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Community Perceptions of Syringe Service Programs in Charleston, West Virginia: A Qualitative Socioecological Perspective

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This is to certify that the doctoral dissertation by

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Abstract

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MA, Mountain State University, 2012

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Dissertation Submitted in Fulfillment

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Abstract

In rural areas of the United States, people who inject drugs (PWID) experience an array of obstacles to accessing adequate healthcare. Locations with high rates of drug use normally offer more healthcare options, including needle exchange programs but, in some communities, there is resistance to providing this kind of care. This increases mortality, morbidity, cost, and adds to the stigma experienced by this vulnerable group**.** The experiences of people with substance dependency, including PWID, has been widely explored throughout studies that reflect a need for increased support. However, the perspectives of the community, especially in rural areas, though equally important, have been largely ignored, even though they have the potential to reduce obstacles to care, and could unlock resources to reduce disparities in mortality and morbidity. In this basic qualitative study, the perceptions of eight community members currently located in communities lacking syringe services were explored using semistructured interviews to uncover factors that influence community support for PWID and syringe services. The socio-ecological model served as the theoretical framework. Quirkos was used to code the data. All participants stated that drug use is an issue for the community and acknowledged that some form of intervention needs to occur. However, major challenges to gaining community support were identified, for example, fears of a negative effect on property values. Factors that influence community support included the proper location of services and the need for community inclusion in the process of determining access to syringe exchange and other wellness options. As the drug epidemic continues to rise in rural locations, these results could lead to wider acceptance and implementation of syringe exchange programs, and this would represent positive social change.

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Dedication

This study is dedicated to the people of West Virginia and the many families who have struggled through the loss of a loved one due to the drug epidemic. West Virginia communities continue to experience a wide array of social challenges and constraints when discussing the drug epidemic. The following research is intended to open a pathway toward better understanding and to aid in creating a better future for our communities.

Acknowledgments

I would like to acknowledge my mother, family, and friends who have supported me through the many years of my quest for a better life through higher education. God provided me the strength through the challenging times; however, it was my family who never allowed me to give up. In addition, I would like to thank my dissertation committee as well as my student advisor for the support they provided through this journey.

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Chapter 1: Introduction to the Study

The public health crisis of injection drug use negatively impacts rural and urban locations in the United States. According to the World Health Organization (WHO; 2021), the number of overdose deaths attributed to injectable drug use in the United States increased 120% between the year 2010 and 2018. Common risk factors leading to mortality and morbidity included the increased availability of opioids (including fentanyl which may be contaminated with other substances), sharing drug equipment, using opioids via injection, and using a combination of alcohol and drugs (WHO, 2021). Syringe services programs (SSPs) combat both mortality and morbidity through services such as medication assisted treatment (MAT), linkage to rehabilitation, and access to clean equipment, and they function as a gateway to other vital health programs (Kendall, 2017; Kerr et al., 2019). Community support for access to syringe services throughout urban areas is ample (Kerr et al., 2019). However, in rural areas such as Charleston, West Virginia, community support for SPPs and other treatment options such as MAT remains inconsistent and poor. This trend continued to contribute to poor health outcomes (Grossman, 2016; Leston et al., 2019).

Previous researchers focused on the perspective of the substance user or PWID. Research reflected feelings of inadequate support, stigma (in general and when seeking care at emergency facilities) and being part of a forgotten and detested population (Grossman, 2016; Leston et al., 2019). For example, in a qualitative study by Allen et al. (2019b), PWID cited stigma, distrust, and a lack of support as the main barriers to their recovery. In another study, PWID receiving MAT reported receiving HIV and hepatitis

testing without prior knowledge or consent, thereby relaying a lack of respect, and signifying probable stigma (Jones et al., 2014).

Background

PWID experienced an array of obstacles to healthcare access in rural communities. Locations that experienced high rates of drug use normally increase healthcare options. However, there are times when the lack of community support for these healthcare options such as SSPs leaves a void in the continuum of care that increases mortality, morbidity, and cost (Kendall, 2017; Kerr et al., 2019). Inadequate support for health care services for PWID within rural communities continues to add to the stigma experienced by this vulnerable group**.** Studies reflected the need for increased support and an elevated level of stability for PWID; however, this perspective is often researched from the side of the person using drugs (Allen et al., 2019a; Kerr et al., 2019).

According to multiple seminal sources, syringe services offer another level of support though linkage to recovery, education, peer coaching, and sexually transmitted infection (STI) testing and treatment (Allen et al., 2019a; Allen et al., 2019b; Kerr et al., 2019). In addition, community support of SSPs has been associated with improved efforts of policy development, a shared commitment of change, and sustainability (Allen et al., 2019a; Kerr et al., 2019). The user does not just attend to obtain needles, they receive education, peer counseling, STI testing and treatment, and linkage to recovery. Several studies have reflected the need for increased support and decreased stigmatization. Jones et al. (2014), in their seminal study, provided in-depth descriptions of the experiences of PWIJ with HCV. However, all fall short of providing a roadmap to sustainable syringe

programs (Allen et al., 2019a; Kerr et al., 2019). In addition, for many rural locations, public health goals do not transfer into the community (Allen, 2019a; Boucher et al., 2017; Davis et al., 2019). Failing to create an alignment through all levels with shared goals is reported to cause conflict, incomplete implementation of aid, and failed programs (Allen, 2019a; Allen, 2019b; Boucher et al., 2017; Davis et al., 2019).

The perspective of the rural community is important and has the potential to reduce health disparities, mortality, and morbidity. Community culture involves influence from multiple levels. In addition, an environment that removes bias opinions, judgement, and barriers creates positive outcomes for all within the community including those who use drugs (Allen et al., 2019a; Grossman, 2016;). Focusing on the community perspective increases awareness of the issue, creates an opening for understanding, and heightens the need for collaborative efforts to increase care; thus, creates social change.

West Virginia currently leads the nation in drug overdose deaths per capita (National Center for Health Statistics [NCHS], 2023; U.S. Census Bureau, 2022; World Health Organization [WHO], 2021). Therefore, increasing access and improving communication using the community perspective will provide a platform for difficult conversation that must occur in order to reverse the current trend. My goal for this study was to explore local barriers to this issue in Charleston, West Virginia. I filled a gap in research surrounding community perspectives on support for PWID through SSPs.

The Gap in Research Knowledge

Previous researchers have not interviewed community members for additional clarification surrounding the lack of syringe exchange and support within the rural

environment. PWID require a dedicated support system, one that includes a positive environment and strong community presence (Davis et al., 2019; Kerr et al., 2019). A committed community support system operates more efficiently through a multilevel perspective due to the collective input, collaborative efforts, and unified outcomes to solve the problem (Davis et al., 2019; Fertman & Allensworth, 2017). Little is known about the types of environments needed to improve communication and collaboration between the various groups involved in trying to establish a SSP in rural locations (Allen et al., 2019a; Boucher et al., 2017). In this study, I gathered information about multiple levels of influence required to create a supportive environment for syringe exchange and remove barriers for all community members.

The Research Problem

Community perceptions can affect the availability of SSPs and are critical when creating sustainable public health programs (Davis et al., 2019; Kerr et al., 2019). The purpose of this qualitative study was to understand community perceptions of SSPs, including barriers that work against these programs, and to recommend strategies for addressing those barriers. For rural areas, linking PWID to care not only reduces health disparities, mortality, and morbidity, but also improves a sense of support (Allen et al., 2019b; Leston et al., 2019). Exploring barriers that exist in rural communities not only fills the gap in current research surrounding PWID, but also towards the result in innovative programs.

The feeling of inadequate support in health care services for PWID is documented throughout research, yet most omit the voice of the community in which this

phenomenon occurs**.** Little is known about the obstacles from the communal point of view (Allen et al., 2019b; Leston et al., 2019). Thus, the perspectives and barriers of members in the community are vital for successful program implementation, policy development, and improved health outcomes. In this study I examined community perceptions of syringe services and any barriers that exist aids in a higher understanding toward creating a sustainable supportive environment throughout the community.

Research Questions

I used the following questions to guide this study:

Research Question 1 (RQ1): What are the perceptions of community stakeholders about syringe service programs for PWID in smaller communities in Charleston, West Virginia?

Research Question 2 (RQ2): What are the recommendations of community members for reducing community barriers to syringe exchange in smaller communities in Charleston, West Virginia?

Theoretical Framework

The theoretical basis of this study was the socioecological model (SEM), According to multiple sources the SEM focuses on the practice of inclusion and the interplay between multiple levels of influence (Creswell & Creswell, 2018; Ravitch & Carl, 2016). Urie Bronfenbrenner (1979) created the SEM and recognized multiple aspects of a problem, with five systems that influenced each other. I used the SEM to identify individual level, interpersonal relationships, community level, and societal factors associated with the phenomenon. The ability to comprehend social activities on an

individual, relationship, community, and societal level strengthens the ability to review how factors at each level influences factors at another level (NCHS, 2023.; Creswell & Creswell, 2018; Ravitch & Carl, 2016). According to (NCHS, 2023; Creswell & Creswell, 2018) the use of the SEM to identify interrelation factors that influence behaviors and culture on multiple levels helps clarify the range of factors that perpetuate the problem.

I used the SEM to review all the factors that affect the structural determinants of health in this study. I collected rich data through semistructured interviews to understand a different dynamic of syringe exchange. Researchers often focus on one perspective, the side of PWID, and conclusions of the community perspective are often assumed in rural areas (Allen et al, 2019a; Allen et al., 2019b). The lack of data involving support for SSPs in rural area s from the community perspective left a void in information to create sustainable programs; thus, I used an inductive approach to understand community members' perspectives.

Nature of the Study

I used a basic qualitative inquiry based on a SEM perspective to capture descriptive information surrounding the phenomenon of community support for SSPs. This method was suitable due to the inductive, exploratory nature of the study..

I used purposive sampling to recruit community members who met the following criteria: male or female, aged 18 to 65, resident of sample zip codes, and willing to discuss SSPs. I selected two participants using the above criterion from 25301, 25302, 25304, and 25311 zip codes. In addition, the inclusion criteria and recruitment flier

included the statement, “Experience in a recovery program is helpful but not required.” I collected data for eight participants at which point data saturation occurred.

Recruitment included identifying eligible participants in the community via church organizations and local healthcare professionals, individuals in residential neighborhoods, and political representative from the city level using geocoding for area specific locations. In addition, contact with the identified participants occurred via digital methods, community outreach, and advertisement with traditional media in the Kanawha County areas that I selected. I explained the study to the potential participants during the recruitment process.

I collected data using recorded semistructured interviews with participants from each zip code within the Kanawha County area. I selected areas in the Kanawha County area due to the lack of a local syringe exchange program. Interviews continued with new participants until data saturation occurred. However, eight interviews were required in total. Ten interviews were scheduled; however, two participants were unable to complete the process. I conducted data analysis concurrently with data collection using coding techniques that led to themes. I used transcripts using Otter to create a verbatim record of the interview that I used to analyze data for similarities and differences. This minimized human error in recalled interview data. I used Quikos as a backup to manual data analysis to ensure consistency with coding and themes, as well as used for visual representation of the final material. Ethical consideration of data collection technique occurred prior to any data collection through the Internal Review Board (IRB), to ensure no harm was experienced by the participants.

Operational Definitions

Harm reduction: referred to any program designed to strengthen capacity and improve SSPs performance and functionality (West Virginia Department of Health & Human Resources, 2020).

Health disparities: health differences that were linked to economic, social, environmental, and geographical disadvantages which can affect individuals and groups of people with greater social and economic obstacles (Healthy-People.gov, 2021).

Health equity: to reduce or eliminate disparities in health as well as the determinants to reach the highest possible standard of health for all humans (Braveman, 2014).

Medication assisted treatment (MAT): the use of medication to primarily treat addiction to opioids such as heroin and prescription pain relievers that contain opiates. (Substance Abuse and Mental Health Services Administration [SAMHSA], 2023).

Morbidity: referred to the rate of disease in a population (Centers for Disease Control and Prevention [CDC]. 2012).

Mortality: referred to the rate of occurrence of death in a population (CDC, 2012).

People who inject drugs (PWID): referred to any person(s) using needles or syringes for drug intake via intravenously into the body (CDC, 2018a; CDC, 2018b).

Stakeholders: referred to any person or group living in the Charleston community who are both positively or negatively affected by the research (Fertman & Allensworth, 2017).

Stigma: referred to discrimination against a particular group of people or place (CDC, 2012).

Syringe services programs (SSPs): also known as syringe exchange or syringe services were programs offering access to sterile needles and syringes, safe disposal of used equipment, and a gateway to other social, mental, and medical services (CDC, 2019).

Assumptions

Previous research conducted by (Allen et al, 2019a; Kerr et al., 2019), relied on descriptive accounts of PWID or general data to understand SSPs. Thus, I assumed that the community may not have been aware of the issue, lacked knowledge surrounding the issue, or lacked the ability to be attentive to the issue. I also assumed that the lack of SSPs in rural areas left a void in the continuum of care that could reduce many hardships such as stress for both PWID and the community. I assumed that participants would be willing to discuss this concept during semistructured interviews and would be forthcoming in their responses.

Limitations

The limitations that I predicted for this study stemmed from the population I studied as well as the transferability of the data. Research conducted by Allen et al, (2019a), suggests that rural populations in Kanawha County were extremely sensitive to the topic of SSPs, and my research was limited to locations without such services, where opposition to them might be high. In addition, outsiders (especially African Americans) were not welcomed in some of these areas in Kanawha County, and those zip codes had

to be discarded to ensure my safety. The study was therefore limited to populations living in zip codes where there were no SSPs, and which were safe for me. Willingness to discuss SSPs was one of the inclusion criteria for participation.

Another limitation was the lack of generalizability of the results. Communities in rural areas consist of both similarities and differences in environments, communities, and accessibility to services (Davis et al., 2019; Grossman, 2017; Kerr et al., 2019). Therefore, the knowledge gained in this study might only apply to Kanawha County and demographically similar locations.

Delimitations

The delimitations in the study were the selected zip codes in Kanawha County which lacked a local SSP. My assumption was that candidates would have different responses to the research questions than those people located in zip codes that already had a SSP (which are far and few between). I did not want to use an area that had a SSP because more than likely those in the community have already accepted the program. In addition, I interviewed one male and one female within those zip codes who satisfied the inclusion criteria, which included no drug use. The gender delimitation was an equal representation of male and female participants.

Significance

Walden's mission of social change not only involves solution-oriented themes for communities and individuals, but also practical applications. This study increases the understanding of community resistance to support and services for PWID. Specifically, the study aims to comprehend barriers to needle exchange programs, and strategies for

overcoming those barriers. Hopefully this research increases services for PWID in rural areas by enhancing understanding of the issues, and expanding support on multiple levels (policy, community and personal). In addition, creating programs dependent on awareness of the population and the barriers that exist creates transferability.

Summary

Rural communities continue to struggle, and lives are lost daily due to drug overdosing and a lack of available resources for services such as SSPs (Allen et al., 2019; CDC, 2019). Additionally, injection drug use in West Virginia—and specifically Kanawha County—is widely associated with HIV, and this reinforces SSP-resistance among many community members. By conducting this research, I discovered community barriers to SSPs, the knowledge of which could be used to improve acceptance of these programs. I used the SEM to develop a multitiered approach to the opiate epidemic. Awareness about SSPs throughout rural communities can be problematic when faced with community barriers that are not addressed.

In this chapter, I reviewed current knowledge and the gap in literature regarding community perceptions of syringe service programs. I provided the foundation that I used to support the research questions for the study. I also provided a clear and concise rationale for the study based on the lack of knowledge surrounding community perceptions of SSPs, and the importance of looking at this problem from various levels within the community.

Chapter 2: Literature Review

My first goal in this study to understand community perceptions of SSPs, and community barriers to supporting SSPs that have been reported in some areas. My second goal was to understand how to improve the situation at an individual, relationship, community, and societal level. This section includes the literature search strategy for reviewing previous work, the theoretical foundation used for the study, the conceptual framework, and a review of literature focusing on the following:

- Stigma and drug use.
- Prevalence of drug use and stigma.
- The types and prevalence of services available.
- The uptake of SSPs.
- Barriers to syringe exchange programs in rural communities.
- Community acceptance of SSPs.
- The need of community support for drug programs of various kinds.
- Substance abuse related to West Virginia.

