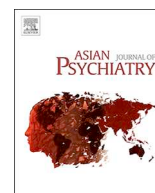




Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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.



Letter to the Editor

The role of mental health services during the COVID-19 outbreak in China



Letter to the Editor

It is well known that addressing psychological health issues in a social context is an effective strategy to help addressing healthcare problems (Kivimäki et al., 2020). Mental health services could therefore play a very important role, when a multidisciplinary medical force is facing a major or disastrous event involving a population.

The 2019 coronavirus disease (COVID-19) has caused the whole world to face major public health and safety issues, and the medical personnel have been fighting the pandemic at the frontline. Among them, many mental health professionals have been involved in the response from a very early stage.

In China several major national professional organizations (the Chinese Association for Mental Health, the Chinese Psychological Society, the Chinese Psychiatrists Association and the Chinese Society of Psychiatry) organized intensive collaborative work among different mental health professionals, and issued several guidelines and protocols for effective psychological interventions for different populations (Ma, 2020; The Clinical and Counseling Psychology Registration System of Chinese Psychological Society, 2020).

Psychiatrists and psychotherapists supported the whole health care system. By February 28th, 330 medical teams with more than 40,000 medical staff had been sent to Hubei Province to support the local health service, of whom 400–500 are psychiatrists. In Wuhan, there were 5–10 psychiatrists working at the designated hospital for the treatment of the COVID-19. The cabin hospitals with a capacity of 600–1500 mild confirmed cases were equipped 5–15 psychiatrists according to the size of the hospital. These professionals were not only responsible for the mental healthcare of the patients, but also responsible for supporting the medical staff.

Mental health staffs were involved in public health interventions based on psychoeducation on health-promoting behaviors as ways to reduce the overall stress caused by the epidemic. To contain the spread of the panic among the general public, as early as January 24th, just one day after the implementation of the strict quarantine in Wuhan, the Wuhan Mental Health Center launched the first free public crisis intervention hotline. Up to now there are 448 free psychological assistance hotlines across the country (National Health Commission of the People's Republic of China, 2020).

Self-help courses, online live broadcast and science lectures on psychological crisis were released or carried out live by experts, making psychological self-help interventions more easily available than ever before for the general public.

Multiple mental health institutions efficiently published the psychological self-aid manual for the public after the outbreak of the disease. The team of the Psychosomatics Department of Shanghai East Hospital Affiliated to Tongji University published a 60,000-word book entitled “Stay safe, stay strong: A guide for psychological self-adjustment in the pandemic period” on Feb 5th (online version) (Xudong and

Zhongmin, 2020). So far, this book has been printed in 125,000 copies and 100,000 copies have been distributed to Hubei medical staff and patients, and Shanghai residents for free.

Chinese mental health professionals have also provided the government with some specialist recommendations about policies, regulations, and measures from the perspective of individual, group and population mental health. Many suggestions have been gradually adopted, such as those addressing the issue of delivering humane, holistic care in the mobile cabin hospitals. Before the launch of this new type of hospital, based on these recommendations, psychosomatic medicine and holistic, humane care were integrated into one service in this kind of hospital. Consequently, despite initial concerns about the possibility of disorganization and confusion, the cabin hospitals were enabled to run in an overall smooth fashion.

Finally, mental health staff was able to empower patients, families, and care providers in coping with the negative impact of traumatic events in recovery stage, such as post traumatic stress disorder (PTSD). In this global outbreak of the COVID-19, some families have lost all members, some people have lost both parents, and many others lost relatives and friends. Thus many families and individuals have been directly affected by death from the disease. Therefore, mental health professionals have been provided different types of psycho-social interventions to address a range of mental health problems.

