Vincenzes KA, et al., J Addict Addictv Disord 2020, 7: 053
DOI: 10.24966/AAD-7276/100053

HSOA Journal of Addiction & Addictive Disorders

Research Article

Surviving the Opioid Epidemic: "It's a People, Places, Things Disease"

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Abstract

On January 14, 2020, it was determined that the opioid crisis continues to be a public health emergency (U.S. Department of Health and Human Services). In order to address this crisis, the nation needs to understand the lived experiences for opioid use survivors. Researchers interviewed eight participants who were in recovery from an opioid addiction. Interviews were a semi-structured format to gain specific information about the participants' lived experiences. Information learned from these interviews were organized and analyzed to identify community resource strengths, weaknesses, opportunities and threats for individuals on the road to recovery from an opioid addiction. These findings can aide communities to develop prevention and intervention strategies specifically targeting people most intimately impacted by an opioid addiction.

Keywords: Addiction; Community; Opioids; Recovery; Rural

Introduction

In October 2017, the opioid epidemic initially was considered a public health emergency and on January 14, 2020, it was determined that the crisis continues to be a public health emergency [1]. In 2017, there were 70,237 drug overdose deaths in the United States and 67.8% of those deaths were related to opioids [2]. This is a statistically significant increase from 2016 for many states to include: Alabama (11.1%), Arizona (9.4%), California (4.5%), Connecticut (12.8%), Delaware (20.1%), Florida (5.9%), Georgia (10.5%), Illinois (14.3%), Indiana (22.5%), Kentucky (11%), Louisiana (12.4%), Maine (19.9%), Maryland (9.3%), Michigan (13.9%), New Jersey (29.3%), New York (7.8%), North Carolina (22.3%), Ohio (18.4%), Pennsylvania (16.9%), South Carolina (13.3.%), Tennessee (8.6%), West Virginia and Wisconsin [3]. As of 2018, the number of people who died daily from an opioid overdose surpassed128 of which prescription opioids were involved in forty percent of those deaths, totaling around 46 daily deaths [4]. On top of the mortality rates, opioid misuse is significantly impacting the economy. It is estimated that over $78.5 billion per year is spent on this crisis [4]. Analyzing environmental factors and healthcare services that often intersect in the lives of a person struggling with addiction may lead to insight on potential preventative practices, which could in turn decrease the overdoses and the nation's economic burden.

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Citation: Vincenzes KA, McMahon B, Forziat-Pytel K, Lange J (2020) Surviving the Opioid Epidemic: "It's a People, Places, Things Disease". J Addict Addictv Disord 7: 53.

Received: September 15, 2020; **Accepted:** September 24, 2020; **Published:** October 02, 2020

Evolution

The significance of society's opioid use is underscored by the trends of opioid use in the past. In the 1960s, the trend was that urban teenage males, of any race, were using heroin as their first opioid experience [5]. By the 1980s and 1990s, heroin began to be used in middle-class neighborhoods. Purer heroin contributed to a spike in national heroin and morphine-related emergency room visits [6]. In the middle of the 1990s, a rash of legislation extended policies for acceptable medical uses of prescription opioid analgesics. Populations that had rarely seen heroin began to be affected by the opioid epidemic as people in more diverse demographics were introduced to opioid analgesics. For the first time since heroin was criminalized, the seed of opioid addiction was planted in doctors' offices rather than on the street [7].

In contrast with people who used heroin fifty years ago, many who use heroin today often began their use with prescription opiates. Many continue to concurrently abuse heroin and prescription opiates, as opposed to any other illicit drug [8,9]. As opioid prescription rates rose, so do the rates of both opioid analgesic-related deaths and heroin-related deaths [10]. The rate of overdoses from prescription analgesics paralleled the rate of written prescriptions, each almost quadrupling from 1999-2014 [7,9]. Although the increase in rates of both written prescriptions and prescription opioid-related deaths is smaller than in previous years, many attribute this to an increase in the use of heroin and synthetic opioids other than methadone [8,11].

