

STRATEGIES TO RESPONSE TO PSYCHOLOGICAL TRAUMA OF HEALTHCARE WORKERS IN VIETNAM DURING THE COVID-19 PANDEMIC: IMPLICATION FOR THE FUTURE

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ABSTRACT

The COVID-19 pandemic has brought great challenges and stress to healthcare workers (HCWs). The application of appropriate strategies to respond to psychological trauma contributes to the protection of HCWs' well-being. The objective of this study is to discover the strategies that HCWs used for psychological trauma coping during their participation in COVID-19 prevention and control. This is a qualitative study, conducted in Ho Chi Minh City (HCMC), Vietnam, collecting information by in-depth interviews with 40 HCWs participating in COVID-19 prevention and control in HCMC in 2021. Findings showed that strategies of stress coping that HCWs used in the pandemic management are diverse. There were six main themes identified as positive coping solutions in this study including rest and entertainment activities; improving the working environment; maintaining social interaction; positive thinking and action; strengthening personal coping capacity; and showing professionalism at work. In addition to these positive coping solutions, some participants expressed that they have used negative coping skills including using stimulants; taking their anger out on others; running away from work; refusing contact with others; surrendering to their own fate; and quitting their

jobs. In addition to general solutions, the participants in charge of different working groups had some specific solutions to deal with the psychological trauma.

Keywords: coping, healthcare workers, psychological trauma, Vietnam

I. INTRODUCTION

Many HCWs participating in preventing and control of COVID-19 were in psychological trauma symptoms^{1,2,3}. The number of cases is increasing every day, making the burden and pressure on healthcare services also increase exponentially in response to the pandemic. The number of healthcare workers experiencing psychological trauma during the pandemic prevention and control process. The contagious nature of COVID-19 coupled with its long incubation period of 2 to 14 days and HCWs who come into contact with infected people on a daily basis can feel stressed because they are in fear of infecting their families, colleagues, and friends¹. During the COVID-19 outbreak in provinces of Vietnam and cities including HCMC, frontline HCWs who spent a long time fighting the pandemic and had different psychological problems such as stress, anxiety, insomnia, and even exhaustion. Ha and colleagues studied on 2,870 HCWs in 63 health facilities participating in prevention and control of COVID-19 in HCMC in 2021, the results showed that, there were 17.7%, 20.8%, and 17.2% of the participants had symptoms of anxiety, depression, and stress, respectively³.

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It is essential to control and limit the negative impacts of the pandemic on the mental health of HCWs who are directly or indirectly facing COVID-19. So, what solutions have they applied to manage their own psychological trauma during their participation in the prevention and control of COVID-19? The goal of the study was to gain an in-depth understanding of HCWs' trauma coping strategies from their own experiences in the prevention and control of the COVID-19 pandemic. HCWs' experiences with trauma coping strategies are valuable lessons and help stakeholders have effective solutions to support them to cope effectively with stressful situations in the future.

II. METHODS

Design: Qualitative research, descriptive phenomenology was applied in this study.

Participants: 40 healthcare providers including doctors, nurses, midwives, public health, preventive medicine, medical technicians and others have been participating in the prevention and control against COVID-19 in HCMC in 2021 with purposeful selection of samples.

Data collection: In-depth interviews with research participants through a semi-structured questionnaire related to psychological pressures that HCWs face and strategies that they apply to cope with trauma during participation in COVID-19 prevention and control. Some main questions used to interview the participants include: During the time of participating in the prevention and control of the COVID-19 pandemic, have you suffered any signs of psychological trauma? What strategies have you taken to respond to psychological trauma during your participation in the prevention and control of COVID-19? Are those solutions you applied effective? The researchers gave detailed

information to the participants about the purpose, research process and in-depth interviews. Informed consent was obtained from the study participants. After getting acquainted, establishing relationships and creating a trust for the participants, the researcher conducted in-depth interviews. The content of the interview focused on the psychological pressures, anxiety and stress that HCWs encountered during the process of participating in the prevention of the COVID-19 pandemic.

Seven interviews were conducted directly face-to-face. The time and place were selected most suitable and convenient for the participants. However, due to the complicated situation of the COVID-19 pandemic in HCMC at that time, the remaining interviews were conducted online to ensure the safety of pandemic prevention and control and create the most favorable conditions for HCWs and still achieve the purpose of the interview. Interviewers and research participants discussed and chose the most convenient time for them so their work and break time are not affected. Each participant was invited to participate in an interview lasting from 30 minutes to 90 minutes. The interview was recorded, the interviewers did not name the participants.

