AJPH COVID-19

Supporting Social Distancing for COVID-19 Mitigation Through Community-Based Volunteer Networks

See also Morabia, p. 1111, and the AJPH COVID-19 section, pp. 1123–1172.

Recent experiences during a variety of disease outbreaks, ranging from Ebola to influenza, have underscored the potential for epidemics to have an impact on daily life, even for those who are not themselves infected.^{1,2} In severe situations, epidemics or pandemics can even affect overall community functioning. For example, a rapidly expanding pandemic can result in shuttered schools, cancelled events, food insecurity, and social distrust in communities.

Some of the effects of emerging epidemics are particularly pronounced in global efforts to control the spread of SARS-CoV-2. Officials in many countries have closed businesses and schools, implemented widespread cordon sanitaires, and cancelled flights and trains. The outbreak has overburdened health systems, making it challenging for people to access care for COVID-19 and for other conditions.³ Despite the implementation of intensive control efforts initially in China, where the pandemic first began, widespread transmission of COVID-19 has been established in almost all countries as of April 8, 2020, indicating that most countries have faced or will soon face questions about whether and

how to implement socialdistancing measures.

As transmission of COVID-19 continues to disrupt daily life, communities could consider using volunteer networks to support community functioning. We explore examples of how volunteers have played a role in minimizing the disruption of epidemic response efforts. We then highlight key roles and responsibilities that volunteers may be able to fill during epidemics or pandemics. Finally, we outline important considerations for the ethical use and safety of volunteers.

PAST EXAMPLES OF VOLUNTEERISM

During the 1918 influenza pandemic, volunteers in localand community-level organizations were instrumental in treating the sick and maintaining community functioning.⁴ Although much of the professional medical workforce had been dispatched overseas in World War I, American Red Cross volunteers are widely credited for rapidly mobilizing their volunteer force to effect substantial improvements in patient treatment at the community level.⁴ In addition to treating patients, American Red Cross volunteers also distributed supplies, created gauze masks, and led public awareness campaigns.⁴

The volunteer pool need not be limited to people who remain well throughout the epidemic. People who have recovered from the disease can also engage in volunteer activities after recovery. During the 2014 West Africa Ebola outbreak, informal networks of Ebola virus disease survivors formed sporadically and spontaneously in affected communities.5 Recovered individuals found that they could play a special role in the recovery of their community by volunteering in Ebola treatment centers because they had a reduced risk of reinfection.⁵ These

survivor volunteers were key contributors at treatment centers, particularly as caregivers for children who were sick or whose parents had become sick. Volunteers also carried out safe burials, provided education to community members, and performed contact tracing.

During the 2014 West Africa Ebola outbreak, many response organizations recognized the importance of using this population to interrupt transmission and supplement the overburdened health care systems. Teams from the United Nations trained survivors to work with children exposed to contacts who had contracted Ebola.5 Following these successes, the United Nations Children's Fund has employed Ebola virus disease survivors to care for sick or orphaned children at treatment centers during the ongoing outbreak in the Democratic Republic of the Congo.⁶ Although it is not yet known whether recovery from COVID-19 confers immunity, all of these efforts underscore the willingness of volunteers to support their communities during epidemics, despite personal loss, continued medical challenges, or lingering uncertainties.

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VOLUNTEERS' ROLE IN COMMUNITY FUNCTIONING

Nonpharmaceutical interventions, such as social distancing, school and work closures, and mass gathering cancellations, are the primary means of decreasing virus transmission among the community in the absence of vaccines and effective treatments.7 Still, people must obtain critical goods and services such as food and medical supplies, which may mean visiting stores or pharmacies, where exposure is possible. Accessing those resources may be particularly onerous in communities that are already chronically underserved.

By allowing susceptible community members to adhere to social distancing while still accessing essential goods and services, volunteers can simultaneously decrease the risk of transmission among the susceptible and facilitate community functioning. Connecting households observing social distancing while still meeting critical needs is a key challenge to supporting the public health response.

Volunteers could contribute by transporting and distributing supplies to homes—for example, routine medicines, supplies, and groceries. They could also fulfill logistical roles such as transporting clinical specimens or helping health care workers and other critical personnel drive to work.

Home-based activities could also indirectly help alleviate the burden on health care facilities. If volunteers are able to conduct well-checks and provide overthe-counter medicines (e.g., antipyretics, decongestants), then fewer people may need to visit a health care facility to get basic care. Instead, people suffering from milder forms of illness can self-treat at home, thereby decreasing the potential for disease transmission among community members and allowing health care facilities to focus treatment on those with severe illness.

Vulnerable populations, such as the elderly and disabled, can experience compounded consequences and increased barriers to staying well during times of crisis. "Door-knock" wellness checks have been employed in past disaster responses to check on vulnerable community members who may need assistance in obtaining supplies or medical care. Such a system could be employed in a pandemic to better serve vulnerable populations. Wellness checks would also be useful for providing up-to-date information to members of the public as the outbreak progresses.

CONSIDERATIONS FOR VOLUNTEER SAFETY

There are many important ethical, logistical, and healthrelated considerations when incorporating community volunteers in response efforts. Volunteers would likely come from diverse backgrounds and have varying levels of expertise, so they would probably need substantial training and support resources. Developing sufficient training infrastructures would be crucial.

Ensuring that volunteers are informed of the potential disease-related risks is important for their ethical participation. However, understanding and communicating these risks can be challenging when information about pathogen or disease characteristics is still emerging and evolving. Similarly, it is important for public health responders and volunteers to carefully consider how to minimize the risk of volunteers asymptomatically transmitting or contracting the disease, such as through providing personal protective equipment to volunteers who perform community-facing roles.

Much is unknown about the disease dynamics of COVID-19, including whether or how frequently asymptomatic, mildly ill, or newly recovered people can transmit the disease to others. It is also unknown whether people recovered from COVID-19 have some level of short-term immunity to the virus. However, if it is established that recovery from COVID-19 confers some level of protective immunity, that could be helpful for response efforts. The answers to those questions, as they become available, will influence the practices of any volunteer programs, and proactive planning for establishing these networks would be necessary in the event that they need to be implemented for this epidemic.

CONCLUSIONS

Severe epidemics can affect day-to-day life and the overall functioning of communities. Examples from recent outbreaks have demonstrated that community volunteers can be helpful in enabling social distancing and minimizing disease transmission. As the current COVID-19 epidemic develops, it may be useful for emergency planners and nongovernmental organizations to consider whether and how volunteers could support the functioning of their communities. AJPH

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CONTRIBUTORS

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

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