Strengthening Communities: A Qualitative Assessment of Opportunities for the Prevention of Adverse Childhood Experiences in the Wake of the Opioid Crisis

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Accepted: 29 November 2021 / Published online: 3 January 2022

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Abstract

The opioid crisis is a significant challenge for health and human service systems that serve children, youth, and families across the United States. Between 2000 and 2017, the number of foster care entries, a type of adverse childhood experience (ACE), attributable to parental drug use increased by 147%. Nevertheless, there is variation in the burden of opioid overdose and foster care rates across the U.S., suggesting community supports and systems to support families affected by substance use also vary. This qualitative study sampled communities experiencing high and low rates of overdose mortality and foster care entries (i.e., a qualitative comparison group) to better understand what might protect some counties from high overdose mortality and foster care entries. The sample included six counties from three states that were selected based on their rates of opioid overdose mortality and foster care entries. Using purposive sampling within counties, interview and discussion group participants included multi-sector community partners, parents whose children had been removed due to parental substance use, and caregivers caring for children who had been removed from their homes. Across all counties, prevention was not front-of-mind. Yet, participants from communities experiencing high rates of overdose mortality and foster care entries identified several factors that might help lessen exposure to substance use and ACEs including more community-based prevention services for children and youth. Both parents and caregivers across all communities also described the need for additional supports and services. Participants also described the impact of COVID-19 on services, including greater utilization of mental health and substance use treatment services and the challenges with engaging children and youth on virtual platforms. The implications for prevention are discussed, including the need to encourage primary prevention programs in communities.

Keywords Adverse childhood experiences · Opioid use · Community · Protective factors · Services

Highlights

- This study aimed to identify possible supports to prevent parental opioid misuse and adverse childhood experiences.
- Communities experiencing high and low rates of overdose mortality and foster care entries were sampled to understand multi-level risk and protective factors.
- Findings support the importance of prevention such as following opioid prescription guidelines and community youth programs.
- Parents discussed the importance of peer mentors and family-friendly substance use treatment as critical supports in their recovery.
- Additional research is needed on the support that caregivers need to effectively care for themselves and their children.

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The opioid crisis is a significant challenge for health and human service systems that serve children, youth, and families across the United States (Birnbaum et al., 2011, Meyer et al., 2014). The Centers for Disease Control and Prevention (CDC) reported that over 81,000 drug overdose deaths occurred in the U.S. in the 12 months ending in May 2020 (see: <https://www.cdc.gov/media/releases/2020/p1218-overdose-deaths-covid-19.html>). In the context of opioid misuse, many families cannot maintain stable employment, resulting in financial hardship and housing/food insecurity. Parents can also be absent from their children's lives for long periods, either due to incapacity, incarceration, residential treatment, and even death due to substances (Gruber & Taylor, 2006). These are also known as adverse childhood experiences (ACEs) which include exposure to abuse/neglect and household challenges, including domestic violence, mental illness, parental divorce/separation, incarceration of a household member, and substance use in the household.

Between 2000 and 2017, the number of foster care entries attributable to parental drug use increased by 147% (Meinhofer & Angler-Diaz, 2019). While substance use is not a new issue for child welfare agencies, the dramatic rise in opioid misuse and drug overdose deaths over the past several years has overwhelmed child welfare agencies with increasing caseloads, removals, and foster care placements (Radel et al., 2018). Moreover, increasing rates of problems related to opioid misuse (i.e., overdoses, hospitalizations, and death) have been accompanied by increasing rates of Child Protective Services (CPS) reports, substantiated reports of child abuse and neglect (CAN), and children being removed from parental care and placed into foster care (Radel et al., 2018).

While child removal is sometimes necessary in the context of familial substance use, removal can be a traumatic experience for children and families (Mitchell & Kuczynski, 2010). As the field of substance use recovery has moved away from solely punitive approaches, there is increasing interest in understanding ways to support families affected by substance use while keeping children safely in the home (Garcia, 2019). For example, the Family First Prevention Services Act specifically requires states to develop plans to explicitly provide families with critical behavioral health supports to address substance use to avoid child removal and foster care placement (a potential ACE) (Children's Defense Fund, 2020). Furthermore, the WHO's social determinants of health framework guides the field to examine structural factors (i.e., socioeconomic and political contexts like social policies and cultural norms) that create the community conditions that drive family contexts and individual behavior (Soler & Irwin, 2010). Using a social determinants of health framework, states and communities are increasingly recognizing the community conditions that

are driving the opioid crisis and "deaths of despair" (Cantu et al., 2020). These include loss of employment opportunities, underfunded schools, criminalization of substance use, limited access to behavioral health services, structural racism, social isolation, and underfunded social services (Cantu et al., 2020, Sinha, 2008). This points to the importance of addressing the community conditions in a comprehensive approach to preventing parental opioid misuse and ACEs.

Prevention approaches seek to effectively address the root causes of injury and ACEs in communities by understanding individual-, family-, and community-level risk and protective factors and applying prevention strategies to shore up protective factors and mitigate risk factors (Centers for Disease Control and Prevention, 2019). For example, ACEs prevention strategies include connecting children and youth to caring adults and positive youth development activities, enhancing economic supports for families, and promoting social norms against violence through community campaigns to prevent and reduce child abuse and neglect (Molnar et al., 2016, Poole et al., 2014, Roygardner et al., 2020).