In fact, increases in heroin-related hospitalizations could be predicted by increases in the rate of opioid analgesic-related hospitalizations seen in previous years [10]. In the 2017 National Drug Threat Assessment, heroin and prescription opiates were listed as the top two drug threats in the nation, although the rate of prescription opioid abuse has decreased over the past two years [11]. Heroin is everywhere, including rural, urban and suburban areas and used by every demographic and culture [11,12]. Nationally, as the practice of combining illegally manufactured fentanyl with heroin became more common, heroin overdoses became more frequent, more than quadrupling between 2010 and 2015 [11]. The rate of deaths from

synthetic opioids other than methadone, such as fentanyl, more than doubled from 2015-2016 [12].

Purpose of the study

Since Pennsylvania continues to be one of the top states with increasing rates of opioid overdoses and deaths, researchers focused on this location to gain more knowledge. Further interest was in relation to the fact that Pennsylvania is comprised of mostly rural counties (48 rural counties and 19 urban counties; [13]). Since 71% of the state is rural, researchers sought to gain insight from individuals who have been personally impacted by this epidemic while living in a rural county. The purpose of the research was to gain a more thorough understanding of the strengths and weaknesses of rural counties in combating the issue. To gather this information, researchers listened to the lived experiences of individuals who are in recovery from an opioid addiction. Results can be used to reveal resource gaps and strengths in the local communities.

Methods

Participants

This research was approved by a university in northeastern Pennsylvania (Approval number: FA15-04). Purposive criterion sampling was used in this study because all participants needed to meet specific criteria concerning the phenomenon of addiction [14]. Inclusion criteria for this study was that the participants needed to live in one of the rural counties and they needed to be in recovery from a diagnosis specific to opioid use. Participants ($N = 8$) were at least 18 years of age at the time of the interview. Exclusion criteria were those who reported a non-opioid addiction, individuals who did not meet the minimum age required to participate and individuals who lived outside of the rural counties.

Of the eight participants, there were four females and four males. All participants were White, which is not atypical for the small rural population. A few participants shared their occupational professions during the initial open-ended question. Of those who shared, three people stated that they had careers in the addiction field helping other people recover and a fourth participant shared that she was a case manager. The majority of participants shared how long they had been in recovery: 1 year, 2 years, 3 years, 6 years, 7 years and 35 years. Two people did not comment on the exact amount of time they had been in recovery. When participants were asked to share their experiences, three of them mentioned when they started using which was at 9 years old, 16 years old and senior year of college. One of the participants revealed that their first time in treatment was at the age of 16.

Procedure

Participant recruitment was via county coroner's, service providers and support groups. These individuals shared the research announcement with people who met the inclusion criteria and notified them of the opportunity to discuss their experience by participating in this research. Potential participants then contacted the researchers to accept the invitation and schedule a time for the interview.

Data was collected through semi-structured interviews. Participants were greeted by the researcher, who then presented and reviewed an informed consent form. The researchers provided an overview of the project, the use of recording devices, the practice of taking notes and the participant's rights (i.e., refusal to answer any question, the ability to stop the interview without penalty and to ask for the destruction of any identifying information). Once the participant signed the consent form, the researchers began the interview by presenting the research questions. First, the interviewer asked the participant to share their personal experience with opioid misuse or overdose. Next, there was a series of questions concerning the prevention and intervention of opioid use and overdose by addressing strengths, weaknesses, opportunities and threats in their community resources. Before concluding the interview, the researchers checked in with the participant to see if there were any questions or concerns.

Data analysis

The core research question driving this study was: What rural community strengths and weaknesses impact an individual's process of recovery from an opioid addiction? A qualitative phenomenological design would best facilitate the understanding of the lived experiences of individuals who were impacted by an opioid addiction [15]. In reviewing the results, the researchers examined their roles as both researcher and human, with possible biases and influences. Three of the four researchers have a masters degree in counseling. The fourth researcher is an emeritus health science professor, who is a community advocate for people suffering from an addiction. One of the researchers is actively in long-term recovery from an opioid addiction. A team approach was utilized when analyzing the transcripts and data, helping to provide reliability from the agreement that occurred between coders on the interpretation of data. The use of a neutral software tool NVivo also helped to increase the trustworthiness of the data interpretation.