Literature Search Strategy

To identify appropriate sources, I used the following electronic databases: Academic Search Complete, CINAHL Plus, Complementary Index, Dissertations and Theses @ Walden University, Gale Academic, Google search engine, Google Scholar, Medline, ProQuest, APA PsycArticles, APA PsycInfo, ScienceDirect, and Walden University e-library. In addition, the exploratory nature of the subject required the use of a larger span of time; therefore, I tailored the search to review years 2010 through 2021

with a larger focus on the last 5 years of information using the following keywords: *community based programs for addicts, community health education, evidence-based solutions for community health, community support for PWID and PWUD, community support for people who use drugs, linkage to care for people who use drugs, PWID and the services required, PWID or IDU or injection drug users or injection drug addicts or heroin users or cocaine users or people who inject drugs, (rural or regional or remote or non-urban)linkage to care, rural area perceptions of syringe exchange,* and *qualitative research for community support for PWID.* Some sources were seminal in nature and thus were included despite the age. I reviewed the abstracts to determine relevancy to the research phenomenon. In addition, reference lists were reviewed for additional articles from the selected research.

Theoretical Framework

Urie Bronfenbrenner's (1979) SEM reviewed multiple levels of influence of behaviors that lead to a deeper understanding of the phenomenon of interest. In addition, according to Bronfenbrenner (1979) and Ravitch & Carl (2016), the SEM enables flexibility in the research design that is valuable for capturing descriptive information in a comprehensive approach to reach all levels of influence and create successful programs using the data obtained from the results. Concepts explored while conducting the research included the community and individual level by identifying characteristics of the current setting, which were associated with barriers to communications and SSPs. In addition to the above mentioned, the relationship level was explored by examining members influence, beliefs, and behavior contributing to any barriers in the community. And lastly,

the societal level concept was looked at by reviewing societal factors that created or encouraged the lack of support for PWID. In addition, clarifying the factors related to behaviors and possible behavior modification using the SEM aids in creating a new plan for those in the community that require accessibility to SSPs (USDHHR, 2020a; USDHHR, 2020b). The SEM supports a higher level of empowerment within the community. Together the above-mentioned factors revealed avenues to both social and physical improvements within the community (Ravitch & Carl, 2016; USDHHR, 2020a; USDHHR, 2020b). The SEM framework and the flexibility within that framework is insightful into the exploratory nature of this research and guides questions to be used to collect data.

The lack of published research on community perspectives on SSPs hinders much needed support for PWID. The drug epidemic continues in rural areas, with little to no support options available, mainly due to the lack of support on a community level (National Institute on Drug Abuse, 2020). A wide array of community stakeholders are needed to build a sufficient support system for SSPs (Pawa & Areesantichai, 2016). For this reason, the SEM was used in this study, to include all levels: individual (persons with substance use disorder and lack of support), the organizational and institutional (such as local and regional health departments and health care facilities), environmental and social (which includes the general community), and policy development (which includes the state and regional perspectives (Ravitch & Carl, 2016; USDHHR, 2020a; USDHHR, 2020b).

According to (Ravitch & Carl, 2016), using the SEM to perform research provides a comprehensive examination of the phenomena; thus, community perceptions surrounding support and the possibility of other recovery options for PWID is fully explored on all levels. In addition, based on (Ravitch & Carl, 2016; USDHHR, 2020a; and USDHHR, 2020b), researchers using the SEM has the potential to uncover valuable insight into community members accounts of possible barriers, beliefs surrounding SSPs, and understanding social norms that give validation to the current conditions. Therefore, I used the SEM to understand the many levels of the problem, including ways to eliminate social barriers between local health department services and PWID. Including multiple levels of influence in the research provided a clearer understanding of the phenomenon through the topics of behavior and social norms, acceptance or denial of SSPs on the community level, and any improvements that could be created to address barriers in the community. According to (Salazar et al., 2015; U.S. DHHR, 2005), a researcher using the SEM to guide a study has more success in their ability to offer sustainable recommendations on multiple levels through the data collected throughout the communities.

Literature Review Related to Key Concepts

Stigma and Drug Use

Drug use in America has steadily increased over the last decade, especially intravenous drug use (NCHS, 2023; NIH, 2020). Prior to the last 2 decades, treatment for substance use disorder occurred in treatment facilities that were not readily available to all nor openly discussed (NCHS, 2023; NIH, 2020). Despite the increase rates of

substance use disorder, higher rates of drug overdose deaths, and the new methods to combat drug use, stigma surrounding the topic and individuals still exist. Stigma stems from multiple sources such as invalid information, lack of communication, and a lack of resources only to name a few (Allen et al., 2019b; CDC, 2019). The mark of disgrace carried by users and the continued lack of treatment options for this population can be dissolved through understanding the origins of social stigma.

One aspect that plays a key role in understanding stigma is the environment. For rural locations, the sociodemographic characteristics such as high rates of unemployment, low income, household size, and low education rates impacted the options people have throughout communities (Allen et al., 2019a). In addition, populations living in rural locations with rugged terrains, like rural Charleston, are more difficult to access, educate and provide services for (Allen et al., 2019a). People in smaller communities often rely on hearsay as well as misinformation to form opinions surrounding topics such as drug use as well as access to care (Dunn, 2013). In addition, less than a decade ago pill dispensaries in rural locations created easy access to legal drugs being used for illegal purposes (Dunn, 2013). Small rural towns failed to realize that they had the power to stop these actions in their communities (Dunn, 2013). Thus, the rates of drug abuse continued to increase, and the perceptions remained stagnant, and the environments worsened with higher crime rates and failing trust between members of the community (Dunn, 2013).

Without the proper support structures and widespread education, PWID experienced more stigma as the communities continue to pull apart. Several authors suggested that the lack of proper treatment access in rural communities perpetuates larger

rates of stigma (Allen et al., 2019a; Allen et al., 2019b; Boucher et al., 2017). This is especially true when PWID use treatment such as naloxone. PWID who seek take-home naloxone have higher rates of negative experiences with professionals (Allen et al., 2019a; Allen et al., 2019b; Boucher et al., 2017). Additionally, firsthand accounts of PWID expressed a greater fear of legal consequences when seeking support and a higher need to decrease stigma through programs such as SSPs and MAT. Structural vulnerabilities and capabilities hindered programs used to combat perceptions surrounding drug use and fear.

Stigma and Crime

The criminalization of drug use has encouraged social stigma surrounding the topic of drug use and PWID. Deryabina and El-Sadr (2017) emphasized the significance of criminalization of drug use and the social stigma attached which limited popular support funding to address the problem. Criminalization is often dictated by state laws, and this adds additional strain to the acceptance of SSPs and MAT by the community. The very mention of drug dependency during medical visits, such as emergency room settings, created a link between the patient and various government registries that could tarnish the medical history (Deryabina & El-Sadr, 2017). These registries would then be viewed by other facilities when the patient seeks treatment and the title of drug dependency could promote an immediate negative persona (Deryabina & El-Sadr, 2017). Stigma and discrimination could lead to limited police assistance and inadequate medical care that makes PWID reluctant to return to care or seek help (Deryabina & El-Sadr, 2017). PWID often fear encounters with local authorities as well as professional staff

from fear of being judged. The authors, (Deryabina & El-Sadr, 2017), noted that needle and syringe programs are vital to the prevention of HIV and other infectious disease and suggested that health care providers and law enforcement require a higher level of awareness and sensitivity.

Communities and Stigma

SSPs and MAT programs are pathways to educate both the participant of the program and the surrounding community. The inclusion of services such as SSPs and MAT remained stagnant or in many cases nonexistent in rural communities while the prevalence of drug use remained high (Allen, 2019b). In addition to the efforts to reduce stigma, determining an accurate amount of drug use in any community can be challenging. One survey conducted in rural Cabell County, West Virginia, reported a 49.6% prevalence of drug use spanning a 2-week period (Allen et al., 2019b) and, even if this is atypical, it demonstrated the magnitude of the problem. According to Allen et al., 2019b, there was a need for targeted programs to restore trust, reduce stigma, and promote education and other services to the at-risk population. In addition, identifying where the majority of drug activity occurs, and the characteristics of the people, could establish a roadmap to promote acceptance and support from the community (West Virgina Department of Health and Human Resources [WVDHHR], 2021).

According to the United States Census Bureau [USCB] (2022), Charleston, West Virginia had an estimated population of 47,129 people in 2022. Almost 18% of constituents in Charleston live in poverty with an estimated 6.2% of the population living without healthcare insurance (USCB, 2022). On average only 42.8% of the population

within Charleston, West Virginia had a bachelor's degree or higher; thus, the indication for building knowledge to combat stigma surrounding PWID and SSPs was evident. In addition, only 84.3% of the population had access to broadband internet, which created challenges to immediate knowledge surrounding available programs based on location (USCB, 2022). Per capita salary is roughly $39k; however, outliers existed for the wealthy and the impoverished which created large gaps between levels (USCB, 2022; WVDHHR, 2021).

Added support options were created by state government through a variety of levels; however, few of those programs prevail in communities unwilling to support the cause. As previously suggested, health disparities in rural areas were often more prevalent than in urban locations (Allen et al., 2019a; Ondocsin et al., 2020). Accessibility to harm reduction programs such as SSPs aids in the reduction of overdose deaths in rural locations such as West Virginia through linkage to MAT and naloxone for participants (Ondocsin et al., 2020). Awareness of the opposition to support SSPs was uncharted throughout West Virginia. Moreover, unfavorable support conditions continue to hinder efforts to establish a new local program. Research conducted by Ondocsin et al. (2020), in Charleston, West Virginia reflected an unsupportive environment on multiple levels. Participants revealed a fear of legal consequence, negative experiences when seeking treatment, and in some cases a hostile environment when authority figures were involved in various situations (Ondocsin et al., 2020). In addition, the lack of city support of the program by then Mayor Danny Jones created additional conflict and misinformation throughout the community (Ondocsin et al., 2020).

Barriers to prevention services and the limited activities to educate in Charleston, West Virginia, to reduce stigma perpetuated the fear on both sides of the issue while the issue of overdose deaths continued to plague the state. CDC data indicated that more people died in West Virginia due to overdose deaths than people who died from car accidents in the state (NCHS, 2023). In addition, while the distribution of controlled prescription drugs (CPDs), fentanyl, methamphetamines, and heroin are the greatest threats, a new psychoactive substance aims to intensify the threat of CPDs (NCHS, 2023). Controlling prescription drug distribution was thought to be the answer that would erase the problem (Dunn, 2013; NIH, 2020). In a 2013 documentary filmed by Sean Dunne titled *Oxyana*, the once thriving rural mining community of Oceana was placed on a national platform due to the overwhelming amount of substance use disorder that destroyed the community (Dunn, 2013).

The poverty experienced in this small rural town is one experienced throughout many of the 55 counties located in West Virginia. In addition, the many hindering factors that elevate barriers to proper treatment programs continued to cause declines in population through death and transfers out of the state (Dunn, 2013; NIH, 2020). Recurring themes emerged throughout qualitative, quantitative, and mix-methods research conducted by (Dunn, 2013; NIH, 2020), that provided answers to why substance use disorder is a problem in rural locations. In addition, (Dunn, 2013; NIH, 2020) suggested when and where the problem is heightened in rural locations as well as provided the source of the issue. However, little is known regarding the answers to who

substance use disorder affects in the community and how that affect translates to community support to SSPs.

Two criteria in West Virginia were identified which reflected the need for continued outreach: the lack of SSPS and the lack of naloxone distribution (WVDHHR, 2021). According to the WVDHHR (2021), the overdose death rate for the state was 91.2 per 100,000 people while the national rate ranked in at 32.7 per 100,000 people. This was a rating 2 times higher than anywhere else in the county. In addition, Kanawha County had the highest rate of opioid-related overdose deaths with 1,232 lives lost, with Cabell, Raleigh, Mercer, and Berkeley following closely behind. Treatment options along with perceptions and inclusion directly affect this ranking (WVDHHR, 2021). Educating the community on multiple levels of influence surrounding drugs use could decrease mortality and morbidity, increase avenues to early intervention, open alternative methods of treatment, and decrease stigma surrounding drug use throughout communities.

Prevalence of Drug Use

Previous Experiences that Affect Drug Use and SSPs

A study conducted by Guise et al., (2017) reviewed a distinct perspective of SSPs. Guise et al., (2017), suggested the importance of assessing experiences that occurred prior to initial drug use is relevant when determining placement for programs such as SSPs and MAT. The experiences of the participants lend value to the concept of hindering or eliminating factors which lead to drug consumption through coping techniques, education, and improved social networks (Guise et al., 2017). In addition, understanding the environments, education levels, and social structure of the participants

where elevated levels of drug use occur increases the development of adequate infrastructure throughout communities (Guise et al., 2017). Ultimately, poor coping skills, increased tolerance to other substances, and poor social networks continue to fuel the issue of drug use, thereby shaping the need for community support and proper placement of programs (Guise et al., 2017).

Substance Abuse Related to WV

Besides increasing community support for SSPs there were other reasons why West Virginia communities should consider increasing the operation of harm reduction programs such as syringe services. As previously suggested, West Virginia has a drug overdose death rate 2 times higher than any other location in the country (WVDHHR, 2021). Additionally, in 2020 injection drug use was named in 80% of newly infected HIV cases (WVDHHR, 2020). Substance abuse disorder continued to drive overdose deaths as well as increased morbidity in Charleston, West Virginia communities, yet the problem seems to be blind to the public (WVDHHR, 2020). Best practices suggested that treatment options alone fail to achieve high recovery rates in rural locations (Kerr et al., 2019). Therefore, the plan to increase community support for SSPs need to expand by the inclusion of education and harm reduction programs such as SSPs.

As previously suggested, drug use in America has increased over the last decade NCHS, 2023; NIH, 2020). According to the NIH (2020), over 53 million Americans over the age of 12 have misused prescription drugs or have used illegal drugs within the last year. In addition, accidental drug overdose was a leading cause of death for those under the age of 45 with the United States of America experiencing a 264% increase in

overdose accidents since 2012 (NIH, 2020). The presence of synthetic opioids such as fentanyl and tramadol continued to add to the overall death rate nationwide while rural areas such as West Virginia experienced an increase in prescribed medication as well as illegal drug use (NCHS, 2023; NIH, 2020). In 2018 alone, providers wrote 69.3 opioid prescriptions for every 100 persons in West Virginia, the national average for the United States was only 51.4 prescriptions (NIH, 2020).

Social and environmental factors continued to influence drug use rates in rural America (Zeller et al., 2021). Prevalence varies in rural locations based on recreational versus pharmaceutical drugs, routes of administration, the location drugs are used, and the number of drugs prescribed only to name a few (Lippold & Ali, 2020). In addition, addiction to IV drug use occurred higher in males than with females (Lippold & Ali, 2020). However, age-adjusted drug overdose death rates for females increased 350% in rural areas from 2000-2015 (Lippold & Ali, 2020). Despite the drastic difference between male and female overdose deaths, all age groups have shown an increase in drug overdose deaths (Lippold & Ali, 2020). Additionally, more of these deaths occurred in homes, abandon houses, and on the streets than in medical facilities (Lippold & Ali, 2020).

Over a lifespan, drug use can vary from person to person often making the topic difficult to fully comprehend. When coupled with stigma and other psychological disorders, the presence of valid responses when performing research created doubt in the validity of data; thus, death records are often used (Lippold & Ali, 2020; Zeller et al., 2021). Even more elusive are the wide array of reasons or motivations that people cite for

substance use such as the need to feel relaxed or as an escape from pain only to name a few (Lippold & Ali, 2020). Understanding critical components of the prevalence of drug use such as socioeconomic differences, health-related behaviors, and access to health care services in rural areas aids in the ability to inform public health programs such as SSPs.

Types and Prevalence of Services Available

Public health authorities have labored to establish working programs to combat the drug crisis experienced across America. However, developing strategies to offer improved services were often reliant on CDC guidance and other national organizations who lack similar geographical and social characteristics. In addition, missing from the CDC strategy was the knowledge gained through the perceptions and experience of community members who impact the social norms and SSP acceptance levels (Kerman et al., 2020). Interestingly, the perceptions of PWID was well accounted for throughout research and reflect the need for additional services in rural areas (Allen et al., 2019a; Allen et al., 2019b). However, the perceptions of the community were left unnoticed yet weigh heavily on what was available to PWID on a local level.

