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Opioid knowledge and perceptions among Hispanic/Latino residents in Los Angeles

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Abstract

Background: Most research and health education efforts to address the opioid crisis have focused on white populations. However, opioid use, opioid use disorder, and opioid overdose deaths also have increased among Hispanics.

Methods: This study conducted four focus groups in a Hispanic community in Southern California (N= 45) to assess opioid-related knowledge, perceptions, and preventive behaviors among Hispanic residents. Focus group questions assessed medication storage, disposal, and sharing; opioid-related knowledge; how to recognize a drug problem; perceptions of the extent of the opioid use problem in the community; and sources of help for drug problems.

Results: Qualitative analysis revealed that most participants were aware of the potential dangers of opioids and the importance of keeping them out of the reach of children. However, participants reported stockpiling, sharing, and borrowing prescription medications for financial reasons. They perceived marijuana use as a larger problem in the community than opioids. They were familiar with the behavioral indicators of opioid addiction, but they were unaware of the availability of naloxone to reverse overdoses. They were ambivalent about searching for information about opioids and treatment options because they lacked self-efficacy to find accurate information on the internet.

Conclusions: Findings identify some knowledge gaps about opioids among Hispanics and suggest opportunities for culturally accessible health education to provide Hispanics with information about opioid use disorder, overdose reversal, and treatment options.

Keywords

Opioid; opioid use disorder; overdose; Hispanic

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JBU participated in study conceptualization, led the data analysis, wrote the first draft, and approved the final draft. GBM participated in study conceptualization, participated in data analysis, provided comments, and approved the final draft. MFB participated in study conceptualization, obtained the funding, provided comments, and approved the final draft.

Introduction

The use of prescription and illicit opioids has increased dramatically in the United States over the past two decades, leading to an epidemic of opioid use disorder (OUD) and opioid overdose mortality.¹ The opioid epidemic has disproportionately affected Whites and American Indians/Alaska Natives, with a lower prevalence and slower rate of increase among Hispanics.^{1–3} Nevertheless, from 1999 to 2017, overdose mortality increased 3.3% per year among Hispanics.¹ The proliferation of illicitly manufactured fentanyl has contributed to the recent increase in opioid overdose deaths among Hispanics.⁴

Because many of the structural-level risk factors for OUD (low social capital, area poverty rate, unemployment rate, lack of economic opportunities, poor working conditions)¹ are prevalent among Hispanic populations, it is likely that the opioid epidemic will increasingly impact this population in the future. It is important for Hispanic families to be aware of the potential dangers of opioids to prevent OUD and overdoses from increasing in Hispanic communities. The national perception that OUD is primarily a problem among rural white populations might prevent urban Hispanics from receiving appropriate health education and treatment. Hispanics face numerous barriers to obtaining effective treatment for OUD, including stigma, lack of information, language barriers, fear of deportation, lack of health insurance, and resistance to using pharmacotherapy to treat a problem caused by drugs.^{5–7} Consequently, Hispanics with OUD are less likely to obtain effective treatment (MAT) is lower among Hispanics than among whites.^{7,11,12}

Many health education opportunities exist to prevent nonmedical use of prescription opioids, OUD, and overdose deaths. Patients and their family members can learn not to stockpile, share, lend, or borrow prescription opioids, to store opioids out of reach of children and other family members who might be tempted to try them, and to dispose of unneeded medications safely. However, recent studies have found that prescription opioid sharing is common (typically for benevolent purposes such as helping a loved one who is experiencing pain),^{13–15} and that fewer than half of patients with opioid prescriptions report having been counseled by a physician about safe practices for sharing, storing, and disposing of prescription opioids.¹⁶

Opportunities also exist to educate friends and family members of people who use opioids about how to recognize overdoses and use naloxone for overdose reversal. Although Hispanics with opioid prescriptions do receive prescriptions for the opioid overdose reversal drug naloxone,¹⁷ naloxone is effective only if someone who is present during the overdose event knows how to administer it. Take-home naloxone, combined with health education, has been effective in increasing overdose reversals among Hispanics.¹⁸ The extent to which Hispanics are familiar with naloxone and know how to obtain and use it is unknown.

