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RESEARCH ARTICLE

Barriers and Facilitators to Naloxone Uptake in Ohio: Implications for Community-Driven Overdose Reduction Interventions

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ABSTRACT

Background: Our study aimed to identify barriers and facilitators to opioid overdose reversal uptake to inform community-driven interventions.

Methods: We conducted in-depth interviews and focus group discussions with community members and key stakeholders in Central Ohio. We used qualitative thematic analysis to identify barriers and facilitators to naloxone uptake in a community setting. We classified barriers and facilitators using the organizational, community, and societal levels of the socio-ecological model.

Results: Forty-seven Central Ohio residents participated in 5 focus group discussions and 15 in-depth interviews. Community members (n=23), harm reduction service providers (n=4), and religious organizational staff (n=5) participated in focus group discussions. We conducted in-depth interviews with law enforcement officers (n=3), pharmacists (n=2), and people who use opioids (n=10). Access to naloxone and misinformation emerged as organizational barriers while safe spaces for people who use opioids emerged as a facilitator. We identified naloxone misinformation and substance use stigma as community barriers. Perspectives on collective responsibility to administer naloxone was identified as both a barrier and facilitator. Poor communication of naloxone laws was a prevalent societal barrier to naloxone uptake.

Conclusion: Community-based interventions that develop collaborations among local organizations to provide naloxone information, training, and distribution may address prominent barriers to naloxone uptake and reduce the current burden of law enforcement to respond to overdoses. Future interventions should also dispel naloxone misinformation, substance use stigma, and confusion about the legal consequences of administering naloxone.

Keywords: Substance use; Opioid; Naloxone; Injection drug use; Overdose, Community intervention

INTRODUCTION

The growing mixture of fentanyl with heroin and other illicit drugs has contributed to a 1000% increase in the age-adjusted synthetic opioid-involved overdose rate in the United States.[1] The current state of the opioid overdose epidemic will require multilevel solutions to address contributing factors such as the changing drug supply, social distress, and socioeconomic inequalities.[2] Solutions include community-based public health interventions such as access to medications for opioid use disorders, syringe services programs (SSP), and naloxone distribution campaigns.[3]

Naloxone is an easy-to-use and safe opioid receptor antagonist that quickly reverses or blocks the effects of opioids.[4,5] The increasing potency of fentanyl and rising overdose rates exacerbate the need for the availability, accessibility, and community uptake of naloxone.[6,7] When available and accessible, naloxone considerably reduces the number of fatal opioid overdoses in

communities.[8,9] Community naloxone distribution programs are one widespread and effective method to prevent fatal overdoses among people who use opioids (PWUO).[10] Family members, friends, coworkers, and bystanders can safely administer naloxone to someone experiencing an opioid overdose. Despite the ease and safety of using naloxone, community uptake of naloxone remains a barrier to reducing opioid-related harms.

Similar to trends in the United States, the widespread availability of heroin and fentanyl has led to dramatic rates of accidental opioid overdose deaths in Ohio.[11] Naloxone is accessible to Ohioans in pharmacies without the need for a prescription, allowing for increased access to the life-saving properties for those at risk for overdose.[12] Under Ohio law, family members, friends, or other individuals who, in good faith, administer naloxone to an individual who is experiencing or at risk of experiencing an opioid-related overdose are not subject to criminal prosecution.[13] However, stigma, lack of awareness of life-saving properties, and lack of training in administering naloxone are widely prevalent, resulting in low uptake of naloxone.[14]

Our objective was to conduct a qualitative analysis to (1) describe in-depth experiences of opioid overdose and reversal among PWUO and key stakeholders in Central Ohio and (2) identify structural and social level barriers, facilitators, and attitudes toward opioid overdose reversal in Central Ohio.

METHODS

Study Design

The current study provides findings of the Needed Opioid Harm Reduction Messaging (NoHaRM) project, which aims to develop a structural and social network-based opioid overdose reversal campaign within Central Ohio. We used qualitative thematic analysis to identify perceptions of naloxone and perceived barriers to its use in a community setting using interview and focus group discussion text from the NoHaRM project. All participants provided written, informed consent before the in-depth interviews and focus group discussions. The Ohio State University institutional review board approved this study.

Data Collection

We recruited local community members and key informants in Central Ohio for focus group discussions and in-depth interviews through convenience sampling at local community organizations, flyers, and ResearchMatch. Eligible participants were age 18 years or older and resided in Central Ohio, with PWUO qualifying if they had used heroin or other opioids within the past 30 days. Key informants included pharmacists, law enforcement officials, religious service organizations, and substance use service providers who regularly engage with PWUO. Recruitment involved interested individuals contacting study staff or being invited via email, followed by an eligibility assessment and scheduling. Key stakeholder groups, including religiously affiliated community center volunteers, organizational staff, and substance use service providers, participated in focus group discussions, while pharmacists and law enforcement officials were recruited for in-depth interviews, allowing us to refine and confirm focus group data. Qualitative interview guides were tailored to community members, substance use service providers, PWUO, and law enforcement officials using survey items from the Ohio Opioid Project study (Implementing a Community-Based Response to the Opioid Epidemic in Rural Ohio, UG3/UH3DA044822), a literature review, and questions crafted by the study team. The guides covered the following topics: perceptions of drug use in local communities, knowledge of naloxone, local drug use and naloxone laws, and opportunities and challenges to addressing the opioid epidemic in Franklin County, Ohio. See Appendix for in-depth interview and focus group discussion guides. Trained study staff conducted focus group discussions and in-depth interview sessions. An additional study staff member was present in each focus group discussion to take field notes. All in-depth interviews and focus group discussions were audio-recorded and transcribed verbatim.

Qualitative Analysis

NVivo 12 was used to code transcripts. A “flexible coding” iterative process was used to code the data.[15] First, 2 study team members who have expertise in qualitative research and public health needs for PWUO read and reread the transcripts and field notes and applied index codes to the text. Respondent-level and cross-case memos were created as the coders began to draft hypothesized relationships between the index codes. Next, using the index for data reduction, a priori and emergent analytic codes were applied to focused sections of the transcripts. This step prioritized the reliability and validity of the coding. Finally, the reliability and validity of our coding results were confirmed by reviewing and comparing excerpts across analytic codes. The broader study team engaged with the data by reviewing coded excerpts, discussing emerging themes, and refining analytic codes to ensure rigor and validity in the findings.

Socio-ecological Model

Because multilevel factors synergistically impact naloxone uptake, we examined how each factor acted alone or in tandem to influence behavior using a socio-ecological model.[16,17] Socio-ecological models allow for exploring a range of protective and risk factors that contribute to complex circumstances impacting health.[18] The original socio-ecological model suggested that health outcomes are determined by 5 nested levels of factors that interact within an individual's social environment, influencing their behavior: intrapersonal factors (ie, characteristics of the individual), interpersonal factors (ie, social networks), institutional factors (ie, social institutions and organizations with formal and informal rules), community factors (ie, relationships among organizations and institutions), and public policy (ie, laws and policies).[16,17] This approach sustains prevention efforts over time and supports population-level impact. The socio-ecological model has been utilized, modified, and applied within various public health promotion

contexts, including contextualizing the opioid crisis,[19-21] and is a practical approach for assessing the multifaceted barriers and facilitators of naloxone use to inform the development of evidence-based community interventions.

