Distribution Agreement

In presenting this thesis or dissertation as a partial fulfillment of the requirements for an advanced degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis or dissertation in whole or in part in all forms of media, now or hereafter known, including display on the world wide web. I understand that I may select some access restrictions as part of the online submission of this thesis or dissertation. I retain all ownership rights to the copyright of the thesis or dissertation. I also retain the right to use in future works (such as articles or books) all or part of this thesis or dissertation.

Signature: _____

Sarah Febres-Cordero 6/11/2021

Staying Alive in Little Five: Perceptions of Service Industry Workers Who Encounter and Respond to Opioid Overdose in Little Five Points, Atlanta

By

Sarah Febres-Cordero

Doctor of Philosophy

Laney Graduate School

Kylie Smith, PhD Advisor

Hannah Cooper, PhD Committee Member

Ursula Kelly, PhD Committee Member

Lisa Thompson, PhD Committee Member

Accepted:

Lisa A. Tedesco, Ph.D. Dean of the James T. Laney School of Graduate Studies

Staying Alive in Little Five: Perceptions of Service Industry Workers Who Encounter and Respond to Opioid Overdose in Little Five Points, Atlanta

By

Sarah Febres-Cordero

B.S.N, Emory University, 2017

M.S, Emory University, 2020

Advisor: Kylie Smith, PhD

An abstract of

A dissertation submitted to the Faculty of the James T. Laney School of Graduate Studies of Emory University

in partial fulfillment of the requirements for the degree of Doctor of Philosophy

in Nursing

2021

Abstract

Background: In Little Five Points (L5P), Atlanta, opioid overdose occurs, and service industry workers are often first responders by default. Little Five Points is an eclectic, primarily independent, commercial district comprised of service industry workers. Community members are implementing harm reduction strategies, including access to sterile syringes and free distribution of naloxone (opioid antidote) to those who are likely to encounter and respond to an opioid-induced overdose. These attributes make L5P an ideal location to identify strategies that can be implemented by laypeople, improve education regarding naloxone administration, and overdose management.

Purpose: The purpose of this study is to describe the perceptions of service industry workers who encounter and respond to opioid overdose in a community setting.

Methods: I conducted a qualitative descriptive study with elements of ethnography and phenomenology in an Atlanta commercial district that has been encountering and responding to opioid overdose in the community and practicing harm reduction since the 1990s. To explore potential strategies for layperson response to overdose, this qualitative descriptive study utilized participant observation, criterion, and snowball sampling, and led to an enrollment of 15 participants. One-on-one interviews employed a 13-question interview guide with semi-structured open-ended questions. Iterative analysis with constant comparison was employed with inductive reasoning. Internal validity was ensured by member checks, reflexivity, peer review, triangulation of methods, and archival research.

Findings: One-on-one interviews with 15 service industry workers yielded 13 hours of rich, descriptive data, and participant observations over seven months produced 44 hours of field data. Our inquiry uncovered the perceived invisible and hidden nature of opioid use and overdose,

revealing three themes: hidden places of consumption, hidden by blending in, and hidden dangers.

Staying Alive in Little Five: Perceptions of Service Industry Workers Who Encounter and Respond to Opioid Overdose in Little Five Points, Atlanta

By

Sarah Febres-Cordero

B.S.N., Emory University, 2017

M.S, Emory University, 2020

Advisor: Kylie Smith, PhD

A dissertation submitted to the Faculty of the James T. Laney School of Graduate Studies of Emory University

in partial fulfillment of the requirements for the degree of Doctor of Philosophy

in Nursing

2021

Table of Contents

Introduction

Purpose of Study

The purpose of this study was to describe the perceptions of encountering and responding to an opioid overdose in a community setting by service industry workers. The goal of the study was to identify gaps in knowledge surrounding overdose rescue attempts. The study results will be used to provide the community with the appropriate tools necessary to effectively intervene in opioid overdose thereby decreasing overdose mortality, a public health concern and the overarching motivation of this study (Ashrafioun, Gamble, Herrmann, & Baciewicz, 2016 & Baciewicz, 2016; CDC, 2012).

Summary of Papers

Blending Qualitative Methods: An Immersive Approach to Community Research
The Invisible and Hidden Nature of Opioid Use and Overdose: Perceptions of Service Industry workers in Little Five Points, Atlanta
Designing a Graphic Novel: Engaging Community, Arts, and Culture into Public Health Initiatives

Context of Inquiry

The number of drug overdose deaths increased by nearly 5% from 2018 to 2019; over 70% of those deaths involved an opioid (Centers for Disease Control and Prevention [CDC], 2020). Between 1999 and 2019, nearly 500,000 people died from a drug overdose involving an opioid in the United States (CDC, 2020). Over 70% of the 70,630 drug overdose deaths in 2019 involved an opioid and on average, 136 Americans die every day from an opioid overdose (CDC, 2020). Since 2013, there has been a significant increase in overdose deaths involving synthetic

opioids, particularly with illicitly manufactured fentanyl when found in heroin, counterfeit pills, and cocaine (Irvine et al., 2018; Kolodny, 2015; Ruud, Raanaas, & Bjelland, 2016). In Georgia specifically, the Georgia Department of Public Health (GDPH) reported an increase in opioid-related deaths of 78% from 2010 to 2019, with heroin and fentanyl increasing opioid-related deaths at unprecedented levels (GDPH, 2018). In 2019, heroin and fentanyl involved overdose deaths are "continuing to plague urban areas in Georgia, with highest numbers of heroin- and opioid-involved overdose deaths, ED visits, and hospitalizations occurring predominantly among residents in urban areas including Atlanta Metropolitan Area, Augusta, Macon, Columbus, and Savannah" (GDPH, 2019).

