Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
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, and has subsequently garnered attention around the world. 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, and 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. 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. Most general hospitals in Wuhan have established a shift system to allow front-line medical workers to rest and to take turns in high-pressure 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 comprises 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. On Jan 27, 2020, the National Health Commission of China published a national guideline of psychological intervention for 2019-nCoV. 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 (UK, 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, China (JC), and Peking University Sixth Hospital, Peking University Institute of Mental Health, NHC Key Laboratory of Mental Health, National Key R&D Program of China (2018YFC1314600). We declare no competing interests.