

Rethinking psychological crisis intervention for frontline medical staff during COVID-19

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1. Abstract

Medical staff in China experienced severe psychological stress during COVID-19. On February 9 2020, I was sent to Wuhan for maintaining the mental health of the staff. I believe the following points should be focused on when psychological crisis interventions are carried out. The first is to quickly and directly understand actual psychological needs, the second is to understand psychological processes dynamically, and the third is the intervention methods should be based on workers' internal psychological needs.

2. Keywords: COVID-19, mental health, Medical staff

COVID-19 first emerged in Wuhan at the end of 2019, then spread throughout China. Because of its rapid spread, extremely harmful effects, and pathogenic complexity, the COVID-19 epidemic was considered a public health emergency of international concern. Medical staff and members of the public in China experienced severe psychological stress, particularly in Wuhan city. On January 26 2020, the Chinese government issued guidelines for emergency psychological crisis interventions, and several types of online mental health services were gradually implemented. On February 9 2020, six mental health professionals were sent to Wuhan. I was then assigned to the second medical team from Zhejiang Province, consisting of 150 medical staff working at Tianyou Hospital affiliated with the Wuhan University of Science and Technology from January 28 2020. My main task was to maintain the mental health of the staff. The team members have now been evacuated to their own units in Zhejiang Province. On the basis of this personal experience, I believe the following points should be focused on when psychological crisis interventions are carried out with frontline medical staff.

First, it is important to quickly and directly understand the psychological stress states and actual psychological needs of frontline medical staff in the face of the epidemic, regardless of age, gender and educational background, to implement "preferences for support" [1] measures. I designed a questionnaire and distributed it to 150 medical staff using the WeChat app. Approximately two-thirds of staff reported "feeling tired" and "feeling nervous" for at least

several days based on the Patient Health Questionnaire-9 (PHQ-9) and Generalized Anxiety Scale-7 (GAD-7) scales, suggesting that uneasiness when facing dangerous situations, exposure to the suffering of patients, and physical fatigue due to heavy work coexisted. This finding was in accord with a previous report by Fagiolini [2], who provided individual psychological support for health care workers in COVID-19 units in Italy. When asked about the most desirable approach, 92.6% of workers reported a preference for engaging in both mental and physical relaxation, and only 22% felt that they required psychological counseling. Similarly, Shechter [3] reported that workers were concerned with having sufficient protective supplies, reducing their families' concerns, and having more rest without interruption [4]. Furthermore, workers were reported to have a limited amount of time and energy for accessing mental health services [5]. Therefore, quick recovery of physical strength and rapid relaxation were reported to be the most desired psychological needs, in accord with the Mental health case manual of psychological intervention during COVID-19 issued by the National Health and Health Commission on February 17 2020. This manual suggests that ensuring adequate sleep, a balanced diet, self-regulation and muscle relaxation training in spare time are important for frontline medical staff.

Second, it is important to understand psychological processes dynamically. In the face of the sudden COVID-19 outbreak and close contact with patients, many frontline medical staff reported experiencing anxiety and depression related to fear about becoming infect-

ed and losing their lives [6]. With improvement of protective measures and increased familiarity with working processes, although staff may still have anxiety and depression, the psychological processes have changed. They are worried about their team will be affected by their own physical condition, experiencing depression when exposed to patients suffering from diseases, and when encountering situations in which they were unsure what to say to a grieving relative [7]. Therefore, workers' psychological focus may shift from their personal safety to the overall situation of fighting the epidemic and their dedication to patients, potentially explaining why they continue to work in a frontline role, despite many staff suffering from physical fatigue, even dysmenorrhea for female medical staff.

Third, the selection of intervention methods should be based on workers' internal psychological needs, not only their external stress symptoms, including anxiety and depression. Regarding the choice of intervention methods, I corresponded with Professor Lin Zheng, a senior psychiatrist at The Second Affiliated Hospital of Zhejiang University, who was sent to Union Hospital affiliated with Tongji Medical College of Huazhong University of Science and Technology on February 14 2020. Professor Lin Zheng expressed that there is no ready-made method for resolving the psychological symptoms of frontline workers under the current epidemic situation. I also corresponded with Professor Wei Chen, a senior psychiatrist at Sir Run Run Shaw Hospital affiliated with the Medical College of Zhejiang University, who also highlighted the importance of rapidly addressing workers' actual needs. The experiences of intensive care unit psychologists at two frontline hospitals in Milan during the acute phase of the COVID-19 pandemic also emphasized that psychological interventions should respond to workers' needs, and interventions should aim to contain emotions and promote resilience [8]. I adopted a relaxation method using virtual reality (VR) technology to promote relaxation and decrease stress among frontline workers [9]. In a quiet and ventilated treatment room, the participant lies on a comfortable sofa, puts on eyeglasses and headphones, watches an attractive three-dimensional image, listens to slow psychological induction language, and gradually relaxes. After the VR experience, most participants reported psychological calm and physical relaxation of the whole body.

In an epidemic situation, the physical and mental health of frontline medical staff is critical for overcoming the epidemic. The primary task of psychological professionals is to understand the actual needs of frontline staff responding to stress, and to choose appropriate interventions to treat controllable factors to achieve rapid recovery of physical and mental health.

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