



# Protecting Mental Health for Healthcare Staff During the COVID-19 Pandemic

*Che-Cheng Chu<sup>1</sup>, Yung-Chieh Yen<sup>1,2,\*</sup>*

**Objective:** The outbreak of coronavirus disease 2019 (COVID-19) has an adverse impact on the mental health of healthcare staff during the pandemic. In this article, we aimed at providing our experiences in reinforcing the mental health of frontline professionals as they faced the crisis.

**Methods:** Three steps were taken to empower healthcare staff while coping with the COVID-19 crisis at a university hospital in Taiwan. First, mental health information related to stress reaction and management was provided for all staff of the hospital via emails. Second, the Departments of Infectious Diseases, Intensive Care, Emergency Medicine, and other departments involved in the care of COVID-19 patients were further evaluated for the potential risk of occupation-related emotional distress. Finally, individualized assessment and interventions were provided for the quarantined staff.

**Results:** We sent mental health communications to all hospital staff (n = 2,851) via emails, including 15 frontline department directors. Besides, 10 quarantined staff received psychological consultations and follow-ups. Positive impacts were reported from the department directors and their staff. Their feedbacks and suggestions were gathered and summarized.

**Conclusions:** Our results showed that psychological support for healthcare workers on the frontline of fighting the COVID-19 pandemic could be successfully reinforced through dissemination of electronic educational information as well as department-based and individualized interventions.

**Key words:** COVID-19, mental health, healthcare staff, quarantine

## Introduction

The COVID-19 pandemic has impacted the mental health of people worldwide. Healthcare staff are subject to a high risk of compromised psychological well-being during the pandemic. In this article, we aimed at reporting our experiences in psychologically empowering frontline professionals as they

faced the crisis of COVID-19. To comprehend the psychological influence of the pandemic on healthcare workers, we conducted a literature review. Analysis of the traumatizing experience from the severe acute respiratory syndrome (SARS) epidemic among Taiwanese healthcare workers in 2003 revealed the development of a sense of fear for life, vulnerability and uncertainty in the initial phase of the outbreak, followed by the somatic and cogni-

From the<sup>1</sup>Department of Psychiatry, E-Da Hospital; <sup>2</sup>School of Medicine for International Students, I-Shou University, Kaohsiung, Taiwan.

Received: July 17, 2020

\* Address reprint request and correspondence to: Yung-Chieh Yen, Department of Psychiatry, E-Da Hospital, No.1, Yida Road, Yan-chao District, Kaohsiung City, 824, Taiwan.

Tel: 886-7-615-0011, Email: ed103750@edah.org.tw

tive symptoms of anxiety. Depression became apparent when the epidemic was being brought under control. The estimated prevalence of psychiatric morbidity among healthcare workers in hospital was about 75%, measured by the Chinese Health Questionnaire, during the SARS period.<sup>1</sup> The reported morbidities included the fear for infecting their family members and coworkers, feelings of insecurity and stigmatization,<sup>2</sup> unwillingness to work,<sup>3</sup> stress, anxiety, depression,<sup>4</sup> sleep disturbance,<sup>5</sup> and post-traumatic stress disorder (PTSD).<sup>6</sup> The occurrence of psychiatric symptoms was linked to the direct care for SARS patients, a history of previous mood disorders, younger age, and perceived negative feelings.<sup>7</sup> One study revealed the importance and benefits of providing psychiatric services for healthcare workers to reduce their psychological distress.<sup>2</sup> Based on the past experiences of SARS in Taiwan, we took a series of measures at our hospital to cope with the upcoming psychological impact brought about by COVID-19. At the beginning of the COVID-19 outbreak, a 14-day quarantine was required by the government for all who arrived in Taiwan with suspected infection. Quarantine, which some of our staff underwent because of their traveling abroad, is often an unpleasant experience. Stressors during the quarantine period include a longer quarantine duration, fears for infection, frustration, boredom, inadequate supplies, a lack of information, financial loss, and stigmatization.<sup>8</sup>

The E-Da Hospital is a tertiary referral center with over 1,200 beds and 38 specialties. The Committee for Employee Mental Health comprises psychiatrists, clinical psychologists, social workers, representatives of the human resource department and several clinical departments who offer various services such as psycho-education programs, 24-hour counseling hotline, and individual psychotherapy. The Command Center for COVID-19 of the hospital was established at the beginning of the COVID-19 outbreak in January 2020. The De-

partment of Psychiatry, in collaboration with the Committee for Employee Mental Health, implemented several preventive measures for the assurance of our staff's psychological well-being.