Participants shared their experience of the lived phenomenon of being impacted by the opioid epidemic within two rural counties in Pennsylvania. This method involved a synopsis of the participants' experiences with opioid abuse as well as their thoughts on any strengths, weaknesses, opportunities for growth and threats within the community (SWOT). A SWOT analysis is a tool for strategic analysis of internal and external factors. Organizations often use this approach to internally evaluate company strengths, as well as identify areas of improvement. Additionally, SWOT analysis looks at the environment to see outside industry trends that could pose as a threat or an opportunity. It has been applied to many other settings, including community needs assessments [16]. For this research, we used this idea to look critically at the community through an addiction-recovery lens.

After completing the interviews, the researchers transcribed the recordings verbatim. Researchers individually went through each transcript to cross reference the identified themes. Identified themes were then independently reviewed by two of the researchers for validation of these themes. The researchers redefined some existing smaller themes into more comprehensive themes. For example, the terms "money," "cost," and "afford" were used throughout the interviews; therefore, the researchers created a larger umbrella theme titled "Money" to encompass each of these words. The transcripts were then entered into NVivo. NVivo's word frequency and word cluster functions identified important reoccurring phrases and sentences, as well as meanings and themes that were common in all participant transcripts. This step further helped to validate the themes identified by the researchers.

Results

The results of the interviews provided information for communities to review in hopes of creating more prevention and intervention strategies for those impacted most intimately by an opioid addiction. The interview results were organized into community strengths, weaknesses, threats and opportunities. This organization hopefully will aide stakeholders in more clearly identifying areas for growth within their communities to combat the epidemic.

Strengths

Identified community strengths included: Awareness/advocacy (n=5), services/resources (n=8) and relationships (n=4). Awareness/advocacy, as well as education, represented the strides the community and its members were making to help combat the problems and stigma surrounding drug use and treatment. Such strides included campaigns focusing on collecting unused prescription medications, youth outreach and community coalitions. Probation officers were educated on addictions and the participants appreciated communication between resources to assist others' attempts to not "criminalize the disease." With regards to services/resources, a multitude of options were noted by participants, including: inpatient and outpatient counseling, intensive case management, smaller and more-intimate twelve-step meetings, partial treatment centers, treatment courts (e.g., substance abuse, mental health and DUI courts), pre-release center groups, warm hand-offs, certified recovery support specialists, sponsorship hotlines, faith-based services, community events and well-informed primary care physicians. The last theme within the community strengths category focused on the value of relationships (i.e., social supports) that were available for those in recovery. Participants saw the power of being supported even in the most difficult of times (e.g., relapse, grieving period after a fatality). Participants also saw strong relationships with doctors, law enforcement, probation officers and family and friends as important to recovery and overall well-being.

Weaknesses

The identified weaknesses included the original three themes: Awareness/education/advocacy (*n*=7), services/resources (*n*=7) and relationships (*n*=2) as well as needs focused on money (*n*=4) and the environment (*n*=3). Education was stated to be a weakness in terms of physicians and emergency room doctors, who were often not knowledgeable of either available resources or the conceptualization of treatment for addiction as a disease. Furthermore, education was limited for some law enforcement officers and court systems that relied on correctional facilities rather than treatment centers for offenders who were struggling with addiction. Weaknesses in services/resources include: difficulties finding or keeping housing; lack of public transportation in rural areas; a dearth of treatment facilities available while in jail or away from home; lengthy wait times for care; shortage of recreational activities; inadequacy of family counseling, especially for counseling children who come from homes afflicted by addiction; lack of counselor consistency and/or counselors in the addiction field; and healthcare funding to cover treatments.

Money, environment/accessibility of drugs and relationships were also stated as weaknesses. For some participants, it came down to an individual's inability to pay for treatment (e.g., treatment facilities available are very expensive and finding funding is often problematic). Other participants discussed having difficulties finding a legitimate job due to having a criminal record. One participant shared that she sold the Suboxone she was prescribed to help make ends meet. Participants stated that drugs could be easily acquired and were cheap; therefore, the seemingly unlimited supply of opioids allowed the individuals to continue to use the substances. Some participants who were in recovery noted that although Medication-Assisted Therapy (MAT) has its place, it can also allow people to stay addicted to a substance. Lastly, relationships were noted as a weakness mainly in terms of lack of parental and community support.