In our analysis, we focused on the 3 broadest levels of the socio-ecological model: (1) public policy, (2) community factors, and (3) organizational factors. We restricted our analyses to these levels because the purpose of the NoHaRM project was to develop a structural and social network-based opioid overdose reversal campaign within Central Ohio. Therefore, our analysis of the barriers and facilitators to naloxone uptake at the broadest levels may best inform this campaign and community interventions in settings outside of Central Ohio.

RESULTS

Participant Characteristics

A total of 47 Central Ohio residents participated in 5 focus group discussions and 15 in-depth interviews between February 2019 and October 2019. Community members (n=23), religious organizational staff (n=5), and harm reduction service providers (n=4) participated in focus group discussions ranging in size from 4-10 participants. In-depth interviews were conducted with law enforcement officers (n=3), pharmacists (n=2), and PWUO (n=10). Most participants were recruited from community outreach (74%), followed by email invitations (17%) and ResearchMatch (9%). In-depth interviews ranged from 27 to 83 minutes, with a median duration of 51 minutes. Focus group discussions ranged from 88 to 124 minutes, with a median of 96 minutes. We collected demographic information for 46 participants; missing information applied to 1 community member (Table 1). Half of the participants were female (50%), the median age was 45 years (IQR: 34-58), and most participants were unemployed (57%) and had completed high school (87%).

Socio-ecological Model: Top-Level Barriers and Facilitators to Naloxone Uptake

We identified barriers and facilitators to naloxone uptake that were aligned with the socio-ecological framework[22] derived from the qualitative data analysis. To directly inform community interventions, identified thematic barriers and facilitators were organized by organizational, community, and public policy levels (Figure 1).

Organizational Level

Barriers

Access to naloxone varied among organizations in Franklin County, Ohio, from limited access among harm reduction organizations to a lack of uncertainty of where or how to obtain naloxone among local for-profit, nonprofit, and government organizations.

> Service Provider: *"we wanna provide the most consistent and reliable coverage for as many people as we can. Unfortunately, it's needed in high demand…I think we're going through about 60 kits per day…That's the most frustrating aspect of this job is being a harm reduction and overdose prevention center and not having naloxone on site and folks are coming in begging for it, begging."*

Table 1. Central Ohio NoHaRM Participant Descriptive Statistics, Stratified by Participant Type (N=47)

	Total[a]		Community Members		People who use Opioids		Key Stakeholders[b,c]	
	N	%	N	%	N	%	N	%
Total	47	100%	23	49%	10	21%	14	30%
Gender								
Women	23	50%	14	64%	5	50%	4	29%
Men	23	50%	8	36%	5	50%	10	71%
Age, median (IQR)[d]	45	(34, 58)	50.5	(35, 60)	39.5	(34, 48)	41.5	(33, 56)
Education								
Less than high school	6	13%	3	14%	3	30%	0	0%
Highschool/GED	8	17%	3	14%	4	40%	1	7%
Some college	13	28%	8	36%	2	20%	3	21%
College graduate	19	41%	8	36%	1	10%	10	71%
Employment status								
Employed (full-time)	19	41%	8	36%	0	0%	11	79%
Employed (part-time)	1	2%	0	0%	1	10%	0	0%
Unemployed[e]	26	57%	14	64%	9	90%	3	21%
County of residence								
Franklin	45	98%	22	100%	10	100%	13	93%
Licking	1	2%	0	0%	0	0%	1	7%
Years lived in Franklin County, mean (std)[f]	23.4	20.1	36.3	17.8	9	11.9	13.6	15.1
Years lived in Central Ohio, mean (std)[g,h]	28.4	19.5	37.9	16.8	-	-	14.4	14.8

[a] Missing demographics from 1 community member participant.
[b] Key stakeholders are defined as law enforcement officers (n=2), service providers (n=4), pharmacists (n=2), and religious organizational staff (n=5).
[c] We condensed these categories to protect participant confidentiality.
[d] Missing age for 2 community member participants.
[e] One person wrote 'retired.' This response was categorized as 'unemployed.'
[f] Years lived in Franklin County was missing for 1 community member and 1 key stakeholder
[g] Years lived in Central Ohio was not recorded for people who use opioids.
[h] Years lived in Central Ohio was missing for 1 community member

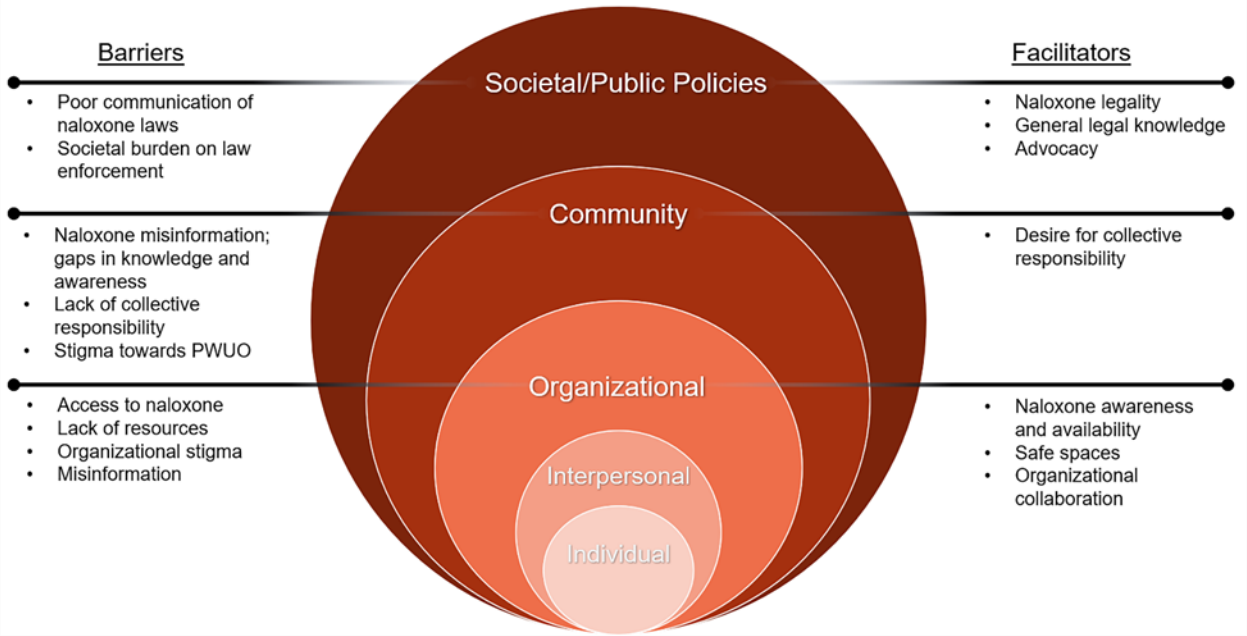

Figure 1. Adapted Socio-ecological Model with Thematic Top-Level Facilitators and Barriers to Naloxone Uptake in Central Ohio

Organizations' attitudes about naloxone may impact employees' perceptions of safety and willingness to use it. As one community member shared, their place of work discouraged the presence and use of naloxone, though the participant kept naloxone in their home and car in case of an emergency.