Supervised Consumption Sites

This lack of understanding one side over the other led to gaps in other alternatives such as supervised consumptions sites (SCS). Prevalent in urban areas, SCSs increased knowledge surrounding the social determinants of health (SDOH) in a community while providing access to medical supervision when consuming drugs (Kerman et al., 2020). Researchers have concentrated efforts in urban locations which increased education related to SDOH and the opportunities for adequate programs such as SSPs and SCS

(Kerman et al., 2020). Kerman et al. (2020). suggested that the use of harm reduction and supervised consumption sites were not always popular within the urban communities. The inclusion of educational efforts in conjunction with collaborative efforts with local authority, yielded improved attitudes and a decrease in stigma (Kerman et al., 2020). Having complete programs that offer a safe and stigma free environment not only reduced deaths, but also permitted an opportunity to link users to other services such as rehabilitation. Moreover, supervised consumption sights offered shelter needed, additional health care access, social support, and emotional support services often required at a higher level for PWID (Kerman et al., 2020).

Community-Based Substance Treatment Programs

Another option often available in urban areas as opposed to rural locations, were community-based substance treatment programs. Johnson (2020) ascertains ex-offenders found value in attending support groups and community-based lifestyle altering programs to combat alcohol and substance use disorder. Moreover, learning coping techniques and sharing experiences in the community-based programs created a broader awareness of the conflicts and triggers which allowed participants to create improved behaviors and reactions (Johnson, 2020). Community-based programs not only reached the participants but also reflected the need for community support (Davis et al., 2019). However, barriers to include the community in these programs continued to exist for PWID in rural areas; thus, a gap continued in the uptake of services (Davis et al., 2019). Boucher et al. (2017) suggested that community-based participatory programs were a vital tool as they offered a level of focus and support for PWID not often received from the community. The

absence of knowledge from the community perspective left a void to the creation of thorough solutions to combat the slow uptake of community-based programs.

Uptake of Syringe Services Programs

Social relationships along with a need or lack of services often gear the direction of community support options. Community support programs facilitate multiple roles through a support system including drug and alcohol addiction, eating disorders, and HIV positive patients only to name a few (Kun et al., 2019). Kun et al., (2019), suggested that the role social relationships play in treatment retention was vital in maintaining positive behaviors and actions as well as building positive relationships that benefit not only the individual but also society. Participants of the Community Antiretroviral Support Group (CASG) perspectives on the role of social relationships also extended to retention of services, financial improvements, and an increased interest in improving education (Kun et al., 2019).

Support

The Need of Community Support for Drug Programs of Various Kinds

To uncover the community perception of SSPs research needed to extend beyond PWID and the assumptions that lead to unsuccessful programs. The SEM framework has been previously used in urban settings to develop SSPs; however, has not extended to the rural location where added barriers exist (Kerr et al., 2019). In addition, uncovering the community perceptions created a pathway to educate, rebuild trust, reduce stigma, and develop sustainable options for the at-risk population (Kerr et al., 2019). Increasing

community involvement and asking straight forward questions surrounding support for SSPs boosted the potential to create a sustainable program.

Peer and Family Support

Another key topic of social relationships and support was the presence and influence of nonaddicts or recovering addicts for the at-risk population. In a study conducted by Kidorf et al., (2016), at a community medication-assisted treatment program, 98% of opioid users advised that the presence of a drug-free family member or friend drastically improved the outcomes of recovery. Additionally, over 89% of participants reported a willingness to invite the drug free member to the program to support their efforts (Kidorf et al., 2016). In another study conducted by Felix et al., (2020), evidence suggested that age-specific options to promote support efforts of patients were highly favorable. Moreover, recovery options supported through the US Food and Drug Administration such as MAT were accessible throughout communities through Medicare coverage (Felix et al., 2020). Policy changes on a federal level coupled with family support increased the opportunities for engagement and growth of SSP (Kidorf et al., 2016; Felix et al., 2020).

Syringe Service Programs

Perceptions of SSPs and PWID

A crucial factor in the expansion of SSPs and community-based programs that had the potential to address many of the socio-structural barriers, such as the education required to increase support, was the perception of these programs by PWID. Boucher et al., (2017) explored the experiences of PWID through semistructured interviews,

expanding on added concepts that would enhance SSPs such as selfcare, motivation, peer support, and overall wellbeing. People with substance abuse want to feel seen and respected despite their condition (Boucher et al., 2017). Harm reduction and other valuable social services are highly valued by PWID (Boucher et al., 2017; Kendall, 2017). When the perception of program availability is not reciprocal the gap in services creates a strain on the entire community (Boucher et al., 2017; Kendall, 2017). PWIDs not only wanted services, but in many cases, needed support services to kick the habit (Boucher et al., 2017).

STIs and SSPs

Another key factor reflecting the need to increase SSPs included the increased case load of HIV morbidity due to IV drug use. In a study conducted by Evans et al., (2018), HIV infections increased in West Virginia Counties lacking SSPs. In particular, one reoccurring theme suggested that participants would obtain clean syringes and needles if those items were readily available in their areas (Evans, et al., 2018). HIV and hepatitis outbreaks tend to occur where there is a lack of resources and a higher rate of sharing drug equipment (Paquette et al., 2018). Thus, support options provided a gateway to decrease infections as well as identifying individuals for other support care (Evans, et al., 2018; Paquette et al., 2018). Kanawha County, one of the locations currently experiencing an increase in HIV cases, was similar in makeup to Scott County, Indiana, where one of the largest HIV outbreaks occurred in the majority of the population. This outbreak quickly exceeded the reach of PWID and affected people who did not use drug through sexual contact (Paquette et al., 2018; Van Handel et al., 2016).

Paquette et al., (2018), further extended this concept to include HIV and hepatitis data to evaluate SSPs and other support structure programs in rural areas. Of the 2,330 results, only seventeen met the criteria for inclusion of full services which included STI testing for PWID (Paquette et al., 2018). Despite growing concerns surrounding drug use in rural areas, the availability rate of SSPs has continued to lag in timeliness. In addition, addressing the unique factors that influence services, such as community support and perceptions, continue to be ignored Paquette at al., 2018). The implication of this data is that there is a need to expand access to drug treatment and social support structures in smaller communities of rural areas.

Barriers to Syringe Exchange Programs in Rural Communities

Despite the need for SSPs and other community programs reflected in research, there are times when other barriers exist involving the programs readily available**.** In rural West Virginia, one barrier which exists is the current laws that criminalize syringes and needles (David et al., 2019). Obtaining clean equipment was not an issue when the SSP was accessible from the local health department; however, participants still feared being arrested once they left the premises of the program (David et al., 2019). In addition, the study suggested reducing negative opinions among community members and pharmacists would increase the level of participation. PWID wanted to experience nonjudgmental care and treatment (David et al., 2019). However, people experienced an elevated level of negativity when attending other services after the program closed (David et al., 2019). Additionally, due to the media attention, people were often exposed since the local health department was in a public area (David et al., 2019). Ultimately, the program closed due

to the public concern regarding functionality and discarded needle concerns (David et al., 2019).

Infrastructure and Environmental Barriers

Closing the only local SSP left a void for the many people seeking services. Additionally, decreasing stigma surrounding the program was left ignored (David et al., 2019). Harm reduction responses continued to vary throughout rural locations such as West Virginia (David et al., 2019). Additionally, little is known regarding the barriers to community support for such programs. Surratt et al., (2020), suggested that beyond physical and mental support, barriers such as transportation, hours of operation, and funding need to be addressed in rural locations. In addition, structural influences such as location and availability of health services should be included in harm reduction programs (Surratt et al., 2020). For example, placing a SSP in the middle of the city when most of the participants must travel a great distance to attain services is counterproductive; however, this is exactly what occurred with the SSP in Kanawha County (David et al., 2019; Surrat et al, 2020).

Consistent health programs were not the cure-all for the drug epidemic. However, the more knowledge gained surrounding barriers, as well as an increase in community support added value to the sustainability of treatment programs available (Treloar et al., 2010). Treloar et al., (2010), defined this concept as “Fitness for duty,” and ascertains that interrelated factors such as social, financial, and environmental needed to be reviewed prior to the onset of services. Evaluating programs that address the needs of PWID required a collaborative approach to ensure success and improved outcomes

(Treloar et al., 2010). Every person is different and began their drug use for assorted reasons; thus, the continuum of care should include a one-stop-shop approach that addressed multiple barriers to improve health outcomes (Treloar et al., 2010).

Moreover, a collaborative approach to SSPs and other services was needed to address the belief that services were not required nor wanted. In a study conducted by Krug et al., (2015), 132 participants name a lack of information and knowledge of services, a lack of outreach, and age restrictions on services as main barriers to utilization of the programs available. In addition, when coupled with stigma and the fear of law enforcement the lack of youth friendly services perpetuated false perceptions and beliefs surrounding SSPs (Krug et al., 2015). The lived experiences of PWID, including adolescents who inject drugs, reflected the need for adaptive comprehensive services; however, still excludes the experiences from the community perspective (Krug et al., 2015).

Community Acceptance of Syringe Exchange Programs

Some rural communities fail to accept programs such as SSPs. In part, residents fail to realize the value SSPs added to the community (Katz, 2018). Additionally, residents were not aware that their support was vital to the longevity and appropriateness of services. Barriers existed from multiple sources; therefore, solutions must include the perceptions of the communities in order to gain a higher level of understanding. In addition, community support of SSPs often determined sustainability. In a study conducted by Katz (2018), PWID provided descriptive data on the closure of the only local SSP in Kanawha County. The closure exposed the at-risk population to additional

risk factors such as sharing needles and an increase of reusing equipment which led to increased risk of infection (Katz, 2018; Paquette et al., 2018). In addition, conflicting laws within the state, such as the Good Samaritan law and a drug-induced homicide law, cause confusion and promoted a level of stigma surrounding drug treatment services (Katz, 2018). Laws that criminalize a mental health condition are not helpful for those in the community trying to understand why syringe services were vital (Katz, 2018). Shaping the community perception must include healthy promotion, inclusion of community perceptions, and education (Katz, 2018).

Social-Ecological Theory

Another requirement for successful SSPs was examining social-ecological factors that affected change in a community. Each level of a community including the individual, the relationships that influenced behavior and contributed to experiences, the community as a whole, and the societal level all created a climate that could either encourage change or inhibit change. Kerr et al., (2019), suggested that programs should include a partnership on a local level in order to develop and implement SSPs. In the study, a total of 7,988 clients using SSPs in urban provided information to understand factors that influence the use of syringe exchange (Kerr et al., 2019). The results reflected reoccurring perceptions such as fear of authority and community stigma, improper or inadequate location, and social hazards that continued to create barriers (Kerr et al., 2019). In addition, the need to address poor infrastructure guided the conversation rather than addressing community concerns and including the contributing factors that cause poor services and access (Kerr et al., 2019).

Resources and Barriers

Another potential barrier included the resources required to support SSPs along with the community environment in which the resources would be housed (Mathews et al., 2020). The concept of inclusion has been a widespread practice to facilitate barriers to HIV testing (Mathews et al., 2020). Community based participatory programs have paved the way to successful testing programs that not only include the at-risk population, but also the communities and community partners (Mathews et al., 2020). Mathews et al., (2020), suggested that while local testing has increased issues still remain for home-testing in both urban and rural locations. In addition, factors identified such as consistency of program hours, availability of products and post-test services, and the absence of confidentiality hindered some programs (Mathews et al., 2020). Community-based strategies are important; however, they must include a higher level of knowledge prior to the onset of services (Mathews et al., 2020). Studies reflected the need to understand conditions throughout this topic from communities through inequalities experienced on various levels (Mathews et al., 2020). Promoting accessibility and community support to treatment options and SSPs in both urban and rural areas differ depending on the resources available and the resources missing (Mathews et al., 2020).

Summary

The purpose of this review was to establish a clear understanding of the literature which existed to uncover clues surrounding research, perceptions of SSPs from both rural and urban areas, and create a better understanding of programs surrounding support for SSPs. Accessibility issues along with stigma surrounding SSPs continue to block a clear

path to syringe programs for PWID in rural communities. In addition, understanding the presence of community support aids in promoting SSPs and other MAT programs. One reoccurring gap is the community perception involved with SSPs support as well as a clear path to initiate sustainable programs. While research reflected a need to include other levels in the process of creating SSPs and other accessible programs, the need to clearly understand the importance of support falls short throughout research. Thus, the need to explore the community perception on multiple levels remained an area unexplored. Chapter 2 expanded on the above through a review of the current literature on SSPs and expanded outside of this specific topic to the literature on (a) stigma and drug use, (b) types and prevalence of services available, (c) evaluation of past or existing programs, (d) the uptake of SSPs, (e) known barriers to and acceptance of drug programs in rural communities, (f) need of community support for drug programs, and (g) substance abuse in West Virginia. The gap in literature reflected through these studies were reviewed and synthesized and the knowledge gained provided a roadmap to research that reduced stigma and health disparities. Chapter 3 will cover methodology, sampling, sampling procedures, population, and data collection.

Chapter 3: Research Method

For this study, I wanted to research the communities currently lacking SSP through the community perspective. Using research to understand the levels of community knowledge and support surrounding the needs of PWID as well as improving community involvement and support for SSPs could be achieved through proper research. However, a clear understanding of the community stance on SSPs had to be obtained in order to achieve these goals. In addition, I aimed to understand community perceptions of syringe exchange and any barriers that exist. The research questions for this study were:

RQ1: What are the perceptions of community stakeholders about syringe exchange programs for PWID in Charleston, West Virginia?

RQ2: What are the recommendations from the community to reducing community obstacles to syringe exchange in Charleston, West Virginia?

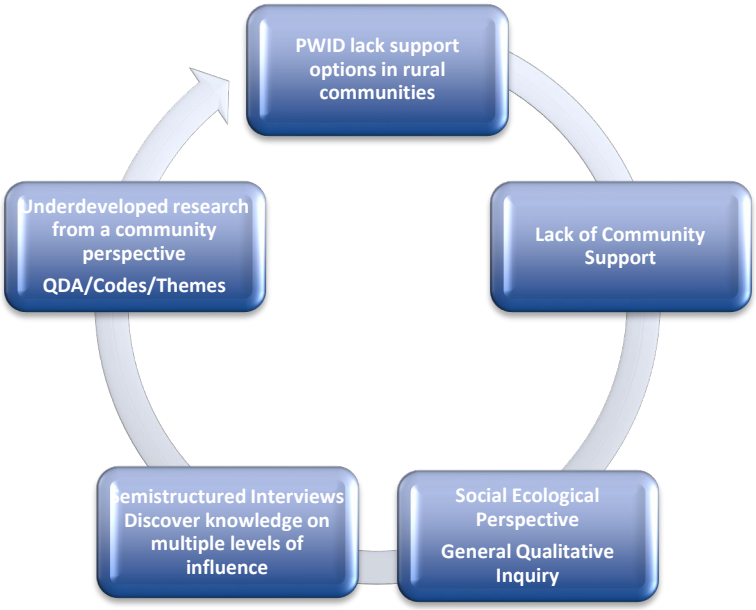
Traditionally, support of SSPs has been reviewed from the side of PWID. In addition, researchers such as Johnson, (2020) and Katz, (2018) use the SEM to explore the topic of SSPs for the development of programs in urban areas. Additionally, multiple levels have been explored; however, based on previous literature this topic is best reviewed from the perception of the community through various levels to expand the knowledge for future research. Coupled with the research topic, the communities currently lacking SSPs required a flexible method of research to potentially uncover how the community perceives drug use within their location and what recommendations would be feasible to reduce obstacles to SSPs within the community.