Before each interview, the interviewers briefly explained the purpose of the interview, the confidentiality of personal information as well as the information expressed by the research participants. The interviewers asked the participant for permission to have a visual and audio recording of the interview. Data saturation was determined after 40 participants have been interviewed and a sequence of answers were repeated. There was no new information or themes were recognized.

Information management and data analysis: Recorded files, videos, notes, and information are stored in a computer with a

secure password. The analysis and synthesis process were immediately conducted at the completion of each individual interview. Content analysis was applied to analyze the data. Audio and visual recordings from each in-depth interview were taped carefully by the research team. Data from observations, notes, and transcriptions were read, coded integrated and analyzed carefully in order to maintain rich detail and deeply information gathered. Triangulation methodology was applied. The data were analyzed by two independent researchers. In generating categories, themes, patterns and coding, the key to unlock the data analysis process were looking for insights into situations, settings, images, meaning, and nuances for textual content according to the psychological impact of the pandemic and psychological trauma coping strategies of the HCWs. A coding scheme was developed. Individual passages were marked and grouped into categories and studied for thematic connection within and among them in order to capture some recurring patterns that cut across the preponderance of data. Definition

or description for each category as they relate to the research questions was also given to provide clarity.

Ethical Considerations: The study was approved by the Ethics Committee in Biomedical Research of Ho Chi Minh City University of Medicine and Pharmacy with the decision 616/HĐĐĐ-ĐHYD.

III. RESULTS

Sociodemographic Characteristics of Participants

Among 40 HCWs participating in the study, there were 24 females, accounting for 60%. Specialties including doctors (7), nurses and midwives (11), public health and preventive medicine (6), medical technicians (5) and other specialties such as pharmacist, nurse assistants, engineer, driver, and cashier (11). The average age of the participants is 35,8 years old, the youngest is 23 years old and the oldest is 58 years old. 62,5% of participants were married and 82,8% of them have elder people in their families (Table 1).

Table 1. The sociodemographic characteristics of the sample (N = 40)

Variables	N	Percentage (%)
Gender		
Male	16	40
Female	24	60
Marital status		
Single	15	37,5
Married	25	62,5
Educational level		
High school	2	5,0
Vocational	21	52,5
College/ University	8	20,0
Higher education	9	22,5
Families with elder people		
Yes	19	82,8
No	11	17,2
Age	Mean ± SD= 35,8 ±10,4 (Youngest – Oldest: 23 – 58)	

Coping skills for psychological trauma among participants

In order to minimize the negative impact of the COVID-19 pandemic on psychological health, each participant participating in the in-depth interview expressed the solutions they have applied to limit those undesirable effects. The strategies that the participants applied to response to the psychological trauma included both positive and negative ways. Besides the general strategies, the participants in charge of different working groups had other specific solutions to deal with the psychological trauma.

Positive coping skills

Among the solutions applied to reduce the negative impact of the COVID-19 pandemic on health and life, the participants in the interviews expressed many positively activities to cope with and manage stress and anxiety for themselves and those around them. The positive coping skills were identified as six main themes. These were rest and entertainment activities, improvement of the working environment, maintaining and expanding social relationships, having positive thoughts and actions, learning and improving self-care capacity and show professionalism at work.



Figure 1: The positive response strategies to psychological trauma of healthcare workers in the COVID-19

Most participants conveyed that they try to spend as much time resting as possible. Addition positive coping actions included entertain themselves with reading online books, listening to music (rap music, meditation music, favorite music), exercising, playing sports, going for a walk or shopping. *“I play games, sports and have meals with friends after working to relieve stress (PV09)”*. However, most of these solutions are limited in terms of time, space

and means, due to work pressure, inadequate time, lack of facilities and equipment. *“Personally, I just wish I had more time to rest. Because I have a lot of works (PV09)”*.

Another solution that had inconsistencies among participants (depending on each person's circumstances) is to interact, talk and connect with loved ones. *“When I'm stress and sad, I call my relatives and talk with them (PV23)”*. While many of the participants talk to their families as a solution

to help them relieved after tiring, pressured and stressful working hours, there are some who had chosen to limit talking to their families with the fear that relatives will know the risks they are facing, and will be worried, and then the healthcare staff will be more worried, stressed and pressured. Therefore, when implementing psychological support for HCWs, it is very important to individualize, not to apply simultaneously as a template for all.