The variation in the rates of overdose mortalities and foster care entries in communities across the U.S. allows researchers to examine how community conditions, including the services, resources, supports, and partnerships to address opioid misuse and ACEs, may vary between communities. Identifying and exploring these services, resources, supports, and partnerships could point to primary and secondary prevention strategies that address the social determinants of health and improve the community conditions in which children and families live, work, and play. Thus, it is important for formative research to include communities highly impacted by the opioid crisis and ACEs as well as those less impacted to understand what factors may be operating to protect or expose communities, families, and children to more adverse outcomes (Tilson, 2018, Merrick et al., 2020).

Qualitative research with parents and caregivers who have been impacted by opioid misuse and ACEs and diverse community providers who serve children and families can help to illuminate potential community protective factors and opportunities to help ensure safe environments for children. In particular, applying a life course methodology to elicit perspectives from parents with lived experience of opioid misuse and multi-generational ACEs (their own and their children's) can elucidate critical touchpoints for primary and secondary prevention efforts (Blanco et al., 2020, Hser et al., 2007). Individuals' and families' experiences with challenges in overcoming opioid misuse and ACEs, including lack of access to services and supports (Gherne et al., 2020) and perceived stigma that may present barriers to help-seeking (Tsai et al., 2019,

Knaak et al., 2019), are important to understand how to effectively structure a public health response to opioid misuse and ACEs.

Using a social determinants of health framework, the current qualitative study aimed to identify the conditions, resources, and supports that might be effective at preventing parental opioid misuse and ACEs while also providing safe, stable, and nurturing relationships and environments for all children and their families. This study addressed the following research questions:

Community-Level Questions

1. What potential community conditions and protective factors (e.g., services, supports, resources, and other features) may prevent or buffer opioid and substance misuse and/or children's exposure to ACEs? How do these factors vary by county rates of opioid overdose mortality and foster care entries?
2. What primary prevention strategies exist in counties that might create the conditions to prevent opioid misuse and/or children's exposure to ACEs? How do these strategies compare/differ by county rates of opioid overdose mortality and foster care entries?

Family- and Individual-Level Questions

3. Are there varying trajectories into opioid misuse that place children at risk for exposure to violence and other ACEs? What are the opportunities for prevention based on these trajectories?
4. How do the experiences of stigma around help seeking and the availability and accessibility of services differ for children, youth, and families in high and low rate communities?

Methods

Study Design

To gauge whether there are individual-, family-, and community-level protective factors that might prevent opioid misuse and other ACEs, counties were selected based on their drug overdose mortality burden and foster care entry rates (as determined by the Adoption and Foster Care Analysis and Reporting System (AFCARS: <https://www.acf.hhs.gov/cb/data-research/adoption-foster-care/>)). We used information from a prior study to divide U.S. States into high- and low-rate counties based on their drug overdose and foster care entry rates to form our qualitative comparison groups (Radel et al., 2018). To ensure

geographic variability, the project team identified counties in states in the Eastern, Southern, Midwest, Central, and Western regions of the U.S. for initial consideration. While the high- and low-rate counties were our primary comparison of interest, we also sampled for a high overdose mortality-low foster care entry county to gain insights into whether there are supports available that keep families intact in high-mortality states. We were also interested in including a low overdose mortality-high foster care entry county to understand whether there are emerging issues that might be driving high foster care entries in counties with low overdose mortality. Three states were selected in three separate regions—Midwest, Southwest, and Northwest. Once a state agreed to participate, we worked with state child welfare staff to select two counties within that state to finalize the sample. A local child welfare liaison in each county facilitated study coordination and assisted with recruitment. Table 1 describes the state and county mix that comprised the sample for the current study and provides additional descriptive data on the counties and states based on existing data and includes estimates on life expectancy, median county income, firearm fatalities, child poverty rate, low birthweight, unemployment, substantiated cases of CAN, and food insecurity.

Data Collection Procedures

Data were collected through interviews and small focus groups (dyads and triads) with three groups of participants—multi-sector community partners, parents whose children had been removed due to parental substance use, and caregivers caring for children who had been removed from their homes due to parental substance use. We used a purposive sampling approach in which county liaisons helped identify parents who had their children removed due to opioid misuse and kinship caregivers and foster parents who were caring children who had been removed from their homes. Further, the liaisons helped identify a wide swath of community partners representing a variety of sectors including child welfare, public health, education, behavioral health, law enforcement, and the judicial system, among others. For parents and caregivers (i.e., foster parents and kinship caregivers), the liaisons informed eligible parents and caregivers in their county of the study and invited them to participate. If interested, the liaison facilitated scheduling an interview or focus group. Parents who were invited to participate in the study were limited to those who were in recovery to help avoid any potential triggers for relapse and to also provide an understanding of their trajectories out of substance use.