Before developing health education messages to prevent prescription opioid diversion and increase OUD treatment utilization in Hispanic communities, it is important to assess Hispanics' current knowledge and perceptions about opioids, OUD, and OUD treatment. In preparation for the development of culturally centered health education materials

for Hispanics, this study conducted four focus groups of residents in a predominantly Hispanic neighborhood in the Los Angeles area. The focus groups asked about medication storage, disposal, and sharing; opioid-related knowledge; how to recognize a drug problem; perceptions of the extent of the opioid use problem in the community; and sources of help for drug problems.

Methods

Participants and recruitment

The University of Southern California Institutional Review Board (IRB) approved all procedures. Focus group participants were 45 residents of a majority Hispanic neighborhood in the Los Angeles area. Participants were recruited through parent and community meetings at an elementary school. A research staff member explained the study at the meetings and invited people to write their name on a signup sheet if they were interested. The staff member called all people who signed up and scheduled them for a focus group, depending on their preferred language and availability. When they arrived for the focus group, data collectors obtained written informed consent using IRB-approved consent forms, available in English and Spanish.

Procedure

In December 2019, a bilingual facilitator conducted four focus groups: two in English (N = 9 and N = 12) and two in Spanish (each N = 12). The focus groups followed a structured interview guide. Focus groups were recorded and transcribed. The Spanish transcriptions were translated into English for analysis.

Measures

The focus group guide contained 27 questions about 5 major themes: Medication storage, disposal, and sharing; Opioid-related knowledge; How to recognize a drug problem; Perceptions of the extent of the opioid use problem in the community; and Sources of help for drug problems (Table 1).

Analysis

A qualitative thematic analysis was used to analyze the data.¹⁹ Data analysis entailed a 3-step process. The first step involved the independent review of the data by the first author (JU) for overarching themes,²⁰ striving to remain open-minded and let the themes emerge naturally. All authors then discussed these overarching themes using the constant comparison method²¹ to develop the themes and their properties. This revealed recurring themes. In the second step, the data were reexamined by a trained research assistant and grouped into these themes with a focus on identifying subthemes and tensions within each theme. Step 3 entailed a series of discussions among the investigators, moving back and forth between the main themes and subthemes and the data until a nuanced analysis of participants' perceptions was achieved

Results

The participants' mean age was 46.04 years (SD = 15.38, range 19-79); 83% were female. All participants were Hispanic/Latino.

Medication storage, disposal, and sharing

Participants acknowledged the importance of keeping medications away from children. Their strategies for preventing children from accessing medications included putting the medications out of children's reach and taking medications out of the home. They listed several locations to take unused medications for safe disposal.

I have small children so I don't like to keep medicine around that I no longer need because they might get into it.

I throw them away because it is dangerous for the children. One never knows, children can easily have access to medications.

[I keep medications] In a box. On the top of a cabinet. High, so the children can't reach it.

[Pharmacy name] has a corner by the pharmacy where you can dispose of any medication that you might have.

I take it to the Sheriff's Station. There is a box there where you can deposit drugs.

I also throw them in the toilet for more safety.

Some participants reported keeping or sharing old prescription medications because it is too expensive or inconvenient to obtain new prescriptions:

I don't dispose of them because we do not have medical coverage. We can use them in the future.

I haven't shared my medication with anyone but I've used someone else's medication like cough syrup and at the time it was due to the fact that I wasn't insured so I had to pay a higher rate for my prescriptions.

I've shared pain medication. It's just easier access to get it from someone else instead of going to the doctor and waiting for a prescription.

Sometimes I have shared medication when a headache, stomachache, or a simple flu are not so severe. I have shared because if I don't, I have to pay for a doctor's visit.

Participants expressed reservations about sharing prescription medications, but some reported doing so to help a person in pain or if the person was already taking the same medication:

My husband and I take the same cholesterol medication so we share.

Because sometimes me and my husband get prescribed the same medicine so we share it, like allergy pills.

I've shared Naproxen with adults because they use the medication. If visitors come and they forget their medication I share mine. It is the same milligrams.

Participants generally agreed that sharing over-the-counter prescriptions was safe:

I think it's okay if it's an over the counter drug but when it comes to prescription drugs you may be giving it to someone who is addicted to the drug and not even know it, even if it's a family member. You may be assisting with their addiction. So over the counter I would and prescription I wouldn't.

Opioid-related knowledge

Most participants had a basic understanding of the definition of an opioid, although only a few could provide completely correct, detailed descriptions:

An opioid is a painkiller.