Improving the working environment is also a solution that the participants admit to be effective, contributing to a significant reduction in anxiety and stress, such as colleagues helping each other at work, talking, exchanging, creating a humorous atmosphere in the workplace, arranging working environment, working scientifically, and coordinating with colleagues in work. *“People talk fun, jokes, relieve stress and help each other at work (PV34)”*. *“At times when my work is so stressful, I talked to my younger sister on the phone (PV 25)”*. In hectic or overwhelming situations, instead of thinking too many things, majority of participants have turned their thoughts to the most positive things such as believing that the pandemic will be repelled, being proud of being able to contribute their efforts, leaving good marks for the future as there will be many good things to tell people and children about themselves. There are many participants instead of lamenting have learned to accept reality and face it or always actively comply with regulations and pandemic prevention strategies. A biotechnological engineer, responsible for disinfecting aircraft, trains, departure and arrival areas in the terminal, cleaning the isolation area during the pandemic. *“I will focus more on the positives. I believe the*

pandemic will end..... I talk to everyone...and I always follow the prevention measures and regulations... and I have more motivation (PV 30)”.

Besides, many participants have prepared and strengthened their own capacity to cope with difficult and uncertain situations, such as demonstrating a sense of responsibility to themselves, to their families, colleagues, people around them, with their working units and community health. Learning to adapt to situations such as reducing personal needs, simplifying problems, especially accepting sacrifices and losses was also applied by the participants. *“I learned how to adapt to the difficult working conditions here (PV26)”*. *“I learned how to minimize basic needs, because in a strong outbreak, work overload, lack of everything, need to satisfy myself is how I deal with psychological trauma (PV19).* Showing professionalism at work such as trying to have a work management plan, managing personal emotions, promoting independence and teamwork are ways of coping that many participants shared. A male nurse who has a 15-month-old son show a sense of professional responsibility: *“There are times that I think of quitting.... But then rethink.... Well, I already walked in here now it looks bad if I leave.... This is in the middle of difficulties, short of staff, if I go home now, I feel so ashamed. How can I tell to my child later (PV 36)”*. Spiritual practices such as praying for patients and peace, as well as believing in faith are also one of the solutions that the participants applied to comfort themselves, relieve and alleviate torments, loss and despair. *“Too stressful, anxious, worried, cannot sleep,... At that moment, I read bible, because I am Catholic. I pray to God for giving me more strength so I can be healthy*

to work. Every morning I go to work, I started to pray... (PV 39)".

The participants directly involved in the treatment and care for COVID-19 patients learned how to master the complex medical equipment used to treat COVID-19 patients such as ECMO machines, ventilators and other equipment, or learned how to inform a bad new to the relatives of patients, which were effective ways to reduce psychological pressure. *"Overload of work! Many patients, many new equipment that we never know before. The way to reduce stressful was that we learned how to used them in the right way and effectively (PV38)"*. Other way, the participants who in charge of tracing, screening COVID-19, and supporting medical declarations in the community expressed the effective way they applied to deal with psychological trauma is to learn to improve communication skills, try to control emotions self-exposure to respond to people's stigma and try to put themselves in the situations of people in the community. *"I always remind myself that I need to try to put myself in their shoes to understand and sympathize with them. By that ways, I found my soul lighter, less frustrated (PV12)"*.

Negative coping skills

Besides the above positive coping solutions, there were six themes identified as the negative way applied by the participants. These included using stimulants; taking the anger out on others; run away from work; refusing contact with others; surrendering to own fate; and quitting the jobs some participants said that they have used a number of solutions to cope with their own psychological trauma that are not beneficial such as drinking alcohol to sleep better and forget their worries that has been haunting them. A small group of participants stated

that they control their stress by being irritable, shouting at others, or someone choose to quit their jobs, run away from their work, few people withdraw, do not want to interact or work with people around them.

Some participants expressed that they have used negative coping skills including use stimulants; taking their anger out on others; run away from work; refuse contact with others; surrender to own fate; and quit their jobs. A community healthcare worker has voiced *"When feeling too stressful, I become irritated. I am very hot tempered. I'm so stressed, I get angry, sometimes I yell at others.... it's so stressful, I can't stand it, when I get angry, I feel less stressed (PV 20)"*. A male nurse has vented out: *"The number of corpses is so many, ... After cleaning up the body, I vomited everything I ate in the morning. I am frozen by the time I get to my room, my roommate got me wine to drink. That's when I woke up and went to take a shower, then I stayed in my room for 2 days (PV 36)"*. A female physician in the preventive medicine complained that she felt very stressed and pressured because of too much work during the pandemic, in addition to lack of understanding and empathy from her superiors and colleagues and had decided to quit her job. *"I quit my job. My station (Health station) changed personnel a lot, many of them quit, ... About 6 (healthcare workers) has left... (PV11)"*.

