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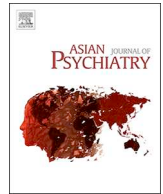
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Letter to the Editor

A mental health workforce crisis in China: A pre-existing treatment gap coping with the COVID-19 pandemic challenges



On 17th Apr 2020, the Chinese National Bureau of Statistics released news that China's economy shrank 6.8 % in the first quarter of 2020 compared to the previous year. This signals that the road toward recovery will likely be long. Risks to mental health come not only from the COVID-19 pandemic (Tandon, 2020; Rajkumar, 2020), but also the consequences of the economic downturn. Unemployment and lost income can be expected among marginalized and disadvantaged such as the migrant workers (Liem et al., 2020a). Rural citizens are another significant group of vulnerable people. They have already lost income for months, in addition to losses to their initial agricultural investment, since roads were blocked causing no access to buy feed for their livestock. These groups of people are likely to encounter high level of psychological burden, as they may have less savings, let alone protection against financial catastrophe. Loss of employment and financial stressors are well-recognized risk factors for suicide (Nordt, Warnke & Seifritz et al., 2015). As the vicious circle of psychological distress and income inequality continues, online counseling services for people affected by the COVID-19 crisis will be needed (Dan, 2020), but they may be far from sufficient (Liem et al., 2020b). On top of the large pre-existing treatment gap, China might face a mental health workforce crisis.

Since 2010, the Chinese government began to prioritize mental health infrastructure development due to a high burden of mental disorders and gap in available services. A recent prevalence estimate of mental disorders in China was 16.6 % (Huang et al., 2019). Several steps were taken. Firstly, the annual budget for all psychiatric hospitals rose from 301.324 million yuan (44.58 million USD) in 2009 to 1271.502 million yuan (184.276 million USD) in 2018 with an annual growth rate of 20 %. Secondly, China invested a large amount of funding to improve the basic construction and facilities of psychiatric hospitals. For example, since 2009, the central government has directly invested 10.59 billion yuan (USD 1.57 billion), and the civil affairs department invested 2.8 billion yuan (USD 0.41 billion) aiming to build new or expand existing hospitals to achieve full coverage of mental health services in each prefecture-level city. Consequently, from 2009 to 2018, the total number of psychiatric beds in China increased rapidly from 191,225–506,637, with an annual increase of 11.75 % and 35.3 beds per 100,000 people, which is above the world average (WHO, 2018). The number of psychiatrists increased from 18,842 in 2009 to 36,610 in 2018, at an annual rate of 7.63 %; however, the number of hospital beds per psychiatrist only increased from 10.1 in 2009 to 13.8 in 2018. The workforce gap continues to grow, and investment into the mental health workforce has yet to catch up. Below are some of the major reasons.

- 1 Currently, there are about 2, 200 new psychiatrists each year. However, less than half of this group receive formal psychiatric training; they receive only short-term psychiatric training before

“transitioning” to psychiatric service work. There are 53,825 primary health care institutions in China, but few have access to psychiatrists. Other types of professionals such as psychologists, social workers, and occupational therapists have not increased. China has roughly 5000 clinical psychologists, compared to the United States, which has roughly 200,000 psychologists, for a population of one-quarter in size. Also, only a small number of economically well-developed areas in China have social workers serving mental health patients. Underlying this lack of mental health resources in primary care might be the predominance of a biomedical model of health.

- 2 The public funding mechanism is hospital-based. Currently, the allocation of funding is based on the number of beds and the number of psychiatrists. Under the double stimulus of fee for services payment and inadequate budget for hospitals, which only accounted for 23 % of the total hospital revenue, most psychiatric hospitals have strong incentives to provide inpatient services for profit. In fact, in 2018, 97 % of psychiatric services were provided in hospitals.
- 3 Effective monitoring and evaluation of the performance of mental health services have not been established. Currently, the most important performance indicators are the overall cure rate and improvement rate of psychiatric inpatient care. These indicators ignore a large number of community patients who were discharged or those who are not yet screened and diagnosed. Internationally, a range of comprehensive indicators are used to measure service performance, for example, suicide-related indicators during and after hospitalization, as well as mortality rates of patients with schizophrenia and bipolar disorder (OECD, 2017).

China has made progress mostly in the medical care of severe mental disorders in hospitals. Common mental health conditions, including depression and anxiety, especially remain unaddressed. In China, like in most developing countries in the world, less than 20 % of people with mental disorders sought advice or treatments (GBD, 2016). Low perceived need for treatment, lack of available treatments, and stigma are among barriers to care (Shi et al., 2020). At the same time, few health professionals like nurses, social workers, and even doctors specialized in psychiatry, would like to specialize in mental health, partly due to lower status relative to other specialties (Chen et al., 2018) and fear of medical violence (Xiong et al., 2016; Hall et al., 2018). To reduce the burden of population's mental health caused by COVID-19 and other disasters and emergencies, a large expansion of well-trained mental health providers is urgently needed.

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Declaration of Competing Interest

None.

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References

- Chen, S., Conwell, Y., Cerulli, C., et al., 2018. Primary care physicians' perceived barriers on the management of depression in China primary care settings. *Asian J. Psychiatr.* 36, 54–59.
- Dan, Z., 2020. China adopts non-contact free consultation to help the public cope with the psychological pressure caused by new coronavirus pneumonia. *Asian J. Psychiatry* 52, 202.
- GBD 2015 Disease and Injury Incidence and Prevalence Collaborators, 2016. Global, regional, and national incidence, prevalence, and years lived with disability for 310 diseases and injuries, 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet* 388, 1545–1602.
- Hall, B.J., Xiong, P., Chang, K., Yin, M., Sui, X.R., 2018. Prevalence of medical workplace violence and the shortage of secondary and tertiary interventions among healthcare workers in China. *J. Epidemiol. Community Health* 72, 516–518.
- Huang, Y., Wang, Y., Wang, H., et al., 2019. Prevalence of mental disorders in China: a cross-sectional epidemiological study. *Lancet Psychiatry* 6, 211–224.
- Liem, A., Wang, C., Wariyanti, Y., Laktin, C., Hall, B.J., 2020a. The neglected health of international migrant workers in the COVID-19 epidemic. *Lancet Psychiatry* 7 (4). [https://doi.org/10.1016/S2215-0366\(20\)30076-6](https://doi.org/10.1016/S2215-0366(20)30076-6). e20.
- Liem, A., Sit, H.F., Arjadi, R., Patel, A.R., Elhai, J.D., Hall, B.J., 2020b. Ethical standards for telemental health must be maintained during the COVID-19 pandemic. *Asian J. Psychiatry*. <https://doi.org/10.1016/j.ajp.2020.102218>.
- OECD, 2017. *Health at a Glance 2015: OECD Indicators*. OECD Publishing, Paris.
- Rajkumar, R.P., 2020. COVID-19 and mental health: a review of the existing literature. *Asian J. Psychiatry* 52, 1–5.
- Shi, W., Shen, R.Z., Wang, S.Y., Hall, B.J., 2020. Barriers to professional mental health help-seeking among Chinese adults: a systematic review. *Front. Psychiatry* 11, 442. <https://doi.org/10.3389/fpsy.2020.00442>.
- Tandon, R., 2020. The COVID-19 pandemic, personal reflections on editorial responsibility. *Asian J. Psychiatry* 50, 102100.
- WHO, 2018. *Mental Health ATLAS 2017*. World Health Organization, Geneva.
- Xiong, P., Hu, S.X., Hall, B.J., 2016. Violence against nurses in China undermines task shifting implementation. *Lancet Psychiatry* 3, 501.

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