> Community Member 1: *"I carry naloxone... I had it for a very short time at work. I was told that we are not allowed to administer it on company time. So, there's education there, right, there's knowledge, that saturation is there, but what can I do with it, right?"*
> Community Member 2: *"So corporation that tells him that if he can't use it on the corporate level—"*
> Community Member 1: *"He has to follow it."*
> Community Member 2: *"Yeah, so how does that attitude play in when you get off the clock?"*

Naloxone misinformation and support for naloxone availability varied among participant groups. Community members and religious service providers had mixed opinions on which organizations should make naloxone available. Although many participants felt morally liable to help someone experiencing an overdose, one church member feared that church members would be legally liable if they failed to reverse an overdose. Beyond liability, community members were concerned about overdosing when assisting a person experiencing an overdose, perpetuating myths that touching fentanyl would lead to an overdose.

> Community Member: *"If you even slightly suspect drug use, that's where [the security officers] stop. You know, they were all trained CPR, AED ... Let the medics get there [and handle it]. We could have the naloxone on hand but ... I had security officers that were making $9 an hour. I'm not gonna trust that [they] put on their personal protective equipment before using the naloxone and that's necessary."*
> Later in the focus group discussion:
> Community Member: *"You need to buy your personal protective equipment. Because you don't want any part of your body coming in contact with [fentanyl], they'd want to be wearing at least the gloves ... I would make sure I had a piece of plastic to throw over the person and have my gloves on to at least give them the naloxone."*
> Interviewer: *"What does using the gloves and plastic help prevent?"*
> Community Member: *"Your skin coming in contact with any of the fentanyl that might be on the person ... And from what I believe, is that if there's fentanyl, they could be sweating it out, right?"*

Among law enforcement officials during interviews in 2019, naloxone was available through the Columbus Police Department. Before providing consistent, department-wide access to naloxone, the Columbus Police Department launched a pilot program that provided naloxone to officers who used it to prevent nearly 60 fatal overdoses.[23,24] In 2019, it was unclear from interviews if any officers were required or encouraged to carry naloxone, and no information about departmental naloxone policies was available at the time of interview.

> Interviewer: *"Is [naloxone] voluntary for officers to carry?"*
> Law Enforcement Official: *"I think it is still somewhat voluntary. But I think I would say probably two-thirds of all the officers on every precinct, which each zone has several precincts within the zone."*

Interviewer: *"Would you say it's a norm to have it, or is it still kind of a new thing?"*

Law Enforcement Official: *"No, I don't think at this point I would say they consider that part of their bag of tools. Just like a flashlight and a taser, whatever they're carrying to use in their job."*

Facilitators

Mandatory job training provided most law enforcement officials, pharmacists, and service provider participants with knowledge about naloxone and its purpose. Community members perceived organizations that are receptive to naloxone education and nonstigmatizing substance use discussions as beneficial. Several community members expressed interest in their employers having naloxone on hand and advocated for naloxone to be publicly available at local businesses.

Religious organizations emerged in our interviews as a safe and stigma-free environment, as several staff members are trained in administering naloxone and have it on hand to respond to overdoses aptly. Safe spaces for PWUO also include an SSP and hospitals and clinics with nonstigmatizing staff.

PWUO: *"[The SSP] was wonderful ... I got to learn how to use naloxone for the first time, ...It was just a good feeling to know that there's people that care enough about people's well-being."*

Community Level

Barriers

Accessibility to naloxone (eg, not knowing where to obtain naloxone) within the community was an issue for several participants.

Religious Organizational Staff: *"I think I saw advertised on a news program on TV as supposedly available in drug stores. Now, I don't know if that's true or not."*

Participants also expressed a lack of knowledge about administering naloxone in the community, which led to fear of misuse, misinformation, and possible legal ramifications.

Community Member: *"...that's why I probably never would carry naloxone. I would be very fearful. I know that the city of Columbus was sued for not giving enough [naloxone] to someone who fatally overdosed. Because they say they gave 3, but they probably needed 4 or 5 doses."*

Community Member: "*If the average person doesn't know how it works, then they may say what is it? Am I giving them too much, I'm not giving them enough? ... I'm not even sure in Ohio, I mean, is there a Good Samaritan law in place?"*

Community members' comfort with administering naloxone varied by relationship type and the setting where an overdose takes place. Greater willingness was expressed for assisting close social contacts such as family members and less so with strangers. Self-efficacy was lower when discussing the possibility of administering naloxone in settings where the respondent lacked authority.

Community Member: *"I'm not sure that I'd wanna involve myself in a case of a stranger. If it were my brother, different situation."*

Religious Organizational Staff: *"If I saw someone drop here (at my organization) I would know what to do, but if I were at the grocery store, or pharmacy, I wouldn't know. I would assume the pharmacist would have it (naloxone)."*

Community substance use related stigma perpetuated stigma against naloxone. Several participants discussed a general sentiment about drug use (and subsequent overdose) being a choice. Perceived mental weakness and lack of willpower to curtail opioid use among PWUO diminished the willingness of community members to assist. These stigmatizing beliefs were often associated with the low perceived willingness to carry and administer naloxone. Participants who noted this stigma believed the community would be more conflicted about intervening for an overdose than other medical emergencies.

Pharmacist: *"But you don't see that with CPR. People are freely willing to administer CPR and understand there's no consequence. Because there's nothing worse than death…you'll see that they'll jump to somebody's aid if they're choking. If they're having a heart attack they'll help him. But this is totally different. I think too many people feel like this (opioid use/overdose) is a choice*."

Participants discussed carrying and administering naloxone in such a way that demonstrated a lack of a sense of collective responsibility for intervening in opioid overdoses. When asked, "Who should carry naloxone?" few participants extended this responsibility to the general community. Participants believed many people subscribe to an "it's not my problem" detachment mentality. First responders, health care workers, and others viewed as "authoritative figures" were often cited as most appropriate to assist by all participant types.

Religious Organizational Staff: "*Well, it's almost like it needs to be the authoritative figure. Whether that's in your house, your father or your mother, or at work. If it's someone who people feel has the authority and the knowledge and will make a good decision on when it's needed*."

Facilitators

Although most participants were reluctant to administer naloxone broadly, some pharmacists, law enforcement officials, and PWUO believed everyone should collectively share this responsibility. This position may reflect the community needs best understood by those closest to the epidemic.