Service Industry Workers as First Responders

Public bathrooms are the Ground Zero of the opioid epidemic (Bebinger, 2017). Access to sterile syringes and syringe service programs is growing. However, supervised injection facilities are not legal in the United States. Public bathroom drug injection is used for convenience, safety, immediacy, and privacy (Crabtree et al., 2013; Parkin & Coomber, 2010). Additionally, the privacy afforded by injecting in public bathrooms reduces the risk of abscesses, scarred or collapsed veins, cellulitis and endocarditis by providing time needed to clean the skin and "cook" drugs properly (Cooper, Friedman, Tempalski, Friedman, & Keem, 2005; Gibson et al., 2011; Small, Rhodes, Wood, & Kerr, 2007). Businesses that provide single stalls are particularly at risk of attracting people who inject drugs (PWID) to inject in their bathrooms to fulfill these needs (Wolfson-Stofko, Elliott, Bennett, Curtis, & Gwadz, 2018). In Little Five Points (L5P), access to sterile syringes at a local pharmacy and through Atlanta Harm Reduction Coalition (AHRC) syringe service program (SSP), together with clean private single-stall bathrooms in bars, restaurants, and retail stores, creates an environment in which public overdose

may be encountered by laypeople. Service industry workers in L5P are first responders by default. Although emergency medical services (EMS) may be activated, the average wait time is 7 minutes in urban areas nationally (Mell et al., 2017) and lack of oxygen can cause organ damage to those in respiratory arrest (Berg, 2000). The Harm Reduction Coalition warns that mouth-to-mouth resuscitation is essential in responding to opioid overdose to avoid brain damage (Coalition, 2020). Strategies exist to lessen overdose mortality from the injection of drugs in public spaces, such naloxone administration; however, further research is needed to determine the acceptability and feasibility of these methods in a community setting (Ashrafioun et al., 2016). To my knowledge, this will be the first study that includes the experiences of service industry workers who encounter and respond to overdose in a community setting in Georgia, who can provide unique insight about the viability of such strategies.

Naloxone, an Opioid Antagonist

Fentanyl, a synthetic opioid is 50 to 100 times more potent than heroin and is added to heroin, cocaine, or pressed pills (Sato, Suzuki, Lee, & Sato, 2010; Volpe, 2011). With the introduction of fentanyl to the heroin supply in the United States, it became more important than ever that laypersons be able to administer naloxone, an opioid antagonist, and implement rescue breathing. Fentanyl overdose may require multiple doses of naloxone to revive someone. Naloxone is administered every 4 (up for debate, the more common teaching in training is every 2-3 minutes) minutes after initiation of CPR (Lavonas et al., 2015), if numerous treatments are necessary and if the overdose victim has respirations of less than 8 breaths per minute or brain damage can occur within 3-5 minutes without rescue breathing (Association, 2019). Although EMS may be activated, if action is not taken in a timely manner those with respiratory failure, those needing multiple doses of naloxone, and

the opioid naïve are at an increased risk of deadly overdose (Fairbairn, Coffin, & Walley, 2017, Irvine, 2018).

According to the Surgeon General of the United States providing opioid overdose education reduces overdose mortality, including learning the signs of opioid overdose and training to administer naloxone in case of an emergency to those who may be present during an overdose (Adams, 2019; Walley et al., 2013). Having intranasal naloxone alone with little or no training has been found to have similar outcomes. However, providers warn that training is needed to ensure rescue breathing and multiple doses of naloxone are available when necessary (Doe-Simkins et al., 2014; Green et al., 2013; Mayer et al., 2018).

Increasing access to naloxone has been identified as an urgent need in Georgia (Substance Abuse Research Alliance [SARA], 2017). Standing orders exist in Georgia pharmacies to address the need for naloxone in the community. Standing orders in pharmacies have been found to reduce deadly overdose events (Davis, Walley, & Bridger, 2015). L5P has a community pharmacy that has been providing sterile syringes for sale since the 1990s and works with the Atlanta Harm Reduction Coalition (AHRC) and Georgia Overdose Prevention to distribute naloxone to laypersons (SARA, 2017). Naloxone is a feasible public health intervention to address the opioid epidemic and is appropriate for laypersons who are motivated by having a family members or friends who uses opioids, is a person who is a current or former user of opioids, or is a service provider (Doe-Simkins, Walley, Epstein, & Moyer, 2009; Green, Heimer, & Grau, 2008; Wheeler, Jones, Gilbert, & Davidson, 2015). Although naloxone has been found to be appropriate for use among those who have close contact with people who use opioids, we must consider if naloxone by laypersons is also acceptable, since they are rescuing people who are unknown to them.