We conducted the interviews and small focus groups (dyads and triads) during late 2019 and early 2020 using similar but distinct protocols for community partners, parents, and caregivers. The community partner interviews

Table 1 Demographic characteristics of selected counties in the Midwest, Northwest, and Southwest United States

County	Life expectancy ^a	Median annual income ^b	Firearm fatalities ^c	Low birth-weight ^d	Unemployment ^e	Children in poverty ^b	Rates of CAN (state-level) ^f	Prevalence of HH-level food insecurity (state-level) ^g
Midwest County 1 (low/low) ^h	78.3	\$59.3	31	7%	2.6%	16%	18.6	13.6%
Midwest County 2 (low/high) ⁱ	76.5	\$57.0	13	8%	2.7%	12%	18.6	13.6%
Northwest County 3 (high/high) ^j	78.6	\$53.8	15	6%	4.1%	16%	12.7	12.9%
Northwest County 4 (low/low) ^h	82.6	\$82.8	7	6%	3.5%	10%	12.7	12.9%
Southwest County 5 (high/high) ^j	74.0	\$41.5	21	12%	5.2%	29%	17.6	17.9%
Southwest County 6 (high/low) ^k	81.6	\$60.2	15	11%	4.1%	18%	17.6	17.9%

^aNational Center for Health Statistics–Mortality Files (2016–2018); Defined as the average number of years from birth a person can expect to live, according to the current mortality experience (age-specific death rates) of the population (unweighted)

^bSmall Area Income and Poverty Estimate (2018); Median income is in thousands of U.S. Dollars

^cNational Center for Health Statistics–Mortality Files (2014–2018); Defined as the number of fatalities attributed to firearms (unweighted)

^dNational Center for Health Statistics–Nativity Files (2012–2018); Defined as the percentage of live births where the infant weighed less than 2500 g (approximately 5 lbs., 8 oz.) (unweighted)

^eBureau of Labor Statistics (2018); Defined as the percentage of the county's civilian labor force, ages 16 and older, that is unemployed but seeking work (unweighted)

^fUS Department of Health and Human Services, Administration for Children and Families (2018); Defined as children receiving a Child Protective Services response (rate per 1000 children) (unweighted)

^gUS Department of Agriculture (2018); Defined as the percentage of county with limited or uncertain availability of nutritionally adequate and safe foods, or limited or uncertain ability to acquire acceptable foods in socially acceptable ways (unweighted)

^hLow/low = Low opioid overdose mortality and low foster care entry rates

ⁱLow/high = Low opioid overdose mortality and high foster care entry rates

^jHigh/high = High opioid overdose mortality and high foster care entry rates

^kHigh/low = High opioid overdose mortality and low foster care entry rates

focused on the available supports and services within their county (e.g., what substance use programs or services are available to families in your county?), perceived gaps in the services (e.g., what gaps in programs or services for families affected by the opioid crisis do you think exist within your county?), and the extent to which stigma affects community uptake of these services (e.g., please describe any barriers or challenges for families to access these programs and/or services). In addition, parents and caregivers were asked about parental trajectories into substance use, awareness of supports and services, opportunities for prevention, and the impact of opioid misuse on children (e.g., thinking back, what was going on in your life at that time when you first started using opioids/other substances?; what services or supports did you seek for your opioid/drug use issues (e.g., help from a physician, counseling, treatment)?; please describe how any friends or family members stepped in to help). Caregivers were also questioned about the challenges they faced caring for children who were affected by parental substance use.

Community partner focus groups and interviews were conducted virtually across all three states. Data collection for parents and caregivers were conducted in person in two states (Midwest and Northwest) in 2019. However, due to the emergence of the COVID-19 pandemic in 2020, all data collection in the Southwest state was conducted virtually. Prior to conducting the interviews, the study team walked participants through the informed consent form and requested verbal consent. Parents and caregivers received a \$50 gift card for participating. All recruitment procedures and interview protocols received approval from the Office of Management and Budget (OMB Control #0990-0421) and Institutional Review Board (IRB) approval from ICF International.

Analysis

We used inductive thematic analysis (Fereday & Muir-Cochrane, 2006) to examine the data. Interviews and focus groups were digitally recorded, transcribed verbatim, and

coded in Nvivo qualitative data analysis software (QSR International Pty Ltd., Version 12, 2018). Separate codebooks were developed for community partners, parents, and caregivers based on a priori interview guide constructs, interview notes, and initial impressions of the data. Prior to the full coding of transcripts, team members independently coded several community partner, caregiver and parent interviews, met to compare initial themes, added new codes as needed and reach consensus on the coding. Three team members then iteratively coded the transcripts and met regularly to compare use of codes. This team-based approach to arrive at intercoder consensus has been used in prior research (Cascio et al., 2019).

Once all transcripts were coded, we examined the data looking for themes and patterns using code frequency tables (both overall and disaggregated by relevant attributes), code co-occurrence tables, text queries, and narrative summaries of individual codes or sub-codes. In the reporting of the resulting themes, tabulations or counting of instances were used to give a sense of how common a given theme was across participants and then used to create a framework matrix for comparing themes for similarities and differences among respondent groups and county types (high- and low-rate). To allow for appropriate comparisons, counties with both high opioid overdose mortality and high foster care entry were compared with counties with both low substance use mortality and low foster care entry. For the purposes of this manuscript, mixed county data (combination of mortality and foster care entry rates) were only used to present the overall descriptive analyses and results related to parental opioid misuse trajectories. Therefore, unless otherwise noted, only high- and low-rate counties were included in all other results. To help with comparing counties based on substance use mortality and foster care entries, we employed an organizing framework and matrix to help organize themes and systematically compare across groups. This technique has been used previously for analyzing qualitative comparison groups (Lindsay, 2019). The comparisons were based primarily on the constructs of the interview guides to provide consistency across the participant groups. To examine resulting themes, we first reported findings overall by audience type, then compared by rates of opioid overdose mortality and foster care entries.