Opportunities

Opportunities identified in the communities were: Services/resources (*n*=8), education/awareness (*n*=5), money (*n*=3) and relationships (*n*=2). Participants explained a large need for an increase in services, including finding funding for those services. *Services* mentioned combated the opioid epidemic both directly and indirectly. Non-drug related services that were specifically mentioned as an opportunity to help those seeking recovery from opioid addiction involved increased access to transportation (e.g., public transportation to treatment for those living in the more rural areas) and expansion of realistic job opportunities. Commonly discussed among participants were the difficulties that individuals experienced in getting and maintaining a job due to drug use and criminal backgrounds. For example, some individuals experienced difficulties maintaining their jobs due to their opioid addiction, whereas others experienced difficulties in being hired when their background checks revealed drug-related crimes. In addition to the above services, participants said that communities need to increase the range of available healthy, productive activities (e.g., jobs, sports, arts & entertainment) that are more accessible, affordable and appealing.

Recovery-specific services that participants wanted to be increased focused on the duration (e.g., treatment programs lasting six months rather than twenty-eight days) and available options for different levels of care (e.g., dual diagnosis treatment facilities, recovery houses, diverse support groups, help for families, Ala Teen, meetings specifically for the LGBTQQIA+ population and counseling centers). Participants also wanted a wider range of options in available individual resources (e.g., mentors, a 24-hour support facility and hotline and advisors).

Participants again noted a need for increased education and awareness in different areas in the community, such as families, health care, law enforcement and schools. Education would need to address both prevention and intervention, providing strategies to help stop drug abuse from occurring, as well as to intervene to help stop the progression of addiction (e.g., teach community members how to save a life by helping someone get into treatment). Education could also increase awareness of the damage inflicted by enabling behaviors practiced unknowingly among these different groups (e.g., parents would learn to not to supply their child with money and means, making drug accessibility easier). Finally, local efforts need to focus on current issues, the conceptualization of addiction as a disease and available treatment options.

The last opportunity domains focused on money and relationships. One participant discussed the importance of private funding to attain services so that the treatment was taken seriously, while another participant recommended scholarships to help increase access to treatment. One last suggestion mentioned donations of clothing for

job interviews to help people in recovery gain employment following treatment or incarceration. With regards to relationships, participants noted the need for people to feel connected and part of the community.

Threats

Community threats most commonly identified in the interviews were: Education/awareness (n=6), limited services/resources (n=5), environment/accessibility (n=4), relationships (n=3) and money (n=3). Lack of education on prevention, intervention and the disease model were explained as threats. Many participants proposed that more education should be provided in the schools at a younger age as a prevention tactic; participants also suggested that more education opportunities should be implemented at the community level to bolster intervention strategies. To decrease the stigma associated with the disease, participants recommended that communities educate the public to expand awareness of the issue. Finally, participants also advanced the idea of education for healthcare providers in hopes of slowing the trend of over-prescribing pain medications.

Limited services/resources in high-risk and rural communities decreased the opportunity for people to enter recovery. Additional threats as they relate to services included: Mental health services, housing, employment, services away from home, transportation to treatment and availability of recreational activities that do not cost a lot of money. With regards to mental health, participants stated that issues with "depression," "divorce," "bipolar disorder," "alcohol use," and "feelings of hopelessness" were all threats to becoming drug-free. Some participants reported that services were available, but that the wait times could be long, giving those who want to stop using time to change their minds before they were admitted into treatment. One participant disclosed that it "took four months for an evaluation."

As a threat, the environment/accessibility, relationships and money were discussed on different levels. First, participants shared that addiction is a "people, places, things disease." One participant elaborated on this statement and said, "You put them back where they are with the same people, places and things. They go back to the same habits". Furthermore, relationships were strongly associated with the "enabling" of drug use particularly when parents would give the individual money, which they thought was going to food, gas and bills. In addition, various participants used opioids to cope, self-medicate and fit in, especially when they had trouble finding new friends while trying to maintain their recovery. Money was a factor because of the cost of treatment especially when health insurance did not cover it. When money was limited, participants shared that selling drugs became a viable option to make ends meet.

