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Review Article

When and how we cannot bear it anymore? A thematic synthesis of global qualitative studies about psychological experiences of the healthcare staff during the COVID-19 pandemic

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Abstract

Introduction: This study aimed to use the thematic synthesis method to review qualitative research about the psychological experiences of healthcare staff during the COVID-19 pandemic.

Materials and Methods: Out of 218 English articles that are found in PsycINFO, Web of Science, Medline, and Google Scholar databases from 2019 to 2021, 22 articles met the inclusion criteria. The process of thematic synthesis was performed based on Thomas and Harden's analysis method in three stages open coding, organizing codes into common categories, and finally creating the main themes.

Results: After analyzing the results, five main themes were extracted including compassion fatigue, factors affecting compassion fatigue, compassion satisfaction, factors affecting compassion satisfaction, and strategic recommendations.

Conclusion: According to the findings, it can be concluded that the healthcare staff experienced both compassion fatigue and compassion satisfaction during the COVID-19 pandemic. Compassion fatigue and satisfaction can affect the psychological state of the healthcare staff as well as the quality of care they provide. The underlying factors of both concepts are discussed and some recommendations are provided.

Keywords: Compassion fatigue, COVID-19, Empathy, Healthcare, Qualitative research

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Introduction

In late December 2019, the World Health Organization (WHO) announced that a new Coronavirus was seen in the world. Due to the rapid spread of the disease only two months later, in March 2020 it was considered a pandemic (1). Until March 2021, the COVID-19 pandemic has infected more than 123 million people, and more than 2,700,000 people lost their lives as a result of the infection in the world (2).

In the context of epidemics or pandemics, the healthcare staff is a vital element for any society

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because the treatment and recovery of the patients, as well as the control of the disease, depends on the health of the medical staff. However, the healthcare staffs in such critical situations are exposed to a variety of stresses that particularly endanger their psychological well-being (3). They may experience a fear of infection and death (4), a fear of transmitting the disease to the family (5), social stigma (6), ambiguous and uncertain conditions (7), burnout, and the constant observation of human mortality (8). These stresses can exacerbate mental health issues such as anxiety (4), and depression (9), which in turn can lead to a decrease in the quality of care. There are some fundamental concepts in the literature on the psychological well-being of the healthcare staff that should be considered here. These concepts are secondary and vicarious trauma, burnout, and Compassion Fatigue (CF) (10-13). Secondary and vicarious trauma refers to the psychological distress caused by a situation in which a person is indirectly exposed to another person's traumatic experience and as a result experiences symptoms similar to post-traumatic stress (10,13). Burnout refers to the stress and negative effects of a job that makes a person emotionally and physically tired, and CF occurs when professionals involve in helping relationships that need a high level of empathy and constant observation of human suffering. CF may create an inability to give high-quality care, a reduction in empathy with others and frustration at work (14). CF may lead to a loss of consolation capacity during the care giving process (15).

On the other hand, many studies about the daily experiences of the healthcare staff in critical situations point out that not all people involved in care giving at times of crisis necessarily experience secondary trauma, burnout, or CF. They may even have some positive and satisfying experiences along with CF (16). What is known as Compassion Satisfaction (CS) refers to the positive emotions that the caregivers might report. CS can be a protective factor against extreme fatigue and burnout (17). CS occurs when people have a deep feeling of happiness, enjoyment of caring, and being supportive (18). Zakeri et al. in their study concluded that the higher the level of CS, the less the nurses are involved in the negative effects of secondary trauma and burnout (19). The COVID-19 pandemic ignited the writing of several peer-reviewed articles on the psychological well-being of the healthcare staff around the world, however, no research has been conducted to synthesize the results of these studies. Hence, this study aimed to do a thematic synthesis of the qualitative studies about the psychological well-being of the healthcare staff during the pandemic around the world.