Results

Data collection was conducted with a total of 76 community partners from across all counties (54 individual interviews and 22 focus group participants ranging between 10 and 16 participants per county). The greatest percentages worked in child welfare (25%) or behavioral mental health (25%) and the largest percentage had been in their fields for more than

10 years (45%) with roughly one-fifth (21%) having been in their field for three years or less.

Interviews were conducted with 25 parents across all counties that were approximately evenly distributed between all six counties. Three-fourths identified as White (75%) and non-Hispanic (75%), and two-thirds identified as female (67%). The majority were single at the time of our interview (75%). Sixty-two percent of parents had three or more biological children under the age of 18; just one-third of parents (33%) had all of their children currently living with them with the remainder having some or all of their children living with others through informal agreements or formal child welfare placements.

Interviews were conducted with 56 caregivers across all counties (ranging between six to fifteen caregivers per county). Most caregivers identified as White (87%) and non-Hispanic (79%) and three-quarters identified as female (75%). Many of the caregivers served as nonrelative foster parents (58%) while more than a third were kinship caregivers (38%), caring for at least one relative child. All of the caregivers interviewed had at least one child living in their home at the time of our interviews, nearly two-thirds had two or more foster/kinship children living in their home (62%), including 15% of caregivers who had four or more foster/kinship children in their home. Below we provide the results of the interview and focus groups across community partners, parents, and caregivers for each of the four primary research questions.

Research Questions 1 and 2

The first primary research question was intended to provide insights into the availability of community-level supports and resources that might create the conditions to prevent opioid misuse and ACEs and whether there were differences based on rates of opioid overdose mortality and foster care entries. Thus, we contrasted high- and low-rate counties to address this question. To address this, community partners, parents, and caregivers were asked to reflect on the available supports, resources, and services in their communities, the gaps, and the facilitators and barriers to accessing these supports and services.

Available services and supports: community partners

In all counties, community partners recalled services that they were aware of or that were the most salient to them rather than choosing from a comprehensive list of services. They described the importance of drug treatment services, mental health programs, and parenting programs in reducing and preventing substance use and preventing ACEs. This was followed by court-based programs, home visiting programs, and support groups. There were few

between-county differences. When looking at programs that were described more frequently in low-rate counties compared to high-rate ones, community partners described: (a) the availability of home visiting and home-based services more frequently (43% in low, $n = 10$; 20% in disproportionately affected; $n = 4$); (b) the presence of prevention programs such as school-based educational, public awareness campaigns, and CAN and teen dating violence prevention programs (26% in low; $n = 6$; 5% in disproportionately affected; $n = 1$); (c) the importance of supports for families to access substance use treatment services (22% in low; $n = 5$; 5% in disproportionately affected; $n = 1$); and (d) having adequate funding for family support and substance use treatment services (52% in low; $n = 12$; 20% in disproportionately affected; $n = 4$). Furthermore, in high-rate counties, community partners mentioned the need for school-based services (25% in disproportionately affected; $n = 5$; 9% in low; $n = 2$) and a lack of youth-focused community services such as after-school and mentoring programs as critical gaps (25% in disproportionately affected; $n = 5$; 9% in low; $n = 2$).

“I think there’s limited opportunities for activities or things for students to participate in, especially youth. There’s not a lot of resources, community support, community resources. I think there’s resources for rehab and addiction but there’s not those protective factors, or protective measures in place to where kids can be engaged in other activities.” Community Partner (Southwestern State, high-rate county)

There were no meaningful between-county differences on the availability and needs for ACEs and substance use prevention. In fact, the need for primary prevention was not front-of-mind in communities as participants struggled to identify what services might have prevented substance use and ACEs.

Available services and supports: parents

Across all counties, parents had similar responses about the types of services that were available including drug treatment and counseling/support services. Parents also reported low awareness of services and difficulties navigating the substance use and child welfare systems. Nevertheless, parents in low-rate counties mentioned a range of community services that they utilized more frequently than parents in disproportionately affected counties including: (a) peer mentors for parents (44% low; $n = 4$; 0% high); (b) parenting classes (33% low; $n = 3$; 13% high; $n = 1$); and (c) transportation services (22% low; $n = 2$; 0% high). Parents in low-rate counties also more frequently mentioned the important role that peer mentors played specifically in

helping them access substance use treatment services (33% in low; $n = 3$; 0% in high).

“And one thing that really helped me...all these people...most of them, they’ve been there. They wasn’t just people who went to school, got a degree and come in there and not knowing anything. These people actually being in this situation, they were drug addicts, they were alcoholics, they were abusive or either abused. One counselor even went as far as posted his mug shot on his wall and framed it. Which actually has inspired me, I am actually looking to take fall college courses to be a psychologist. That actually started me to do the same thing. I want to be a drug and alcohol counselor.” Parent (Southwest State, high-rate county)

Available services and supports: caregivers

Caregivers spoke mostly about services directed toward the children in their care or themselves. Caregivers in low-rate counties spoke more frequently about a variety of services compared to caregivers in high-rate counties including: (a) respite care (67% low; $n = 8$; 27% high; $n = 4$); (b) support groups (67% low; $n = 8$; 27% high; $n = 4$); (c) trainings (50% low; $n = 6$; 27% high; $n = 4$); and (d) educational services (25% low; $n = 3$; 0% high). They also described needing a variety of additional services in their counties: 33% ($n = 4$) mentioned needing more respite services in low-rate counties compared to 7% ($n = 1$) in high-rate counties; 50% ($n = 6$) mentioned needing more support groups in low compared to 13% ($n = 2$) in high-rate counties.