Discussion

Use of opioids, both nationally and in the state of Pennsylvania, continues to be a significant issue that policy makers and legislatures are working to address. The epidemic continues to prevail for various reasons. Across the interviews, the interconnection of relationships, resources and education were consistently discussed across the multiple domains. These issues were often seen as a strength, but in given situations they could also be a weakness, threat, or opportunity for growth. For example, relationships were seen as a strength by some participants because the support from various family members, friends, community members and mental health providers helped them through the recovery process and/or the grieving process (for those who lost a loved one). On the other hand, relationships with people can also be seen as a weakness and possibly even a threat to a person's overall recovery. If the person in recovery is being enabled by a loved one, or they meet someone in a treatment program who becomes an enabler post-treatment, they are faced with additional obstacles to recovery. Relationships, though, with mentors, advisers and mental health clinicians, were seen as opportunities, as well as avenues to recovery.

While the two Pennsylvania rural communities in this study are making strides to improve the awareness, education and treatments for people who have an addiction, there is a great deal of room for improvement. In rural counties, there are a limited number of support groups available, which often results in conflicts of time (e.g., a single AA meeting being offered at 7pm on Thursday). Furthermore, some services, like support groups, are not substance-specific. Participants expressed the need for more variety, given the uniqueness of how opioids impact their lives. Participants also expressed the need for more services at different levels of care that are developed with specific stages of recovery in mind. For example, people who are in the beginning stages of recovery need facilities that specialize in detoxing individuals going through withdrawal, which differs from the ongoing outpatient counseling that supports those who are in a later stage of recovery. Finally, continued education can be provided to doctors on other forms of pain management such as acupuncture. Alternative forms of pain management then need to be supported by insurance companies so that people can afford to use these methods rather than relying on prescription opioids.

Another interesting finding from this research was that some participants noted a resource as a strength, while a different participant stated it as a weakness and/or opportunity. For example, having a drug court was identified as a strength (being able to help those with drug use history or criminal backgrounds due to drug use), though others saw this system as flawed. This discrepancy could be due to the lack of knowledge of resources within the community. Perhaps communities could increase the awareness of available resources so that those who are in need of them know of their existence. Various resources could be advertised or shared in heavily populated areas of town, such as in grocery stores, drug stores and gas stations. This may help to increase both the knowledge and overall use of these resources, which could ultimately give people hope that they have a different choice: to be drug-free.

Limitations

One of the limitations of this research is that the participants all lived within the same two rural counties. While this can provide important information for these specific communities in addressing the opioid crisis, it may not be generalizable to more urban areas. Additionally, since we did not collect more specific demographic information on the participants, the diversity of the participants may have been rather limited, further limiting the generalizability.

Another limitation focuses on the research methods. This research was a qualitative design, which means any cause-and-effect conclusions cannot be inferred. Future research may consider creating a survey based on the themes derived from the interviews. A survey design could focus on the barriers or threats identified in the interview and their correlation to opioid use. Furthermore, researchers could look at the potential moderating variable of social support to see how

this may impact the relationship between the threat and opioid use. Lastly, the data analysis was mainly done by two members of the research team. Even with use of computer assisted analysis software, data results could have been influenced by the interpreters' bias. Though inter-rater reliability occurred, other forms of data analysis checking could have been used such as member and expert checking.

Conclusion

As one interviewee eloquently stated, "Addiction is not a social stigma, it is a mental stigma. It is a physical thing. It is an illness. It affects all genders. It affects all races. And it affects all social economic backgrounds. You have made bad decisions, but you are not a bad person. You just made bad decisions. And good people make bad decisions. That doesn't mean they are not a good person." As opioid use and drug overdoses continue to rise, we need to listen to those impacted personally by this epidemic. We need to develop a comprehensive, collaborative, multi-systemic approach to working with this population. By working together within and across counties and state lines, we can educate and help reduce the use of overdose-related hospitalizations and deaths, while increasing the potential for people to receive the help they need to successfully engage in long-term recovery.

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