Basic qualitative inquiry (BQI) is a simple descriptive method designed to describe a phenomenon in detail and people's experience and understanding of the phenomenon. Seminal studies of BQI include Ravitch and Carl (2016), Babbie (2017) and Creswell and Creswell (2018). These authors clarify that are no set guidelines for BQI which allows for the data to guide the form of the study as the research progresses. Therefore, in my study, BQI allows me as the research to uncover the basic needs and experiences of the rural population to be uncovered and to drive the study, including needs for new improved resources and solutions. The BQI approach allows me as the research to uncover participants' knowledge surrounding the lack of support for syringe exchange, but also their reflections on that knowledge as they may relate to other levels. Specific areas in Charleston, West Virginia currently lack SSP. According to Allen et al., 2019a the perceptions of PWID want SSPs to be located in the community. However, Allen et al., 2019a omits the community stakeholders perception as it relates to the support of SSPs in the community. In addition, understanding why previous SSPs have failed can either support or refute that there is a lack of community support.

Ultimately, when I couple the SEM with the BQI I am able to use the most appropriate choice to exam individual perspectives and opinions as well as test their knowledge surrounding the topic of SSPs. According to multiple sources (Babbie, 2017; Fertman & Allensworth, 2017), my research will uncover how the knowledge gained interconnects. Thus, my research will enable me to exam those connections and offer insight to creating a new platform for discussion. See Figure 1.

Figure 1

Community Perspective Research Design



Effective interventions for PWID should include access to SSPs and increased interactions in the community for sustainability of the program (Pawa & Areesantichai, 2016; Richardson & Bell, 2018). For example, according to Allen et al. (2019a), the lack of syringe exchange only perpetuated poor behaviors such as unsightly/unsafe discharge of drug equipment, increased homelessness/unstable housing, and increased crime rates. In addition, PWID experience disadvantaged environments which then perpetuates increases in sexually transmitted morbidity and mortality (Allen et al., 2019a; Wilson et al., 2015). On the opposite end was the cost effectiveness of syringe exchange as such

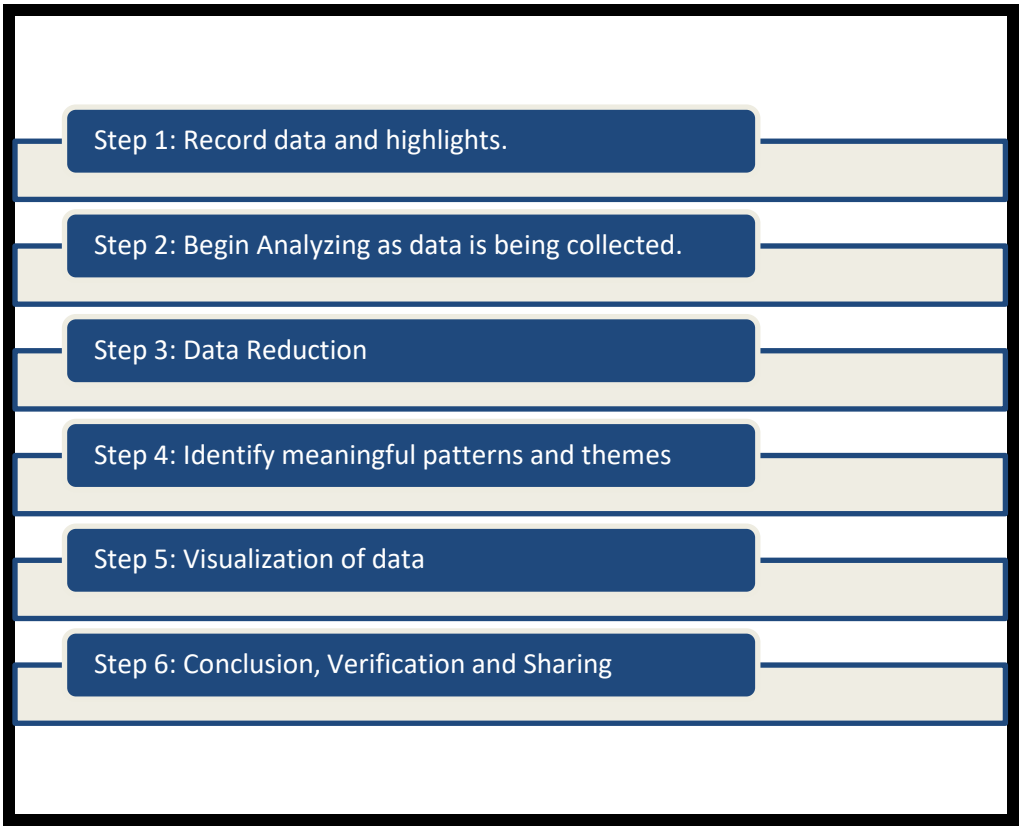
programs have the potential to offer a pathway to improved environments, decrease crime in the community, and improved rehabilitation (Allen et al., 2019a; Grossman, 2016).

Currently in West Virginia, overdose rates average twice as high as the national average ranking at 91.2% when compared to 32.7% (USCB, 2022.; WVDHHR, 2021). Community culture involves influence from multiple levels of influence to support options for PWID. Thus, using a basic research approach in collaboration with the thoughts, values, and beliefs of the community had the potential to increase the chances of meaningful research that could impact PWID as well as the community. In addition, a community environment that removed bias opinions, judgement, and barriers had the potential to create positive outcomes for all within the community including those who use drugs (Allen et al., 2019a; Grossman, 2016). The SEM and the basic research design would offer the researcher the flexibility required to understand and uncover basic meaning surrounding community perceptions regarding syringe exchange. Additionally, the rationale involved in this study created opportunities for the researcher to develop a clearer understanding that had the potential to support innovative programs throughout rural West Virginia. See Figures 1 and 2.

This was a qualitative inquiry research design where I collected data through semi structured interviews as recommended by Burkholder et. al (2016). A general qualitative approach was used. Steps in the research process are laid out in Figure 2.

Figure 2

Abbreviated Steps to Data Analysis for SEM a Basic Qualitative Approach



The results will be provided to participating communities, with suggestions for improvements to access, support, and the environment. as well as ways to reduce stigma (Allen et al., 2019a; Grossman, 2016). The ability to understand social activities on an individual, relationship, community, and societal level strengthens the ability to comprehend factors both as individuals as well as how those factors interrelate at another level (Creswell & Creswell, 2018; NCHS, 2023.; Ravitch & Carl, 2016). In addition, identifying the factors that influence behaviors and culture will help communities to design solutions based on the contributing factors (Creswell & Creswell, 2018; NCHS, 2023).

I was able to use the key elements that drive the SEM framework to uncover information regarding the value of the topic in rural areas experiencing a lack of adequate support and infrastructure for syringe exchange by reviewing all the factors that affect the structural determinants of health. Therefore, my results have the potential to increase the level of comprehension surrounding the subject and uncover the potential capacity of the community for each of the four levels. In addition, the results has the potential to expand understanding as to why the past attempts to support syringe services failed, even though they had the potential to overcome challenges (Allen et al., 2019; Grossman, 2016). The results could create a solid foundation to rebuild the Charleston community to support SSPs.

Role the Researcher

Researchers have the potential to play several roles surrounding the research process as well as the topic of interest (Patton, 2015; Ravitch & Carl, 2016). In this study I was the primary data collector, facilitator, and data interpreter. In addition, I ensured data collection procedures are met to ensure the accuracy and validity of data requirements through an IRB review as well as the committee feedback. It is important to provide instructions as well as obtain consent from all participants (Ravitch & Carl, 2016). It is equally important to ensure that the participants had a clear understanding of the processes, and that communication and the information shared is transparent (Patton, 2015; Ravitch & Carl, 2016).

According to multiple sources, it is important for researchers to acknowledge their influential role as part of the interview process (Creswell & Creswell, 2018; Ravitch &

Carl, 2016). I had no personal or professional relationships with any of the participants, as this could have compromised the ethics of my recruitment and the reliability of the information received during the interview process. Likewise, I used no incentives to recruit participants for the study, and all data were kept confidential, and quotes from the data were reported anonymously.

Sample: Participant Selection

Community perceptions are unique due to the fact that cultural and environmental aspects of a community affect individual behavior as well as health outcomes within the community (Soriano, 2012; Villejo et al., 2017). The best potential sources for participants in this research was the Kanawha County communities that lack syringe exchange resources. Thus, I selected specific geographical regions which included zip codes 25301, 25302, 25304, and 25311. Quota sampling included two participants from each area based on the age range from 18 to 65 years old, male, and female, and place of residence or work. The above included criteria for participation in the research had the best possibility of providing a full range of knowledge and the potential to create agents of change to support SSPs.

Additionally, for the best opportunity to address the areas of concern, convenient purposive sampling of two population was used. For sampling purposes, a general population within the set parameters of the Charleston communities was selected. This group had the potential to provide a clear point of view and experience from those who do not suffer directly from drug use; however, they may have experienced hardships within an environmental setting. According to the NCHS (2023), Charleston communities

were overcome with a high rate of drug use and drug overdose deaths; thus, data collection in this area is vital. In addition to the above criteria, the marketing campaign mentioned that community members currently in recovery are welcome to participate in the study. People previously inflicted with substance use disorder offer valuable data in terms of awareness, required programs, and goals for improvements (CDC, 2022; Grossman, 2016). Currently, recovery coaches are established in local hospitals, health departments, and some churches within the 25301 and 25304 areas which offers access to this population. Together, this group of participants had the potential to offer the richest data for this study until data saturation occurred.

As a primary principle in qualitative study, data saturation occurs when repetitive information occurs throughout the data; thus, no further data collection nor analysis is needed (Baker & Edwards, n.d.; Ravitch & Carl, 2016). For a strong participant base, the researcher obtained a minimum of 10 participants using traditional methods such a marketing in the local newspaper, flyers in the local health department/hospitals and throughout each geographical location using community organizations such as churches and community centers. Marketing occurred until the minimum of 10 participants were obtained which met the criteria and agreed to the terms. Immediately following the selection, data collection began and data analysis occurred to process emerging themes, until data saturation. In order to collect valuable data, the participants were in a location lacking a syringe exchange program which was determined based on data from the WVDHHR. Based on the state of the current pandemic, potential participants were recruited using nontraditional methods such as Facebook Community, Twitter, and other

social media outlets. The use of social media outlets allowed me to ensure the invitation reached multiple groups within the areas selected.

Maintaining a trustworthy flow of information during the research process is vital and if not monitored could lead to misinformation and confusion (Creswell & Creswell, 2018; Ravitch & Carl, 2016). Thus, it was important to be clear and concise, welcome feedback, keep information updated and have open communication with my dissertation team. Maintaining a positive attitude regarding the research and feedback should aid in the timeliness of data analysis and consistency (Creswell & Creswell, 2018; Ravitch & Carl, 2016). In addition, quality checks of the data were routinely performed through my committee. Additionally, my use of online communication forums was monitored and followed the same criteria as all other forms of communication. All information was discussed and disseminated in a timely manner. This practice had the potential to add value to the overall research plan and trustworthiness of the research (Creswell & Creswell, 2018; Ravitch & Carl, 2016).

Data Analysis Plan

I used the following analysis plan for the SEM researched proposed. The first two steps involved collecting data using semistructured in-depth interviews. The questions which are included in the Appendix, allowed me to uncovering perceptions surrounding community support for syringe exchange, the level of responsibility each level plays in support efforts, and social norms. According to (Burkholder et al, 2016; Creswell & Creswell, 2018), reflection and analysis that occurs as data is collected provides a high level of consistency throughout the research process. Thus, to ensure consistency I

performed both analysis and reviewed the data collected with the SEM and general qualitative inquiry framework. Transcripts from Otter were coded three times and analyzed for similarities and differences with the help of Quikos. During the data collection and analysis stage, ethical considerations were considered to ensure no harm was experienced by the participant.

The next step I used included reducing information that was not directly relevant to the research questions but may have meaning as an outlining topic. According to (Creswell & Creswell, 2018; Ravitch & Carl, 2016), this step during research analysis is relevant to uncover clue about the topic that the research questions may not focus on. In addition, according to (Ravitch & Carl, 2016), identifying patterns in the data and organizing those into themes helped the research link the data to the model as well as the potential to extend the understanding of the phenomenon. In short, this process helped me answer the research questions. The last phase was for me to transform the data into a visual representation and share the information regarding the phenomenon. Quirkos was purchased to aid in this process.

I was the only data collector for this study. I only performed data collection in the selected zip codes based on the lack of SSPs in those areas over a 11-week span. This timeframe allowed me the adequate time to perform at least 2 to 2 ½ interviews a week as well as perform coding to identify themes. Recordings and transcripts received a numerical reference so that participants could remain anonymous during the research process; however, personal identifying information such as email address or physical address was collected in order to share the research findings. No published tools were

used during this research, and I secured data in a locked file which I will keep for a maximum of five years.

Peer Debrief

According to (Ravitch & Carl, 2016; Salazar et al., 2015), using quality checks from peers and colleagues is a vital part of the qualitative research process. Therefore, I collaborated with Dawn Carswell on this project. Both Dawn and I used high-risk populations such as PWID as the topic of research. In addition, she and I have consistently provided each other feedback thus far throughout the educational journey. Though Dawn and I used different participants to capture the knowledge required regarding the experiences of drug use on the individual and the community for research, both experiences in research added value by way of the support provided throughout the process. Both Dawn and I hope to add value to the overall process and offered each other structured feedback throughout the rest of the PhD journey.

In the end, the interview questions were altered twice for language clarity to add a higher level of comprehension for various levels of people. In addition, two questions were removed that had the potential to cause undue stress so that the conversation would be more natural with the participant. The removal of these two items adds a conversational aspect to the questions and removed a dominance in the conversation during interviews which could hinder complete answers to the research questions (Ravitch & Carl, 2016; Rubin & Rubin, 2012). This process was observed by Walden faculty and peers and also participants of the pilot survey who provided feedback.

To ensure adequate time was allotted during the pilot, each participant was advised the interview process would be at least 1 ½ hours to complete. This timeframe was adequate to establish rapport, answer any questions regarding the original invitation, see Appendix B, review consent and recording protocols, see Appendix A, answer any additional questions, discuss confidentiality, see Appendix C, provide closing statements, see Appendix D, as well as complete the interview.

Voice recordings were made using two methods, a voice recorder on my laptop and an App called Otter. These two methods offered the best capturing tools as well as established a backup method in the event that one recording is lost or damaged. Otter is a free app available which allows the user to transcribe and transfer information easily and the data can be easily encrypted and stored. In addition, no personal information is required to use the tool and the App is free as opposed to other costly software. Please see Appendix E for the final proposed research questions.

As previously suggested, using Otter removed the need to physically transcribe the data; however, coding will be left to human skill. We as humans make errors; thus, my main objectives when researching qualitative data analysis software (QDA) were the ability to sort information as well as to review the flexibility of the program. In addition, cost played a significant role for students with budget constraints. Therefore, I selected to use Quirkos. Quirkos offered a wide array of features for researchers looking for data analysis not based on simple causations. The features are useful, and the ease of setup is convenient for beginning researchers. In addition, the free 3-week full trial version allows the user access to try all the available features such as coding and retrieving data, color

coding and highlighting text, and the ability to create shortcuts to specific text which is useful when selecting similar data. The ability to export data back to Word is an added feature and allows visual data to be viewed and shared in a familiar program. Additionally, the visual data capabilities of the program offer a wide range of potential visual representations of the data collected.

Instrumentation

The source of data for this research was derived from the use of standardized open-ended questions (SOEQ) that focus on uncovering barriers which may exist on various levels throughout the community, established perceptions surrounding SSPs, and helps create a new foundation based on the recommendations from the community to reduce obstacles to syringe exchange. Prior to each interview each participant received a brief overview of the study, a review of confidentiality, and receive a question-and-answer period. Each interview was recorded via audio recording for playback and transcribing purposes. The data will also be shared with participants at the end of the study either via email or a community meeting.

In order to develop the research interview questions, multiple steps were included. First, the SOEQ tool was developed based on literature reviewed as well as my experiences through my professional career as a Disease Intervention Specialist (DIS). During my twelve-year career in Public Health, a reoccurring theme emerged during partner interviews with patients, the lack of SSP support throughout the community. Next, to ensure consistency, authenticity, and reliability the SOEQ was peered reviewed by professors and peers for suggested verbiage and structure adjustments. These steps

were taken prior to the use in a mock community assessment where additional feedback occurred post assessment. Including feedback offered from multiple sources such as professionals, peers, and participants expanded the clarity of the research questions (Creswell & Creswell, 2018; Ravitch & Carl, 2016). Lastly, published reviews and textbooks where experts outline how to evaluate SOEQs were reviewed to identify common features to improve the tool (Creswell & Creswell, 2018; Ravitch & Carl, 2016).