Materials and Methods

This study is a review of qualitative studies and we employed a thematic synthesis method. In a thematic synthesis, the researcher systematically reviews qualitative articles in a specific area, and then collects, analyzes, and synthesizes the results (20). The result of such reviews is a general understanding of a subject and enrichment of the research literature (21,22). Physicians, medical staff, healthcare, COVID-19, Coronavirus, Corona, pandemic, psychological experiences, and qualitative were the keywords along with OR and AND search operators. We reviewed PsycINFO, Web of Science, Medline, and Google Scholar during December 2019 to March 2021. After careful examination of the papers based on the inclusion criteria, 22 papers out of 218 related articles were selected. The inclusion criteria were as follow: Using a qualitative methodology, English language, full text, peer-reviewed, publishing date between December 2019 to March 2021, and thematically related to psychological experiences of the healthcare staff around the world. We used the Critical Appraisal Skill Program (CASP) checklist to assess the quality of each article to ensure the quality of methodology and ethical standards. The criteria in this checklist are: a) using a relevant method to achieve the study objectives, b) using sufficient sampling and appropriate sampling methods, c) using appropriate data collection strategies, d) the use of appropriate analytical methods, e) interpretation of data based on findings, and f) confirmation of the code of ethics and observance of ethical considerations of the research (22). The three stages of thematic synthesis as described by Thomas and Harden (20) were employed to analyze the data. These stages are as follows: the free line-by-line coding of the results, the organization of the 'free codes' into related areas and the creation of 'descriptive themes'; and the developing of 'analytical themes'.

Results

Table 1 shows the characteristics of 22 studies that are included in the thematic synthesis. The total participants in the included studies were 595 healthcare staff around the world. In 11 studies a phenomenological approach was used, while in three studies a content analysis, in three studies a thematic analysis, in two studies a grounded theory, and in three studies qualitative descriptive approach was employed.

Table 1. Characteristics of the included papers

Number	1st Author	Location	Sample size	Methods	Summary of main themes
1	Schroeder, 2020 (23)	USA	21 nurses	QDS	Adjusting to a dynamic situation, understanding adapting to the pandemic, the duty to be on the frontlines
2	Norful, 2021 (24)	USA	55 healthcare staff	QDS	Fear of uncertainty, physical and psychological manifestations of stress, and resilience building
3	Gordon, 2021 (25)	USA	11 nurses	QDS	Emotions experienced, physical symptoms, care environment, social effects, and coping strategies
4	Sterling, 2020 (26)	USA	33 healthcare staff	GT	Feeling invisible, risk for virus transmission, varying amounts of information, supplies, and training, relied alternatives for support, forced to make difficult trade-offs in their work and personal lives
5	Iheduru-Anderson, 2021 (27)	USA	28 nurses	PA	Emotional roller coaster, self-care, 'hoping for the best', 'nurses are not invincible', and 'I feel lucky'
6	Nyashanu, 2020 (28)	UK	40 healthcare staff	PA	Fear of infection, lack of recognition/disparity, lack of guidance, unsafe hospital discharge, death of professionals, and unreliable testing
7	Collado-Boira, 2020 (29)	Spain	62 nurses	PA	Pandemic perception of the emergency, fear to be unprepared
8	Jones (30)	Australia	17chaplains	GT	Changing healthcare environment, the impact of the virus, chaplains responding to the crisis
9	Kalateh Sadati, 2021 (7)	Iran	24 nurses	TA	Defected preparedness, perceived risk, family protection, social stigma, and sacrificial commitment
10	Alizadeh, 2020 (8)	Iran	18 healthcare staff	CA	Occupational demands and supportive resources
11	Galehdar, 2021 (5)	Iran	13 nurses	CA	Care erosion, professional growth, and necessities
12	Ardebili, 2020 (31)	Iran	97 healthcare staff	TA	Working in the pandemic, changes in personal life, negative affect, gaining experience, normalization and adaptation, and mental health
13	Galehdar, 2020 (32)	Iran	20 nurses	CA	Anxiety, fear of infecting the family, distress, delivering bad news, obsession, and wearing protective equipment
14	Fawaz, 2020 (4)	Lebanon	13 healthcare staff	PA	Fears of spreading the virus, work-family conflict, stigma of being infected, and inadequate information
15	Liu, 2020 (33)	China	13 nurses	PA	Being fully responsible for patients' well-being, challenges of working on COVID-19 wards, and resilience amid challenges
16	Zhang, 2020 (34)	China	23 nurses	PA	The psychological change process and the psychological characteristics of each period
17	Sun, 2020 (16)	China	20 nurses	PA	Negative emotions, self-coping styles, growth under pressure, and positive emotions
18	Tan, 2020 (9)	China	30 nurses	PA	Negative experiences during clinical first-line work, and positive impacts of clinical first-line work
19	Gao, 2020 (35)	China	14 nurses	PA	Assess the competency of nurses, reorganize shift patterns, communicate managers and nurses, and nurses' shift patterns
20	Lee, 2020 (36)	South Korea	18 nurses	PA	Lack of preparation, struggling on the frontline, altered daily life, unexpectedly long, ambivalence, motivations, meaning, and growth
21	Kackin, 2020 (37)	Turkey	10 nurses	PA	Effects of the outbreak, short-term coping strategies, and necessities
22	Munawar, 2020 (38)	Pakistan	15 healthcare staff	TA	Stress coping and challenges