Those who have encountered and respond to overdose in a community setting could provide insight into naloxone administration and respiratory supportive care and assess if these strategies are acceptable to laypeople.

Families and those close to those at risk for overdose have received extensive training in some settings; however, there is a need to extend training to anyone who may encounter and respond to overdose in the general community (Bagley et al., 2015; Balster & Walsh, 2016; Lewis et al., 2016). Thus, it is essential to understand the impact of current knowledge, beliefs and behaviors surrounding naloxone use and identify gaps in training and understanding of opioid overdose within the community setting among laypersons who may be frequently exposed to overdose (Dietze et al., 2018).

Chapter 1: Blending Qualitative Methods: An Immersive Approach to Community Research

Abstract

Qualitative methods are often used to capture the perceptions of those we study in relation to a particular phenomenon. This paper outlines the approach used in my dissertation project which aimed to understand the experience of service industry workers who had responded to an opioid overdose in their place of work. The nature of the project required the design of an immersive qualitative study appropriate for a community setting. The overarching approach used in the study was qualitative descriptive, with elements of ethnography and phenomenology. As a qualitative researcher, I have an ethical duty to choose methods that are appropriate to answer the research question while protecting the participants. Given these concerns, and the complex nature of the study itself, a mixture of qualitive methods was required to conduct this qualitative research study, therefore, I chose qualitative descriptive as the primary method. Qualitative descriptive methodology has a pragmatic design allowing for techniques from many qualitative traditions. I chose to add elements of ethnography since I was immersing myself in a unique culture, and phenomenology recruitment sampling was chosen to ensure an appropriate sample. Qualitative descriptive techniques also allow for flexibility in analysis. Often, the analysis in qualitative studies is predetermined by a particular approach which can limit researcher's tools. For example, studies using ethnographic and qualitative approaches by nurses have come under increased scrutiny as they are often lacking in thick description, reflective practice, and transparency of analytic methods. Although analysis in qualitative description is data-near and presented in the voice of the participants, this does not mean the analysis is shallow or lacks

meaning. In this study, we used open coding, and thematic analysis for analyzing data because of the nature of the underlying questions of the study. In this paper, we delineate the methods of data collection and analysis to provide transparency in our research and to argue for blended qualitative approaches in order to answer complex research questions.

Keywords: Qualitative, nursing, community, ethnography, phenomenology, approach, design, overdose, naloxone (topic driver of the method).

Introduction

The purpose of the study was to describe the perceptions of service industry workers encountering and responding to an overdose in a community setting. This helped to identify gaps in knowledge surrounding overdose rescue attempts and to provide the community with the appropriate tools necessary to effectively intervene in opioid overdose. Overdose mortality is a major public health concern (Ashrafioun, Gamble, Herrmann, & Baciewicz, 2016; CDC, 2012) that needs to be addressed through effective public health interventions.

Qualitative descriptive methods were chosen because we aimed to assess the needs of the community, to describe the phenomenon of encountering and responding to an opioid overdose in a community setting, and to produce knowledge that can be used to inform future research and intervention design (Maxwell, 1996; Neergaard, 2009). During the initial stages of the research design, I focused on the works of J.A. Maxwell's (1996) interactive approach, while also incorporating insights by Sharan B. Merriam (2009), and Michael Q. Patton (2002) and Creswell (2007) to determine the qualitative design. To distinguish between what is traditionally thought of as research design and "the way qualitative researchers actually go about designing their research" (Maxwell, 1996, preface) Maxwell presented an interactive approach, or guide to qualitative research which includes traditions of ethnography, phenomenology, ethnography, and

grounded theory. Qualitative methods themselves are influenced by contextual factors throughout the study.

For example, from an ethnographic approach, during the data collection phase I had to decide where to conduct interviews. I made the offer to participants to interview them in my home, their home, or wherever is convenient if we were in a private space with no interruptions. My second participant chose for me to interview her in my home and asked me if I could cook breakfast for her and her husband before we conducted the interview. This is something I was not expecting but knowing the culture of L5P and appreciating that my participants and I had a good rapport, I agreed to cook for everyone. This was not the only instance where my participants wanted food. In another interview, I brought a participant lunch from a local restaurant, and we ate in the car together as we did the interview. This is the reality of immersive qualitative work, the culture may have demands that the researcher did not consider when designing the study.

Maxwell (1996) offered a pragmatic approach that is accessible, especially to the novice researcher. It was during the first reading of the interactive approach that I had the idea for this research study. This was the first text that broke down qualitative research in a way that I could understand. Maybe most importantly, Maxwell taught me that as researchers we must have some theory in our approach, or "a picture of what you think is going on" (p.37) that acts as a tool to design your research study. This advice led me to my original research aims, and I also included the method needed to capture what I "thought was going on".

Aim	Method	What is going on?
To describe the phenomenon of encountering and responding to an overdose in a community setting, as	One-on-one interviews will be employed to address this sensitive topic.	By addressing this topic, we can identify gaps in overdose education and assess knowledge of identifying an overdose.

experienced by service industry workers.		
To assess the current availability and acceptability of Naloxone among service industry workers in L5P.	One-on-one interviews with service industry workers who have encountered an overdose.	Will provide insight into laypersons' views and needs when administering naloxone in a community setting, which will inform future training.
To explore attitudes and beliefs surrounding evidence-based practices that decrease the spread of disease.	One-on-one interviews with service industry workers who have encountered an overdose. Participant observations with Atlanta Harm Reduction Coalition in L5P	Attitudes surrounding, sharps containers and syringe service programs, decrease overdose in the community with safe-injection facilities, and provide treatments for people who use heroin with medication-assisted therapies.