Issues of Trustworthiness

As previously suggested, strategies such as quality checks with peer reviewers as well as professionals creates credibility and dependability within the procedures used as well as the data collected (Creswell & Creswell, 2018; Ravitch & Carl, 2016). Additionally, credibility is achieved through the participants and their informed responses to the research questions (Rubin & Rubin, 2012). According to multiple seminal sources qualitative data that produces creditable results built from a solid plan ensures accuracy and stability (Ravitch & Carl, 2016; Rubin & Rubin, 2012). Transferability can be achieved through similar environments, communities, and stakeholders. Confirmability is achieved through the findings and the interpretations; thus, a structured reflective process will occur (Ravitch & Carl, 2016). In order to meet the above requirements, term plans guided the process, aid in consistent task achievements, and allowed for a continued review of the research work and process. In addition, committee chair discussions and reviews provided feedback for any potential bias concerns, problematic plans, or any issues that could potentially harm the integrity of the research.

Ethical Considerations

Ethical considerations stem from questions surrounding PWID and SSPs. Due to the sensitive nature of the topic as well as the vulnerable population being discussed, the study benefitted from an early ethics consultation. According to Creswell and Creswell (2018), an IRB consultation has the potential to bypass several concerns with ethical issue. Due to the nature of the proposed research participant recruitment may also be an area of ethical concern. The research questions have the potential to trigger emotional responses from participants who have lost loved ones and friends due to drug overdose or from participants who have experienced crime or violence. In addition to an early consultation to minimize potential ethical issues, participants should be aware of the program objectives, the possible risk and benefits, the legal rights, and the responsibilities (Creswell & Creswell, 2018; Ravitch & Carl, 2016).

Other areas of ethical concern to consider were the use of the proper tools such as an invitation to participate, flyer presentation, the consent form, and ensuring the participants understood their rights. These items have the potential to cause distress within the communities being used based on suspicion of the research being performed. Due to this potential, discussing the research on several platforms has the potential to minimize community concerns. To add a level of consistency, discussions surrounding the research were performed in a timely manner in all of the suggested areas.

For the purpose of this research the personal identifying information were removed from all responses to the questions. In addition, the information was held in a locked cabinet until the close of the research pilot. Upon completion of the research

information will be stored for a maximum of 5 years. In addition, participants will receive a number to associate the findings. Only I will be aware of which number corresponds to each participant. As a researcher, it would be beneficial to remain unbiased to responses to the questions. In addition, it would be beneficial to remain on task with the research question order and not to mislead or guide the responses. It was important for me to address and discuss any questions or concerns the participants had so that adequate time was devoted to any explanation required.

Retaining the correct population representing the target areas could lead to participation issues. Based on the objectives this research sought to engage people in areas lacking SSPs. However, there was always the potential to engage participants outside of the dedicated age group and area which could influence the outcome and, in some cases could be harmful (Franz et al., 2019). It became vital to establish the parameters of the participation guidelines and use the geographic parameters. Again, clear expectations of participants were discussed, and immediate removal of any inaccurate participants occurred as needed.

Discussions with the IRB as well as the research committee ensured the above-mentioned areas of concern were addressed. In addition, the IRB process ensured the research included information that promoted a clear understanding of the research goals, possible risk or benefits of the participants, and my responsibilities (Creswell & Creswell, 2018; Ravitch & Carl, 2016). This information was vital when conducting research involving participants from the community.

Summary

The purpose of this qualitative research was to understand community perceptions surrounding SSPs and uncover any barriers that exist at any level in the Charleston community. The SEM approach was selected because it offered the best possible outcome in rural locations in order to answer the research questions. In addition, the framework allowed for the flexibility often required in exploratory research (Creswell & Creswell, 2018; Ravitch & Carl, 2016). The data collection process offered a level of approach that placed the participants at ease yet provides quality information. Furthermore, the information collected had the potential to create a new foundation for the advancement of SSPs using collective perspectives.

The above chapter reviewed the methodology along with the role I played, data collection instruments and analysis tools, pilot review, trustworthiness, and ethical procedures that establish a sound plan. In addition, discussion occurred based on the credibility, transferability, and dependability of the requirements needed to establish qualitative research. The summary also provides the relevance of this research plan to the research purpose and establishes transition to Chapter 4.

Chapter 4: Results

Overview

The purpose of this basic qualitative inquiry was to examine the perceptions of community stakeholders as well as their experiences surrounding the topic of SSP throughout Charleston, West Virginia. The lack of syringe exchange in rural areas leaves a void in the continuum of care for PWID. The presence of SSP could reduce many hardships such as stress for both PWID and the community. Additionally, reducing the hardships on both sides creates a path to understanding the community perception from multiple levels of the phenomenon using evidence-based research. The new community structure, with the addition of everyone throughout the community, has the potential to increase successful future programs.

For this research I focused on locations currently lacking adequate SSP services to determine barriers that may exist and what options should be available to overcome those barriers. I selected the SEM to examine multiple levels of this topic to expand on current research often focused on the point of view from individuals who have experienced substance dependence. Using SEM to guide my research allowed me to gain insight into participants experiences and perceptions surrounding SSOs through lived examples. This chapter includes multiple sections describing the overall research process, participant demographics, data collection, analysis of data, trustworthiness of the information, results, and a summary.

Pilot Study

There was no research conducted prior to IRB approval. However, I conducted a short pilot to assess the questions created that was used on the questionnaire during the research. The questions I used were peer reviewed, and suggestions were accepted for corrections to wording and any other adjustments needed. I altered the interview questions for language improvements to add a higher level of comprehension for multiple levels of people throughout the community. Due to the feedback, I received from the participants as well as Walden staff, two probing questions and a quick question were removed so that the conversation would be more natural between the parties. The removal of the above-mentioned items added a higher level of clarity to the questions and promotes open conversation about the questions. In addition, the changes I made to the research question removed a dominance often created during interviews which hinders complete answers from the participants (Ravitch & Carl, 2016; Rubin & Rubin, 2012). This process was observed by Walden faculty and peers and also participants of the pilot survey who provided feedback.

Research Setting

I conducted this research to analyze the perceptions of community residence in Charleston, West Virginia, surrounding SSP. This setting was selected due to the current lack of access for PWID, PWUD, and community members experiencing barriers to support options. Currently in this region, there is a high rate of drug use and overdose deaths; however, an underrepresentation of services to meet the needs associated with drug use (Allen et al., 2019). Furthermore, the rural setting of Charleston is a significant

aspect to the study as poverty and rugged terrain trouble the region. I analyzed multiple levels of the community to collect data often overlooked when discussing the drug epidemic. In addition to the perceptions, I wanted to uncover during semi structured interviews, the goal is to create new conversations surrounding the thoughts, needs, and wants from the community perceptive. Out of the 10 initial participants selected, eight completed the questionnaire, one participant dropped out due to an overdose death in the family and the other failed to respond after multiple attempts to reschedule.

Demographics

A total of 20 people who lived in the selected areas responded to the original post for recruitment, 10 were selected who met the criteria, and eight out of the 10 completed the study; two participants selected were not available for interview. Quota sampling occurred based on zip codes 25301, 25302, 25304, and 25311. Each area included two participants, male and female, aged 18 to 65 all from areas lacking SSP access in Charleston, West Virginia. Data saturation was present after the fifth interview; however, eight interviews were performed in total due to prior scheduling. Participants data were grouped by zip code and sex and all interviews were performed in a 11-week timeframe. In the sample, occupation was collected to ensure multiple levels of perspectives following the SEM model. Table 1 provides detailed demographic information of the participants.

Table 1

Participants' Demographics

Participant	Occupation	Age	Sex	Zip Code
P1	Health Care	34	Female	25301

P2	Operations Associate	48	Male	25301
P3	Data Analyst	44	Female	25302
P4	City Laborer	30	Male	25302
P5	Social Worker	45	Female	25304
P6	Student	23	Male	25304
P7	Nurse Practitioner	39	Female	25311
P8	Political Representative	54	Male	25311

P1 was excited to participate in the study and was interviewed according to the schedule. She carefully selected her words and answered all the questions. She emphasized a desire to support the use of SSP throughout the state but focused more on a comprehensive approach to offering new services. In addition, she believed that public perception played a significant role in support for SSP, and without it any program is bound to fail. P1 agreed to the consent and confirmed her transcripts within a 3-day timeframe.

P2 had previously transferred into the area from another location in West Virginia. He rescheduled his interview once due to work obligations but was eager to answer the interview questions due to the current issues within his current place of residence. The participant stressed his approval of SSP services; however, he focused on property value and proper placement. In addition, the participant's focus was not surrounding the improvement for individual substance users but focused more on improving the community at large. He agreed to the consent and confirmed his transcripts within a 2-day timeframe.

P3 was originally from the selected area. The participant was thrilled to be selected to participate and met accordingly with the scheduled time. P3 was very open during the discussion; she believed that there was an issue with drug use in Charleston,

but that the city is fighting two wars. P3 suggests that there is a war against prescription pharmaceuticals and the other war is against the lack of support services for PWID and their families. She stressed the importance of tracking prescribed pharmaceuticals as well as addressing the mental health aspect of drug use. She did not believe there were enough programs provided in the city. She agreed to the consent and confirmed her transcripts within a 4-day period.

P4 was a 30-year-old male city laborer originally from the location; however, had just recently returned from a two year out of state position. The participant met accordingly with the scheduled time and was eager to answer all the questions to voice his thoughts surrounding the topic. Overall, this participant agreed that the community needed additional services and community involvement; however, highlighted the need for additional police involvement. In addition, this participant repeated strong beliefs toward mobile centers that would meet people where they are in order to provide assistance so that property value would not be harmed. He did not believe that laws supported SSP. He agreed to the consent and confirmed his transcripts within a 1-day period.

P5 was a 45-year-old female social worker who moved from out of state to West Virginia. The participant met me at the scheduled time to conduct the interview and provided ample verbiage for each question. She was well informed about the topic due to her profession and believed that there were not enough support services. She included poverty, environment, and race as root causes of the drug epidemic. However, she emphasized socioeconomic status as an issue as well surrounding the topic of drug use

and SSP. In addition, her perceptions included widespread access to Narcan, clinical resources that focus on a comprehensive approach, economic value within the community and changes to insurance for increased accessibility to rehabilitation. The participant agreed to the consent and completed the review within 7 days.

P6 was a 23-year-old male student originally from the location. The participant rescheduled once due to prior school obligations. He was comfortable with the session and was eager to provide his input surrounding the topic. This participant provided clear and concise answers and agreed that there was a lack of support in the area. He highlighted the lack of funding and support and socioeconomic status in terms of where drugs cause the most harm. The participant also believed that SSP and other assistance should be tailored to the community because race played a role in the types of assistance available. Overall, the participant felt everyone should receive education surrounding the topic. He agreed to the consent and completed the review of transcripts within 7 days.

P7 was a 39-year-old-female nurse practitioner originally from the area. The participant met at the scheduled time and was glad to offer her input surrounding the topic. She was very nervous about her content and reviewed her transcripts twice for clarity. The participants answers were clear and concise in nature and well-articulated. She highlighted the lack of support and the significant impact this had on the community. In addition, she focused on disease and illness and the cost associated with the treatment of both disease and drug rehabilitation. She emphasized addressing stigma and education throughout communities and the need for an all-inclusive approach surrounding

improvements and accessibility to SSP. The participant agreed with the consent and completed the transcript review within 2 weeks.

P8 was a 54-year-old politician who was originally from the area. The participant rescheduled once due to work obligations. The participant was comfortable answering all the questions and was eager to participate in the study; however, selected his words carefully. Overall, he emphasized the need for stability and awareness surrounding the topic as well as various forms of aid for the drug epidemic. He did not believe that providing syringes was the only answer to solve this issue and highlighted poverty and the lack of accountability as a source. He did stress the impact the increase in drug use has had on the STI rates and believes a systematic approach with various levels of expertise is required to move forward. The participant agreed with the consent and completed the transcript review within 5 days.

Data Collection

I received IRB approval on August 16, 2022, with the attached consent form to use during data collection. Data collection occurred over an 11-week timeframe in Charleston, West Virginia, with four male and four female participants. The participants were offered two timeframes for appointments and scheduled accordingly. All the participants provided consent prior to their appointment and was provided ample time for any questions both before and after the interview. I used a semi structured interview format. A total of eight participants completed the interview. All interviews were recorded and transcribed using Otter services and each participant was asked to review their transcripts for accuracy and approval to use in the study.

I used the semi structured interview format which enabled me to gather the perceptions of community stakeholders within the Charleston areas currently lacking access to syringe exchange resources. I used convenient purposive sampling which allowed me to use a general population through set parameters within the location as well as people previously inflicted with addiction. In addition, for the marketing campaign I mentioned the set parameters for participation including age range 18 to 65 years old, male and female, current place of residence, and individuals who had recovered from addiction. This population offered valuable experiences and perceptions surrounding the two research questions regarding the Charleston communities. Recruitment occurred via social media with the option to share the information with a larger audience.

No discrepancies occurred during the data collection phase; however, during P5's interview there was a small interruption with Otter and thus the interview was paused for 4 to 5 minutes. Otter is a timed application; therefore, when recording occurs over a longer time the program must be reset. Nonetheless, I used multiple provisions to create confidence in the research procedures as well as the interpretation of the results. To provide evidence of trustworthiness and ensure accurate information was gathered several steps were taken during the study. I established credibility by way of an established research method, IRB approval, member checks, and committee guidance. I stayed on task and followed the approved process to create a clear and concise transition from data collection to data analysis.

I established transferability of the research through multiple methods, including following approved methods; however, transferability of the research will require similar

environments. In addition, I insured that each step in the research process was documented including the participant requirements, the number of participants who completed the study as well as those participants unable to complete the study, and the demographics and setting. In addition, the data collection process and data analysis procedure are clearly documented allowing future research in this area to repeat the process. Additionally, I used a reflective period during the data collection phase of the research, which occurred after each interview. Using this process enable me to review the transcripts and note any similarities and systematically address any areas of concern. This would be possible when replicating the study in similar communities.

Confirmability is achieved through objective analysis using unbiased methods during the collection and analysis phase of research. Thus, during the data collection and analysis process, I minimized bias by using the same tools previously approved which allowed a systematic approach. In addition, reflective commentary was used during data collection and analyses. Open communication occurred between peers and the committee chair for additional quality checks. Data analysis occurred simultaneous with data collection using open codes. An example of my coding system is in Table 1, showing open codes, supporting data excerpts, potential categories.

Table 2

Examples of Open Coding

Open Codes	Potential Categories	Participant	Excerpts
Barriers	Resolving community barriers and challenges	P-2	"They're not going away so we need to figure out what to do to give them safe services that also work for the safety of the community too"

Stigma	Community resources used to reduce the fear associated with SSPs	P-3	"I don't think either side is paying attention to it to be honest. I don't believe anyone understands the barriers nor consequences of not having programs"
		P-3	"We don't see the human aspect of this, there is way too much stigma involved and we have to remove those barriers and move forward"
		P-4	"You have people being treated differently depending on where you live so there's always going to be this stigma associated with drug use"

Table 3 below displays the coding format for the above-mentioned data.

Table 3

Overview of Organized Sample Coding

RQ	Category	Codes	Themes	Quotes
RQ1	Community Community views on drug use	Crime Laws/Policies Housing barriers Transportation	Theme 1: Community members perceive drug use as an issue for the community	P1 "My perception around the issue of drug use would be that I think it's pretty widespread, especially in our community and in the city of Charleston." P4 "Drug using in the community, it is there and something needs to be done about it." P4 "Well honestly, I do think that it needs to be policed more." P6 "My perception of them is that drugs cause all sorts of issues." P7 "They call it a drug epidemic in this state, and so that's pretty significant because it means communities statewide."
			1a: Community members believe there are not enough services for PWID	P1 "I do not think there are enough services. For people that do use drugs. I think there should be more services

RQ	Category	Codes	Themes	Quotes
				offered." P5 "They might not exchange the needles if you aren't giving them enough services." P6 "There's definitely a lack of support." P7 "But when it comes to something like drug use, they don't view it the same. As a disease or an illness and so there's not a lot of support." P8 " I feel that there's not very many stable programs that allow people to obtain proper drug rehabilitation and to sustain sober living so.."

