among the patients. Patient 9 described this as follows:

"I never even thought about death. Many people had died just as a consequence of the fear of death. I had heard news about the death of many of my relatives but still believed that I had to tolerate and this pushed me toward recovery."

Moreover, patient 2 pointed out that:

"Since after the recovery, I have a feeling of coming back from Iʿtikāf[1]. I was cleaned and felt being intimate with God. I felt that I became stronger, greater, and of more capacity - any difficulty that fails to kill me will make me even stronger."

Discussion and conclusions

The patients engaged with the Covid-19 experience enormous amounts of anxiety and fear as they are exposed to a disease of largely ambiguous and unknown implications and this leaves their survival in doubt. On the other hand, these patients witness the others dying due to the disease, especially in the special wards dedicated to such patients not to mention the widespread broadcasting of the numbers of daily cases and deaths around the world. The painful consequences of the disease, such as bronchial asthma, further promote the thought that an eventual death is just close, overwhelming the patients with anxiety and sense of tension. In contrary to many other diseases, Covid-19 is known to put the patient in a deep experience of loneliness and, in some cases, isolation (in quarantine). The fear of dying alone and away from the family members and the loved ones adds to the existential anxiety associated with loneliness and death. Knowing that the Iranian culture highly acknowledges the burial rites as a measure to provide peace and condolences, frequent imagination and rumination of the fear of burial in isolation out of reach of any relative without doing conventional funeral rituals (saying prayer for the deceased, bathing (Ghusl) and shrouding his/her body (Kafan), and performing the so-called Talghin (*i.e.*, recitation of Qu'ranic verses to the dead in their graves before they are covered with soil)) induce

1. A religious event where Muslims experience all-day stay in a mosque for a certain number of successive days during which they fast and do nothing but saying prayers and communicating with their God.

excessive levels of anxiety in patients, disrupting their mental image of dying in calmness and happiness.

Indeed, anxiety can be referred to as a source of many psychological issues; it can result in a number of well-known negative psychological problems, including depression and hopelessness, sleep disorders, anger and hatred, obsessive-compulsive disorder, and, if raised to higher levels, depersonalization and de-realization. As a consequence, the patient would be vulnerable to loneliness, denial of reality, anxiety, depression, sleep disorders, and hopelessness.

In line with the present study outcomes, the results of a research by Liu *et al.* (2020) showed that, during the outbreak of Covid-19, negative emotions (*e.g.*, anxiety, depression, and anger) increased significantly, while positive emotions and life satisfaction ended up with lower scores as people were more concerned about their and their family's health rather than spending time with friends. In another work, Kang *et al.* (2020) emphasized that, under such critical conditions as those established by the outbreak of Covid-19, consequences of the disease could not only endanger the mental health of people, but impose a resistant effect on the negative emotions of individuals. Qiu *et al.* (2020) and Sareen *et al.* (2013) ended up finding that psychological disorders like fear, anxiety, depression, denial, and hopelessness were some of the most significant disrupting psychological responses exhibited by many patients and individuals exposed to the disease.

Etiologically speaking, various factors contribute to the fear and anxiety. These include personal factors such as personal traits, stress-coping approaches, and cognitive biases. In fact, according to the theories of stress and perceived risk, public hygiene emergencies tend to trigger negative emotions and cognitive assessments, which can then serve the individual as a protective factor. Nevertheless, long-term negative emotions can attenuate the immunologic performance of the individual, disrupting his/her natural physiological balance. At the same time, individuals may react to extreme disease conditions in the form of over avoidance or blind compliance (Schaller, 2015).

On the other hand, the results of the present study showed the increased levels of spirituality, evolved interpersonal relations, and modified self-concept among the patients after their recovery. Indeed, spiritual experiences contribute to forming a positive subjective atmosphere in the patients, ending up with alleviated levels of pain

due to their painful experience of the disease and better adaptation to possible stressful events in the future. Spiritual experiences have been acknowledged as a coping solution and an emotional regulation method. Critical conditions provide individuals with new conceptualizations of social life, which did not exist or were largely ignored in the past. Regarding its historical background, the Iranian culture greatly promotes spiritual issues (Musapoor *et al.*, 2020). Based on his clinical studies, Yalum reported significantly increased levels of kindness and humanism in the individuals who closely experienced imminent death (such as those who survived a car accident) (Feist *et al.*, 2016).

In line with the outcomes of the present research, Gomez and Fischer (2010, as cited by Heydari, 2019) defined spirituality as a state of being, positive emotions, recognition of the relationships between the individual and himself/herself or others, and the possession of an inherent metaphysical force that provides the individual with senses of identity, perfection, satisfaction, enjoyment, happiness, beauty, love, respect, positive attitude, purposefulness and well-guided path of life, calmness, and innate balance. On the other hand, given the positive effects of the spiritual experiences on the solidarity of the family and responsibility in individuals (Fatemi and Hayati, 2017), such experiences tend to establish an atmosphere of empathy and common understanding in the family – a thing that can well moderate such negative impacts as anxiety and psychological disorders while improving the responses to internal and external tensions (Mirzaei, 2015). That is, individuals tend to exhibit further tendencies toward establishing supportive relationships with others at the time of a global crisis, with the help of which the humans can not only go through the crisis more conveniently but also achieve deeper spiritual and existential understandings of their relationships. This deepened understanding can then pave the way that individuals go when it comes to psychological and intrapsychological aspects of the self-management (Yu *et al.*, 2004).

In relation to the limitations of the present research, it can be stipulated that the quarantine conditions and the severity of the states of some of the patients kept us from performing direct face-to-face interviews. Moreover, some of the interviews were relatively short due to the special conditions underwent by the interviewees. Moreover, despite the endeavors made by the researchers, the fact that

this study was performed qualitatively makes it susceptible to general limitations of the qualitative research methods, including the observer bias (which is virtually impossible to eliminate) and lack of generalizability of the results.

In the present research, we investigated the psychological and spiritual dimensions of the patients engaged with Covid-19. Accordingly, for future studies, it is recommended to consider socio-psychological support techniques for these individuals to accelerate their recovery. Moreover, one may compare the positive and negative consequences of this disease on the patients using a mixed-methods research approach to extend the diversity and reliability of the results.

To sum up, the results of the present research showed that the patients experienced not only negative psychological implications of the critical disease course and the pains that they suffered at the tough moments of fighting for life, but also positive spiritual growth factors that were developed upon their deep unique experiences during the disease. These positive and pure spiritual experiences significantly modified the patients' live following their recovery. Prioritization of values, search for new life opportunities and routes, leanly experiencing the moment and the places and enjoying and acknowledging every single moment of life, looking for actual meanings and strengthening one's connection with the God in religious individuals, tasting deep love, sacrifice, and altruism when dealing with others, were among the key factors counterfeiting the corona virus. The disease further contributed to the development of a distinctive self-concept that provided the individual with some innate power and self-reliance by which he/she could better cope with his/her problems at higher levels of tolerance, and boosting his/her chances of success while admitting his/her natural and innate weaknesses.

This research provides good insights regarding the experiences gained by the patients engaged with Covid-19 for not only the therapists, caregivers, and family members, but also the Covid-19 patients to keep themselves overwhelmed with the hope for recovery.

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