Many studies claim to be an ethnography or grounded theory, or phenomenology, however, to truly be any of these types of qualitative inquiry, the study is bound to the "specific methodological frameworks emerging from distinctive disciplinary traditions" (Sandelowski, 2000, p.337). Qualitative description draws from naturalistic inquiry and allows for elements of other qualitative methods without being constrained by a single approach; for example, our study included elements of ethnography and phenomenology in order to better understand and describe the problem at hand in an in-depth and ethical way (Kim, Sefcik, & Bradway, 2017; Neergaard, 2009; Sandelowski, 2010). Additionally, qualitative description has been found to be an appropriate approach when assessing needs in a population and for tailoring future interventions (Neergaard, 2009). Qualitative descriptive summaries also lay the groundwork that may inform future grounded theory, or phenomenological study (Sandelowski, 2000). Most importantly, qualitative descriptive methodology keeps us from inappropriately naming other methods in our qualitative work (Sandelowski, 2000).

In order to understand the unique culture of Little Five Points we chose to incorporate ethnographic participant observation. At one point I considered ethnography the main approach. However, since I am not a trained anthropologist, and methods of ethnographic analysis often focus on interpreting language and creating taxonomies (J. P. Spradley, 1979), it seemed more appropriate to combine this method with other qualitative methods. I chose triangulation of methods to compare data from multiple perspectives, to validate findings, and to gain a more comprehensive understanding (Creswell, 2007). Triangulation seeks to create a "holistic picture of the social whole" by employing multiple methods and seeking out the culture, sub-culture, systems, and subsystems in the community (Merriam, 2009).

Ethnographic methods and participant observations were informed by the works of James Spradley (1979-1980), David Fetterman (1998) and Martyn Hammersley and Paul Atkinson (1995). Martyn Hammersley and Paul Atkinson (1995) devoted an entire book, *Ethnography: Principles in Practice,* to the implication of reflexivity in ethnography with this statement in the first pages, “A first requirement of social research according to naturalism, then, is fidelity to the phenomenon under study, not any particular set of methodological principles, however strongly supported by philosophical arguments” (p.7). Hammersley and Atkinson wove reflexivity throughout the approach from conception to the final write up. Heavily influenced by the work of Irvin Goffman’s 1972, *Interaction Ritual* and with nods to the works of Glaser and Strauss and Grounded Theory (Glaser, 1967), Hammersley and Atkinson made the case that ethnography is not dependent on one methodological approach. In this work they went on to say that although ethnography is a tradition in qualitative research, the method is not bound by any one approach from data collection, through analysis, and even in the way the final ethnography is written (Hammersley, 1995).

Hammersley and Atkinson (1995) also included many pragmatic considerations when designing a reflexive research study. For example, I knew that I had to choose between wearing casual clothing and exposing my tattoos, or presenting myself as a clinician, or research professional by wearing a jacket. The authors suggested in an immersive study to do what was best to improve rapport (p.87). Therefore, I presented myself as a L5P native; since I do have kinship ties to L5P, this seemed reasonable. Hammersley and Atkinson reinforced that I could "mobilize all of my existing social networks, based on acquaintanceship, kinship, and occupational membership" (p.60) if I did this in a reflexive way. I had to ask myself many times about what I should write down, and what was just too personal. When I was interviewing of observing a participant, I asked myself, "how would the participants feel if I were to publish this quote or an observation from fieldwork"? Hammersley and Atkinson kept me accountable to the participants in the study with constant reminders that respondent validation is how we respect our participants' privacy, by allowing them to have input during the throughout the study including during data collection and analysis, and how the results are presented and interpreted (Hammersley, 1995).

David M. Fetterman's *Ethnography, Second Edition, Step by Step Applied Social Research Methods*, (1998) was helpful in educating me on how to synthesize "retrospective interviews to reconstruct the past, highlights their values and reveals the configuration of their worldviews" (p.40). During my training in quantitative research, I had learned about "recall bias" and worried that retrospective interviews would be a threat to validity (Coughlin, 1990). However, Fetterman was quick to point out that what happens in someone's past does shape their current worldview and therefore it is valid. I was not so much concerned with the experience itself, or how much the participants would be able to remember, but how did the experience

affect the person, most importantly, how did the encounter and response influence the person and shape the needs in the community?