QDS: Qualitative Descriptive Study, GT: Grounded Theory, PA: Phenomenological Approach, TA: Thematic Analysis, CA: Content Analysis

After thematic synthesis, five main themes including compassion fatigue, factors affecting compassion fatigue, compassion satisfaction, factors affecting compassion satisfaction, and strategic recommendations were extracted from the findings of the included papers. These five themes were categorized into 15 categories and 74 sub-themes.

The first theme: Compassion fatigue

According to many participants, the most important psychological experience of healthcare staff during the COVID-19 was CF symptoms which occur when people pay too much attention to others in traumatic situations. The most common symptoms of CF were experienced in the psychological, physical, and vocational aspects of life. Emotional symptoms were reported in terms of a variety of negative emotions (8,9,16,31), emotional fatigue (16,34), anxiety (24,30), anger (25), fear of infection and disease (4,5,8,29), fear of death (5,7,29,32), confusion (5,29), extreme sadness and helplessness (4,30,32,38), tension (7,27,34), worry (11,38), and feelings of loneliness and isolation (27,29). Having such emotions could affect the work of people, and create work-family conflict (4,7,31), low self-efficacy in controlling the patients' conditions (5,9,31) as well as burnout (31). Moreover, many participants reported some forms of physical fatigue (9,27), insomnia (8), and hardships of wearing protective equipment for long hours (5,29,33) that could add to their difficulties.

The second theme: Factors affecting compassion fatigue

Psychological, occupational, and social factors were among the most important factors affecting CF. Emerging symptoms of obsessive-compulsive disorder (5,32), depression (9), anxiety (5,9), grief (27), and feelings of guilt and regret of not being with family (16,36) were some psychological factors that created a sense of fatigue. Some participants expressed exacerbation of their pre-pandemic mental health issues and some expressed issues that arose after the pandemic (29). Psychological well-being is also strongly influenced by occupational and social factors. Challenges such as prolongation of the pandemic (5,26), ambiguous conditions (7,9,16,29,33), lack of knowledge and preparation for the pandemic (4,7,24,29,37), long working hours (5,9,33,35), and vocational stress (8) creates mental distress, and ineffective social interactions increase its severity. Participants mentioned a lack of enough social support (24, 25), the social stigma of working in the COVID-19 ward and the possibility of being infected (4,7,8), and a reduction in the close social relationship (8) has left them with a feeling of helplessness.

The third theme: Compassion satisfaction

Many studies claimed that people may experience compassion fatigue and satisfaction concurrently. Psychologically, individuals experience positive emotions (9), high motivation (37), altruism (16,27,38), empathy (9,25,38), energy renewal (34), sense of satisfaction (16), increased appreciation and love for others (16,27), hope (27,35), and a sense of happiness (16,27) while caring for others. It seems that a rapid adaptation to new conditions (16, 31), post-stress growth (27,37), and greater self-confidence was the result of such emotions. In the occupational dimension, there is a significant amount of satisfaction from gaining new experiences (31), willingness to help patients more with and caring-as-opportunity attitude (27), and increasing job cooperation (33).

The fourth theme: Factors affecting compassion satisfaction

Psychological, occupational, and personal factors were among the most important factors affecting CS. Normalizing the situations for oneself (31,38), resilience (33,38), and receiving mental health interventions (37) were some psychological factors that could lead to satisfaction.

Raising awareness of the disease (25), receiving a sense of appreciation from the people, family, and sources of power (8,27), participating in the COVID-19 related webinars, and projects (23), having supportive resources at work (23), could increase the level of CS at work. Performing self-care behaviors and strategies (27,37) such as contacting friends and family (25,36), watching movies, doing exercise, using online social media and listening to music (34) reading books, and performing religious acts such as praying (38) have profound effects on the sense of satisfaction.

The fifth Theme: Strategic recommendations

The results of several studies included strategic recommendations to increase satisfaction and reduce fatigue of the healthcare staff.