Service Provider: *"In my dream world [naloxone] would be as fundamental in a first aid kit as band-aids. Cuz there's no reason not to have it. I mean, people carry Epi-Pens, it should follow the same principle. And especially if someone was using themselves, having it on them, even though they wouldn't be able to administer it themselves, just knowing that was available to anyone who came upon them in an unfortunate circumstance would be highly advantageous."*

Law Enforcement Official: *"Everyone [should carry naloxone]. You never know where you're gonna run into an overdose."*

Societal and Policy Level

Barriers

The most common societal or policy-level barrier was the recognition that law enforcement may not be sufficient for responding to overdoses and naloxone administration. Community members and PWUO expressed concerns that involving law enforcement may lead to legal repercussions or jail rather than medical services and transport.

Community member: *"A lot of people are afraid they're going to go to jail and be criminally charged and a lot of people that do drugs are in the system already. So, they fear that if [law enforcement or emergency medical services] come and they have to rescue me they're gonna throw me in the back of the cop car and come up with any old reason as to why I'm getting arrested."*

Furthermore, law enforcement felt overburdened by the increasing need for overdose responses. Many felt inadequately trained to provide linkages to services for people who overdose.

Law Enforcement Official: *"I really don't, I mean, I think too much is already put on police agencies in this country. I mean, we're expected to be social workers, counselors. We already do way too many things that are not what police officers were created to do in the first place. I mean, at the end of the day, the main job of a police officer, really, is just to enforce the laws of a city or state or a town that they are sworn to uphold and protect. But over the last 50 years, it feels like continuously more has put upon police departments to be responsible for. Which I also think is one reason why with certain segments of the population, the relationship is so bad."*

Community members felt they lacked formal communication channels for common law and policy updates, often resulting in limited knowledge of legal rights and protections related to naloxone administration. Community members felt the Good Samaritan law was confusing and were unaware of what protections would be provided to them if they reported an overdose. As a result, PWUO and community members discussed reluctance to report overdoses due to fear of arrest for drug possession.

Other societal barriers impacting naloxone use among the general public include knowledge gaps among community members in understanding the Good Samaritan law and other naloxone and drug possession related policies, inadequate access to drug treatment and health care services, and pervasive poverty and income inequality that limits engagement in treatment services. For example, even if participants were able to access naloxone at pharmacies or other community locations, cost remained a barrier.

Pharmacist: *"...we're trying to currently look for a way to get naloxone to patients in an affordable way because right now it's not available on a slide program because of the expense of the medication."*

Facilitators

Law enforcement and pharmacists discussed processes for receiving common law and policy updates. Law enforcement officials felt they knew laws regarding obtaining, carrying, and administering naloxone. They noted the professional requirement of reviewing legal updates and attending several monthly training sessions.

Pharmacists discussed receiving monthly notifications from the Ohio Board of Pharmacy about laws and policies related to drug use in Ohio. They also grasped the overall concept of Ohio's Good Samaritan Law but were unaware of the specific details and thought the laws should be advertised to increase awareness.

DISCUSSION

Our findings demonstrate key barriers and facilitators to opioid overdose reversal in Central Ohio. Many felt law enforcement had become the first responders to overdose, resulting in law enforcement burnout and acknowledgment of limited social service training. People who use opioids and community members also reported hesitations in involving law enforcement or providing emergency medical assistance due to previous negative interactions or fear of criminal charges. Additional barriers to naloxone use include naloxone misinformation and general drug use related stigma. Despite these barriers, some felt a shared collective responsibility to reduce overdose deaths by carrying and using naloxone. Several community organizations, including religious organizations, were noted as possible avenues for providing safe spaces for PWUO and fostering naloxone awareness and training. Within Ohio, several policies exist that could encourage naloxone use and legally protect those who administer naloxone; however, awareness and understanding of policies were limited among community members, pharmacists, and law enforcement.

Relying on law enforcement for overdose first response and naloxone administration may be inadequate for reaching PWUO. Participants in our study noted law enforcement officials burnout and societal burden, which aligns with previous studies. A study among law enforcement officials in British Columbia, Canada, identified a complete systematic failure of law enforcement and the criminal justice system to address the needs of people who use drugs.[25] Punitive legal systems lead to suboptimal engagement in drug use treatment and other drug related care, often due to stigma and discrimination from those involved in these systems. Despite law enforcement officials being a frequent point of contact for overdoses, law enforcement officials within our study and others noted their limited capacity to provide sufficient support for PWUO, such as social services and linkage to care. Future studies are needed to explore the positioning and role of law enforcement in delivering overdose response and ongoing care for PWUO in Ohio. Given the overwhelming burden placed on law enforcement and emergency responders, the presence of safe injection sites

with staff trained to administer naloxone could alleviate ambulance calls and reduce fatal overdose rates.[26-28]

A knowledge gap regarding use and safety predominantly drives naloxone misinformation within organizations and among community members. Among our sample, community members and law enforcement officials expressed concerns that having naloxone readily available could encourage more substance use, likely leading to more overdoses. This misinformation drives perceptions of which organizations should provide naloxone for employees within retail and work environments and the general public. Despite the common notion of naloxone availability leading to more overdoses, research indicates that widespread naloxone among PWUO does not increase opioid use.[29] Furthermore, many feared needing proper protective equipment for administering naloxone due to scientifically unfounded fear of contact exposure, particularly from fentanyl. Misinformation on the scientifically unsupported consequences of tactile and respiratory contact with fentanyl has been spread across mainstream and social media.[30] Our findings demonstrate a need for interventions to specifically address widespread naloxone misinformation and compassionate awareness of opioid overdose.

The lack of awareness and understanding of Good Samaritan laws among community members presents a significant public health challenge, potentially deterring individuals from seeking emergency assistance during overdoses. Many participants expressed confusion and uncertainty regarding the legal protections afforded to them if they reported an overdose, contributing to a reluctance to call for help due to fear of arrest.[31-33] This highlights a broader issue of limited formal communication channels for disseminating updates on laws and policies related to naloxone and drug possession. Misconceptions about Good Samaritan laws can undermine their effectiveness, reducing the likelihood that people will intervene in overdose situations.[8,34] While law enforcement officials and pharmacists reported receiving regular policy updates and training, gaps in community-level awareness remain, suggesting that current educational efforts are insufficient. Addressing these knowledge barriers through widespread public education campaigns, clearer messaging on legal protections, and accessible community outreach efforts could help increase naloxone use, reduce overdose fatalities, and strengthen public trust in harm reduction policies.