## Methods

### Dissemination of related information via emails

Three steps were taken to prepare health-care staff for the upcoming COVID-19 crisis. First, information on potential mental symptoms related to COVID-19 and resources for getting assistance was provided for all staff via emails. Symptoms of stress and exhaustion were elucidated for arousing self-awareness. Coping strategies were offered to balance life and stress. Several ways to maintain the social connection were then presented. A hotline was set up so that staff in need of support could access the clinical psychologists in charge of counseling and follow-up.

### Department-based psychological support

Second, the frontline departments (including Departments of Infection Control, Intensive Care, Emergency Medicine, and departments related to the care of COVID-19 patients) were approached and the following three strategies were implemented to alleviate the psychological impacts of COVID-19.

(1) Collection of staff's responses from the head nurses of COVID-19 wards, Emergency Department, Intensive Care Unit, Department of Administration as well as staff in the Division of Laboratory Medicine at the Infection Control Center regarding the increase in workload, manpower shortage, and pressures from extra work shifts.

(2) Providing knowledge for department directors about discernable mental and physical symptoms of COVID-19. The information included precaution measures against fatigue,

burnt-out, insomnia, depression, anxiety disorder, and post-traumatic stress disorder. Most important of all, special attention was paid to the mental health of younger staff, those with shift work, those probably or possibly exposed directly to COVID-19, and those conscripted into COVID-19 units due to manpower demands.

(3) Staff education on self-care training, including pressure management, emotional regulation skills, physician-patient communication as well as recognition and treatment of psychological problems in COVID-19 patients.

### Individualized evaluation and intervention

Third, individualized assessment and intervention were given to the staff in need. Services were extended to quarantined staff suspected of being infected, including those who have traveled abroad recently and those worked in COVID-19 wards. The Command Center of the hospital would inform the Human Resources Department of the above situations. Then the latter would notify the Committee for Employee Mental Health, which would initiate serial measures of mental support. Weekly telephone interviews with the quarantined staff, either at home or in the dormitory, were conducted to inquire about the adequacy of daily commodities and adjustment to the quarantined life. In addition, the Chinese Health Questionnaire-12 was used to assess the staff's emotional state. Finally, a hotline was provided for

emergent assistance; telephone counseling was offered for staff who manifested psychological distress and in need of psychiatric intervention.

## Results

All hospital staff (n = 2,851) received the communication of mental health via emails, and 15 frontline department directors were approached including the head nurses of COVID-19 wards and other department directors. Finally, 10 quarantined staff members referred by their departments joined an individualized assessment and psychological program (Table 1). Some positive feedbacks were obtained from the phone contacts with the department directors and the staff. Several directors reported that, by understanding the symptoms of mental exhaustion and burnt-out, they became aware of their staff's emotional states. Moreover, some staff expressed their appreciations for our daily reports reflecting the problems associated with an increase in workload, the concerns about shortage of personal protective equipment, and ambiguity regarding the COVID-19 prevention policy to the responsible departments to enable timely interventions. For the staff quarantined in the dormitory, several reflected their needs for environmental modifications and material supplies. Accordingly, we assisted in offering relevant information. As for the staff quarantined at home, most reported satisfaction with the arrangement through telephone interviews. Most were adequately supplied with commodi-

Table 1. Numbers of the healthcare staff approached during the COVID-19 pandemic.

Steps	Measures	Target	Period	Numbers
1	Mental health information provided via email	All staff in the hospital	2020.03.17	2,851
2	Investigating and approaching the department directors	Head nurses of COVID-19 wards, Emergency Department, Intensive Care Unit, staff in the Division of Laboratory Medicine of the Infection Control Center, Administration Department	2020.03.17 – 2020.04.20	15
3	Individualized assessment and intervention	Quarantined staff and those referred by the department directors	2020.03.17 – 2020.04.07	10

ties by the government and family members to enable them to fit into the quarantined pattern of life. However, some worried about being stigmatized at work because of their connection to the pandemic. Moreover, some expressed their concern about the 14-day quarantine and the increased workload of their colleagues due to their absence.

