

Communicating Effectively With People Experiencing Homelessness to Prevent Infectious Diseases

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Background. People experiencing homelessness (PEH) are disproportionately affected by many infectious diseases, including coronavirus disease 2019 (COVID-19). However, communication efforts during public health emergencies like the COVID-19 pandemic often do not consider the unique needs of PEH. We examined how PEH seek and receive health information and how traditional health communication methods resonate with them.

Methods. We conducted in-person focus groups with PEH in 4 jurisdictions (Cincinnati, Ohio; Denver, Colorado; Sacramento, California; and the Bronx, New York) during July 2021.

Results. Findings from 15 focus groups with PEH (n = 53) revealed the need for trusted messengers and consistent messaging across local organizations, as PEH seek to verify information they receive from multiple sources. PEH overwhelmingly preferred to receive health information through face-to-face conversations, especially with healthcare providers with whom they had an established relationship, but they also cited news media, the internet, and social media as their main sources for obtaining health information. PEH reported that effective communication products pair a recommended action with instructions and resources about how to take that action within their community.

Conclusions. These findings support healthcare providers collaborating with public health agencies to ensure that infectious disease prevention messages for PEH are provided by trusted messengers, multimodal, paired with resources, and consistent.

Keywords. homelessness; COVID-19; health communication; infectious diseases; trusted messengers.

In a public health emergency, or even during expected increases in infectious diseases, such as seasonal influenza, communicating about preventive actions that can reduce the likelihood of illness is an important component of infectious disease control [1]. Effective communication is even more critical during rapidly evolving situations, such as the coronavirus disease 2019 (COVID-19) pandemic, because guidance can change quickly as understanding of the disease advances.

People experiencing homelessness (PEH) are disproportionately affected by infectious diseases, such as invasive streptococcal infections, viral hepatitis, tuberculosis, COVID-19, and others [2–5], and they similarly face an increased risk during public health emergencies. Furthermore, compared with the general public, PEH may face challenges accessing trustworthy information quickly and on a predictable, routine basis because of longstanding mistrust of the medical system, lack of consistent access to internet and other media outlets, and the potential for low health literacy, compounded by visual impairment [6–8]. As a result, PEH have unique risks and needs during

infectious disease public health emergencies, and communication strategies to convey messages to PEH are needed [9].

Communication efforts during public health emergencies often do not take the unique needs of PEH into account. We conducted focus groups to identify how PEH seek and receive health information, focusing on COVID-19 but also including other infectious disease topics, and to assess how traditional health communication methods resonate with them.

METHODS

This project was a collaboration between the Centers for Disease Control and Prevention (CDC), Oak Ridge Associated Universities, and the National Coalition for the Homeless. The team selected homeless service provider organizations in 4 jurisdiction sites (Cincinnati, Ohio; Denver, Colorado; Sacramento, California; and the Bronx, New York) to participate in the project. Jurisdictions were chosen based on diversity of geographic location and client population demographics.

Moderators conducted in-person focus groups with PEH during July 2021 that lasted approximately 2 hours each. We chose to conduct focus groups instead of individual interviews for 2 reasons. First, in an individual interview, the interviewer and notetaker would outnumber the participant, and possibly communicate a negative power dynamic. We sought to create

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a more comfortable environment for participants by ensuring they and their peers were in the majority. Second, the focus groups included time for cocreation of communication materials, which can benefit from the inclusion of the ideas and perspectives of multiple participants. Because of COVID-19 community transmission levels in the project communities, moderators followed CDC guidance, local or state ordinances, and facility policies to protect staff and participants from exposure to COVID-19.

The 4 site organizations collaborated with Oak Ridge Associated Universities staff to arrange focus group logistics and recruit participants within their cities. Sampling was active and purposive/nonrandom. Site staff proactively assessed their clients to identify individuals who were comfortable conversing in English, able to volunteer and participate in a focus group discussion, and able to provide informed consent. Each site recruited 12–16 adults (≥ 18 years) who represented an array of ages, sexes/genders, racial/ethnic identities, family composition, and experiences with homelessness (ie, type and duration), using a provided questionnaire and written script. The questionnaire and script were standard across all 4 sites. Based on recommendations from the National Coalition for the Homeless, participants who reported ≥ 1 night of homelessness since March 2020 were eligible for inclusion. Participants provided verbal consent to participate in the focus groups and to have the discussions recorded. Participants were given a \$100 gift card as a token of appreciation.

A moderator guide was developed based on Integrated Knowledge Translation and cocreation principles [10]. The guide contained 35 questions that were designed to elicit (1) how PEH prefer to receive health information, (2) what factors influence trust for sources of health information related to infectious diseases; and (3) what types of messages, terminology, and information PEH perceive as useful. We assessed specific messaging related to COVID-19 prevention measures including handwashing, social distancing, mask wearing, and COVID-19 vaccination. This activity was reviewed by CDC and was conducted consistent with applicable federal law and CDC policy (see, for example, 45 CFR part 46, 21 CFR part 56; 42 USC §241(d); 5 USC §552a; 44 USC §3501 et seq).