Within our sample, many recognized the collective responsibility to reduce overdose deaths among PWUO, paving the way for community-driven approaches for naloxone information, training, and distribution. Naloxone community-based interventions can build on shared values and social practices to overcome barriers to widespread naloxone availability. Based on our sample, community organizations, including religious organizations, could be ideal settings for naloxone information, training, and distribution to supplement SSP. Naloxone community-based interventions have effectively improved knowledge and training and have the strong potential to reduce opioid overdose deaths effectively.[35] However, given the heterogeneity of these types of interventions, evidence is needed on the intervention quality and fidelity to guide further scale-up. Furthermore, increasing naloxone accessibility should be paired with other effective community-based interventions, such as increasing initiation to medications for opioid use disorders and improving retention of these medications, to reduce opioid overdoses in Ohio.[36]

Given the qualitative nature of this study, we recruited a nonrandom sample of PWUO, community members, pharmacists, and law enforcement officials to participate in interviews or focus groups, which may not be fully representative of others in Central Ohio. A sample of 15 PWUO and 15 key informants was deemed an appropriate sample size for in-depth interviews due to the exploratory nature of this research and the anticipated availability of respondents. Although 10 PWUO was a large enough sample for no new themes to emerge, the key informant sample was insufficient to achieve data saturation. Therefore, voices are missing, and the validity of the results may be limited. Another limitation of this study is the implications of focus group dynamics for some participants.[37] Focus groups can result in strongly opinionated individuals guiding the conversation and ultimately shaping the group narrative, especially with sensitive topics such as overdose deaths. These dynamics can lead to individuals saying what is socially accepted by the emerging group narrative and not wanting to share deviant opinions, which may have discouraged candid discussion of more barriers to naloxone. Nonetheless, interviewers and facilitators were trained in nonjudgmental techniques and attempted to encourage participation from all participants.

PUBLIC HEALTH IMPLICATIONS

Despite the life-saving properties of naloxone, several barriers must be addressed at the societal, community, and organizational levels to increase widespread use in Central Ohio. Community-driven approaches that capitalize on amplifying the collective responsibility shared by the community, organizations, and law enforcement on naloxone administration, legal protections, and stigma reduction will be essential in effectively reducing opioid-related overdose in Ohio and similar settings with high overdose death rates.

CONFLICTS OF INTEREST

The authors have no competing interests to declare.

AUTHOR CONTRIBUTION

Angela Estadt, Kathryn Lancaster, and JaNelle Ricks contributed to writing—original draft, reviewing, and editing. Sabrina Sanchez contributed to writing – reviewing, and editing. Angela Estadt and Sabrina Sanchez contributed to data collection and analysis. Angela Estadt prepared Figure 1. JaNelle Ricks and Kathryn Lancaster were involved in conceptualization, methodology, supervision, and funding acquisition. All authors critically reviewed and approved the final manuscript.

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APPENDIX In-Depth Interview Guides and Focus Group Discussion Guides

A. In-Depth Interview Guide for People Who Use Opioids

Interview guide objectives: This interview guide is for people who use opioids (PWUO). The goal of the interview guide is to gain a better understanding of the context of opioid and other drug use, injection drug use, service utilization, and barriers to services in drug-using or PWUO populations.
Note for interviewers: Probes for each question are flexible. We would like to use similar probes across all sites, but you can adjust the wording, order, etc as you see fit – they are a guideline for topics to explore.
Intro: Thank you so much for talking with me today. As you know, we're interested in learning more about drug use in [County name], so I have some questions for you. Everything you tell me will be kept confidential and we will not share your name with anyone besides study staff. Stop me at any time if you have any questions for me as we go through, if anything is unclear, or if you would prefer to skip a question.
We would like to hear about your experience with opioids and other drugs, so that we can help develop programs and policies that may make services that you actually want to use more available to you. Your participation may help to make things better for people in your situation, and those who come along after you – so we appreciate the time that you are taking to talk to us.
Any questions before we begin?
Background/Intro

1. I would like to start by getting to know you a little better.
   Probes:
   a. Where did you grow up? [If not from the area]: How long have you been in this area?
   b. Tell me about your family and friends.
      i. Who do you get help or advice from, when you need it?
   c. Tell me about someone who has had a positive influence in your life?
   d. What community organizations are you involved in? What activities do you participate in?
      i. Are you involved with a local church?
      ii. Do you attend Narcotics Anonymous meetings?

Drug Use – History and Current Use
Now I'd like to ask you some questions about drug use.

2. Tell me about any experiences you have had with using an opioid – like a pain pill or heroin – to get high? If yes: Probes:
   a. How old were you, the first time?
   b. Who were you with? Where were you? Where did you get the drugs?
   c. How has your opioid use changed since you first started?
      i. How regularly do you use prescription opioids now? What do you use? Where do you get them from?
      ii. How regularly do you use heroin now? Where do you get the heroin?
3. What drugs are you injecting currently? [Note: probes a-e below are for each substance mentioned]:
   a. Tell me about the most recent time that you used it. How much did you use?
   b. Who else was there? Where were you? Is this your ideal place? Why did you use drugs there?
   c. Whose syringe did you use? [If not their own]: Who used it before you did? Who used it after you did? What type of syringe was it (eg, insulin, other than insulin, removable needle?) [If purchased]: How much did it cost?
   d. What did you do, if anything, to protect yourself from some of the negative consequences of using drugs? (eg, things like HIV, HCV, overdose, or abscesses?)
      i. How did you clean your skin? How did you stop the bleeding after you injected? Does this vary by the type of drug you're using, eg, black tar heroin, pills, etc?
   e. How has your use of this drug changed over time?
   f. How often are you rushed when you are injecting? What are the typical ways that you get ready to inject, stop injection site bleeding and clean-up after you inject?
4. You mentioned that you inject [list all substances mentioned from question 2].
   a. [If haven't mentioned fentanyl]: Have you ever used any drugs containing fentanyl? Did you realize before or after you took the drug that it contained fentanyl? Were you seeking a drug that contained fentanyl, or were you unaware? How did you know/how were you aware that it had fentanyl?
   b. Where did you get it from?
   c. How are the drug preparations different across the drugs (eg, pills, heroin, fentanyl, methamphetamine, cocaine, etc.)?
   d. What type of equipment do you use for different drugs? Is the amount of water you add different?
   e. Do you need to inject more or less frequently depending on the drug? Can you explain?
   f. Can you tell me any instances when you have injected pills? Can you describe the type of pill? How does the type of processes you use differ from powder?

Overdose and Naloxone/Narcan
Now I'd like to ask you some questions about overdose.

5. How do you define an overdose? How do you determine if someone is overdosing or just high?
   a. Under what circumstances do you think you're most likely to overdose? Using which drugs?
6. Tell me about your most significant experience with someone else overdosing? [If unclear: In other words, the experience that affected you the most?]
   a. Where were you?
   b. What did people do? What did you do? Was EMS or 911 called?
   c. What drug(s) were involved?
7. Now I'll ask about your experience with overdosing, which includes if you passed out, turned blue, or stopped breathing from using drugs. Have you ever overdosed? [If yes]: Tell me about the most recent time that you overdosed.
   a. What happened?
   b. Where were you?
   c. Were you alone or with others? Who?
   d. What did people do? Was EMS or 911 called?
   e. Were you taken to a hospital? Are people concerned about being arrested if 911 is called for an ambulance?
   f. What drug(s) were you using?
8. How confident do you feel in your ability to respond to an overdose?
9. What do you know about Narcan?

a. How is naloxone administered?
b. Tell me about a time you have used naloxone/Narcan or seen someone use naloxone/Narcan. How did you administer it?

