



## Perspective

# Tropical Public Health

journal homepage: <http://journals.hainmc.edu.cn/tph/home>

doi:

## Role of community participation in the prevention and control of coronavirus disease 2019 (COVID-19)

Jianxiong Wu, Yanhong Gong, Xiaoxv Yin ✉

*Department of Social Medicine and Health Management, School of Public Health, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, Hubei, China*

### 1. Introduction

Community participation refers to the participation of local community organizations and residents in various interventions, health promotion programs, and activities to solve public health issues in the community[1]. The active role of community participation in different health promotion programs and public health events has been widely demonstrated[2,3]. During the outbreak of coronavirus disease 2019 (COVID-19) in China, the community has become the frontline for the prevention and control of the virus; various community organizations turned into the most important and direct implementers of all kinds of preventive and control measures. During the prevention and control of COVID-19, community participation also implied the significance of multidisciplinary collaboration; the full realization of which required the joint engagement of neighborhood/village committees (basic democratic autonomous organizations), primary hospitals, community volunteers, and other parties in the battle against the epidemic[4]. This study aimed to review and analyze the role of community participation in the prevention and control of COVID-19 in China, so as to provide references for its implementation in other countries.

### 2. Community participation in closed management

In order to contain the spread of COVID-19, the temporary shutdown management and resident self-isolation have been implemented in various communities (villages) across China. This was achieved by establishing sentry posts, which were attended to by community workers and volunteers, at the entrances and exits of all communities (villages) to investigate people entering and leaving the community. The closure of management was particularly strict in Wuhan where the epidemic was extremely severe. In general, residents in Wuhan were neither allowed to enter nor leave their communities under common circumstances. In addition, supermarkets and shops were closed to individuals, while the procurement of daily necessities and food was performed collectively by the community rather than an

individual. To realize this, community workers first collected the daily needs of residents *via* WeChat groups or telephone inquiries. Once necessities and food were collectively purchased, they were then distributed to the corresponding community. Alternatively, in areas outside Hubei, the number and frequency of people entering and leaving the community (village) per household were strictly limited. Furthermore, residents were required to show either their passports or IDs and underwent body temperature measurement upon entering or leaving the community.

### 3. Community participation in suspected case investigation and management

Immediately after the outbreak of COVID-19, different areas in China rapidly established community prevention and control networks by strengthening the comprehensive health monitoring of community residents. In addition, detailed investigations of people who visited the Hubei Province, especially Wuhan, and their close contacts were organized, and any identified suspected cases were registered and followed-up at the community (village) level. During the investigation, community cadres closely collaborated with primary medical staff and police departments, and adopted information technology, such as big data monitoring, to enhance the precision and accuracy of the tracking and managing close contacts.

Furthermore, each community reserved some hotels, schools, and primary hospitals as community isolation locations, which were used to conduct medical observations of suspected cases and close

✉ To whom correspondence may be addressed. E-mail: [yxx@hust.edu.cn](mailto:yxx@hust.edu.cn)

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

**For reprints contact:** [reprints@medknow.com](mailto:reprints@medknow.com)

©2020 *Tropical Public Health* Produced by Wolters Kluwer- Medknow. All rights reserved.

**How to cite this article:** Wu JX, Gong YH, Yin XX. Role of community participation in the prevention and control of coronavirus disease 2019 (COVID-19). *Trop Public Health* 2020; 1(1): 1-2.

**Article history:** Received 23 March 2020

Revision 27 March 2020

Accepted 30 March 2020

Available online 31 March 2020

contacts, so that any changes in their condition could be reported and confirmed cases could be transferred immediately. According to the Report of the WHO-China Joint Mission on COVID-19, 30 provinces in China, except Hubei, have completed the registration of over 5 million people from Wuhan[5]. The completion of this substantial work would have been impossible without community participation.

#### 4. Community participation in public risk communication

Prompt public risk communication is essential upon the occurrence of a public health emergency. This is even more important in the information age, since the transmission of fake information can cause public panic and affect social stability. Community participation can facilitate the establishment of connections and communication among residents [6]. This is possible because community organizations closely communicate with residents on a daily basis, and community workers are predominantly composed of residents, making it easier for them to gain the trust of the community. During the COVID-19 epidemic, communities in China actively utilized these advantages and carried out targeted health education that helped residents understand the necessary prevention and control measures against COVID-19, such as frequently washing hands, wearing masks, and avoiding large gathering hence improving the self-protection awareness of residents. In addition to health education, communities also actively engaged in guiding the public's opinion on the emergency prevention and control of COVID-19, thereby making sure accurate information is conveyed to residents.

In conclusion, community participation plays a vital role in the prevention and control of COVID-19 in China. However, the shortcomings of the existing community participation activities should be noted. First, there are insufficient community workers compared to the large population in each community. Especially in Wuhan, many community workers are overloaded due to the extreme shortage of available workers. Second, community participation in disease prevention and control often involves multidisciplinary collaboration. However, occasional coordination and communication failures can lead to duplicated work and disorganized management that can raise the dissatisfaction of residents. Therefore, community organizations should review these problems and introduce changes in future work to establish a more efficient and stable community participation mechanism.

#### Conflict of interest statement

The authors declare that there is no conflict of interest.

#### Funding

The study was supported by “the Fundamental Research Funds for the Central Universities(2020kfyXGYJ073)”

#### References

- [1] Armstrong-Mensah E A, Ndiaye S M. Global Health Security Agenda Implementation: A Case for Community Engagement. *Health Secur* 2018;**16**(4):217-223.
- [2] Dong W, Fung K, Chan K C. Community mobilization and empowerment for combating a pandemic. *J Epidemiol Commun Health* 2010;**64**(2):182-183.
- [3] Atkinson JA, Vallely A, Fitzgerald L, et al. The architecture and effect of participation: A systematic review of community participation for communicable disease control and elimination. Implications for malaria elimination. *Malar J* 2011;**10**:225.
- [4] FU H, Li Y, Chen L, et al. Application of community participation principles in community health promotion projects. *Chin Public Health* 2002(10):104-105.
- [5] World Health Organization. Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19). 2020.
- [6] Kolopack PA, Parsons JA, Lavery JV. What makes community engagement effective: Lessons from the Eliminate Dengue Program in Queensland Australia. *PLoS Negl Trop Dis* 2015;**9**(4): e3713.