All focus groups were audio recorded, and a verbatim transcript of each session was created. Data analysis was conducted by 2 analysts who first examined data through repeated readings of the transcripts and listening to audio recordings. Next, they coded all transcript data using NVivo software (QSR International; 2020) and using thematic analysis methods to organize participants' statements into useful codes/categories. Deductive codes were initially derived from the discussion guide questions and evolved, as necessary, to capture inductive, participant-led themes as identified by the analysts.

A subset of 2 transcripts (13% of all transcripts) were coded by each of the 2 analysts, after which interrater reliability was

calculated using Cohen κ values (comparing analyst 1 with analyst 2) [11]. An initial κ value of 0.64 was obtained, at which point the analysts met and discussed the codes that were found to have the least agreement (ie, a negative or zero value). While the total number of transcripts double-coded was not large, the total amount of content double-coded was substantial, as each transcript was lengthy—averaging >40 pages. On initial manual review of discrepancies identified in the first interrater reliability calculation, discrepancies were rarely substantive but rather were almost exclusively coding style differences (eg, one coder selected complete sentences while the other selected phrases/incomplete sentences). Correcting for style differences alone brought the κ value to an acceptable level. After reaching consensus on updated code definitions, the analysts recoded their 2 transcripts, and Cohen κ was determined again with resulting values of 0.75.

RESULTS

We conducted 15 focus groups with 53 PEH. Demographics are summarized in Table 1. Participants were primarily male, black or African American, unmarried, living in a shelter or facility, and did not have children. Participants were evenly distributed across age groups, except for the age group 40–49 years, which had comparatively fewer participants. On average, participants reported 213 nights of homelessness in the past year; participants' own definition of homelessness could vary (eg, some participants who live in a shelter consider only staying on the streets as homelessness), so this result should be interpreted with caution.

Preferred Channels for Communication

Face-to-Face Conversations

Although participants cited news media, word of mouth, the internet, and social media as their main sources for obtaining day-to-day and health information, they overwhelmingly preferred to receive health information through face-to-face interactions. Participants stated that the information received through face-to-face interactions is clearer, personalized, and confidential, and that the format creates a space to ask questions. One participant from Sacramento explained, “I understand you if we're doing stuff face-to-face. I'm able to ask you all the questions, you're going to answer my questions and my questions only, because... I ain't got to worry about nobody else on social media getting all up in the conversation.”

Cell Phones

For the majority of participants, cell phones were a common way to seek and receive both general and health information. However, some participants reported lacking consistent access to cell phones and the internet. For health-related information, participants reported searching for their symptoms in popular

Table 1. Demographic Characteristics of Focus Group Participants, July 2021^a

Characteristic	Prevalence, % (No. of Participants)
Sex	
Male	56.6 (30)
Female	35.8 (19)
Transgender	5.7 (3)
Other	1.9 (1)
Age, y	
18–29	22.6 (12)
30–39	26.4 (14)
40–49	7.5 (4)
50–59	18.9 (10)
≥60	24.5 (13)
Race^b	
American Indian/Alaska Native	1.9 (1)
Asian	1.9 (1)
Black or African American	50.0 (27)
White	39.6 (21)
Prefer not to answer	7.5 (4)
Ethnicity	
Hispanic or Latino	22.6 (12)
Not Hispanic or Latino	62.3 (33)
Prefer not to answer	15.1 (8)
Marital status	
Married	7.5 (4)
Unmarried, living with partner	5.7 (3)
Divorced	24.5 (13)
Widowed	3.8 (2)
Separated	9.4 (5)
Single	47.2 (25)
Prefer not to answer	1.9 (1)
Primary residence^b	
In a shelter or facility	49.1 (26)
Outside	20.8 (11)
Someone else's house	13.2 (7)
In a car	1.9 (1)
Somewhere else	18.9 (10)
No. of children	
0	60.4 (32)
1–2	34.0 (18)
3–4	5.7 (3)
≥5	0.0 (0)

^aFocus groups were conducted at 4 sites, in Cincinnati, Ohio; Denver, Colorado; Sacramento, California; and the Bronx, New York.

^bSome participants selected >1 response.

search engines and determining credibility based on either reviewing several results or by ensuring that the search result terms closely match their symptoms. A few also conducted internet searches before going to talk to their physicians.