Additionally, Fetterman (1998) confronted the many ethical challenges associated with ethnography and qualitative work. For example, in many qualitative texts study participants who frequently interact with the researcher are referred to as “key informants”. Fetterman stated that in certain cultural contexts if his participants found out that he was calling them informants in any way that he would lose their trust (p.46). Therefore, he chose to use the term “key actors”. Fetterman suggested if you find a key actor, and you have a rapport with them, include them in as many discussions as possible throughout the data collection and analysis, while having enough sources that you are sure that the key actor is not distorting the view of the phenomenon being studied (p.50). As this study is a blending of qualitative methods, I chose to call the participants who were interviewed once or twice, participants, while calling the one participant who was not interviewed a key actor. This key actor had never encountered an overdose in L5P but worked in L5P for 20 years and was working in L5P during the time of the study. The key actor was willing to discuss the study with me on an ongoing basis (2-3 times a week. I was fortunate to find a key actor who could keep me in the loop as to what was happening in L5P and to validate data not only during data collection, but in the analysis phase as well. To protect the identity of the key actor, this is all I am willing to disclose.

Given that ethnographies are usually presented in a book format, it was important to think about how this data would be suited to a three-paper dissertation format. (Agar, 1973; J. P. Spradley, 1970; J. P. Spradley, & Mann, B. J. , 1974). In the field of nursing, rapid ethnography has become increasing popular in order to answer research questions related to health, however, several limitations have been identified to this approach, including poor reporting of design,

methods of analysis, and the poor use of reflexivity (Vindrola-Padros & Vindrola-Padros, 2018). I anticipated that a qualitative descriptive approach would allow for more time in the field, a clear set of methods, time for reflexivity, and an approach to data analysis that would allow us to contextualize the phenomenon of interest in a community setting (Robertson & Boyle, 1984).

Phenomenological methods were used for our recruitment plan. In the tradition of phenomenology, I used criterion sampling (participants meet a predefined criteria) to ensure the sample included those who had encountered and responded to an opioid overdose in L5P while at work (Husserl, 1982). Additionally, I strove to collect information from a range of businesses as service industry workers are not a monolith. Therefore, I purposefully chose to recruit from different establishments, such as restaurants, bars, theaters, and retail businesses. Once these criteria were established, I informed our seed sample of the study purpose (encountered an overdose while working in any establishment in L5P) to inform the snowball sample that followed (Patton, 2002). The snowball sample method worked well in L5P, after I would interview someone, I would ask them, do you know anyone else who encountered an overdose while working in L5P? They would then refer me to someone else they knew who had encountered an overdose while working in L5P. Before I contacted the next participant, I would ask the referring participant to contact them first to be sure they were interested in participating in the study.

Risk for Human Subjects

This study was approved by the Emory University IRB. Although the study received an exempt status, I pressed the Emory IRB to consider this work as engaging in human research and used all the resources available from the IRB for the study materials (consent form). Verbal consent was obtained before and after data collection (one-on-one interviews) and during

member checks. No record of participant identifying information was kept. The Emory IRB considers sociobehavioral research to be low risk as the goal tends to be to gain knowledge about human behavior, and rarely requires more than "an initial IRB submission" (Emory University, 2021). In order to protect the participants throughout the study, I was sure to stay true to the ethical responsibilities of qualitative work, including de-identifying the participants who were interviewed about their encounters, requesting permission from the community advisory board if I wanted to use a name or a quote, and by practicing reflexivity throughout the study.

Data Collection

One on one interviews were chosen as the primary means of capturing the experiences of our participants to understand how they construct their reality. This method of data collection traverses all forms of qualitative inquiry; however, my focus was on the *emic* understanding of the phenomenon at hand. The *emic* perspective is that of the insider, or native, and is the perspective sought in ethnographic inquiry (Fetterman, 1998). Additionally, I sought to consider the concept of multiple realities. For instance, the phenomenological doctrine of *Vesrtehen*, which means "understanding" recognizes as humans we have a capacity to make sense of this world, are capable of empathetic behavior, and personal experience largely determines our perceptions of the world and our behavior (Patton, 2002, p.52). Recognizing that multiple realties exist allow us to search for evidence from different perspectives to provide a complete description of the phenomenon being studied.

I employed semi-structured, open-ended questions that were recorded and transcribed by a professional service. I checked the transcriptions for accuracy and as more questions arose, or questions were found to be inadequate, the interview guide was updated. I kept a detailed audit trail of all the decisions made and changes made to the interview guide. The interview guide

included a question about the phenomenon itself, and we added 12 additional questions with probes to attempt to answer secondary and sub aims (appendix A).

I employed a conversational, non-judgmental tone during interviews. If someone spoke of their past use of drugs and alcohol I did not comment with any judgments about the behaviors. I attempted to create a rapport during the interview so that participants felt comfortable to share information freely. This technique is noted by Hammersley and Atkinson as "impression management" (p.83-99). The conversational tone of the interviews led to thick rich description, but we had one participant that was not as engaged, and the transcript is substantially shorter than the remaining fourteen interviews.

Reflexivity and Ethics

Because I had over 20 years of experience working within the culture of L5P, my own *emic* perspective had to be addressed. Some may have considered me an insider, or *native*. Although I had left L5P five years prior to beginning my dissertation studies, there was a question of if I was already a *native.* In ethnography studies going *native* is thought to be a liability, as you lose the ability to be objective (Fetterman, 1998). However, there are benefits to being more of an insider than an outsider as well, including the ability to access the community, to be trusted within the community, and to identify key actors, community advisors, and potential participants (Fetterman, 1998).