An opioid is a prescription drug is derived from opium, which is a drug.

Medication that comes from the poppy.

From what they taught me in school an opioid is a chemical from a flower. People grow poppies because they have a special chemical. My brother is a Marine and they tell them not to eat anything that contains poppy seeds before taking a drug test. It is used for pain medication. It helps numb the pain. People like that feeling so it's really addictive. Opioids are a really strong medication.

Others provided vague or partial definitions:

I think that it is a medication that is prescribed or not.

It's a prescription drug that alters the way the mind or your body functions either to speed it up or slow it down.

I've been hearing about it on the news and I want to know what it means. I know that they are very strong medications. I have been hearing that opioid abuse is a problem.

Only a few participants could define fentanyl:

I was watching a news report where they were saying that it is a powder that they mix with another substance. It's a new drug. Fentanyl is new to us. A policeman was saying that a small amount can kill you. You don't know what's in it.

I think it might be a type of substance that is mixed with cocaine. It makes the person that uses it feel a type of pleasure.

I heard it is put into heroin. A lot of people are overdosing on it. It's supposed to be a downer.

It is used during surgery. Anesthesiologists use it. It's part of the mixture to put a person to sleep. Fentanyl has been abused by people like Michael Jackson.

No respondents in any of the focus groups could define naloxone.

How to recognize a drug problem

Participants described drug tolerance and withdrawal as indicators of a drug problem. They also agreed that people with drug problems could be recognized by their behaviors, including seeking more of the medication after their prescription runs out or trying to obtain more of the medication from friends or unethical physicians.

Sometimes when their body is so addicted to the drug and they need a stronger dosage to control the pain.

When he doesn't have his medication, he is desperate.

When they use all of the medication and they still want more.

When the person doesn't get the same results. If the person is abusing his medication, he runs out of it faster.

When I go to the hospital, patients are selling their own medication to others across the street. These buyers use these medications as drugs.

Sometimes the doctors don't want to give them that medication anymore so they ask their friends if they have that medication or can you ask your doctor for it and I give you money for it.

They sell it among themselves. I have heard that there are some doctors, if you have an ID and pay them in cash, they will give you the prescription.

They get the prescription and turn around and sell it to someone else.

Most prescription medications have a set number of refills. Once you over use those refills and the person still wants to continue taking the medication, then you realize that something is wrong.

Perceptions of the extent of the opioid use problem in the community

When asked whether opioid and other drug use were problems in their community, most participants mentioned marijuana rather than opioids. Marijuana was described as a nuisance because it smells bad and attracts gangs and crime:

Yes, it is a problem because I have neighbors that smoke a lot of marijuana. I know this because of the smell.

A neighbor can be smoking marijuana and the smell is so strong that we all end up smelling it.

It causes problems because it creates gangs that tag our walls. They shot up the corner store where adults were smoking marijuana.

At the corner store they legally sell marijuana but also sell illegal drugs on the side. We have been asking the police to close the store for three or four years.

Just from what I've witnessed in my community drugs are easy to obtain. For example, I live on a very busy main street. So from my balcony I can witness young adults sometimes even teenagers just hanging out loitering smoking marijuana so I can smell it.

I've witnessed it with neighbors. Where I live, the neighbors do it every day. They smoke marijuana and take drugs at the park. We call the police.

We aren't even safe at the park anymore. When I take my children to play sports, they are smoking marijuana everywhere, in the parking lot and on the playground equipment.

Participants also noted problems with other drugs besides marijuana:

In this community, all types of drugs are used.

It's been a problem for years. The problem now is that there are so many drugs. Overuse is a problem in this community.

I can see prescription bottles left on the street, I can see needles on the side of the road, I can witness irate behavior, and I myself have personally called the police and they can handle the situation. I myself have called children's protective services on parents that have been outside doing drugs with their children around. So it's a real big problem.

You see the accessibility of the drugs where that specific house gets visitors all day. It's not Girl Scout cookies. And you just go to the park. You see an individual sitting there and six, seven, eight different visitors. You just see the accessibility that brings use and abuse.

Participants also stated that children and adolescents' easy access to drugs was a problem in their community:

I believe that the biggest problem is that illegal drugs are so accessible to children. I've known this since I was a kid.

I think that legal and illegal drugs are a problem in our community because it is harming our children who are as young as eight, nine, and ten years old.