Factors Influencing Trust

Participants were asked how they determine if information they encounter can be trusted. The most commonly stated method of verifying credibility of information was by obtaining it from experts. Individuals frequently described trusting

whatever they view as expertise, which most often was local healthcare providers with whom they had an established relationship. The relationship could be with medical providers they regularly interact with but also friends, family, or acquaintances who work in the healthcare field. For many PEH, the farther the message source was geographically, the less trust they had in it (though they may still be exposed to the message via news, internet searches, and social media).

In addition, there was a notably large segment of participants who described triangulating information to judge whether it could be trusted. Participants reported that they would ask the same question of multiple independent sources and determine whether they heard the same response. This concept organically emerged in many of the focus groups. In at least 4 groups, individuals also described wanting to verify information through their own, structured research efforts. When searching for information on the internet using popular search engines, participants often said they determined the credibility of the information by reading several of the results to get different opinions before then formulating their own. One participant in New York explained, “I’ll take bits and pieces from each. Take this from one person, take this from the internet... you have a clear view on both angles. That’s how I see it... You should be able to just hear one thing from one person and see another, and then see if that connects the same.”

Prevention Messages Perceived as Useful

We asked participants about particular elements of communication products or encounters (eg, posters, handouts, news reports, direct communication) that made COVID-19 information clear or useful. Resoundingly, the information helpful to most participants related to credible protective measures they viewed as actionable. This theme emerged in more than two-thirds of the groups. One participant in New York explained, “[The helpful information was] you got hand sanitizer to wash your hands more, wear a mask, cover your mouth when you’re coughing, don’t touch other things. Especially on the train.”

Participants described the importance of actionable information in the context of their concerns about COVID-19 that are unique to the experience of homelessness. Examples of these concerns included being unable to distance in shared shelter or service spaces and threats of altercations between strangers with divergent views on protective measures who were housed together. Other COVID-19 concerns for PEH included loss of jobs and housing, closure or reduced functioning of supportive services, reduced access to hygiene and restroom facilities, reduced access to information sources, and inability to acquire newly recommended essential supplies.

Participants volunteered types of information they had heard and found helpful; often this information provided them with actions they knew how to take to protect themselves or that

compared COVID-19 to more familiar illnesses which they felt capable of protecting themselves from. Individuals in 3 of the groups identified information they had found about vitamins and home remedies as helping them to feel protected. A few individuals cited information about which vaccine brand would be best for them. One participant in Sacramento explained, “When I heard it was a virus like the flu or something, that made me feel a little bit better... knowing they knew what it was. I said, ‘I’ll just roll with it.’ But just knowing what it was and where it came from... something that my little brain could compute.”

Some participants also reported that receiving information about local resources that enabled them to carry out recommended measures, such as messages that informed them where testing sites and vaccination clinics were being held, was helpful. A small number of participants stated that information about COVID-19 symptoms was the most helpful to them. One participant in Denver explained, “When they finally told us the symptoms... it just helped me to know what to look for, how to tell when a person has it and when you should stay away from that person.”

Perception of Messaging Regarding Prevention Measures

Participants provided feedback about specific messaging regarding measures to prevent COVID-19: handwashing, social distancing, mask wearing, and COVID-19 vaccination.

Handwashing

Handwashing was a message that almost all participants stated they had heard and supported, even several of those who were less receptive to other messages, such as mask wearing or vaccination. They described the importance of regular handwashing all the time and not just during a pandemic. Several described needing more resources to carry out this behavior, while others felt they had what they needed to comply.

Social Distancing

Similarly, most participants had heard and enacted messages about social distancing to limit the spread of COVID-19, in particular staying 6 feet apart. Nonetheless, a few stated that staying 6 feet apart is not an effective COVID-19 mitigation strategy. Some stated that it is not possible for them to follow this guidance, and a few others cited examples of how others frequently do not comply. Those who stayed outdoors or who preferred to keep to themselves found this guidance easier to follow than those who lived in congregate shelters.

Mask Wearing

More than half of the groups included at least one person who really disliked wearing masks, felt masking was ineffective in protecting them from COVID-19, or both. Several participants

described confusion related to changing guidance about when, where, and how to wear a mask.

COVID-19 Vaccine

Participants discussed and questioned many aspects of the COVID-19 vaccine and its rollout. Almost half of participants voluntarily stated they were vaccinated; their rationales for doing so varied widely. The most frequently cited motivations were deeply held beliefs that vaccines effectively prevent a host of serious illnesses (primarily expressed by older participants), and a desire to protect their own health and reduce their fears about COVID-19. A few expressed a strong desire to see more vaccine messaging shared with individuals in their communities in hopes of persuading more to vaccinate. Some participants discussed vaccine adverse effects, with some citing fears about side effects as their reason for not getting the vaccine. Participants also discussed concerns around the speed at which the vaccine was developed, the risk of blood clots, its impact on pregnancy, and racial distrust of the healthcare system. A few participants had concerns about the ethics and rigor of the clinical trials and the lack of approval from the US Food and Drug Administration at the time the focus group was held.