This epidemic highlighted these challenges that need to be resolved in order to be better prepared for similar scenarios in the future. Firstly the number of psychiatrists needs to be increased. In the last ten years the number of psychiatrists has increased from 24,000 to 40,000 (Chenhui et al., 2019), however, for a number of reasons patients suffering from mental disorders are generally more susceptible to infections (Hao et al., 2020a), so in this outbreak there were more psychiatric emergencies than psychiatrists and psychotherapists could handle. Secondly, even though there are lots of online psychological self-help services, many questions remain unanswered with regards to the availability and accessibility of online mental health services in low and middle-income countries (Hao et al., 2020b), especially for chronic psychiatric patients (Chuanyuan et al., 2020). Finally, while playing a positive role in the control of the epidemic spread, the quarantine measure has also resulted in some negative outcomes, especially in the field of psychological health. So for the future there is a need to research a number of areas, such as the evaluation of the positive and negative effects of the quarantine on mental health and on the limitation of the epidemic spread, the efficacy of supporting interventions, as well as legal issues when facing severe public health crises.

Author Contributions

CYK, XDZ, JZY did data collection, data analysis, data interpretation and writing the manuscript. JT, FM, FQ, HM, CS, JY, SRY, LL, LX, YJX and WTL collected the data.

<https://doi.org/10.1016/j.ajp.2020.102176>

Received 29 April 2020

Available online 19 May 2020

1876-2018/ © 2020 Elsevier B.V. All rights reserved.

Financial disclosure

There is no any funding source.

CRediT authorship contribution statement

Chuanyuan Kang: Conceptualization, Data curation, Formal analysis, Funding acquisition, Writing - review & editing. **Jun Tong:** Investigation. **Fu Meng:** Investigation. **Qiang Feng:** Investigation. **Hong Ma:** Investigation. **Chuan Shi:** Investigation. **Jing Yuan:** Investigation. **Shuran Yang:** Investigation. **Liang Liu:** Investigation. **Li Xu:** Investigation. **YingJun Xi:** Investigation. **Wentian Li:** Investigation. **Xudong Zhao:** Conceptualization, Data curation, Formal analysis, Funding acquisition, Writing - review & editing. **Jianzhong Yang:** Conceptualization, Data curation, Formal analysis, Funding acquisition, Writing - review & editing.

Declaration of Competing Interest

The authors declare no competing interests.

Acknowledgements

This work was supported by Grant 2018YFC 1314400 from National Key R&D Program of China, Grant 81660235, 81971288 from the National Natural Scientific Foundation of China, Special fund for fighting the COVID-19 outbreak sponsored by Tongji University School of Art and Media and Institute of Disaster Medicine, East Hospital, Tongji University (20TJBXKY06).

Thanks to all health workers who are fighting against the epidemic. We thank Prof Micol Ascoli for her assistance in writing the paper.

References

- Chenhui, Shi, Ning, Ma, Liyin, Wang, Lelai, Yi, Xun, Wang, Wufang, Zhang, Xiamin, Wu, Shubin, Lili, Zhang, Guan, Zhao, Miaomiao, Hong, Ma, Bin, Wang, 2019. Study of the mental health resources in China. *Chin. J. Health. Policy* 12 (2), 51–57.
- Chuanyuan, Kang., Shuran, Yang., Jing, Yuan., Li, Xu, Xudong, Zhao, Jianzhong, Yang, 2020. Patients with chronic illness urgently need integrated physical and psychological care during the COVID-19 outbreak. *Asian J. Psychiatr.* 7 (51), 102081. <https://doi.org/10.1016/j.ajp.2020.102081>.
- Hao, Yao., Jianhua, Chen., Yifeng, Xu., 2020a. *Lancet Psychiatry* 7 (4), e21. [https://doi.org/10.1016/S2215-0366\(20\)30090-0](https://doi.org/10.1016/S2215-0366(20)30090-0).
- Hao, Yao., Jianhua, Chen., Yifeng, Xu., 2020b. Rethinking online mental health services in China during the COVID-19 epidemic. *Asian J. Psychiatry* 50, 102015.
- Kivimäki, M., Batty, G.D., Pentti, J., Shipley, M.J., Sipilä, P.N., Nyberg, S.T., Suominen, S.B., Oksanen, T., Stenholm, S., Virtanen, M., Marmot, M.G., Singh-Manoux, A., Brunner, E.J., Lindbohm, J.V., Ferrie, J.E., Vahtera, J., 2020. Association between socioeconomic status and the development of mental and physical health conditions in adulthood: a multi-cohort study. *Lancet Public Health* 5 (3), e140–e149. [https://doi.org/10.1016/S2468-2667\(19\)30248-8](https://doi.org/10.1016/S2468-2667(19)30248-8).
- Ma, X., 2020. COVID-19 Related Psychological Self-help Guide for the Public. People's Medical Publishing House, Beijing.
- National Health Commission of the People's Republic of China, 2020. Guideline for Psychological Crisis Intervention During 2019-nCoV. <http://www.nhc.gov.cn/jkj/s3577/202001/6adc08b966594253b2b791be5c3b9467.shtml>.
- The Clinical and Counselling Psychology Registration System of Chinese Psychological Society, 2020. Working Guide of the COVID-19 Psychological Assistance Hotline (First Draft, in Chinese). (Accessed Jan 31, 2020). https://www.sohu.com/a/369720727_692020.
- Xudong, Zhao., Zhongmin, Liu., 2020. Stay Safe, Stay Strong: a Guide for Psychological Self-adjustment in the Pandemic Period. Shanghai, Shanghai Science and Technology Press.

