## The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus

In December, 2019, a novel coronavirus outbreak of pneumonia emerged in Wuhan, Hubei province, China,<sup>1</sup> and has subsequently garnered attention around the world.<sup>2</sup> In the fight against the 2019 novel coronavirus (2019-nCoV), medical workers in Wuhan have been facing enormous pressure, including a high risk of infection and inadequate protection from contamination, overwork, frustration, discrimination, isolation, patients with negative emotions, a lack of contact with their families, and exhaustion. The severe situation is causing mental health problems such as stress, anxiety, depressive symptoms, insomnia, denial, anger, and fear. These mental health problems not only affect the medical workers' attention, understanding, and decision making ability, which might hinder the fight against 2019-nCoV, but could also have a lasting effect on their overall wellbeing. Protecting the mental health of these medical workers is thus important for control of the epidemic and their own long-term health.

The local government of Wuhan has implemented policies to address these mental health problems. Medical staff infected with 2019-nCoV while at work will be identified as having work-related injuries.<sup>3</sup> As of Jan 25, 2020, 1230 medical workers have been sent from other provinces to Wuhan to care for patients who are infected and those with suspected infection, strengthen logistics support, and help reduce the pressure on health-care personnel.<sup>4</sup> Most general hospitals in Wuhan have established a shift system to allow front-line medical workers to rest and to take turns in highpressured roles. Online platforms with medical advice have been provided to share information on how to decrease the risk of transmission between the patients in medical settings, which aims to eventually reduce the pressure on medical workers.

Psychological intervention teams have been set up by the RenMin Hospital of Wuhan University and Mental Health Center of Wuhan, which comprise four groups of health-care staff. Firstly, the psychosocial response team (composed of managers and press officers in the hospitals) coordinates the management team's work and publicity tasks. Secondly, the psychological intervention technical support team (composed of senior psychological intervention experts) is responsible for formulating psychological intervention materials and rules, and providing technical guidance and supervision. Thirdly, the psychological intervention medical team, who are mainly psychiatrists, participates in clinical psychological intervention for health-care workers and patients. Lastly, the psychological assistance hotline teams (composed of volunteers who have received psychological assistance training in dealing with the 2019-nCoV epidemic) provide telephone guidance to help deal with mental health problems. Hundreds of medical workers are receiving these interventions, with good response, and their provision is expanding to more people and hospitals.

Understanding the mental health response after a public health emergency might help medical workers and communities prepare for a population's response to a disaster.<sup>5</sup> On Jan 27, 2020, the National Health Commission of China published a national guideline of psychological crisis intervention for 2019-nCoV.<sup>4</sup> This publication marks the first time that guidance to provide multifaceted psychological protection of the mental health of medical workers has been initiated in China. The experiences from this public health emergency should inform the efficiency and quality of future crisis intervention of the Chinese Government and authorities around the world.

This work is supported by the National Key R&D Program of China (2018YFC1314600). We declare no competing interests.

Lijun Kang, Yi Li, Shaohua Hu, Min Chen, Can Yang, Bing Xiang Yang, Ying Wang, Jianbo Hu, Jianbo Lai, Xiancang Ma, Jun Chen, Lili Guan, Gaohua Wang, Hong Ma, \*Zhongchun Liu zcliu6@whu.edu.cn

Department of Psychiatry, RenMin Hospital of Wuhan University, Wuhan 430060, China (LK, CY, YW, GW, ZL): Wuhan Mental Health Center, Wuhan, China (YL); Department of Psychiatry, First Affiliated Hospital, Zhejiang University School of Medicine, Hangzhou, China (SH, JH, JL); The School of Computer Science and Technology, Huazhong University of Science and Technology, Wuhan, China (MC): School of Health Sciences, Wuhan University, Wuhan, China (BXY); Department of Psychiatry, First Affiliated Hospital of Xi'an Jiaotong University, Xi'an, China (XM); Shanghai Mental Health Center, Shanghai Jiao Tong University School of Medicine, Shanghai, China (JC); and Peking University Sixth Hospital, Peking University Institute of Mental Health, NHC Key Laboratory of Mental Health (Peking University), National Clinical Research Center for Mental Disorders (Peking University Sixth Hospital), Beijing, China (LG, HM)

- Wang C, Horby PW, Hayden FG, Gao GF. A novel coronavirus outbreak of global health concern. Lancet 2020; published online Jan 24. http://dx.doi.org/10.1016/ S0140-6736(20)30185-9.
- 2 The Lancet. Emerging understandings of 2019-nCoV. Lancet 2020; published online Jan 24. http://dx.doi.org/10.1016/ S0140-6736(20)30186-0.
- 3 National Health Commission of the People's Republic of China. Occupational injury insurance supports occupational injury "protection umbrella" for prevention and rescue personnel in the fight against new coronavirus pneumonia. http://www.nhc.gov. cn/xcs/fkdt/202001/0ffbb879ac1b4466b01de 8b40a1372fc.shtml (accessed Jan 26, 2020).
- 4 National Health Commission of the People's Republic of China. The guideline of psychological crisis intervention for 2019-nCoV pneumonia. http://www.nhc.gov.cn/jkj/s3577/202001/6adc 08b966594253b2b791be5c3b9467.shtml (accessed Jan 27, 2020).
- 5 von Keudell A, Koh KA, Shah SB, et al. Mental health after the Boston marathon bombing. Lancet Psychiatry 2016; 3: 802–04.



Published **Online** February 5, 2020 https://doi.org/10.1016/ S2215-0366(20)30047-X