## Discussion

Our experience with the implementation of this project led to several recommendations that could be crucial for the alleviation of mental stress among healthcare workers when facing similar crisis.

First, integrating multi-departmental resources is crucial to creating a unified platform and streamlining multiple perspectives to effectively offer assistance to those in need. In this aspect, the function of a coordinator (a clinical psychologist from the Department of Psychiatry in this situation) is vital to promoting collaboration among parties involved and following up the changes in stress level among the staff. The gathering of opinions and feedbacks from the frontline staff also allows early recognition of their needs and implementation of timely intervention.

Second, the educational program related to mental health provided for the administrators is critical for the identification of staff in need of help. The information provided by the Department of Psychiatry may also help in promoting the staff's mental health during the COVID-19 pandemic. Hence, it is suggested that the administrators should pay close attention to the factors that may affect the staff's mental and physical health in all aspects, including the working hours and conditions as well as shifts and repose.

Third, for the frontline staff, training for the early recognition of COVID-19 patients' psychological problems is important for timely intervention. Teamwork in the clinical situa-

tion is effective for relieving tension. Collaborated efforts can be made among colleagues to mitigate the disorientation and pressure due to mental stress from COVID-19. Patients may manifest with uncooperative behavior and negative emotion like anxiety, depression, and fear. Through effective teamwork, the staff's competence in coping with the disease can be boosted.

Finally, the quarantined staff who expressed concerns about the erosion of self-esteem and image as well as the increased workload of their colleagues should be reassured by letting them understand that their temporary leave from the job not only could reduce the risk of others' exposure to the virus but could also contribute to the overall safety of the society. Empathy toward the quarantined staff can be fostered through the positive attitude and supportive measures implemented by the hospital. The development of emotion management skill among medical staff assisted by the the Psychiatry Department is essential for the maintenance of their mental health during the COVID-19 pandemic.

## References

1. Chong MY, Wang WC, Hsieh WC, et al: Psychological impact of severe acute respiratory syndrome on health workers in a tertiary hospital. *Br J Psychiatry* 2004;185:127-33 doi: 10.1192/bjp.185.2.127.
2. Lee SH, Juang YY, Su YJ, et al: Facing SARS: psychological impacts on SARS team nurses and psychiatric services in a Taiwan general hospital. *Gen Hosp Psychiatry* 2005;27:352-8. doi: 10.1016/j.genhosppsych.2005.04.007.
3. Bai Y, Lin CC, Lin CY, et al: Survey of stress reactions among health care workers involved with the SARS outbreak. *Psychiatr Serv* 2004;55:1055-7. doi: 10.1176/appi.ps.55.9.1055.
4. Chen CS, Wu HY, Yang P, et al: Psychological distress of nurses in Taiwan who worked during the outbreak of SARS. *Psychiatr Serv* 2005;56:76-9 doi: 10.1176/appi.ps.56.1.76.
5. Chen R, Chou KR, Huang YJ, et al: Effects of a SARS prevention programme in Taiwan on nursing staff's anxiety, depression and sleep quality: a longitudinal survey. *Int J Nurs Stud* 2006;43:215-25

- doi: 10.1016/j.ijnurstu.2005.03.006.
6. Lin CY, Peng YC, Wu YH, et al: The psychological effect of severe acute respiratory syndrome on emergency department staff. *Emerg Med J* 2007;24:12-7. doi: 10.1136/emj.2006.035089.
  7. Su TP, Lien TC, Yang CY, et al: Prevalence of psychiatric morbidity and psychological adaptation of the nurses in a structured SARS caring unit during outbreak: a prospective and periodic assessment study in Taiwan. *J Psychiatr Res* 2007;41:119-30 doi: 10.1016/j.jpsychires.2005.12.006.
  8. Brooks SK, Webster RK, Smith LE, et al: The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet* 2020;395:912-20 doi: 10.1016/S0140-6736(20)30460-8.