Study Results

The themes that emerged during data analysis include: (1) community members perceive drug use as an issue for the community, (2) community members believe that there are multiple barriers to community support, (3) a common belief of community members is that access to services curb disease transmission, (4) a common belief of community members is that reducing barriers will take a wide range of support options, changed behaviors and people, (5) a common belief that resources, shared goals, and accountability can reduce barriers, and (6) community members believe that local health departments should play a role in education to reduce barriers. Results revealed that the community of Charleston, believed that more services are needed to improve

accessibility. However, a shared area of concern was the economic impact that may occur on the property value within the community. In addition, most community members believe that failed communication, stigma, and racial motivation are key drivers to the lack of accessible programs in the at-risk areas. Younger community members believed strongly toward collaborative efforts and support efforts to improve the quality of the community as a whole, whereas middle-aged and older community members continued to have concerns regarding property value, crime, and with the homeless population.

RQ1

RQ1 was: What are the perceptions of community stakeholders about syringe exchange programs for PWID in Charleston, West Virginia? I identified three core themes in community perceptions, each with subthemes, as follows:

(1) Drug use is an issue for the community

(1a) there are not enough services for PWID,

(1b) the problem of homelessness is directly related to accessibility of services,

(1c) SSP is believed to cause a negative economic impact on property value.

(2) There are multiple barriers to community support for SSPs

(2a) Failed communication, stigma, and sight racial motivations as key drivers,

(2b) a lack of public information and education about SSPs hinders community awareness and comprehension,

(2c) a lack of community participation in planning access to successful programs.

(3) access to services is believed to be required to curb disease transmission.

Theme 1: Community Members Perceive Drug Use as An Issue for the Community

This theme established a foundation for community views on drug use and the common beliefs surrounding PWID in Charleston, West Virginia, communities. The community level perceived drug use as an issue and agreed that there were not enough services in the community for PWID. Societal support was clear and concise. During one-on-one interviews, participants frequently expressed concern for the community as well as for people experiencing substance abuse. Participant one stated, "My perception around the issue of drug use would be that I think it's pretty widespread, especially in our community and in the city of Charleston." Participant seven stated, "They call it a drug epidemic in this state, and so that's pretty significant because it means it's having a significant impact in the community statewide."

Subtheme 1(a), there are not enough services for PWID. To build on the foundation that drug use is an issue for the community, members also acknowledge that there was a lack of services for PWID. Participant one stated, "I do not think there are enough services for people that do use drugs. I think there should be more services offered." Participant eight stated, "I feel that there's not very many stable programs that allow people to obtain proper drug rehabilitation and to sustain sober living, so they go back into the system and continue the cycle." Participant four confirmed this: "I just think that we need better facilities, like safe havens because … (being) homeless … is a huge issue both for them and the community."

Subtheme 1(b), the problem of homelessness is directly related to accessibility of services. Most participants understood that there is a connection between being homeless,

drug problems, and accessibility to services within this population. For example, Participant eight stated, “I think cleaning up part of the homelessness could also help clean up some of the drug usage.”

Subtheme (1c), SSP is believed to cause a negative economic impact on property value. Another community perception is the common belief that SSPs will cause an economic impact on property values. Thus, the location of SSPs is a factor when considering placement of these programs. Participant two stated,

> “To be honest, I wouldn’t like it in my community, and that is not because I don’t think that it’s not supposed to be there. But I moved to a place that I live for a reason. One to be away from people and you know, unfortunately, my property value matters to me.”

Similar in nature, participant four stated, “Maybe we could have more facilities to help with that throughout the community, but people worry about those because of property issues and crime you know,” Participant six mentioned,

> “You can look at the property value too, especially in the capitol city. I mean look at where they push the drugs to the outer limits, so why would they want them right here in the city where they are putting millions of dollars into creating this imagine that we are a perfect city.”

Theme 2: Community members believe that there are multiple barriers to community support for SSPs

The acknowledgement that there are multiple barriers to community support that needs to be addressed was common amongst community participants. Together,

participants indicated that there is an issue with drug use and that drug use is widespread but all of the participants were not sure if everyone in the community was aware of the issue. Participant four suggest, “I believe that there is an issue and it will take everyone to fix it.” While participant five stated, “People don’t know how big of an issue this is. I know back in my day we learned say no to drugs, but now it’s so hush hush and nothing can be taught in school. You really have to stop this trend early so the drug use never begins.” Along similar lines participant seven stated, “People aren’t educated on this topic and so they may not realize that there is an issue.”

Subtheme 2(a), failed communication, stigma, and sight racial motivations as key drivers. This sub-theme reflects individuals citing failed communication, stigma, and racial factors as key drivers to the theme 2. For example, participant five stated, “You have to do it differently in rural communities because people don’t trust the people in charge. They have misused the trust for so long that communication has to occur and laws have to change.” In short, participant five believed that the people in charge of SSP have overstepped the boundaries and abused trust in the community. In addition, participant six suggested that, “When the community or the people don’t understand the topic or what the product is then there is no way any of that will be supported. So, people are cautious.” Rural areas are often different than their counterparts in urban areas when discussing this topic; thus, stigma plays a role a different role. Participant seven stated:

> I think drug users are, well to be blunt, there’s a huge stigma to drug use, and I believe people have less compassion, less empathy, and are less included to help

what they consider someone who's doing that or placing themselves in that situation by making a choice.

To build on theme two, (2b), community members believe a lack of public information and education about SSPs hinders community awareness and comprehension offered community perceptions on the lack of public information and education about SSPs which hinders community awareness and comprehension. This subtheme centered on education and equality. Participant one stated, "I think it's important for education to probably be available for people who aren't familiar with those programs…" and participant four stated, "Equality in health, you just have to have better systems all together. I mean education, medication, access, everything." The participants also suggest that education in the community as well as the substance user is important. Participant seven suggested, "I am talking about support for drug addicts or resources for the assistance that they sometimes need. Nor is there enough education in the community surrounding the topic all together."

The last subtheme in this section (2c), a lack of community participation in planning access to successful programs, involved community structure. Community members perceived a need for community participation in planning as a key driver to access to successful programs. Participants described community support as being a vital part of program accessibility and are aware that in the absence of community support programs often fail. Participant one stated, "I think without community support these programs won't be successful." The participant also stated, "I think it's really important for community members, I think people in the community, you know, need to take an

interest." Social support structures lend value to creating sustainable programs. Participant three stated, "I think community support affects access to syringe services throughout the community." While participant five described the need for additional support based on past failures, "I don't know maybe there needs to be additional community support, we tried so many times to help in this city and look where it got us, nothing and nowhere, no local programs for the community which is just insane."

Theme 3: a common belief of community members is that access to services curb disease transmission .

Theme three uncovered a common belief of community members which is that access to services curb disease transmission. Disease mortality and morbidity trends lend valuable information to what is occurring in the community as well as what services are needed. Participant one mentioned, "It's one more touch point in the community for them to have access to medical care and have access to clean needles that aren't being reused and shared and so really, it does reduce disease transmission." While participant seven added:

> Overall, you're assisting with the reduction of certain diseases that you see commonly in that community. And I think if you have to treat the diseases, you're treating something anyways, so why not have a what we call a primary or a secondary prevention as well.

Combined, the first three themes along with the subthemes, offer significant insight into the community perspective surrounding the topic of SSP and drug use in areas currently lacking adequate services. Overall, the participants described the need for

services, the belief that drug use and access are issues that need to be addressed, expressed areas of concern, and described how access to services would be helpful to curb the spread of disease. In addition, the need to expand knowledge on the community level for both the user and the community were explored. Overall, a variety of perceptions were uncovered that led to the study to the RQ2 which offers more details surrounding the recommendations and barriers which exist.

RQ2

RQ2 was: What are the recommendations of community stakeholders for reducing community barriers to syringe exchange in smaller communities in Charleston, West Virginia? Through the interview process three main themes were uncovered along with four subthemes.

(1) Suggestions to remove or reduce barriers included a range of support options, changed behaviors, and people

(1a) community participation in planning is essential for community support,

(2) Shared goals, accountability and added resources believed to reduce barriers

(2a) race can play a role in the availability of services,

(2b) funding impacts accessibility to both education and services,

(3) Local health departments should play a role in education to reduce barriers,

(3a) SSPs should be the responsibility of many entities.

To begin the foundation for RQ2, participants were asked about interpersonal practices and beliefs. A common perception amongst most participant's reflected a belief

that reducing barriers would take a wide range of support options, changed behaviors, and various people throughout the community. Participant three stated:

> They can make these outreach centers or group homes to help get these people places to go that makes it more accessible and easier to get to and five them you know the services but that will take a lot of work and several people from multiple areas to get this started.

While participant five focused more on changed behaviors by stating, “there’s no patience and compassion with is comes to addiction.” Participant eight added:

> It has to be a collaborative effort honestly, but it will be difficult getting all of the players at the table. I don’t think either side is paying attention to it to be honest. I don’t believe anyone understands the barriers nor the consequences of not having programs.

Subtheme (1a) confirmed that participants believed that community support is vital to the success of any services offered; therefore, community participation in planning is essential for community support. Participant one stated, “I think without community support, these programs won’t be successful.” To add value to this perception participant five, suggested, “I don’t know, maybe there needs to be more community support groups for that, that are created outside of the healthcare system and outside of the clinical system.” To sum up the subtheme with a need to use multiple levels of members, Participant eight stated, “You know, we have struggled with community support, but we are not creating an all-inclusive environment either on many of these projects.” In addition, Participant eight suggested:

> There are several different roles people could play if you educate them and give them the proper tools. There are different roles that individuals could play in. Honestly, being a Christian. I really think that the church could do more.

Theme two for RQ2 further advanced the discussion from an individual level. A common belief of community participants was that resources, shared goals, and accountability can reduce barriers. Participant four stated:

> I heard the other day that HIV is on the rise due to drug use but what is our state or city doing about that, instead they want to focus on this sports complex and not on dealing with issues that should matter more.

In addition, Participant four suggested:

> They would rather dump money into all of these attractions or distractions as I like to call them, to make our city look good, but underneath all that glitz and glamor is the drug use and disease and that isn't going to attract people to want to live here.

Adding to that theme, Participant eight stated, " So, we have to implement and practice effective communication and shared responsibilities, but in that we have to say what is effective communication for this population?"

While most participants believed shared goals would aid in program development, several members believed that the lack of accountability has resulted in barriers. Participant four stated, "There is no accountability," and Participant six stated:

> At the end of the day, people are always going to have this negative reaction when it comes to the syringe program because of what all could go wrong but it can be lessened over time through education and the right resources.

Participant eight suggested that accountability must come from multiple areas by stating:

> I personally believe that there's a multitude of things that we can do to help but for the most I part, I believe that people on drugs must have some form of accountability as well. We can't fix everything, but I mean, you know, we can offer free counseling for those that actually want to do it and we can go above and beyond with programs such as syringe exchange, but this isn't a cure all.

To further develop theme two, subtheme 2(a) described community perceptions that race played a role in the availability of services. Participant two indicated, "Unfortunately, my property value matters to me and I think there are a lot of places we could put these kinds of things that they don't have to be right in somebody's neighborhood. In addition, Participant three suggested:

> I mean we know that drug havens are all over the place but then we tend to focus a program or service in an area that can't reach the population it needs too, that just doesn't make sense. They should be more eager to have those types of programs in areas where they are needed.

Along the line of individual levels Participant six stated:

> I mean let's face it, here in West Virginia there is a stark difference between races, and they simply just don't want drugs nor the programs that can fix it messing up their perception of what the city should be.

Participant 6 continues to discuss this topic stating:

> If you're talking about black communities, or populations where the majority of people are low income, you are looking at not that must help honestly, you know, they don't have as much assistance in these areas.

Participant eight extended that perception stating:

> We've had the needle exchange programs and things of that nature and although I believe they are a great thing to have in certain areas, it still perpetuates the system because they are not set up to succeed in the correct locations,

Another subtheme that emerged was (2b), this subtheme reflected the community members belief that funding impacts accessibility to services and education. Community members expressed perceptions of concern with funding and how it impacts access to services and education in the community. Participant four stated, "So maybe there's a larger issue, one with funding and then maybe the lack of education. Participant five imitated that claim by stating, "The problem is still there though. Then there is the funding and education, and don't get me started on the laws." Similarities in perception exist with Participant six stating, "There's a lack of funding, as far as creating help […] you really have to give it to organizations that provide assistance for those communities and people, and families struggling with addiction," and with Participant eight stating, "But let's be honest, funding is always going to be a barrier."

The final theme to emerge during the interview process was theme three, the perception that community members believed that the local health department should play a role in education to reduce barriers to support. While most members believed that local health should play a key role, they were also under the perception that all the burden should not fall on the health department. Participant two stated the following:

> I think that your local health department should, you know, bear the brunt of that unfortunately, but I do think that they need help from your top city officials […], you have to have some help from the people who make the rules and policies in your state and have them on board, because if not, then you're always going to run into the health department's being handcuffed.

This sentiment was echoed by Participant four stating, "The local health department should play a role in education definitely.," and Participant seven stating, "I think the health department is where the population is most likely to have access to so it's the best place to offer and advocate for their health."

One subtheme which emerged under the local health department core theme was 3a., some community members believed that promoting SSPs should be the responsibility of many entities. The participants described individual beliefs such as Participant one stating, "I think it would be helpful for it to be promoted by community members, not just you know, all the education and promotion coming from the local health department." While participant four stated, "The local health department should play a role […] I mean, education, medication, access, everything you know so that takes multiple people to do that." Participant eight noted that local health authorities have

attempted to assist with this subject without success and thus a different approach may be needed:

"I think honestly, I think the health department is a double edge sword. We have tried these programs there before and they failed. I believe it is because we try to double dip all the time because you have people in the health department community that come from these communities so there is a level of understanding […] we expect them to handle STIs and immunizations and everything else, and that is too much to bear for such a small staff of people. I think we should or could start with several community-based centers maybe that would or could open up some of those doors to help this population."

Findings Based on Recorded Reviews

I closely reviewed the Participants' recorded interviews and generated notes for further data analysis. Notes not only included tone and manner of the participants but also listening for comfort and ease of communicating, confidence in tone and manner, and noting any issues that occurred leading the discussion to move off subject. Seven of the eight participants were comfortable talking about all of the topics during the interview with only one expressing areas of concern when answering the research questions. It is noteworthy to mention that this participant also had a strong religious opinion. The interview process was easy to complete with all of the participants with only one issue arising because of a time laps that occurred with the recording system Otter. The participants were confident about their perceptions surrounding the topic and most of the participants elaborated on each of the interview questions.

One of the eight participants provided clear and concise answers. Based on the notes, this participant was younger and often expressed education as a key factor throughout the discussions. In addition, this participant expressed the use of good questions as the reason for answering each interview question with precision and success. On the opposite end, one participant had to be redirected several times throughout the interview as their responses often veered off subject. While the information collected was valuable, the recording had to be performed in two sessions due to the length of some of their responses. There was no more than a minute lag and the participant picked up the conversation as if there were never a pause.

Evaluations of Findings

Themes and subthemes that emerged in response to RQ1 of community perceptions acknowledge that drug use is an issue that needs to be addressed in the community and that issue current lacks support. While some community members believe the issue to be centered in the homeless population, other members believed that drugs and support options are an issue based on location and race. In addition, despite the fact that all participants support SSPs, location and economic impact are areas of concern for community stakeholders. On an individual level community members perceived failed communication, stigma, and racial tension as key drivers to the issues surrounding support options. Community members cite rural beliefs and a lack of understanding SSPs as a gap to the line of open communication. Community members perceived education as a key factor in community awareness and comprehension of the topic. Additionally, community support is a key driver to the success of any SSP program offered in the

community. Overall, community members believed that access to SSP curb disease transmission and can be a gateway to offer other services in a one-stop-shop type of atmosphere. This information lends value to how community stakeholders feel about SSP in Charleston, West Virginia.