DISCUSSION

We examined how PEH seek and receive health information, who they trust as messengers, and what types of messages they find useful. We conducted focus groups with PEH in 4 jurisdictions and found that health messaging for PEH is best conducted face to face by trusted messengers, multimodal to allow for verification, actionable given resource constraints, and clear and consistent to avoid confusion. These findings highlight the importance of coordinated messaging efforts to reach PEH. People who work in the healthcare field, including medical providers, who regularly interact with PEH can play an important role as trusted messengers for information about infectious diseases, especially during public health emergencies.

Participants described triangulating information as a way to determine trustworthiness of the message. The findings of these focus groups indicate that the amount of trust PEH have in a message is related to the number of times they hear the message from local peers and experts. This suggests the need for healthcare providers, local public health departments, and homeless service providers to collaborate to develop consistent messages that will be delivered across agencies and in different formats. It also raises the concern that misinformation, if repeated frequently enough within a community, might be interpreted as fact.

In addition, participants described the most helpful messages as being actionable, with information about how to take preventive action within their communities, with resources that they could access easily. Throughout the focus groups, participants expressed concerns about COVID-19 that are unique to

the experience of homelessness—particularly the lack of control of their physical environment, especially for those who were sheltered.

Messages and communication products need to include information about how to take preventive actions using locally available resources, such as the location of handwashing stations and restrooms, availability of vaccination clinics and free COVID-19 testing, and information about how and where to wash cloth face masks. When a public health emergency affects the availability of resources PEH commonly use to seek information or necessary services, it is even more crucial that communication messages and products explicitly state how PEH can protect themselves within their communities.

Our findings align with other studies about effective communication with PEH. The literature supports relying on trusted messengers within the healthcare and social service field to communicate with PEH about taking specific actions to prevent illness. These studies also emphasize the importance of verbal, and often face-to-face, communication between healthcare or service providers and PEH [9, 12, 13]. Similar to our findings, healthcare providers can be a broad categorization, including primary care providers and nurses as well as community health workers or peer educators with lived experience of homelessness [9]. Relationships and trust between messenger and PEH are important, as described by healthcare and housing service providers in interviews about challenges to encouraging COVID-19 vaccination among US veterans [14].

Our finding that PEH seek to verify information received by a process of triangulation has been described elsewhere in the literature, though within other populations. Research about information seeking practices among young parents suggests triangulation—often used as a method among scientific researchers—may be common among lay populations as a way to seek and make sense of information before making decisions, especially when that information is complex and in flux. These findings warrant additional study.

In addition, the literature supports our findings that PEH require practical, actionable information paired with resources. PEH responding to a survey about practices and attitudes toward hygiene and vaccination amid an outbreak of hepatitis A reported needing information about where, when, and how to access vaccination [15]. Similarly, PEH have reported not needing information about the importance of hand hygiene to prevent COVID-19, but they express a greater need for access to supplies and facilities to perform the behavior [16].

Similar to our findings, a review of literature about access to technology among youth experiencing homelessness describes the widespread use of smartphones, social media, and internet searches among study participants, as well as the difficulties in maintaining consistent access to personally owned devices, as well as devices provided by public institutions, such as libraries [17]. Interviews with

PEH, clinicians, and support workers in the United Kingdom about telephone- or video-based healthcare appointments during the COVID-19 pandemic also highlighted the difficulty PEH faced in accessing appropriate care when they did not have reliable access to smartphones or means to pay for phone calls [13].

Although the project produced important insights into the communication preferences and information needs of PEH, it does have limitations. First, even though qualitative data collected through focus groups can produce rich insights, the findings are not generalizable and therefore cannot be applied to all PEH. Second, this project was designed to assess the participants' individual communication preferences. While some participants mentioned preferred message framing or revealed cognitive biases that influenced their decision making, this project did not systematically capture these biases, which need to be addressed when creating health communication messages and materials. These cognitive biases are not unique to PEH; further study of the effectiveness of the participants' preferred communication methods is warranted [18].

In addition, participants were recruited by homeless service provider organizations. It is possible that PEH who are not connected to organizations providing services may have different experiences and perceptions. Finally, though the project team selected the 4 jurisdictions to provide a diversity of geography and client population demographics, it was not always possible to recruit participants from all constituencies. It is possible that focus groups conducted with PEH in different jurisdictions or in rural areas would produce different results.

In conclusion, communicating infectious disease prevention information to PEH during public health emergencies is critical. Public health agencies and healthcare providers can effectively communicate infectious disease prevention messages to PEH by ensuring that messages are provided by trusted messengers, multimodal, paired with resources, clear, and consistent.

Notes

Disclaimer. The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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