10. What do you know about obtaining/accessing/buying naloxone/Narcan?
    a. Do you know where you can access naloxone/Narcan for free?
    b. Experience obtaining naloxone/Narcan?
    c. Do you currently have naloxone/Narcan with you or at home? If you wanted to get naloxone/Narcan, do you know how to get it?
11. Are you trained in using naloxone?
    a. If not, do you have interest in being trained
12. If you have a naloxone kit, where do you keep it?
    a. If don't have a kit, where would you keep it?
13. Who do you think should carry naloxone?
    a. What concerns would you have about carrying naloxone?
        i. How practical would it be to carry it?
    b. What would make you more likely to carry naloxone?
14. Who do you know that carries naloxone?
    a. Should naloxone be provided to friends and family members? Why or why not?
    b. Should naloxone be provided to suppliers?
15. Would you recommend naloxone to others?
16. How confident are you that naloxone would work if you overdosed?
17. Tell me what you know about the state's laws related to getting or using naloxone (Narcan)? About calling 911 if someone overdoses?

Interaction with Law Enforcement/Laws and Policies

Now I'd like to ask you some questions about your interactions with police (local police, sheriff deputies, state police, DEA).

18. Tell me about the last time that the police stopped you.
    a. What were the reasons that they stopped you? Where were you? What were you doing?
    b. How did they treat you? What happened in the end?
    c. Tell me about any experiences you have had with being beaten by the police?
        i. What happened?
    d. Tell me about any times you called the police for help? If so: Tell me about the last time you called the police for help. How did they respond? What were the reasons that you called them?
        i. How did they treat you? What happened in the end?
        ii. How typical is this of the police, sheriffs, or other law enforcement?
    e. What do you think about the police, generally?
    f. Tell me about any experiences you have had when you needed the police, but didn't call them? What are the reasons that you didn't call?
19. Have the police ever stopped you for drug use?
    a. Where were you?
    b. How did they treat you? What happened in the end?

Sometimes, state laws and policies just aren't communicated well to people. I'd like to ask you a few questions about state laws and policies related to drug use.

20. Tell me what you know about the state's laws related to possession of drug paraphernalia?

Services/Health Care

Now I'd like to talk to you about your experiences with health providers and other community services. To start, I'd like to ask about how you get health care and what your experience has been.

21. Do you have health insurance?
    a. [If yes]: What kind?
    b. [If no]: What do you do if you're sick or injured?
22. How do you decide when it's time to go to a health care provider?
23. Where do you usually go when you need health care (hint: private doctor, clinic, ER, etc.)?
    a. How do you feel about this place? How do you feel about the staff members who work in the health care office? How do you feel about your health care provider?
24. Tell me about your most recent interaction with any doctor or other health care provider.
    a. When did you go? What led you to see a doctor or health care provider?
    b. How did you get there?
    c. How did you feel about your experience in the waiting area?
    d. How did you feel about the people you interacted with before you saw your provider?
    e. How did you feel about the provider? (hint: comfort level, communication style)
    f. How, if at all, did the topic of drug use come up?
        i. [If drug use was discussed]: How did the conversation go? What topics did you discuss? Did they discuss the possibility of substance use treatment? What did you like about the conversation? What didn't you like about it?
        ii. [If drug use was not discussed]: Would you have wanted to talk with your provider about drugs? What kept you from discussing it? What would you have wanted to say or ask?
    g. Is this typically where you go to seek care? [If yes, move on. If no]: What are the reasons you chose to go this place versus your normal place? How does this differ from your normal place?
25. Have you ever decided that you needed care, but didn't go? Tell me about the reasons you didn't go.
    a. Insurance?
    b. Transportation?
    c. Could not make an appointment?
    d. Afraid/concerned about how the doctor would treat you?
26. Where do you usually get your prescriptions filled?
    a. How do you feel about the pharmacy staff at this place?
    b. Tell me about any other experiences you have had receiving drug-related services. What kind of clinics or providers did you go to?
    c. Tell me about your interest in accessing methadone or buprenorphine treatment in the future.
        i. [If interested]: Why are you interested? Is there anything that might make it easier for you?
        ii. [If not interested]: What makes you feel that way?
27. Tell me about any times you got a needle or syringe from a syringe exchange program? Probes:

   a. Tell me about your experiences getting needles or syringes from a syringe exchange program? This could include you going yourself, or getting them from someone who went to a syringe exchange program.
      i. [If getting from someone else]: Why didn't you go yourself? Awareness/hours/access/concern about how program staff would treat you?
   b. How did you first hear about it?
   c. How often do you use it? How many syringes do you typically turn in and how many can you get?
   d. What do you like about it? Tell me about any challenges to using it? What other services do you think it should offer? How could it be made better?
28. What other services would you be interested in receiving?
   a. What locations would you prefer to go to?
29. We have talked about many things today. I really appreciate your willingness to share your thoughts. Is there anything else that you feel that I should know or that we haven't covered but you feel is important for us to know?

Conclusion: Thank you so much for talking with me today – we really appreciate it. If you have any concerns, please don't hesitate to reach out at the number provided on the consent form!

B. In-Depth Interview Guide for Law Enforcement

Intro: Thank you so much for talking with me today. As you know, we're interested in learning more about your experience with the opioid epidemic in your area, so I have a few questions for you. Once again, everything you tell me will be kept confidential and will not be linked to you in any way. Of course, if you have any questions for me as we go through, if anything is unclear, or if you would prefer to skip a question, please don't hesitate to stop me at any point. Any questions before we begin?

*To keep things consistent, I want to ask first what term you would usually use to describe drug users. For example: "drug users," "drug addicts," "people who inject drugs," "injection drug users," "injectors," etc. That way, I can use that for the rest of the interview.

[Note to interviewer: use whatever language provided in place of "PWUO" throughout the guide.]

Background/Intro

1. What is your position in your organization? Tell me about what you do on a typical day at work.
   a. Tell me about the people you interact with on a typical day at work (coworkers, other organizations, regular people, etc.).
   b. What population/populations do you largely work with? Do you work directly with PWUO?
2. How often do you personally interact in any way with PWUO?
   a. Tell me about your most recent interaction, or tell me about a typical interaction.
   b. Has this changed in the past few years? Can you describe how?
   c. What are some challenges to working with PWUO? Have these changed recently? (gotten worse? better?)
   d. How adequately prepared have you felt for working with PWUO?

Laws/Policies

There are so many different laws and policies that can vary in each different state, when it comes to drug use and possession. Sometimes it's hard even for law enforcement agencies to keep track of this.