I feel that there are problems here in our community. Young people are using illegal drugs near our schools.

They are using it in the schools. We have a fourteen-year-old son. We don't know where he gets drugs. We think that he is getting them near our home. They are opening marijuana stores.

It's a secret that everyone knows. They sell it in the middle school. The children sell it to each other. We know because our children tell us. We go to school and complain but no one knows anything.

Some participants mentioned that drugs are a problem in many communities, not just their own community:

I travel quite a bit so I see that it is a problem everywhere. People try to degrade this community but it is everywhere. The parents need to be more involved. If we as a community get more involved with our children at school, it would really help.

It's not just about this community. I moved from a different community and drugs were there as well. There are different types of drugs now and how you get them

is different but the drugs are there. The fact that they are so easily obtainable is a problem. We have talked to law enforcement and the problem is that by the time we report the crime the drug dealers are long gone. With social media being such a thing, it takes one post to say hey we are so come buy all these edibles come by and buy all these drugs by the time it gets to law enforcement they are long gone.

Participants also perceived that the problem of marijuana use in their community had increased since California legalized marijuana (in 2016):

Since they legalized the sale of marijuana, it's harming us more because everyone is using it. I know some ladies like us who smoke marijuana because they can't sleep. I think that it is a big abuse. In our neighborhood, people smoke marijuana out in the open every day.

I think with the legalization of marijuana, any adult can purchase it. Most people have access to it. It worries us because we don't know who is using drugs.

The legalization of marijuana greatly affects us because people need it and are addicted to it.

Sources of help for drug problems

When seeking help for their own drug problem or for someone else's drug problem, most participants would consult close family members and clinicians.

I would ask my family for help.

I would probably ask my immediate family, my husband, my parents, someone I feel comfortable sharing that type of situation with.

I would talk to my family and the doctor

I would first talk to that person to see how I could help. But if I couldn't help them, then I would talk to someone else like another family member or a specialist.

First of all, I would talk to family members to see if they noticed the same behavior I have and then discuss how to go from there. Then go to the person and confront them.

I would ask the doctor if they had any programs to help the person that needs it.

It is also important to understand that even though the person is the one consuming the drugs this also affects family members so they also need to ask for help.

Participants had mixed opinions about searching for information on the internet. Some said that they would search the internet for information or service providers.

I think researching the side effects what the drug would cause would give better insight as to whether or not I can confirm my theory for signs to determine if I believe they need help or not.

I would research online because I know there are a lot of government agencies or programs and I would present that information to that person.

I can find information about places where I can get help.

I would research so that I could send that person or go with that person to a specialist.

However, others mistrusted the internet because it contains false or misleading information:

I would not look on the internet because sometimes what they publish is not true.

I would not research it online. There is too much false information that is posted out there.

The internet is a double-edged sword. You can find correct and incorrect information.

You can look up things on the internet, you just have to be careful. The internet is not gospel. You can use it but carefully. It's not 100% correct.

Some participants also expressed low self-efficacy to find accurate, relevant information on the internet.

I wouldn't know what to search for.

I would look on the internet but I wouldn't know what agency to contact.

From my personal experience diagnosing myself, so when my finger hurt I looked online and found that it could be a simple thing to a very serious problem where I could be dead in two weeks. I am very cognizant of that, so I am very careful with that.

I'm not an expert so I would go see an expert in person, not look on the internet.

Discussion

Although Hispanics have a relatively low prevalence of opioid misuse and OUD, opioid problems are increasing in Hispanic communities^{1–4} and deserve attention. This qualitative study of opioid knowledge and perceptions among Hispanic adults highlights some knowledge gaps and opportunities for health education, prevention, and treatment. Some participants were aware of the definition of opioids and their effects on the body, but others had only a partial understanding (e.g., opioids are a drug derived from the poppy flower). Although the participants themselves did not mention the need for culturally centered health education programs or materials, previous research^{22,23} suggests that culturally centered interventions could be an effective way to fill knowledge gaps, reduce risky behaviors, encourage participation in behavioral health interventions, and facilitate linkages to drug treatment programs.