Increasing psychological support (7,8,37), visiting counselors or psychologists (38), providing mental health services (5,31,35) availability of protective equipment (37), and training the healthcare staff to be adequately prepared for the face of possible future pandemics (23), strengthening job commitments with reminding and highlighting jobs calling (7,32,35), and increasing informal and formal supports (8,33) were some of the recommendations.

Discussion

The present study sought to understand the fundamental question of how and by what mechanisms CF of the healthcare staff is explained. To reach this end we started with a general question about the psychological status of the healthcare staff during the COVID-19 pandemic. Since showing empathy and having compassion is one of the most important principles of care, exploring this issue has special importance among the healthcare staff as the people who are at the forefront of the pandemic. On the other hand, the COVID-19 pandemic and using a thematic synthesis approach allowed researchers to explore the concept of compassion in depth, regardless of culture, borders, race, religion, and social context, and on a global scale. Based on our synthesis of the results of 22 qualitative studies, five main themes were extracted that represented a comprehensive and new description of the phenomenon under study.

The first and most important theme was the negative consequences of a sudden encounter with the unpredictable COVID-19 pandemic. In line with previous studies (27,31), these consequences were categorized as symptoms of CF, which most participants considered to affect their job function and also their physical and psychological well-being and lead to a pervasive sense of helplessness. Our finding highlights the importance of mental health in the field of medicine and care giving because it was found that what most causes the healthcare CF is not necessarily hard work, but emotional issues and experiences. Buheji M, Jahrami, and Dhahi (39) also synthesized literature about COVID-19 stress and claimed that experiencing emotions such as anxiety, sadness, anger, fear, despair, and confusion may reduce the endurance of the healthcare staff. As a result of Aghili and Arbabi's (40) review study, negative psychological consequences are more common in women, nurses, and professionals who are at the frontline of providing health services for COVID-19 patients.

In the second theme, according to the global experiences of the healthcare staff, psychological, social and career factors could affect CF and CS. The important point is that time can be the key factor among all the elements because long-term care of critically ill patients could complicate and prolong CF symptoms (24). In explaining this finding, Ardebili et al. (31) also found that healthcare professionals can look at the place and perception of time from a psychological perspective, but we resulted what makes the healthcare staff more impatient and tired than anything else is the perception of time. In the COVID-19 pandemic, the prolongation of the disease greatly affected the perception of time, in other words, the healthcare staff perceived that time passed very slowly, or does not pass at all. According to this perception, they will feel and experience repetitive and routine tasks every day. This kind of perception could shape the core of boredom and fatigue. Moreover, it seems that the prolongation of ambiguous conditions leads to a vicious cycle. In line with this finding, Naghavi and Zamani-Forooshani (41) stated these conditions increase CF symptoms and if it is not broken, it creates negative emotional consequences.

Another important point that can be also confirmed by Sun et al. (16) on the psychological experience of caregivers during COVID-19 is that CF and CS are not necessarily two ends of the same spectrum that one of them disappears in the presence of the other. In most studies, it has been pointed out that the healthcare staff may experience them concurrently. Healthcare staff may have a deep feeling of satisfaction with care giving if this was their calling in the first place. The third theme, CS refers to the positive experiences of care giving during the pandemic. In line with qualitative previous research, Sterling et al. (26), this type of satisfaction is experienced through joy and satisfaction at work. According to our and Kackin et al. (37) findings, the formation of CS is the result of a harmony between psychological, individual, and vocational factors.

Given the fact that CF and CS can be simultaneously formed and experienced, in most

studies, strategic recommendations have been made that seem if taken into account the healthcare staff will experience more satisfaction than fatigue. These are suggestions in the realm of psychological, social, and vocational wellbeing that have been emphasized in previous research on CS (33,37).

Conclusion

The results of the 22 qualitative studies on the psychological experiences of healthcare staff around the world were thematically synthesized and five main themes were extracted from the findings. Compassion fatigue and satisfaction affect the mental health of the staff and the quality of care. Therefore, it is necessary to pay attention to the underlying factors of each one and to design interventions that could affect them. The findings of this study can be implemented to design educational workshops and prepare intervention programs in various psychological and occupational dimensions in the healthcare system. In addition to these practical recommendations, further studies around the role of gender, religion, and spirituality, the patients' demographic conditions, and the healthcare staff's demographic characteristics in explaining CF and CS are recommended.

Ethical considerations

The authors declare no financial support or conflict of interest.

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