Another female doctor with many years of experience working at the Department of Anesthesiology and Resuscitation at a level 1 hospital, has come in contact and treated many seriously ill patients and witnessed many deaths before. However, when participating in the treatment of COVID-19 patients at a field hospital, she felt helplessly witnessing the rapid death of the patient,

stressful and overwhelming work, the lack of personnel and comfort, unsafe working environment, having to spend a long time in a hot, unventilated protective personal equipment, stated that sometimes she hoped to be infected with COVID-19 so that she can have a rest. “...I hope to lie down and

rest, my head is always tight like a string, the patient is in critical condition, I have to take care of many things, sometimes I don't have time to call and miss my children, ... So exhausted, so stressed that I wish I could get COVID-19 so I can have a break” (PV37).

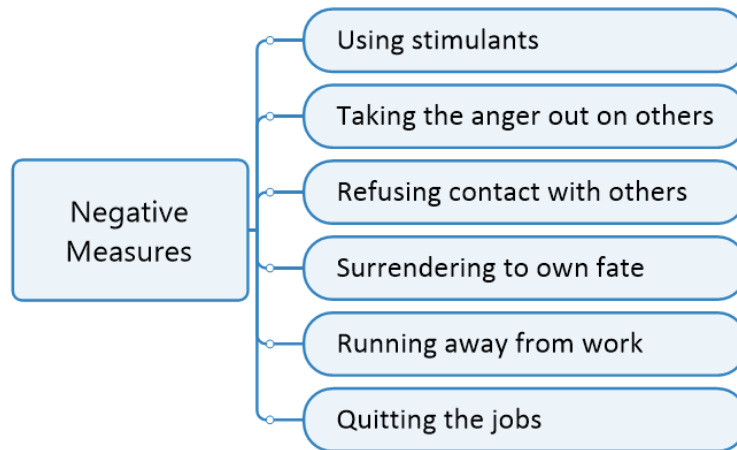


Figure 2: The negative response strategies to psychological trauma of healthcare workers in the COVID-19

IV. DISCUSSION AND CONCLUSION

Selected solutions to cope with psychological trauma during the COVID-19 pandemic of the participants in this study are also similar to the findings in other studies. In the systematic literature review by the end of 2020 done by Callus, the strategies mentioned by HCWs have been applied to manage psychological trauma, including recreational activities, relaxation, and increased awareness about the pandemic in the community, providing clear and specific knowledge for HCWs about the situation to help reduce stress; telepsychological interventions, strengthening individuals' self-care capacities, peer support, improving work environment, and providing mental health services are solutions that help minimize the negative impact of the pandemic on the psychological trauma of

HCWs⁴. In the study of Ferendiuk (2019) showed that resting and relaxing are the solutions to reduce stress⁵. It has been shown that breathing is an essential element for the mindful meditation practices introduced by Kabat-Zinn⁶, as mindful meditation provides the opportunity to pay “non-judgmental attention to one’s cognitive, emotional and physical experiences, while reorienting your concentration on respiratory sensations to promote cognitive and emotional regulation and progressively relaxed states”⁷. Increasing awareness is another way that can reduce stigma to mental health problems including burnout and develop resilience in the health care provider by preventing burnout⁸. In addition, awareness of COVID-19 and regular updates about appropriate preventive strategies are recommended¹³.

It is also suggested that mindfulness training is beneficial for healthcare personnel because it can promote self-care and sense of well-being^{8,9}. It can also increase resistance to stress, quality of professional life, and self-compassion in which is necessary in clinical settings to facilitate a therapeutic environment. Self-compassion is also associated with a series of psychological strengths such as resilience, happiness, optimism, wisdom, curiosity, courage, exploration, and emotional intelligence²⁷.

In conclusion, HCWs participating in the frontline of COVID-19 prevention and control in Ho Chi Minh City, Vietnam encountered mental health problems such as anxiety, stress, exhaustion, confusion, and impotence. The solutions HCWs apply to minimize the negative impact of the COVID-19 pandemic on psychological health are diverse, including both positive and negative solutions. Despite the difficulties, HCWs managed to control the situation and overcome difficult situations. There are also many of them who suffer from obsessions, stress and sadness. A comprehensive solution to provide timely and effective psychological support to provide the best health care for those who involved in the prevention and control of future pandemics and other similar crisis situations essential and urgent.

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