The U.S. Food and Drug Administration (FDA)'s Risk Evaluation and Mitigation Strategy (REMS) program encourages physicians to obtain specialized training about opioids, with the assumption that the educated physicians would prescribe fewer opioids and educate their patients about potential risks. Evaluations of the REMS program²⁴ suggest that it

indeed increased the number of physicians trained, but there is little evidence that this led to increased physician-patient communication about opioids in minority communities. Such a top-down approach might be inappropriate for marginalized populations that experience barriers to healthcare access and perceive a stigma around seeking behavioral healthcare. Community-based programs are well-positioned to disseminate this information from physicians to Hispanic communities. Because Hispanics are more likely to seek support from social networks and lay healers than from the Western medical system,²³ a more culturally congruent strategy for dissemination of opioid education in Hispanic communities would be to involve community elders (*abuelas*) and lay health workers (*promotoras*) in the process.²³ These culturally-connected people could receive training about OUD and convey this information in culturally appropriate ways to their communities. Such a strategy also could incorporate a more holistic conceptualization of healing and wellness that resonates with traditional healing practices by promoting sobriety from a bio-psycho—social-spiritual perspective.²³

The present study identifies some of the information about opioids that needs to be disseminated to Hispanic communities. Health education programs for Hispanics could define opioids, explain how people transition from using prescription opioids appropriately for short-term pain management to OUD, and that many opioid users turn to illicit opioids when prescriptions are unavailable. It is also important for users of prescription opioids, as well as their family and friends, to learn how to obtain naloxone and how to use it to reverse an overdose. None of the participants in any of the four focus groups were familiar with naloxone. Programs exist to distribute naloxone and train people how to use it; however, these programs might not have reached Hispanic communities.

When asked about the drug problem in their community, most participants mentioned marijuana rather than opioids. Marijuana use is much more prevalent than opioid use,²⁵ and it has recently become a salient issue in California because it became legal for personal use in 2016 and retail storefronts began to open in 2018. In the early years of California's retail licensing program, unlicensed retailers proliferated and were not shut down promptly due to lack of resources for enforcement.²⁶ These unlicensed retailers, who often disobey regulations about age verification, child-proof packaging, and operating hours, continue to be located disproportionately in Hispanic communities²⁶. This might contribute to the availability and ubiquity of marijuana in Hispanic communities. Participants appeared to be less aware of the prevalence of opioid use, although some noted that drugs of all types were a problem in their community. It is important to note that marijuana use is a risk factor for opioid misuse,²⁷ so prevention programs should address both substances.

Perhaps because this sample was primarily comprised of parents and caregivers of young children, the participants in this study were especially concerned about children and adolescents accessing and using drugs. Most participants were aware of the importance of preventing youth from accessing prescription medications, either by placing them out of reach or by taking unused prescriptions to a safe disposal location. However, some participants reported keeping and sharing prescription drugs because obtaining new prescriptions was a financial burden. Interventions are needed to discourage medication stockpiling and sharing. Because protecting children is a salient cultural value in Hispanic

cultures,²⁸ perhaps health education programs could frame the issue as a way to protect children from drugs.

Although the internet contains some excellent Spanish-language resources about opioids,²⁹ most participants in this study were reluctant to search the internet because they lacked confidence that they could distinguish accurate information from inaccurate information. Healthcare providers, clinics, schools, and social service agencies could publicize the websites that are from reputable sources as reliable sources of information about opioids.

Limitations

Participants were all parents or caregivers of elementary school children in a single neighborhood in the Los Angeles area. We selected this neighborhood because it has a high concentration of Hispanics, an understudied group in opioid research. The extent to which these findings would generalize to other neighborhoods, or to residents who are not caregivers of young children, is unknown. Because the sample was predominantly female, these findings might not generalize to Hispanic men.

Conclusion

Despite these limitations, the results of this qualitative study highlight some important information gaps about nonmedical opioid use, OUD, and opioid deaths in Hispanic communities. Hispanic communities need more information about the process by which prescription opioid use can lead to OUD, emphasizing the importance of not sharing opioids and recognizing when a loved one is beginning to develop OUD. It is also important for Hispanic family and friends of opioid users to understand how to obtain and use naloxone for overdose reversal. Although the opioid epidemic has not impacted Hispanic communities as strongly as it has impacted white and American Indian/Alaska Native communities, the prevalence of OUD and opioid overdose deaths continues to increase among Hispanics. Culturally centered health education programs, disseminated effectively to community members, are needed to prevent the opioid epidemic from expanding further into Hispanic communities.