“I’ve asked for it about 3 times because I know we’re allowed 3 days a month is what I was told. And so I’ve asked for it about 3 times... I’ve asked the person who is supposed to help me [and he] has not answered me...So we’ve had [foster care children for] 6 months and we’ve had no respite.” Caregiver (Southwest State, high-rate county)

Caregivers in low-rate counties also reported learning about services more frequently from other caregivers as opposed to directly from child welfare staff compared to caregivers in high-rate ones (58% low; $n = 7$; 20% high; $n = 3$).

Our second research question aimed to gauge whether there were primary prevention strategies in low-rate counties that could be feasibly implemented in high-rate ones to prevent opioid misuse and children’s exposure to other ACEs. In order to address this question, we compared the gaps in existing services mentioned in Question 1 and

assessed whether respondents in high-rate communities mentioned this as a need. We contrasted high- and low-rate counties to address this question. As described above, community partners mentioned school-based programming (curricula programs as well as staffing), addressing parents' childhood trauma, and offering community or after-school programs for youth were all critical in preventing or minimizing ACEs in low-rate communities. Many also noted that these types of programs were not always available in high-rate communities where resources were not available to provide these services. Community partners mentioned the critical need for funding for family support and substance use treatment services in high-rate counties. Partners in low-rate counties also mentioned that there were few drug treatment services available and discussed the need for long-term funding for their existing services to better support parents and children who are affected by substance use (26% in low; $n = 6$; 15% in disproportionately affected; $n = 3$). They also mentioned having behavioral health services available in their communities. However, broader community conditions limited the extent to which parents could access these services. Transportation was one of the most frequently mentioned barriers to accessing services.

Research Question 3

Our third research question was designed to understand whether there are varying trajectories into parental opioid misuse that place children at risk for exposure ACEs. We also gauged whether there were opportunities for prevention based on these trajectories. For this research question we included all counties including those with mixed rates of overdose mortality and foster care entries. We also include contrasts between high- and low-rate counties when differences emerged. Across all communities, parents described a variety of different trajectories into their opioid misuse. When examining patterns of first use, the dominant themes were related to starting with medical prescriptions, for conditions such as childbirth or due to physical pain from an injury (44%; $n = 11$), or for experimentation (24%; $n = 6$). Most parents (88%; $n = 22$) spoke of polysubstance use and using multiple substances over time, such as methamphetamine, marijuana, and alcohol. Regardless of whether parents reported first using substances because of a prescription or for experimentation, a common theme across parents' stories was the occurrence of other traumatic issues in their history or currently going on in their lives when their substance use began. Parents mentioned childhood trauma (20%; $n = 5$), substance use within their families of origin (24%; $n = 6$) and having their parents incarcerated (4% or one parent). Domestic violence and other relationship issues were reported as an issue in almost half of parents' lives when they began their opioid misuse.

In contrasting high- with low-rate communities, parents in high-rate communities reported more use of methamphetamines (75% in high; $n = 6$; 33% in low; $n = 3$), experiencing trauma in their past (38% in high; $n = 3$; 11% in low; $n = 1$), substance use that affected their relationships (75% in high; $n = 6$; 44% in low; $n = 4$), and being arrested or incarcerated as a result of their substance use (38% in high; $n = 3$; 11% in low; $n = 1$). In one county, generational substance use was perceived to be widespread across all types of participants with family norms that encouraged substance use and viewed it as a rite of passage.

"I think what's commonly called multi-generational use or familial use is really quite remarkable. And the amount of... I am not sure I would use the word acceptance but I'm struggling with another word, you know... The fact that everybody knows somebody who injects is fairly remarkable. And the number of folks who have parents or children or uncles that also are addicted. I think the only word you could use would be pervasive." Community partner (Southwestern State, high-rate county)

Parents talked about varying ways that their substance use changed over time and among all the parents in our sample, substance use escalated, with addiction leading parents to increase their use, often through any means possible. In many cases, parents talked about starting with pain pills for a medical condition or to provide them with more energy to take care of their kids and then becoming addicted (44% of parents; $n = 11$). In other cases, parents talked about beginning experimenting with other substances such as marijuana or alcohol but then needing harder drugs (28% of parents; $n = 7$). Many parents also reported multiple relapses and periods of time where they were in treatment or stopped using but then started up again.

"I had my second kid and my husband at the time traveled for work so I was all by myself. So, I noticed that when I would take the pain pills, I would have more energy to take care of the kids. Because I was just one person, tired and then I had these surgeries. To be able to function I would need more and more and more. I thought my body, I thought I was in pain but I think my body was just getting used to the pain pills. And so, I was probably going into withdrawals and just needing a higher prescription and kept asking for more." Parent (Northwest State, low-rate county)

Parents were asked to reflect on factors that may have mitigated their substance use or helped prevent the escalation of their substance use. Although parents sometimes struggled with articulating what might have mitigated their

substance use trajectory, the dominant themes resulting from those discussions were increased support from family or friends (36%, $n = 9$) and more information about substance use disorder and treatment information (36%, $n = 9$). Parents spoke about how they did not think they could talk to anyone about their substance use problem and felt they would be judged by their families and friends if they knew about their symptoms of substance use disorder, making it difficult for them to seek help. In fact, some parents were reluctant to seek help due to fears of child removal. Several parents also spoke about how other factors could have helped stopped their substance misuse or promoted prevention, including their own personal motivation, more support groups or peer mentors, more youth activities to promote prevention, and better/more comprehensive support from child welfare.