RQ2 uncovered themes and subthemes that emerged to address recommendations from community stakeholders to reduce barriers to SSP in smaller communities support a wide range of support options, changed behaviors, and multiple people to address the issue. Not only do community members believe that support options are vital to reducing barriers but also that shared goals and a higher level of accountability on both sides are necessary. On an individual level, community members again cite location and addressing racial disparities as key drivers to removing barriers. While most members believed this is a shared issue and shared responsibility to address the matter, several members pointed out that drug users must also be accountable and a part of the solution. Another barrier community members believed impacts access to services and education is funding. Community members believed that local health departments should play a role in education efforts to reduce barriers; however, members also believed that local health departments should not hold all of weight of this task.

Overall, this study found that community members believed that SSPs should be the responsibility of many entities throughout multiple levels to increase the possibility of the best outcome and want to be included in the process to create solutions. The population of this study stemmed from community members with a variety of experiences, education levels, and employment history. Using the SEM further allows the

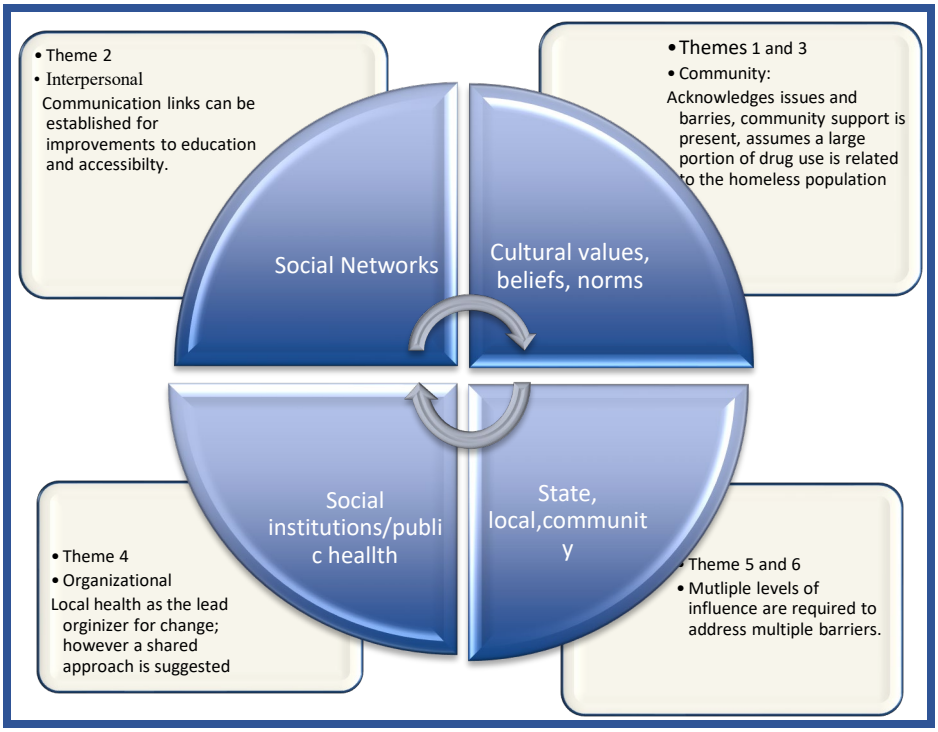
research to look at descriptive data surrounding the six themes to be viewed as an interrelation concept stemming from multiple factors.

Theme one and three relate to the individual level and the cultural values and norms which reflect that the community is aware of the problem yet has some concerns that have not been addressed such as education and the lack of inclusion. These are items that the next level, the social level, can address. Theme two looks at interpersonal relationships. The community lacks trust in many of the systems and processes; however, they do trust local health departments which could bridge the gap between levels.

Theme four looks at the community level, local health departments can serve as the lead facilitators throughout the conversations and offer a mutual physical & social environment because they have established trust on both sides of the issue. This leads to theme five and six or the societal level. Community members believe that societal factors which helped create the previous climate can be addressed and refined, through multiple levels of influence. All community members can address current and future barriers and come together in order to sustain SSPs with shared goals and with shared accountability. These shared experiences can provide a comprehensive prevention approach when viewed from multiple levels of influence and can be expressed in the SEM as seen in figure 3.

Figure 3

Socioecological Categories based on community perceptions.



Summary

This chapter concludes Chapter 4. This chapter reviewed the pilot study, research setting, patient demographics, data collection and analysis procedures, evidence of transferability and confirmability, study results, recorded results review, evaluation of findings, and the summary. The purpose of this basic qualitative inquiry was to examine the perceptions of community stakeholders as well as their experiences surrounding the topic of syringe service programs throughout Charleston, West Virginia. The lack of syringe exchange often experienced in rural areas leaves a void in the continuum of care that could reduce many hardships such as stress for both PWID and the community. The

themes uncovered in this research highlighted the need for additional education and communication throughout communities that expands to various levels of influence, a thorough review of SSPs including the services offered and proper placement of any new programs, and a need for shared responsibility to solve this issue. In addition, while the research demonstrates that community stakeholders acknowledge the current situation is unsatisfactory and recognize that several barriers exist there is no one set solution to address the problem. To further advance this discussion, data analysis will continue in Chapter 5 through interpretation of the results.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

In this chapter I will discuss the research findings, the limitations of the research, recommendations, and the implications for future studies. I will conclude the chapter with a summary of the research.

The purpose of this research was to examine the perceptions of community stakeholders as well as their experiences surrounding the topic of SSP throughout Charleston, West Virginia. I used a basic qualitative inquiry and the SEM designed to examine multiple levels of this phenomenon to expand on current research often focused on the point of view from the substance dependent individuals and not from the community perspective. Eight participants living in small communities in Charleston, W. Virginia completed the interview.

Findings for RQ1

RQ1 was: What are the perceptions of community stakeholders about syringe service programs for PWID in Charleston, West Virginia.

A total of six themes emerged, each with subthemes. For theme one, at the core, community members are aware of issues in their community and believe that drug use is an issue for the community. Furthermore, community members have an understanding that there is a connection between homelessness and drugs problems in the community. In addition, community members understand the need for services; however, over half of the participants mentioned concerns surrounding their property value as well as issues that may accompany SSPs such as crime. In short, community members are aware of the

problems that hinder their city and have a general understanding that the problem requires a solid solution.

The second theme based on the community perspective was that there are multiple barriers to community support. Community members cite issues such as failed communication, stigma, and race as key drivers to the availability of services. Furthermore, community members believe that a lack of public information and education about SSPs hinders community awareness and comprehension. Additionally, community members believe that there is a need for community participation in the planning process as well as the execution of services. Social support structures are an area of concern for Charleston community members. Ultimately, the members in the community understand that there are multiple barriers that require their participation to overcome.

The third theme to emerge for RQ1 from the community was that SSPs also have the potential to provide other services needed for PWID. People in the community see SSPs as a gateway to reducing other diseases and offering additional assistance. The community is aware that shared equipment leads to disease outbreaks such as HIV and hepatitis. In addition, if PWID attends services, the community believes that this is an opportunity to provide a high-risk population with secondary services they may need. Overall, the community has an understanding that SSPs are important for the at-risk community as well as improving community health.

Findings for RQ2

RQ2 was: What are the recommendations of community stakeholders for reducing community barriers to syringe exchange in smaller communities in Charleston, West Virginia?"

The last three themes emerged for RQ2. Theme four emerged based on the communities recommendations. One item that continually surfaced throughout the interviews with Charleston citizens is that community inclusion was absolute. Community members advised that not only is their presence fundamental in the planning process, but also in the execution phase. Community members also voiced options on the key parties who should be included to discuss these issues. Aside from the community members themselves wanting to be included, participants named everyone from local health departments and church officials to recovered people who had substance use disorder. Charleston community members have an understanding that multiple people need to be involved to establish stable SSPS.

The fifth theme based on community recommendations was that resources, shared goals, and accountability would reduce barriers. Community members also believe that the focus on the drug epidemic is overshadowed by the lack of attention on the proper projects in the city and a lack of funding for this subject. In addition, community members believe race plays a role in the availability and placement of services. Understanding this recommendation is important because it reflects the communities thoughts surrounding what steps need to occur in order to improve accessibility and accountability.

The last theme to emerge based on recommendation from the community is that local health departments should be at the forefront of educating the community to reduce barriers and stigma. Not only did the community want to be involved in the process and were not turning a blind eye as previously assumed by other research, but also the community wanted to be part of the solution. Community members believe that successful programs will be created through additional education and properly promoting SSPs. In addition, the community understands that local health departments are not properly staffed; thus, there needs to be a shared responsibility to create a pathway to improved health outcomes.

Summary of Findings

I found that participants believed a solution to reducing barriers will take a multileveled approached using a wide range of people while including people from the community where services will be placed. In addition, the participants believed that while local health departments should be at the heart of education efforts, it is the community's responsibility as a whole to promote and support SSPs. Currently, community members believe that there is a lack of attention on this topic; thus, community members want additional funding and education to support new initiatives.

The data analysis reflects participants' awareness of drug issues within the community was high; however, the knowledge surrounding stigma, SSPs, and the inclusion of other services varied. In addition, while participants revealed that services were needed, they often took on a "not in my backyard," stance on placement for the facilities. This theme supported the findings of Allen et al.(2019b) and the CDC (2019),

who reported that stigma stems from various sources such as a lack of communication, invalid information, and a lack of resources only to name a few, which often places a key role in support of these services. Understanding the root of stigma and the environment are key to creating solutions (Allen et al., 2019b; CDC, 2018b).

Participants' beliefs surrounding the impact of community support was prevalent throughout the research. Moreover, participants understood the impact that multiple levels of influence on accessibility and barriers; however, participants' solutions to this topic included initiatives such as additional communication and more services in the proper locations. Items such as misinformation and a lack of understanding the needs of both the community and the substance user were attributed to the lack of support options. While participants believe that the local health department should be at the forefront of education, they also understand that it takes multiple people at various levels to educate and address areas of concern. According to research conducted by Ondocsin et al. (2020), residents of Charleston, West Virginia reflected a lack of understanding of this complexity, which hindered support efforts. In addition, according to the CDC (2019), the low level of activities to educate in Charleston, West Virginia, to reduce stigma and increase knowledge impacts both the community and the drug user.

Community members who participated in this research believed that drug use is an issue, the lack of accessibility and resources is an area of concern, and that something needs to occur to improve the conditions. Community stakeholders believed that a multitiered approach that is driven by community support along with education driven from the local level is needed to improve accessibility within the at-risk locations. In

addition, while the participants believed that SSPs curbs disease transmission, the target population is unclear, and the issue is often seen as a problem driven by homelessness. Increasing education and awareness and inviting everyone to the table to discuss the topic and address barriers will aid in a solution. Former researchers found similar results in their data surrounding drug use as an of concern, accessibility issues in rural locations, and that increasing community education and awareness is vital but fell short of offering a clear community perspective to uncover the areas of concern (Allen et al., 2019a; Allen et al., 2019b; Kerr et al., 2019).

The results of the research highlighted the need for expansive efforts to educate on multiple levels of the community, specifically in areas lacking SPPs services. The SEM is designed to examine multiple levels of influence; thus, my use of the SEM for this research accurately represents the beliefs and experiences of several levels of the communities currently lacking SSPs in Charleston, West Virginia. Communities need a solid foundation grounded in knowledge to support drug use and improve community environments.

Interpretation of the Findings

Drug Use is an Issue for the Community

The data I collected using RQ1 focused on the perceptions of community stakeholders about syringe exchange programs for PWID in Charleston, West Virginia. Three core themes emerged, each with additional subthemes, as responses to the research questions. The first finding I uncovered during my research established a foundation for community views on drug use.

Community members perceived that drug use is an issue and that there are not enough services available. Additionally, community members labeled drug use as an epidemic. Social and cultural factors often greatly influence community stakeholders (Boucher et al., 2017). While some community members believed the issue to be centered in the homeless population, other members believed that drugs and support options are an issue based on location and race.

Regardless, community members believe that there are several reasons for the drug epidemic and the continued stress felt by all members in the community. Some community members believed that by not offering the proper services in the community then PWID will not use what little services are offered. Other members believed that the lack of services is due to the instability of previous programs. Community members are not optimistic about the topic and believe that the solution will take time and effort of all members willing to work together to provide real forward solutions. In addition, despite the fact that all participants support SSPs to help those in need and curb drug use, the homeless population, location, and economic impact on property values are large areas of concern.

This community perception adds value to findings of previous research surrounding drug use, the lack of options for substance abusers, and community support needed for SSPs. Additionally, the analysis I uncovered extends knowledge from the community perspective that rural communities have a no tolerance attitude toward offering services (Allen et al., 2019a; Kerr et al., 2019). A crucial factor in expanding SSP programs throughout rural locations is the need to address gaps in knowledge

through an inclusive effort to assess barriers (Boucher et al., 2017). Because I used the SEM, I was able to uncover supports efforts to include and use multiple perspectives in order to understand the phenomenon. In the case of rural communities lacking SSPs, community members believe that SSPs are needed, but the location of these services should be discussed prior to placement.

There are Multiple Barriers to Community Support

The second finding I uncovered during this research is that community members acknowledged that there are multiple barriers to community support. On an individual level, community members perceived failed communication, stigma, and racial tension as key drivers to the issues surrounding support options. Community members cited rural beliefs and a lack of understanding SSPs as a gap to the line of open communication and a key driver to stigma. In addition, community members perceived education as a key factor in community awareness and comprehension of the topic. Despite the acknowledgment of the issue, community members fail to trust those in charge because of past attempts to create programs without communicating with the community. Community members agreed that the community needs to be involved in the planning process to sustain community support as that support is a key driver to the success of any SSP offered in the community.

This finding confirms knowledge previously reported surrounding acknowledgement of drug use and that some form of action is required but offers a deeper understanding of that knowledge from the community perspective. Allen et al. (2019a) suggested that stigma stems from multiple sources and is heightened by difficult access to

SSPs in rural areas. In addition, multiple sources suggested that the lack of proper treatment access in rural communities perpetuates larger rates of stigma toward PWID (Allen et al., 2019a; Allen et al., 2019b; Boucher et al., 2017). PWID are often reluctant to seek help and assistance due to discrimination and stigma (Boucher et al., 2017; Deryabina & El-Sadr, 2017); however, the research I conducted confirms that community members perceive failed communication, stigma, and racial tension as key drivers to the issue.

My researched used the SEM framework which helps review the various levels of SSP from the community representative's stance. On the community level, community members agreed that there are issues with drug use and a lack of services. This information provides a pathway to address those barriers based on current beliefs of the community versus past failed attempts to create solutions (Allen et al., 2019b; Ravitch & Carl, 2016). The community members deemed education and other various resources as immediate needs, thus, providing a pathway to create a new foundation.

Access to Services Curbs Disease Transmission

The third major finding was that community members believed that access to SSPs curbs disease transmission. Some members also believed that SSPs can be a gateway to offering other services such as STI testing. This information lends value to the perceptions community members have about SSP in Charleston, West Virginia, and adds depth to the topic. Research conducted by Ondocsin et al., (2020), in Charleston, West Virginia, reflected an unsupportive environment on multiple levels. However, the community perception was that SSPs are needed and offers value to the environment by

curbing disease. Moreover, community members believed that offering services will allow other options to be introduced to PWID such as education, drug treatment, and other medical care.

In some instances, community members perceived access as the lesser of two evils. In addition, the community members perceived the need for a reduction of certain disease yet believed that offering clean equipment would be more beneficial. Additionally, the perception was that SSPs would be more cost effective. Researchers Evans et al. (2018) suggested that HIV infection in rural West Virginia has risen at an unprecedented rate and the use of SSPs would have unfounded implications. Societal support has the potential to impact access to SSPs in locations where the need for services is not currently met. Additionally, the lack of access to SSPs hinders communities on an individual, communal, and organizational level.

The SEM model allowed me as the research to view of this phenomenon from multiple levels of the population. Individual and community knowledge aids in the efforts to create solution driven approaches that offer services based on the needs of the community members as well as the substance users. In addition, researchers conducting studies on organizational knowledge helps decrease the gap in communication between community members and program developers who previously offered SSPs. Previous research focused on accessibility needs from the perceptive of PWIDs (Allen et al., 2019a; Allen et al., 2019b; Davis et al., 2019). While the perceptions of PWID are important, the inclusion of community members becomes equally important. The perceptions of the community members in the community added value to creating

supported programs in the proper location. Community members understood that accessibility equates to improved population health and the overall environment.