References

- Singh GK, Kim IE, Girmay M, et al. Opioid epidemic in the United States: empirical trends, and a literature review of social determinants and epidemiological, pain management, and treatment patterns. Int J MCH Aids. 2019;8(2):89–100. [PubMed: 31723479]
- [2]. Hudgins JD, Porter JJ, Monuteaux MC, Bourgeois FT. Prescription opioid use and misuse among adolescents and young adults in the United States: a national survey study. PLoS Med. 2019;16(11):e1002922. Published 2019 Nov 5. [PubMed: 31689290]
- [3]. Zeledon I, West A, Antony V, et al. Statewide collaborative partnerships among American Indian and Alaska Native (AI/AN) communities in California to target the opioid epidemic: preliminary results of the Tribal Medication Assisted Treatment (MAT) key informant needs assessment. J Subst Abuse Treat. 2020;108:9–19. [PubMed: 31056429]
- [4]. Lippold KM, Jones CM, Olsen EO, Giroir BP. Racial/ethnic and age group differences in opioid and synthetic opioid-involved overdose deaths among adults aged 18 years in metropolitan areas – United States, 2015–2017. MMWR Morb Mortal Wkly Rep. 2019;68(43):967–973. Published 2019 Nov 1. [PubMed: 31671083]

- [5]. Bergman BG, Ashford RD, Kelly JF. Attitudes toward opioid use disorder medications: results from a U.S. national study of individuals who resolved a substance use problem. Exp Clin Psychopharmacol. 2020;28(4):449–461. [PubMed: 31556675]
- [6]. Brenes F, Henriquez F. Hispanics, addictions, and the opioid epidemic: brief report. Hisp Health Care Int. 2020;18(1):40–43. 1540415319888437. [PubMed: 31747797]
- [7]. Evans EA, Yoo C, Huang D, Saxon AJ, Hser YI. Effects of access barriers and medication acceptability on buprenorphinenaloxone treatment utilization over 2 years: results from a multisite randomized trial of adults with opioid use disorder. J Subst Abuse Treat. 2019;106:19– 28. [PubMed: 31540607]
- [8]. Hadland SE, Wharam JF, Schuster MA, Zhang F, Samet JH, Larochelle MR. Trends in receipt of buprenorphine and naltrexone for opioid use disorder among adolescents and young adults, 2001–2014. JAMA Pediatr. 2017;171(8):747–755. [PubMed: 28628701]
- [9]. Lapham G, Boudreau DM, Johnson EA, et al. Prevalence and treatment of opioid use disorders among primary care patients in six health systems. Drug Alcohol Depend. 2020;207:107732.
 [PubMed: 31835068]
- [10]. Rhee TG, Rosenheck RA. Buprenorphine prescribing for opioid use disorder in medical practices: can office-based out-patient care address the opiate crisis in the United States? Addiction. 2019;114(11):1992–1999. [PubMed: 31307111]
- [11]. Hser YI, Saxon AJ, Huang D, et al. Treatment retention among patients randomized to buprenorphine/naloxone compared to methadone in a multi-site trial. Addiction. 2014;109(1):79– 87. [PubMed: 23961726]
- [12]. Zhu Y, Evans EA, Mooney LJ, et al. Correlates of long-term opioid abstinence after randomization to methadone versus buprenorphine/naloxone in a multi-site trial. J Neuroimmune Pharmacol. 2018;13(4):488–497. [PubMed: 30094695]
- [13]. Beyene KA, Sheridan J, Aspden T. Prescription medication sharing: a systematic review of the literature. Am J Public Health. 2014;104(4):e15–e26.
- [14]. Ford JA, Pomykacz C, Szalewski A, Esteban McCabe S, Schepis TS. Friends and relatives as sources of prescription opioids for misuse among young adults: the significance of physician source and race/ethnic differences. Subst Abus. 2020;41(1): 93–100. [PubMed: 31295073]
- [15]. Lewis ET, Cucciare MA, Trafton JA. What do patients do with unused opioid medications? Clin J Pain. 2014;30(8):654–662. [PubMed: 24281287]
- [16]. Kennedy-Hendricks A, Gielen A, McDonald E, McGinty EE, Shields W, Barry CL. Medication Sharing, Storage, and Disposal Practices for Opioid Medications Among US Adults. JAMA Intern Med. 2016;176(7):1027–1029. [PubMed: 27295629]
- [17]. Madden EF, Qeadan F. Racial inequities in U.S. naloxone prescriptions. Subst Abus. 2020;41(2):232–244. [PubMed: 31718487]
- [18]. Katzman JG, Greenberg NH, Takeda MY, Moya Balasch M. Characteristics of patients with opioid use disorder associated with performing overdose reversals in the community: an opioid treatment program analysis. J Addict Med. 2019;13(2): 131–138. [PubMed: 30303890]
- [19]. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3(2):77-101.
- [20]. Lincoln YS, Guba EG. Naturalistic Inquiry. Vol. 75. Thousand Oaks, CA: Sage; 2005.
- [21]. Strauss A, Corbin J. Basics of Qualitative Research. Vol. 15. Newbury Park, CA: Sage; 1990.
- [22]. Castro FG, Bautista TG, Mendieta MI, Ramirez SO, Heydarian NM, Hughes AS. Chapter 23. Systems contexts for designing culturally adapted prevention interventions. In: Schwartz SJ, Unger J, eds. The Oxford Handbook of Acculturation and Health. Oxford: Oxford University Press; 2017:411.
- [23]. Sorrell TR. Mexican traditional medicine: application of a traditional and complementary medicine system to improve opioid use treatment in Latinos. J Holist Nurs. 2020. doi:10.1177/0898010120911540.
- [24]. Heyward J, Olson L, Sharfstein JM, Stuart EA, Lurie P, Alexander GC. Evaluation of the extended-release/long-acting opioid prescribing risk evaluation and mitigation strategy program by the US Food and Drug Administration: a review. JAMA Intern Med. 2020;180(2):301. [PubMed: 31886822]