In terms of impacts of parental substance use on children, community partners mentioned observing a range of ACEs including neglect, children witnessing parental drug use, witnessing domestic violence, children being placed in child welfare, parental incarceration, children being physically abused, and children experiencing unstable living conditions. Community partners in one county mentioned a high rate of child removals due to substance use because of how these cases were handled in the judicial system. In addition, a lack of policy alignment often hindered the extent to which children could be reunified with their parents as in some cases the timeline for treatment, particularly for opioids, might take longer than the timeline set by child welfare for reunification. This often led to more complex child welfare cases and multiple foster care placements before reunification. Parents also spoke about a variety of impacts to their children because of their substance use. This included children being emotionally impacted and being removed from their home. After reunification, some parents reported additional challenges, generally related to behavioral issues due to their being away from their child. This was particularly the case with older children that remembered more about their experiences. In some cases, children were angry with their parents. In other cases, parents described how children were concerned about their parents and worried that something might happen again to trigger their substance use. Some parents also spoke about how children got very attached to their foster family and even thought of them as their parents. Interestingly, parents in low-rate communities reported more perceived impacts on their children including that they left their children unattended (67% in low; $n = 6$; 0% in high), that it impacted their children emotionally/behaviorally (78% in low; $n = 7$; 38% in high; $n = 3$), and that it physically impacted their children (22% in low; $n = 2$; 0% in high).

“So, it definitely seems to have affected my oldest more. She seems to remember more. She suffers from

anxiety still, which is definitely difficult. She wonders if mommy is okay. Like if I show any emotion of being sad or upset, she gets really concerned. On the other side of it it’s really awesome to hear her say how proud she is of me today. I think it’s unfortunate that in some aspects they had to grow up a little faster. I mean especially having to go through the foster care and the court rooms and stuff like that.” Parent (Northwest State, high-rate county)

Research Question 4

Our fourth research question examined experiences of stigma around help seeking. We contrasted high- and low-rate counties to address this question. Overall, approximately 80% ($n = 19$) of parents reported that they had experienced some type of stigma related to their substance use, primarily “perceived stigma,” or fears about judgment from other people because of their substance use.

“I mean people are really judge-y of drug addicts, of homeless people, of parents - mothers especially it seems who lose their kids. I mean I was constantly being judged and I was aware of it. And it was definitely hard and hurt. And I used to be embarrassed to tell people that I was an addict in recovery that I had gone to inpatient treatment...it was really shameful to be an addict and to have gone to rehab and had DHS take your kids. There’s a lot of judgment around that.” Parent (Northwest State, low-rate county)

A small number of parents reported direct experiences with stigma, primarily from medical personnel or other service providers who treated them differently because of their substance use disorder. About 20% ($n = 5$) of parents reported that fears of stigma or being judged affected help-seeking, though most parents reported that although they may have had concerns about stigma or been afraid of being judged, this did not prevent them from seeking services. The majority of community partners (60%; $n = 38$) reported that their clients experienced, or feared stigma related to their substance use.

“I think there’s overall substance abuse stigma that a lot of times families do not see it as an actual addiction, that it’s a choice. Then lack of education or understanding on the user and not understanding that it’s a disease.” Community partner (Midwest State, low-rate county)

In comparing communities, both community partners and parents in low-rate counties discussed the issue of

stigma more than their counterparts in high-rate communities. Community partners reported more stigma about substance use in low-rate counties (70% low; $n = 16$; 40% high; $n = 8$), higher perceived stigma (30% low; $n = 7$; 15% high; $n = 3$), and greater stigma/fear around help seeking (39% low; $n = 9$; 25% high; $n = 5$) than community partners in high-rate communities. Parents also reported more stigma around help seeking in low-rate counties (44% low; $n = 4$; 25% high; $n = 2$) than parents in high-rate counties. Parents in low-rate counties similarly mentioned slightly more often than parents in high-rate communities that less stigma about substance use disorder would have prevented their substance use from escalating (33% low, $n = 3$; 13% high, $n = 1$).

Effect of COVID-19 on Families and Services

Since child welfare services, local clinical and social services, and court procedures shifted to remote and telehealth options with the emergence of the COVID-19 pandemic, county liaisons faced new challenges related to the pandemic that included ensuring access to technologies for parents and families (cell phone or computers) who had no other means of accessing remote services and adjusting to their own new remote schedules. Due to this, we added probes to our interview guides to query about whether and how COVID-19 impacted services, families, and children in the Southwest state.

Challenges brought on by COVID-19 came up throughout the interviews in the Southwestern state when participants were asked to reflect on challenges more generally as well as those resulting from the pandemic. While most changes resulting from COVID-19 were discussed as challenges, such as reductions in services and the shift to virtual services, a few participants spoke about positive changes related to the pandemic. In several instances, community partners spoke about greater engagement in some services such as counseling and mental health services.