Although I had the ability to make these connections quickly, I also understood that to have a rigorous study with valid results, I would have to immerse myself not only in the culture of L5P, but the culture of injection drug and opioid use. I may have been considered a *native* in L5P, but I was certainly *not* a native in the world of Syringe Service Programs (SSP's) and harm reduction. Before field work in L5P began, I immersed myself in SSP work with the Atlanta

Harm Reduction Coalition in the English Avenue neighborhood, aka, The Bluff, in Atlanta. It could be said that this was an ethnography within an ethnography. From June 2019 to October 2019, before attending SSP in L5P, I volunteered as the wound care nurse once a week (10 am to 3pm) for a total of 60 hours. These 60 hours were crucial in gaining trust among the people who worked with, and are served by, the harm reduction program. By immersing myself in this community in this way, when it came time to return to L5P to collect data, I knew from my experience in the Bluff what it is like to look at a community as someone who is there to learn from others with objectivity or what ethnographers call "anthropologically strange" (Hammersley, 1995, p.10).

Making Community Connections

As researchers, we should be committed to building relationships in communities that will support our research goals, and to do so without being extractive for our own gain. My first introduction to allies in the search to support my efforts to respond to the opioid epidemic was from the Rollins School of Public Health. Dr. Hannah Cooper, of The Science to End Drug Related Harms (SPARK), coordinated a brown bag seminar so that all in the university who sought to research the epidemic could share their work, cross-collaborate, and find allies. It was in these first meetings that I was just introduced to the concept of harm reduction. concept had not been presented to me before in my undergraduate nursing education, but the principles were appealing to me as a nurse. I knew that the people I had interacted with in the SSP setting who use drugs, who smoke, and have sex, do not want a life riddled with health problems-- they want to live long, happy, prosperous lives. It is a myth that people who use drugs do not care about their health. Human beings are complex and do not, and cannot, always act in ways that are devoted solely to the maintenance of health.

Drug use is a social and health issue. People who use drugs do not stop being human; their addiction does not disentitle them of their right to a healthy life (Wodak, 2012). I felt a kinship with the people who work and visit AHRC for services, a kinship (Hammersley, 1995, p.60) with those who wish to support behaviors and decisions that the greater public choses to penalize, ignore, or cast blame (Wodak, 2012). During these meetings, there was a woman that sparked my interest. Dr. Zare operates the Atlanta Harm Reduction Coalition that services L5P and English Avenue with harm reduction strategies, including SSP's in Atlanta. While the present study took place in L5P exclusively, without an introduction to harm reduction and SSP by Dr. Zare, I would not have been able to contextualize my study within the broader community and subculture that surrounds people who use injection drugs. I decided that working with AHRC would enrich the study and I was invited to volunteer as a nurse with AHRC in the English Avenue neighborhood before beginning the study in L5P, as I described above in Reflexivity and Ethics. This period enabled reflexive time to think about the aims of my study and influenced my thinking about the design. Below we present two field notes from the first days and months working in a harm reduction setting which demonstrate the importance of this reflexivity. These notes are published here with the approval of Dr. Zare, and the ambassador and co-founder of the AHRC, Mona Bennett.

> **Field Note June 2019:** It took about a month before I had the courage to approach Dr. Zare. After a brown bag meeting, I followed her out of the building and gave her my elevator speech. I was interested in working in the opioid epidemic and I wanted to contribute to harm reduction efforts. I told her I was a nurse, that I was planning on conducting my dissertation work in L5P, and asked if I could volunteer. I wanted to learn about harm reduction firsthand rather than

reading about it in scholarly papers and on the internet. Dr. Z took me up on my offer immediately and within a week I was the Atlanta Harm Reduction SSP outreach wound care nurse. My first day at AHRC I was introduced to Mona Bennett. I knew who Mona was because I had seen her in L5P for years. She supplied condoms to many of my friends to prevent STI's/HIV transmission over the years and had become a L5P regular. What I did not know was that Mona had been running an underground SSP in L5P and Vine City since the late 1980's. I will never forget my orientation with Mona-- she sat us down in a small room and taught us how to cook heroin, how to talk about sex in the streets (it is not vaginal secretions, it's pussy juice), and gave us a brief history of heroin use in L5P. In this historical account Mona did not sugarcoat the oppression inflicted in Black neighborhoods by White people. She did not try and be politically correct, she just told us like it is. Mona understands her community, she knows how to talk about drugs in the community, and I have learned more today from Mona about Harm Reduction than I could have ever learned in a classroom.

Field Note August 2019: It took some time for me to be accepted at AHRC, although I see myself as a minority, a brown person, a woman of Venezuelan descent. They see me as a White person, and I have letters behind my name (RN). From June 2019-October 2019 I volunteered in The Bluff (Vine City) exclusively. I did not want to have any preconceived notions about L5P SSP before I defended my proposal and obtained IRB approval for data collection. These three months were crucial to establish working relationships with the outreach workers, to have

> an introduction to harm reduction, and to understand the needs of the outreach clients. I knew my place; I was a student learning from the masters. I did my best not to insert my knowledge until I was accepted in the group. A turning point was when Dr. Zare asked me to come in to do a CPR/Rescue Breathing/Narcan training for the staff. Just a couple of weeks prior, someone overdosed in the bathroom at the AHRC office, and the outreach workers responded with Mona at the helm. The training was to be focused on group rescue of opioid overdose, with the assumption that more than one person would be available to participate in the attempt. With the entire staff and a pillow from home (a makeshift dummy) I trained everyone on opioid response at AHRC (the focus was rescue breathing and Narcan, as opposed to traditional trainings that start with compressions). Something changed today, during and after the training everyone was treating me like I belonged there, and that I am an asset to AHRC!