- [25]. Substance Abuse and Mental Health Services Administration. 2017. Key Substance Use and Mental Health Indicators in the United States: Results from the SAMHSA. 2016 National Survey on Drug Use and Health (HHS Publication No. SMA 17–5044, NSDUH Series H-52). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from https://www.samhsa.gov/data/
- [26]. Unger JB, Vos R, Wu J, et al. Locations of licensed and unlicensed cannabis retailers in California: a threat to health equity? Prevent Med Rep. 19:101165.
- [27]. Azagba S, Shan L, Manzione L, Qeadan F, Wolfson M. Trends in opioid misuse among marijuana users and non-users in the U.S. from 2007–2017. IJERPH. 2019;16(22):4585.
- [28]. Valdivieso-Mora E, Peet CL, Garnier-Villarreal M, Salazar-Villanea M, Johnson DK. A systematic review of the relationship between familism and mental health outcomes in Latino population. Front Psychol. 2016;7:1632. [PubMed: 27826269]
- [29]. SAMHSA. Manual de instrucción de SAMHSA para la prevención de sobredosis de opioides. 2018. https://store.samhsa.gov/system/files/sma18-4742spanish.pdf.

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Table 1.

Focus group questions.

Medication storage, disposal, and sharing

- Do you store old medicine that you no longer use?
- If you store your medication when you no longer use it, where do you put it?
- Do you get rid of medication you no longer use? Why or why not?
- How do you get rid of your medication?
- Have you ever shared medication with anyone? If yes, why?
- Do you think it's all right to share medication? Why or why not?

Opioid-related knowledge

- What is an opioid?
- What is Fentanyl?
- What is Naloxone?
- What does addiction mean?
- How do individuals become addicted to opioids?

How to recognize a drug problem

- How do you know if someone might have a problem with prescription drugs?
- How do you know if someone might have a problem with illegal drugs?
- How do you know if someone is addicted to opioids?

Perceptions of the extent of the opioid use problem in the community

- Do you think illegal drugs are a problem in your community? Why or why not?
- Do you think opioids are problem in your community? Why or why not?
- Do you think drug addiction is a problem in your community? If so, what kind of drug addiction, and why is it a problem in your community?

Sources of help for drug problems

- Would you ask for help if you thought you had a problem with drugs?
- If you wanted help for your drug problem, who would you go to for help?
- Would you talk to someone if you thought a family member had a problem with drugs? Why or why not?
- Who would you talk with if you thought a family member had a problem with drugs?
- If you had a problem with drugs, would you look up information about drugs on the internet? Why or why not?

If a member in your family were abusing drugs, how would you handle it?

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Where can people in your community go to get help for problems related to drug abuse?