Reducing Barriers will take a Wide Range of Support Options

RQ2 asked about the recommendations from the community to reduce obstacles to syringe exchange in Charleston, West Virginia. I uncovered three additional themes and subthemes that emerged to address recommendations from community members to reduce barriers to SSP in smaller communities. The fourth major finding was that reducing barriers will take a wide range of support options, changed behaviors, and multiple people to address the issue. In addition, the community members believed that their participation is vital to the success of the programs offered throughout the community. Not only do community members believe that support options are vital to reducing barriers but also that shared goals and a higher level of accountability on both sides are necessary to reduce barriers. It is noteworthy to mention that some community members supported the inclusion of substance abuse community members, suggesting a shared level of accountability to create successful programs.

The perceptions of community members regarding barriers to SSP affect the uptake and support provided by others throughout the community. Guise et al., (2017), suggested the importance of assessing the experiences of the drug user as it relates to the development of adequate infrastructure throughout communities. Improving education efforts, social networks, and coping skills adds value to improved health outcomes for the community (Guise et al., 2017). Therefore, when both perceptions are uncovered, these data add value from multiple levels of this topic.

The community members found that the current process to address barriers has not worked; thus, determining that appropriate solutions cannot be viewed with one perspective. The community felt left out of the equation in the past, which only caused additional disdain and resentment when SSPs have been established in the past. The knowledge gained found that using multiple levels to address barriers offers the best possible outcomes for future endeavors.

Reducing Barriers

The fifth finding from the interviews suggested community members believed that resources, shared goals, and accountability can reduce barriers and increase the resources necessary to close the current gap to successful SSPs. Community members believed that the location of services previously offered was not only impacted by race but that most of these programs were placed in locations that fail to reach the population most affected. Most of the participants believed that the current focus of the city was misplaced on topics related to adding revenue instead of addressing the drug epidemic. Additionally, members of the community cited the lack of adequate funding for these programs which only widens the rift between shared goals and accessibility in the best locations.

Kun et al., (2019), suggested that the state of social relationships plays a significant role in treatment retention, community supported programs, increased budgets, and increased interest in educational efforts. Based on the findings of this research, this information adds value to the topic from the communal, individual, and organizational level. Strained relationships between the various levels causes mistrust

throughout the community. In addition, the community members felt defeated because they were not included in the process of establishing SSP nor the placement of these facilities.

The previous lack of knowledge from the community perspective often left a gap in the ability to create sustaining programs. Moreover, at first glance, previous research supported the concept that limited the ability to offer social support while focusing on the gaps in care from the substance use perspective (Allen et al., 2019a; Allen et al., 2019b; Ondocsin et al., 2020). Thus, understanding the limitations which influence social structures and community members lends value to the communities to aid in improving resources and funding possibilities, increasing the usage of shared goals, and increasing accountability from the individual, community, and societal levels.

Who Plays a Role

The sixth finding is that community members believed that local health departments should play a key role in education efforts to reduce barriers. The perception was that local health has a large presence throughout the community and had the best possible outcomes for new programs offered to both the at-risk population and in their communities. Participants in the community believed there is a higher level of trust and capability within local health professionals. Additionally, community members believed that everyone throughout the community should play some role in creating new programs.

Most community members believed that local health departments should not have to attain this goal alone as current events have strained their resources. Local health

departments not only cares for immunizations, STI clinic, vaccinations, and tuberculosis, but also COVID-19 and health inspections only to name a few. Community members believed that several entities should aid in promoting SSPs throughout the community. While community participants cite local health departments as the lead of these new initiatives, they also perceived law enforcement, church leaders, elected officials, and community leaders as agents of change; thus, they must be included in the discussion. This finding extends knowledge surrounding the perceptions of SSPs from the community members perceptive.

In Boucher et al.'s (2017) study, it was revealed that socio-structural barriers, such as education, required an increase in support function from the perception of PWID. In addition, PWID advised that despite their condition, they wanted to feel respected, well cared for, and supported (Boucher, et al., 2017). While the perceptions and experiences of PWIDs are important, program availability requires multiple levels within the community. The gap in services continues to create a strain on the entire community (Boucher et al., 2017). Therefore, the community members believed that the participation of the right people impacts access to services and education.

Each level of the SEM offered valuable insight into community members accounts of possible barriers, beliefs surrounding SSPs, and understanding social norms that give validation to the current conditions (Ravitch & Carl, 2016). Based on the findings of this study, it is clear that community members do in fact support SSPs; however, want to be included in the discussion prior to placement of these programs. As with any topic, there are concerns; however, communities who experience a lack of

services are burdened by drug use and want to be included in the discussion to create improved programs in the correct locations.

Limitations of the Study

There were several limitations in this study. The first was in the population sample being studied, which was limited to locations without accessible SSPs. While this information offered invaluable data, it also limited the pool of candidates because everyone throughout Charleston, West Virginia, may not share the same perceptions. There were other rural areas that could have been used; however, there are still locations in Charleston, West Virginia, which have racial boundaries, thus, these areas were not considered in this study.

Another limitation is the lack of generalizability of the results. Rural locations such as Charleston, West Virginia, have both similarities and differences in the environment, accessibility, and communities based on locality (Davis et al., 2019; Kerr et al., 2019). Geographic locations can be in proximity of less than a mile and be vastly different. While it was not difficult to find participants, only 8 of the 10 selected participants completed the interview questions. Data saturation began to occur prior to reaching the end of the process; however, 10 participants was the target goal to ensure a variety of response based on the location of each participant. Responses from the participants repeated frequently amongst the zip codes. Therefore, the knowledge obtained during this study may only apply to communities that are demographically and socially similar in nature.

The third limitation in this research was the use of Otter as a method to capture the interview. The topic of SSPs has been an area of contention for years in West Virginia. While all of the participants agreed to be recorded, it could have led to hesitation in the participants' answers. In addition, Otter has a time limitation; thus, for lengthy interviews or interruptions that arise, interviews can be paused, hindering the answer of the participant.

Another limitation in the research was the lack of data pertaining to the number of deaths attributed to IV drug use in the designated areas included. Mortality and morbidity are collected in Charleston, West Virginia; however, specific information was not located pertaining to deaths due to legal drug use versus illegal drug use. According to (Davis, et al., 2019; Deryabina & El-Sadr, 2017), identifying the at-risk population using specific details such as mortality and morbidity allowed for tailored education, prevention, and intervention. Additionally, (Davis, et al., 2019; Deryabina & El-Sadr, 2017) suggested this information could increase the accuracy of SSP placement. The lack of specific data for the areas selected could have expanded the quality of questions surrounding the knowledge of participants as it related to mortality in their location.

The last limitation is in the qualitative nature of the study. Trustworthiness of qualitative data is difficult to achieve without a clear study design (Ravitch & Carl, 2016; Salazar, Crosby, & DiClemente, 2015). Issues such as researcher bias are difficult to maintain and has the potential to influence results (Ravitch & Carl, 2016; Salazar, Crosby, & DiClemente, 2015). Considering this information, I maintained use of the data collection and analysis methods mentioned earlier in the study. I placed emphasis on the

research design and utilizing only the methods outline in the approved prospectus while communicating any additional needs with my committee. Quality checks throughout the study allowed me to maintain focus and assist in the research process.

Recommendations for Future Research

Several recommendations are derived from this study. The first recommendation is to expand the sample by increasing the geographic area to include additional communities in the research. There were a limited number of zip codes included in this study, therefore, future endeavors should involve locations with or without SSPs.

The second recommendation would be to increase the sample size of the study. As previously mentioned, only eight of the 10 participants completed the interview process. Increasing the sample size could increase the perceptions of SSPs from multiple levels of the community.

A third recommendation is to use a mixed methods approach to conduct future research. While qualitative data provides detailed descriptive data, a mixed-methods approach adds numerical data which when coupled together offers greater insight into a phenomenon (Creswell & Creswell, 2018; Glanz et., al., 2015). Additionally, a mix-method approach has the potential to not only use current datasets, but also the ability to reach a larger number of community members in an expanded area (Creswell & Creswell, 2018; Glanz et., al., 2015). Moreover, the addition of a mixed-methods approach increases the potential for different instruments to collect data.

The results of the research suggest that participants are supportive; however, they have different levels of concern surrounding the topic of SSP. While the community

perceptions mainly offer individual and community experiences, environmental factors such as poverty and physical location can also play a role in SSPs and the availability of these programs. Intervention efforts and programs established need to be developed with the community and consider all social and environmental factors. Ultimately, the added information from a mixed-methods approach has the potential to aid in education, funding, and potential policy development.

The final recommendation of this study is to expand the use of social media platforms. The use of social media as a tool for research adds value to social science (Franz et al., 2019). I only had the opportunity to use one social media tool; however, using different platforms can expand the reach to different audiences as well as include various geographic areas. There are a total of 55 counties in West Virginia. I only included one county which limits data collections. Using a different communication platform could attain additional knowledge to add to the discipline. In addition, the knowledge could repeat itself, by which confirming the results of this research. Resource tools to reach both public and private sectors advocate inclusive efforts; thus, allow for expansive planning to create community-based programs.

Implications of the Findings

Injection drug use in America continues to reach epidemic proportions for both urban and rural areas. According to Kendall, (2017) and Kerr et al., (2019), SSPs provide services such as MAT, rehabilitation access, and clean equipment for the users of the program. Despite the fact that PWID are in favor of these programs, the community perception is often assumed or omitted from research (Grossman, 2016; Leston et al.,

2019). While communities experience a wide range of barriers pertaining to SSPs, these experiences are vital to narrowing the gap in knowledge surrounding their perceptions. It was discovered that the participants of Charleston, West Virginia, not only agreed that the gap in services currently experienced by several areas is a problem, but also that the issues of accessibility to SSPs needed to be addressed.

Moreover, community members understand the hardships involved in any venture associated with substance use. For example, during this study a treatment facility was established in Malden, West Virginia, an unincorporated community in Kanawha County, which was opened without the inclusion of the community members (Pellegrino, 2023). Despite previous accounts from research suggesting communities have no tolerance for any form of syringe support or medically assisted therapy facilities, the residence of Malden only had issues with the areas the facility was established because it was in proximity of Malden Elementary school (Pellegrino, 2023). The findings of this study support the above-mentioned while including significant additions. Not only do the results create avenues of support, but also includes social, emotional, and informational needs based on the people living in the communities affected.

The results of this research provide significant data about the perceptions of SSPs from the community which will allow the creation of new programs utilizing a multidisciplinary approach. From the lens of SEM perspective this topic reviewed community, interpersonal, and individual viewpoints. Barriers such as the lack of community planning and assistance continue to influence social support (Ondocsin, et al., 2020; Pellegrino, 2023). In addition, areas of concern such as property value decreases

and the homeless population continue to be areas of community concern. Thus, the research showed that the community needs to fully support SSPs are currently not being met.

In addition, there is a need for more public information and education on this topic. The results indicate that these participants want a leader to develop and enhance the knowledge gap currently experienced by communities throughout West Virginia. In addition, because community involvement and support are vital to the success of any established program, the results reflect the need to include prominent community leaders. Most people who are living with substance use disorder use local health departments for other services; thus, utilizing this platform to expand goals surrounding this topic would be acceptable to the community.

The findings included issues at an individual, relationship, community, and societal level, as per the SEM and this information revealed new considerations on how to advance SSPs where needed. Basic qualitative inquiry was used to identify risks and opportunities that identify factors associated with the phenomenon (Creswell & Creswell, 2018; Ravitch & Carl, 2016). The ability to comprehend social activities on an individual, relationship, community, and societal level strengthens the ability to review how factors at each level influences factors at another level (CDC, 2022; Creswell & Creswell, 2018; Ravitch & Carl, 2016). The results in this study identified the factors that influence behaviors and culture on multiple levels which will allow the community members to design solutions based on the contributing factors (CDC, 2022; Creswell & Creswell, 2018).

The study results added a key element missing, the community perspective. Thus, the information gathered decreased the knowledge gap in this discipline and added value through the advancement of establishing much needed services, SSPs. As previously mentioned, prior research omitted descriptive data from the community perspective (Allen et al., 2019a, Allen et al., 2019b). Additionally, public health can use these findings to build new relationships throughout the community so that all parties are at the table to discuss any initiatives toward creating new programs. In all, the factors that affect the structural determinants of health would be valuable for any community member to review.

Social Change Implications

The insight gained from this research has the potential to shift how SSPs are created. Policy recommendations could include items such as conducting community surveys prior to the placement of SSPs and the use of a multilevel committee to oversee projects. In addition, the research could decrease social stigma surrounding drug use and PWID through educational efforts based on the participants suggestions. The community understands the value of these programs as well as how these programs improve the lives of others. What the community participants fail to understand is why they are not included in the conversations and decisions when establishing these facilities. By adding a multidisciplinary social structure, the impact of this reach could alleviate some of the current pressure and problems felt by all surrounding SSPs throughout the community.

Conclusion

The purpose of this qualitative research was to understand the perceptions of community members regarding SSPs throughout Charleston, West Virginia, and uncover any barriers that may exist at the community level. Using basic qualitative inquiry, I was able to view multiple levels of influence surrounding this topic from the community stance. Previous research focused mainly on the need for SSPs in rural communities from the perspective of PWID and PWUD. Thus, the information I collected during this research provided a framework to understand how community members feel about SSPs in their communities.

Based on previous literature, it was expected that community members would not support SSPs. However, it was found that community members are simply tired of the common practice of being excluded in the discussion surrounding SSPs. More traditional widespread methods of public health initiates often use platforms that include a wide array of people, yet West Virgina often falls short in using this practice. Yes, there are areas of concern, which on the surface, may appear that the community lacks support for SSPs. However, I was unable to find a lack of evidence to support this assumption. In fact, in West Virginia communities the members want to be a part of the solution and want their perceptions heard. The community members believe that being left out of the decision making process regarding SSPs often leads to a lack of acceptance.

The first major finding reflects that the participants believed drug use is an issue and that there are not enough services for PWID. The participants also believed that homelessness is related to accessibility to services within the population. The second

finding is that participants believed the issue of drug use needs to be addressed and acknowledges that failed communication, stigma, and racial motivations are key drivers to barriers. While the participants believed that education is a factor to community awareness and comprehension, they also believe that SSPs in the wrong location will cause an economic impact on the property value.

Despite this finding, participants agreed that access to services are beneficial and has the potential to curb disease transmission. The fourth finding was that community support is vital to the success of services; thus, fixing the issue will take a wide range of support options, changed behaviors, and people. The fifth finding reflects the need for community resources, shared goals, and accountability to reduce barriers. The community believes that location and race can play a role in the availability of services and impacts funding, accessibility to services, and education. The last major finding was that people in the community want a shared approach with many people at the table while local health departments should lead the way and help educate the community to reduce barriers.

This research demonstrates that community members do care about social, personal, and financial factors that impact their communities regarding drug use, PWID, and SSPs. In addition, any future programs must include the community members before placement of SSPs. The information from this research may help communities create a platform to address their concerns while including the needs from other entities such as PWID, local business, and state agencies only to name a few. Aside from helping communities, this research may also help policymakers and health care providers in their

quest to create programs that are viable, successful, and sustainable for PWID and PWUD. Finally, this research has the potential to positively motivate discussion surrounding drug use in smaller communities and the potential for community engaged programs.

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Appendix: Interview Questions

#	**Interview Questions**
1	What are your perceptions on drug use in this community and do you believe that there is a lack of support in the community for this population?
2	Why do you believe syringe support services are not available for PWID in your community
3	What resources and support do you think are available in this community to reduce drug use and overdose deaths?
4	What are your feelings about providing services such as syringe exchange for PWID?
5	Why do you believe some residents are against offering syringe exchange programs in your neighborhood?
6	Tell me what steps could be taken to improve conditions for PWID in this community? Follow up: Who do you think should be involved?
7	What role should the local health department play in reducing health risk such as access to clean syringes to hinder the spread of HIV and Hepatitis for PWID in the community?
8	What role could individuals in the community play in reducing risk for PWID?
9	How do you think community support affects access to syringe services?
10	What role should the community play in reducing negative attitudes surrounding syringe exchange?