3. How do you typically find out about different laws and policies in Ohio?
   a. Do you ever get training on these laws and policies? Tell me more about this.
   b. How do you find out about changes in laws and policies?
4. It would be helpful for us to get more information about some of Ohio's laws. You may or may not be familiar with all of these, and that's totally fine. How familiar are you generally with Ohio's laws on drug use?
   a. Tell me about Ohio's laws on syringe possession?
   b. Tell me about Ohio's laws on syringe distribution?
   c. Tell me about Ohio's Good Samaritan laws?
   d. Tell me about Ohio's naloxone laws?
   e. Tell me about Ohio's laws related to HIV criminalization/conduct while HIV-positive?
5. What do you think about these laws and policies?
   a. Are they helpful or unhelpful?
   b. Do you think you would like to know more about Ohio's laws related to drug use?
   c. Do you think most law enforcement agents have a similar level of understanding of these laws, or not?
   d. Do you think most law enforcement agents have a similar opinion toward these laws and policies, or not?
6. Do you know of other organizations that work with PWUO?
   a. What types of organizations? What services do these organizations provide?
   b. How did you learn about these organizations? Do you work with them, or do you know others who work with them? Do you interact with them in any way? Tell me more about this.
   c. How often do you interact with these groups? Think about the last time you interacted with one of these organizations. Can you tell me about this? What led up to the interaction/what was the nature of the interaction? How did you feel about the interaction? Was it effective/productive? Is that typical?
   d. How do you feel about these organizations? Do you think they are effective or not? In what ways? Are there ways in which you think they could be made more effective?
7. From your experience interacting with PWUO, what do you think are some of the reasons people might start abusing and injecting drugs?
   a. How would you describe the typical person who injects drugs?
   b. What do you think drives people to start misusing drugs?
   c. Where do you think they're getting their drugs from?
8. What do you think about the opioid epidemic overall? What kinds of broader things do you think are driving the epidemic?
   a. What kinds of things in your community do you think have contributed to the increase in drug/opioid abuse?
   b. Are there any other things that you think might be contributing? (eg, local or state policies, economic conditions, etc.)
9. How would you say law enforcement agents have been impacted by the opioid epidemic? How has your typical day changed?
   a. Over what time period have you noticed any changes? The last year? Several years?
   b. What do you think the biggest impact on your work has been?
10. Do you think that PWUO are successfully getting help for drug use in your community?
   a. Do you think that PWUO are getting the treatment or health care services that they need? Why or why not?
   b. What do you think might make it difficult to get treatment? (Is this a problem with availability of services, or a problem with people being able to access the services that are available?)

Narcan

11. What do you know about Narcan/naloxone?
    a. How is naloxone administered?
12. What do you know about obtaining/accessing/buying naloxone?
    a. Do you know where you can access naloxone for free?
    b. Experience obtaining naloxone?
13. If you have a naloxone kit, where do you keep it? (If don't have, where would you keep it?)
    a. Are you trained in using naloxone? If not, do you have interest in being trained?
14. Who do you think should carry naloxone?
    a. What concerns would you have about carrying naloxone?
        i. How practical would it be to carry it?
    b. What would make you more likely to carry naloxone?
15. Who do you know in your personal life who carries naloxone?
    a. Should naloxone be provided to friends and loved ones of PWUO? Why or why not?
    b. Should naloxone be provided to suppliers?
    c. Would you recommend naloxone to others?

Opportunities/Challenges

16. What do you see as the biggest challenges to addressing the epidemic?
    a. What are some challenges to your organization in particular? (eg staffing, resources, time, etc.)
    b. What are some challenges to other organizations?
    c. What do you think needs to be done? What would you like to see/what could be improved? (eg, organizations interconnected, more resources, different policies, etc.)
17. What do you think your organization could realistically do to address the epidemic?
    a. Do you currently have the capacity to expand? Would you and others be willing to expand your services, or is that not realistic?
    b. What is the overall attitude toward handling the epidemic at your organization? How would you describe it?
    c. Do you have any other thoughts about the epidemic, or experiences with PWUO, that you'd like to share with me?

Conclusion: Thank you so much for talking with me today – we really appreciate it. If you have any concerns, please don't hesitate to reach out at the number provided on the consent form!

C. Focus Group Discussion/In-Depth Interview Guide for Service Providers and Pharmacists

Intro: Thank you so much for talking with me today. As you know, we're interested in learning more about your experience with the opioid epidemic in your area, so I have a few questions for you. Once again, everything you tell me will be kept confidential and will not be linked to you in any way. Of course, if you have any questions for me as we go through, if anything is unclear, or if you would prefer to skip a question, please don't hesitate to stop me at any point. Any questions before we begin?

*To keep things consistent, I want to ask first what term you would usually use to describe people who inject drugs. For example: "people who inject drugs," "injection drug users," "injectors," etc. That way, I can use that for the rest of the interview.

[Note to interviewer: use whatever language provided in place of "PWUO" throughout the guide.]

Background/Intro

1. What services do you/your organization provide? Tell me about what you do on a normal day at work.
    a. What population/populations do you largely work with? Do you work directly with PWUO?
2. How often do you personally interact with PWUO?
    a. Tell me about your most recent interaction.
    b. What is it like taking care of people who inject drugs? Has this changed in the past few years? Can you describe how?
    c. How does working with PWUO differ from working with other clients?
3. Do you know of other organizations that work with PWUO?
    [If more than 5 organizations listed]:
    a. What services do these organizations provide?
    b. Of these, which would you consider to be the most important key players?
    [If less than 5 organizations listed]:
    a. Do you work with them, or do you know others who work with them? Do you interact with them in any way? Tell me more about this.
4. From your experience interacting with PWUO, what do you think are some of the reasons people might start abusing and injecting drugs?
    a. How would you describe the typical person who injects drugs?
    b. What do you think drives people to start misusing drugs?
    c. Where do you think they're getting their drugs from?
5. What kinds of things in your community do you think have caused the increase in drug/opioid abuse?
    a. Are there any other things that you think might be contributing? (eg, local or state policies, economic conditions, etc.)
    b. What do people in your community think about the issue, eg how much it occurs, why it is occurring in your community, or what the consequences are? Do you think these perceptions are accurate, or not?
6. Do you think that PWUO are successfully getting help for drug use in your community?
    a. Do you think that PWUO are getting the treatment or health care services that they need? Why or why not?
    b. What do you think might make it difficult to get treatment? (ie, is this a problem with availability of services, or a problem with people being able to access the services that are available?)
7. How would you say your organization has been impacted by the opioid epidemic? How has your typical day changed?
    a. Over what time period have you noticed any changes? The last year? Several years?
    b. How do you think your observations compare with how the opioid epidemic has been seen in the media?
    c. What do you think the biggest impact on your work has been?
8. Has the population of people that you see changed over the past 5 years? If so, how? Probes:
    a. Are they getting older or younger? Are there more men or women?
    b. Do they have health insurance?
9. What do you know about HIV and HCV among PWUO? What do you think your colleagues know?
    a. What might help increase awareness among health care providers?
10. Are you comfortable talking to your opioid-using patients about drug use services?
    a. Would you be comfortable talking about buprenorphine or methadone treatment?

b. Would you be comfortable talking about syringe exchange programs?
c. What other services might you talk about? Why or why not?
d. What makes it difficult to talk about drug use services with your patients? What might make it easier?