“Our utilization report has gone up because the clients now are calling in. And I guess because everyone is on this high state of anxiousness with the media and this crisis, they’ve been calling in for their sessions or logging into video rooms. So, for outpatient we’ve really seen an increase in call volume and counseling sessions.” Community partner, Southwest State

However, other more intricate services that were now being conducted virtually, such as parental visits, were increasingly more challenging due to the difficulties of using video technologies and engaging children in these types of visits.

“All of them, before the current crisis, they all had in person supervised visits...It became a lot harder on the kids when they’re not allowed to have in person visits because of the current virus situation. Now they’re relegated to video conferences, with their parents, especially for their ages it’s really hard to keep their attention looking at a screen.” Caregiver, Southwest State

Discussion

Using a social determinants of health framework, the current study was designed to identify the conditions, resources, and supports that might be effective at preventing parental opioid misuse and ACEs while also providing safe, stable, and nurturing relationships and environments for all children and their families. To this end, we included communities with high and low rates of opioid overdose mortality and foster care entries to understand what may protect communities, families, and children from opioid use and exposure to violence and other ACEs. Overall, there were similar themes across high- and low-rate counties on the availability of resources and supports. However, there were a few differences worth noting. First, the high-rate communities identified the need for more community-based prevention services for children and youth to better prevent their exposure to ACEs. This included mentoring programs and afterschool services that provide prosocial relationships and environments during childhood and adolescence. Community partners in low-rate communities also mentioned these as key supports for children and youth and this aligns with the best available evidence for the prevention of ACEs (CDC, 2019). In addition, funding for these services was identified as a critical need in high-rate communities. Funding was also mentioned as a need in low-rate communities but was not a concern among many community partners. This may reflect a lower need for services within those communities.

Across all counties, prevention of substance use and ACEs was not front-of-mind for partners, parents, and caregivers. It was a challenge for them to think about what could have prevented parental opioid misuse and other ACEs, particularly among parents and caregivers. Many parents also believed that there was not anything that could have been done to prevent both which reinforces that substance use is being perceived as an individual issue and not the result of the community conditions that may also contribute to high rates of opioid misuse as outlined by the WHO Social Determinants of Health Framework (Soler & Irwin, 2010). This suggests the need for norms and narrative change work which is a process for creating new public

narratives to reduce stigma and increase support for programs that create safe, stable, nurturing relationships and environments for all children and their families (Klevens & Meltzer, 2019; Russell et al., 2020). Prior narrative change work focused on shifting the narrative around child abuse and neglect from a “bad parents” frame to one that focuses on societal responsibilities to ensure that all children are safe and healthy (Frameworks Institute, 2004). Additional work is being done in communities to bring a social determinants of health framework to the issue of opioid misuse (Cantu et al., 2020). This has led to multi-sector community coalitions that address both the individual factors and the upstream community conditions (e.g., lack of transportation, social isolation) that create the context for opioid misuse.

Many parents in high-rate communities mentioned that they initiated their opioid use because of a medical prescription. Parents in low-rate communities mentioned this less frequently. Evidence suggests that opioids may have been overprescribed for medical procedures, including those where pain was minimal (Makary et al., 2017). This suggests the importance of following CDC prescribing guidelines and only prescribing opioids when medically necessary (Dowell et al., 2016). For several years, the CDC, law enforcement agencies, and state and local governments prioritized creating guidelines for prescribing opioids, ensuring medical professionals are familiar with guidelines, and acting in accordance with relevant laws (Dowell et al., 2016). In addition, parents often mentioned their own traumatic experiences as a reason for their initiation and escalation of substance use including experience growing up in child welfare themselves, household substance abuse, parental incarceration, and domestic violence. This suggests that programs that address parental trauma may be a promising way to prevent parental substance use and ACEs. Research has demonstrated a consistent relationship between trauma and substance use (Shields et al., 2015; Wolf et al., 2015) and that integrating trauma-informed care into substance use treatment may be a promising approach for addressing substance use issues and preventing ACEs (Brown et al., 2013). Additional research is needed to demonstrate the effectiveness of integrating trauma-informed care on addressing substance use and preventing ACEs using rigorous evaluation designs (e.g., randomized control trials and quasi-experimental designs).

In addition to a lack of awareness of substance use prevention strategies, most participants did not address strategies to support families affected by substance use in avoiding child removal while ensuring child safety. Family First Prevention Services Act (FFPSA) state plans may increase the availability of behavioral health services for parents and prevent foster care entries when possible. Parents did describe the value of having peer mentor programs

to provide additional supports to parents. There is promising evidence for the effectiveness of peer support programs on substance use recovery (Reif et al., 2014; Tracy & Wallace, 2016) with mixed evidence in child welfare settings (Huebner et al., 2018). One such program, the Sobriety Treatment and Recovery Teams (START) program has earned a “promising” rating on the FFPSA Title IV-E Prevention Clearinghouse, allowing states to include this program in their state plan. (Administration for Children and Families, 2020). More research is needed to understand the effectiveness of peer mentors in helping parents recover from substance use and whether this is a promising strategy for reunification. Across all communities, peer mentors were described as invaluable in helping parents adhere to treatment plans and recovery. This role is particularly important given the low awareness of services and supports reported by parents along with difficulties in navigating systems that were reported across all communities in the current study.