By beginning our work this way, I established a commitment to prolonged engagement, a qualitative method used to ensure thick description (Merriam, 2009). I also demonstrated my commitment to the community; when it came time to do participant observations in L5P SSP with AHRC, I was welcomed to join. Additionally, when data collection did begin in L5P, I had a better understanding not only of the communities affected by the opioid epidemic, but of established and emerging interventions to address the epidemic through a harm reduction lens.

Community Advisory Board

We chose the *Patient-Centered Outcomes Research Institute* (*PCORI) Dissemination Framework* to guide the implementation of a community-centered and tailored educational resource (Esposito, 2015). PCORI requires that community members and other key stakeholders

become actively engaged as members of the research team and are seen as equal contributors to the research processes (Frank, Basch, & Selby, 2014; Gonzalez-Guarda, Jones, Cohn, Gillespie, & Bowen, 2017). Entering L5P, I had the full support, guidance, and mentorship from a community advisory board which included a local pharmacist, the executive director of AHRC, the outreach workers who run the SSP, a local nurse who educates on Narcan administration, and a key actor who had over 20 years' experience in L5P. Additionally, we discussed the project with key stakeholders in the L5P neighborhood, including members of the business association, local business owners, people in recovery from heroin use, and service industry workers. In preliminary talks with the community advisory board, a member from L5P voiced concern that the neighborhood may be presented in a way that would label the community as a "drug den" and implied this work could have a negative impact on the community. In order to avoid stereotyping, from the initial design of the study and throughout data collection and analysis, we sought to describe the intracultural diversity of L5P to provide a balanced report of L5P and avoid stereotyping (Fetterman, 1998).

There are many ethical considerations when conducting qualitative research related to a sensitive topic. Just as we wish to acquire thick descriptive data, we must also provide thick ethical description in our work (Brinkmann, 2006; Smythe, 2000). Both the research participants and any third parties being discussed must have their identity and privacy protected by de-identifying and storing all data to maintain confidentiality and privacy (Brinkmann, 2006; Hadjistavropoulos, 2001). Verbal consent was obtained, and data were stored on a secure server and on a password-encrypted personal computer. To respect the integrity of research participants, we took special care to not abuse the trust given to us by portraying them in a way that is undesirable. We endeavored to show the multiple truths of our findings in a respectful way.

Informed consent was considered throughout the study, not just at enrollment or data analysis. Before every conversation, interview, and member check, participants were verbally consented to participate in the study.

Member Checks

Member checks (respondent validation) increase credibility of the findings and were used throughout the study to ensure capturing the data appropriately to reduce bias. Member checks are important from an ethical point of view and were used to ensure active and ongoing participant consent (Hammersley, 1995). Member checks are simply presenting your description of interviews to participants to ensure congruence. It is considered, "the single most important way of ruling out the possibility of misinterpretation of meaning of what they say and the perspective they have on what is going on" (Maxwell, 1996).

Member checks became increasingly important once the analysis and dissemination phases of this qualitative work began. Although analysis of the data was done by the researcher, if there was any question of the meaning of any conversation within a transcript, participants were contacted to clarify data and to provide informed consent again.

In the consent, I asked participants to consider a second interview where member checks were employed. Member checks were employed multiple times throughout the study. In addition to member checks, I frequently spoke with the CAB and the key actor to be sure that the data "rang true". This was simply done by having a conversation about the de-identified findings and asking, "does that sound right to you?". These conversations were incredibly helpful to assure me that the data were being analyzed in an appropriate cultural context when the key actor confirmed our results. These processes were repeated throughout the study. I had over 50 conversations about the findings of the study with the key actor. Additionally, the community advisory board was contacted frequently to determine an appropriate means for the dissemination

of the findings. By immersing myself in participant observations, having constant contact with the participants, the key actor, and the CAB created an immersive environment.

Sampling Strategy

I chose criterion sampling, a phenomenological approach, in which participants are chosen who meet predefined criteria. The most prominent criterion is the participant's experience with the phenomenon under study. The researcher looks for participants who have shared an experience, but "vary in characteristics and in their individual experiences" (Moser & Korstjens, 2018). I chose to recruit seed participants - service industry workers who shared the experience of encountering an overdose in L5P. Inclusion in the sample was determined by two questions, "do you work in L5P?" and "have you encountered an overdose while working in L5P?" Service industry workers were defined as anyone who works in an establishment in L5P (a commercial district). Criterion sampling was chosen to include a variety of workplaces. By purposefully choosing workers from retail, restaurants, bars, and people who worked as parking lot attendants, I aimed to capture many perspectives since service industry workers are not a monolith. These first respondents agreed to help recruit participants through snowball sampling since I did not feel it was appropriate to recruit people when they were at work, and I did not feel that cold calling people at work was a way to build rapport and trust (Patton, 2002). This first (seed) sample ensured that there was a diversity of workplaces among the remaining participants since I believed they were likely to have contact with friends that worked throughout the commercial district who had similar experiences (Magnani, Sabin, Saidel, & Heckathorn, 2005; Tenny, Brannan, Brannan, & Sharts-Hopko, 2020).