Chuanyuan Kang¹
Department of Psychosomatic Medicine, Shanghai East Hospital, Tongji University School of Medicine, Shanghai, 200120, China

Jun Tong^{a,b,1}
^a Affiliated Wuhan Mental Health Center, Tongji Medical College of Huazhong University of Science & Technology, Wuhan, 430012, China
^b City University of Macao, Macao, China

Fu Meng¹
Department of Psychosomatic Medicine, Shanghai East Hospital, Tongji University School of Medicine, Shanghai, 200120, China

Qiang Feng
Department of Psychosomatic Medicine, Shanghai East Hospital, Tongji University School of Medicine, Shanghai, 200120, China

Hong Ma^{a,b}
^a Peking University Sixth Hospital, Peking University Institute of Mental Health, Beijing, 100191, China
^b NHC Key Laboratory of Mental Health, Peking University, Beijing, 100191, China

Chuan Shi^{a,b}
^a Peking University Sixth Hospital, Peking University Institute of Mental Health, Beijing 100191, China
^b NHC Key Laboratory of Mental Health, Peking University, Beijing 100191, China

Jing Yuan
Department of Psychiatry, The Second Affiliated Hospital of Kunming Medical University, Kunming, Yunnan 650101, China

Shuran Yang
Department of Psychosomatic Medicine, Shanghai East Hospital, Tongji University School of Medicine, Shanghai 200120, China

Liang Liu
Department of Clinical Psychology, Pudong New Area Mental Health Center, Pudong New Area, Shanghai, 200124, China

Li Xu
Department of Psychiatry, The Second Affiliated Hospital of Kunming Medical University, Kunming, Yunnan, 650101, China

YingJun Xi
The National Clinical Research Center for Mental Disorders, Beijing Key Laboratory of Mental Disorders & Advanced Innovation Center for Human Brain Protection, Beijing, China
Beijing Anding Hospital, Capital Medical University, Beijing, China

Wentian Li
Clinical Psychology Department, Wuhan Mental Health Center, Gongnongbing Road 125, Wuhan, Hubei, 430012, China

Xudong Zhao¹
Department of Psychosomatic Medicine, Shanghai East Hospital, Tongji University School of Medicine, Shanghai, 200120, China

Jianzhong Yang^{*1}
Department of Psychiatry, The Second Affiliated Hospital of Kunming Medical University, Kunming, Yunnan, 650101, China
E-mail address: jzhyang2004@163.com.

* Corresponding author at: 374 DianMian Road, Department of Psychiatry, The Second Affiliated Hospital of Kunming Medical University, Kunming Yunnan 650101, China

¹ These authors contributed equally to this work.