Caregivers (i.e., foster parents and kinship caregivers) across all communities described the need for additional supports and services. Many in high-rate communities described the need and importance of respite services that provide them with needed time to focus on themselves and alleviate the mental and physical stress of caregiving. Caregivers in low-rate communities had some access to respite care, but also described needing more to best juggle the multiple demands on their time. Additionally, caregivers consistently discussed having a lack of information and services that would help them to better support the children in their care including respite care and support groups that might help them to better manage the stress of caregiving. Kinship caregivers were less likely to be aware of support services which may be due to them not being connected with an existing group of foster parents (Worrall et al., 2018). There is also a need to understand how caregiving might positively and negatively impact their biological children. There are likely opportunities for additional ACEs prevention efforts focused on caregivers’ children to best support all children and families impacted by the opioid crisis. Prior qualitative research suggests that fostering significantly altered biological children’s family life resulting in decreased attention from parents and family stress. At the same time, the experience helped to develop the biological children’s resiliency and an appreciation of their parents’ strengths (Younes & Harp, 2007). Additional research is needed to understand the needs of caregivers and their families.

Furthermore, there were some community-level conditions in low-rate communities that might be related to lower rates of overdose mortality and foster care entries. Community partners mentioned greater access to transportation and housing, which may point to the importance of stable

structural (i.e., socioeconomic) conditions which could help to buffer the chronic stress that leads opioid misuse and children's exposure to ACEs (Stith et al., 2009; Sinha, 2008). Nevertheless, many parents in low-rate communities discussed a higher amount of perceived stigma around substance use. This may be because substance use is not perceived as a “norm” compared to high-rate communities. Norms change strategies can be useful in addressing this stigma and reduce barriers to help-seeking especially if they address norms around intergenerational substance use in communities where it is prevalent (Botha et al., 2016). There is also a need for more treatment services and resources in low-rate communities. This was a notable gap that may leave low-rate communities vulnerable to emerging substance use issues.

Lastly, responses regarding impacts because of the shift to remote services during the COVID-19 pandemic were mixed and challenging to interpret. Most notably, in some instances such as behavioral health and mental health services, demand for services seemed to increase. While this could suggest that families in need may feel more comfortable with virtual services, it could also be a response to the emotional toll of the pandemic. Therefore, additional research might be useful to assess the impact of remote mental health services on families and whether having this option might encourage uptake particularly in the wake of the ongoing COVID-19 pandemic when the availability and uptake of remote services may continue to grow to meet the needs of individuals and families across the U.S.

Limitations

As with all research, our study had several limitations. The participants were purposively sampled to garner a diversity of perspectives and are not representative of all community partners, parents, and caregivers in the counties included in our sample. Our sample of parents represents a small subpopulation who encountered the child welfare system due to their substance use which further limits the generalizability of our results. Furthermore, our sample consisted of primarily white parents and caregivers. This is not representative of the general child welfare population that is disproportionately Black (Cenat et al., 2021). It is important for future work to include a wider range of diverse parents to better understand multi-level risk and protective factors for opioid misuse and foster care entries. In addition, participants were identified based on-site liaisons' recommendations, which may have introduced selection bias. Furthermore, the use of comparison groups in qualitative research is a relatively new technique within the field of public health (Lindsay, 2019). Additional qualitative comparison research on this topic will help to provide a comprehensive picture of the needs of children, families, and

communities affected by the opioid crisis. Due to the emergence of the COVID-19 pandemic during data collection at our last two sites, we shifted from in-person to virtual data collection with parents and caregivers. This may have affected the rapport that the interviewers established with the participants and could have limited the information that was shared over the virtual platform. Additionally, parents and caregivers that volunteered to participate during the pandemic may not be representative of those who might have volunteered pre-pandemic.

Despite these limitations, this study has many strengths. First, the qualitative methods used allowed us to solicit rich descriptive information from participants. Our use of comparison groups helped to identify the presence or absence of critical programs and supports that might benefit communities. Second, collecting data from multiple participant types including key informants representing various types of community partners allowed us to incorporate diverse perspectives and build trustworthy depictions of the overall experiences within disproportionately affected and low-rate counties from multiple perspectives.

Conclusion and Public Health Implications

The current study aimed to identify individual-, family-, and community conditions that might be effective at preventing parental opioid use and ACEs. The sample included high- and low-rate communities to understand what might protect some families from overdose mortality and foster care entries. Across all communities in the sample, prevention was not front-of-mind. Nevertheless, community partners in high-rate communities discussed the importance of primary prevention programs for children and youth including afterschool and mentoring programs. Parents discussed the importance of peer mentors and family-friendly substance use treatment as critical supports in their recovery. Additional research is needed on the support that caregivers need to effectively care for themselves and their children. Findings support the importance of prevention including following opioid prescription guidelines (Dowell et al., 2016) and primary prevention programs for children and youth (CDC, 2019) to better prevent ACEs and parental substance use.

Disclaimer

The findings and conclusions in this study are those of the author(s) and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Funding Support for this project was provided by the National Center for Injury Prevention and Control, U.S. Centers for Disease Control and

Prevention, Contract to ICF, International (#HHSD2002013M53944B; OMB Control #0990-0421). Special thanks to our community partners, parents, and caregivers for sharing their experiences in order to improve the health and wellbeing of children, families, and communities across the U.S. The authors thank Laura Radel, Theresa Armstead, Beverly Fortson, Whitney Rostad, and Arielle Arzu for their contributions to this project.

Compliance with Ethical Standards

Conflict of Interest The authors declare no competing interests.

Ethical Approval This study received Institutional Review Board approval for human subjects research and obtained informed consent from all participants in the study.

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

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