Narcan

11. What do you know about Narcan/naloxone?
    a. How is naloxone administered?
12. What do you know about obtaining/accessing/buying naloxone?
    a. Do you know where you can access naloxone for free?
    b. Experience obtaining naloxone?
13. If you have a naloxone kit, where do you keep it? (If don't have, where would you keep it?)
    a. Are you trained in using naloxone? If not, do you have interest in being trained?
14. Who do you think should carry naloxone?
    a. What concerns would you have about carrying naloxone?
        i. How practical would it be to carry it?
    b. What would make you more likely to carry naloxone?
15. Who do you know who carries naloxone?
    a. Should naloxone be provided to friends and loved ones of PWUO? Why or why not?
    b. Should naloxone be provided to suppliers?
    c. Would you recommend naloxone to others?

Laws/Policies/Law Enforcement

There are a lot of different laws and policies about drug use in each different state, and even organizations may not know about all the different laws.

16. How do you find out about laws and policies related to drug use, or changes to laws/policies in Ohio?
    a. What can you tell me about Ohio's laws/policies about drug possession?
        i. About possession of needles or other paraphernalia?
        ii. About Good Samaritan laws related to getting or using naloxone (Narcan)? About calling 911 if someone overdoses?
        iii. Other important drug use laws?
    b. What do you think about these laws and policies? Are they helpful, or unhelpful?
    c. Do you think most other organizations or individuals who interact with PWUO have a similar level of understanding of these laws/policies, or not? How do you think they view these laws similarly or differently?
17. Do you interact with the police in the context of drug use?
    a. How/in what context do you interact with the police?
    b. How does this normally go? Give me an example. (How would you describe these interactions?)
    c. How would you describe the response of the police to drug use and the opioid epidemic?

Opportunities/Challenges

18. What do you see as the biggest challenges to addressing the epidemic?
    a. What are some challenges to your organization in particular? (eg, staffing, resources, time, interactions with other organizations, etc.)
    b. How adequately prepared have you felt for working with PWUO?
    c. What are some challenges to other organizations?
    d. What would you like to see/what could be improved? (eg, organizations interconnected, more resources, etc.)
        i. What local resources are available that you think could play a role?
    e. Are there community members who oppose or might oppose efforts to address these issues? How do you think they will show their opposition?
19. Have you ever not been able to accommodate a drug user? (eg, it was out of your skill area, you didn't have time, etc.)
    a. What was/were the reason(s)?
20. What do you think your organization could realistically do to address the opioid epidemic?
    a. What do you think is needed?
    b. If there were an effort launched to increase services for PWUO, would this be acceptable to your organization? What would be some limitations?
    c. Do you currently have the capacity to expand? Would you and others be willing to expand your services, or is that not realistic?
    d. What is the overall attitude toward handling the epidemic at your organization? How would you describe it?
21. Do you have any other thoughts about the epidemic, or experiences with PWUO, that you'd like to share with me?

Conclusion: Thank you so much for talking with me today – we really appreciate it. If you have any concerns, please don't hesitate to reach out at the number provided on the consent form!

D. Focus Group Discussion Guide for Community Members/Religious Organizational Staff

Intro: Thank you so much for talking with me today. As you know, we're interested in learning more about your experience with the opioid epidemic in your area, so I have a few questions for you. Once again, everything you tell me will be kept confidential and will not be linked to you in any way. Of course, if you have any questions for me as we go through, if anything is unclear, or if you would prefer to skip a question, please don't hesitate to stop me at any point. Any questions before we begin?

Background/Intro

I would like to start by getting to know you a little better.

1. How long have you lived in this area?
2. How has drug use in this area changed while you have lived here?
    a. Tell me about any changes in the number of people using drugs to get high?
    b. Tell me about any changes in what people are using?
    c. Tell me about any changes in the kinds of people who are using?
    d. Tell me about reasons you think these changes have happened?
3. What kinds of things in your community do you think have caused the increase in drug/opioid abuse?
    a. Are there any other things that you think might be contributing? (eg, local or state policies, economic conditions, etc.)
    b. What do people in your community think about the issue, (eg how much it occurs, why it is occurring in your community, or what the consequences are)? Do you think these perceptions are accurate, or not?
4. Do you think that PWUO are successfully getting help for drug use in your community?
    a. Do you think that PWUO are getting the treatment or health care services that they need? Why or why not?

b. What do you think might make it difficult to get treatment? (ie, is this a problem with availability of services, or a problem with people being able to access the services that are available?)

Narcan

5. How confident do you feel in your ability to respond to an overdose?
6. What do you know about Narcan?
   a. How is naloxone administered?
   b. Tell me about a time you have used Narcan or seen someone use Narcan. How did you administer it?
7. What do you know about obtaining/accessing/buying naloxone?
   a. Do you know where you can access naloxone for free?
   b. Experience obtaining naloxone?
   c. Do you currently have Narcan/naloxone with you or at home? If you wanted to get Narcan/naloxone, do you know how to get it?
8. If you have a naloxone kit, where do you keep it? (If don't have, where would you keep it?)
   a. Are you trained in using naloxone? If not, do you have interest in being trained?
9. Who do you think should carry naloxone?
   a. What concerns would people in your community have about carrying naloxone?
      i. How practical would it be to carry it?
   b. What would make them more likely to carry naloxone? You?
10. (If you carry/are trained to use naloxone) Would you recommend others to be trained to use/carry naloxone?
    1. What might prevent people you know from being trained?
11. Who do you know that carries naloxone?
    a. Should naloxone be provided to friends and family members? Why or why not?
    b. Should naloxone be provided to suppliers?
12. What do you see as challenges to using naloxone in your community?
    a. Law enforcement stance on its use?
    b. Religious organization stance on its use?
    c. Availability of naloxone?
    d. Knowledge of naloxone or perceptions about naloxone use?

Laws/Policies

There are a lot of different laws and policies about drug use in each different state, and even organizations may not know about all the different laws.

13. How do you find out about laws and policies related to drug use, or changes to laws/policies in Ohio?
    a. What can you tell me about Ohio's laws/policies about drug possession?
       i. About Good Samaritan laws related to getting or using naloxone (Narcan)?
       ii. About calling 911 if someone overdoses?
    b. What do you think about these laws and policies? Are they helpful, or unhelpful?
    c. Do you think most other people in your community have a similar level of understanding of these laws/policies, or not? How do you think they view these laws similarly or differently?

Opportunities/Challenges

14. What do you see as the biggest challenges to addressing the opioid epidemic in Columbus?
    a. What would you like to see/what could be improved? (eg, organizations interconnected, more resources, etc.)
       i. What local resources are available that you think could play a role?
    b. Are there community members who oppose or might oppose efforts to address these issues? How do you think they will show their opposition?
15. Have you ever not been able to accommodate a drug user? (eg., it was out of your skill area, you didn't have time, etc.)
    a. What was/were the reason(s)?
16. What do you think communities could realistically do to address the opioid epidemic?
    a. What do you think is needed?
    b. What is the overall attitude toward handling the epidemic in your community? How would you describe it?
17. We have talked about many things today. I really appreciate your willingness to share your thoughts. Is there anything else that you feel we should know or that we haven't covered but you think is important for us to know?

Conclusion: Thank you so much for talking with me today – we really appreciate it. If you have any concerns, please don't hesitate to reach out at the number provided on the consent form!