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Letter to the Editor

## Implementation of quarantine in China during the outbreak of COVID-19



Letters to the Editor,

Quarantine is sometimes used to contain or minimize infectious disease outbreaks, particularly in the developing world (Giubilini A, et al., 2018). It can be very effective in protecting or restoring public health; however, it has limited utility for highly transmissible diseases (Wendy E Parmet and Michael S Sinha, 2020).

With the outbreak of the 2019 coronavirus disease (COVID-19), various quarantine policies have been implemented in China and most other countries in order to reduce transmission and control the epidemic.

Hubei province in China initially imposed the strictest quarantine measures, especially in the provincial capital Wuhan where traffic control was first applied on Jan 23 to restrict people from freely leaving and entering the city. Subsequently, 13 cities of Hubei followed the same action by Jan 27.

Provinces outside Hubei issued strong recommendations to minimize personnel movements after Jan 22-23. People who had traveled from or via Hubei were asked to isolate themselves in a quarantine facility or at home for 14 days after arriving at their destination. As the epidemic continued to ravage the country, the 14-day quarantine reduced potential disease transmission (National Health Commission of the People's Republic of China, 2020). Under the strict enforcement of these measures as well as other efforts, China has made substantial progress since the end of February in controlling the outbreak.

While playing a positive role in prevention and control of the epidemic, the quarantine measure has also had some unexpected consequences, especially in the psychological field. People have suffered from emotional disturbance, anxiety, anger, confusion, depression, insomnia, somatic symptoms such as palpitations, difficulty breathing, and stigma as summarized by Brooks et al (2020) due to sudden separation from loved ones, shortage of living supplies, the loss of freedom, or uncertainty over disease status. Other patients with chronic diseases have been confronted with difficulties in routine medical treatments due to inadequate supply of transportation, medicines and shortage of equipment and human resources in hospitals. Another issue relating to quarantine is legality. Although in the Infectious Disease Control Act (IDCA) in China (The national People's Congress of the People Republic of China, 2020), it is said that quarantine could be used as a preventive measure for confirmed and suspected patient, and pathogen carriers, in this epidemic, quarantine has been imposed more widely than the range of Infectious Disease Control Act.

In rapid response to these psychological influences, psychiatrists and psychotherapists from other provinces were sent to Hubei to provide mental health services for patients and medical staff, including those in the newly-built temporary hospitals. By February 28, 330 medical teams of more than 40,000 medical staff had been sent to Hubei Province to support the local health service, of whom 400~500 were psychiatrists. The psychiatrists and psychotherapists were not

only responsible for the mental state of the patients, but also responsible for supporting the medical staff. Diagnoses of mental disorder, medications, individual and group therapies through smart phone were made. In addition to these psychiatrists and psychotherapists, non-medical support including psychological counselors and social workers were working mainly for the public outside the hospitals. In addition, in this epidemic, internet resources were maximally used in this combat against the epidemic. Psychological assistance hot lines, online self-help intervention courses, including cognitive behavior therapy (CBT), progressive muscle relaxation training and mindfulness meditation, along with live broadcast science lectures were provided. These measures made psychological social interventions more accessible to the general public than ever before.

Chinese mental health professionals also provided government with specific expert advice about policies, regulations, and measures in rescue work from aspects of the mental health and humanity. In Chinese joint prevention and control mechanism, the psychological reports in the pandemic from the whole nation would be regularly sent to national health administration. In addition, not only the advice for psycho-social intervention for the medical staff and patients in general hospitals, psychiatric hospitals, temporary hospitals, but also advice regarding psychological support for survivors and relatives of the dead was given to the central government. Many suggestions have been gradually adopted, such as humanity management in the newly-built temporary hospital. Before the launch of this new type of hospital, psychosomatic medicine and humanitarian care were integrated into its services. The government also organized trained volunteers to assist affected people who had difficulties in daily life.

In general, quarantine in China has proven effective in epidemic prevention and control, and an appropriate response to its psychological impact had been made. When implementing quarantine as means of containing or preventing infectious disease, it is important to address when, why and under what conditions can the government fulfill its duty to make the burden of quarantine bearable for those affected (Wendy E Parmet and Michael S Sinha, 2020). The questions also arise as to how is the decision made regarding the range of quarantine, based on what kind of evidence. Finally based on the different cultures, social situation and, coping strategies in different countries, travel bans and mandatory quarantine should be reviewed in the light of public health law. Therefore, it is time for us to assess the issues related to quarantine, such as effect evaluation, related supporting measures, the balance of social operation and its law and legality.

# Author contributorship

CYK, XDZ, JZY contributed to the conception of the manuscript, and wrote the manuscript. FM, QF, JY, LL, LX, SRY, YJW collected the materials and data.

### **Declaration of Competing Interest**

The authors declare no competing interests.

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## Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.psychres.2020.113038.

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