Interdisciplinarity and Cross-Collaboration

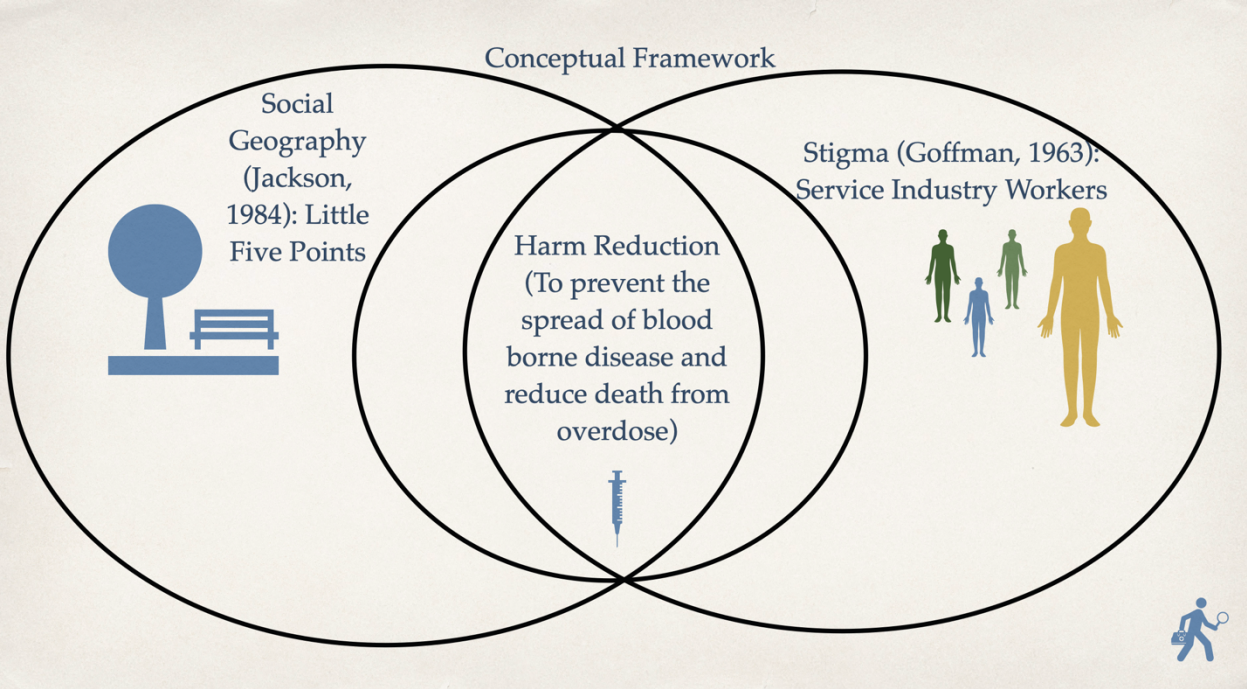
When designing and implementing our qualitative study, I had the benefit of having a historian on the research team. In designing our study, I found little reference to the importance

of historical context being incorporated into qualitative research design. However, I had many questions that could only be answered by historic or archival research. These questions included, "how did L5P become a place where people overdose in the community frequently enough that I knew there was a sample large enough to answer our research question?" and "what are the historical foundations that allowed the opioid epidemic to become the crisis it is today?" These questions are not addressed in the contemporary public health literature. Krieger (2012) insisted, "methods and theory require context" and part of that context is the history of the people and places you study (Krieger, 2012 p.936). Although many qualitative researchers recommend investigating theories (to contextualize or create research questions, but usually after analysis to frame results) throughout a study, it is not generally recognized that the historical context of a given group of individuals, or a place is incredibly important to understanding where the people you are collaborating with to achieve your research goals are now.

Throughout our study I sought to understand the history of the community of L5P and the neighboring residential spaces in order to better contextualize the findings. I came to understand how L5P became a place of tolerance, how it struggles to balance the needs of local businesses and a desire to care for the underserved that have made L5P their home, how it has managed to be a safe space for sub and countercultures in the southern United States (no small feat), and now I see how L5P is at the beginning of a new chapter of its history as the city is changing again. This type of information is essential knowledge for researchers who hope to inform policy aimed at designing a better way forward.

The theoretical framework for the study was informed by concepts from across the social and health sciences disciplines including harm reduction (Boucher et al., 2017; Smith, 2012; Switzer, Guta, de Prinse, Chan Carusone, & Strike, 2015), social geography (Jackson, 1984), and

stigma (Goffman, 1963; Jones & S., 1984) (Figure 1). These lenses add insight, however, none of these constructs could fill in the gaps that were left by not understanding the historical context of L5P. I benefited greatly from having a multidisciplinary team. Qualitative inquiry is not accomplished in isolation. Many qualitative research texts fail to mention the importance of interdisciplinary and cross-collaboration in qualitative research. Developing the framework and design of this study revealed the importance of collaboration, and an ability to be flexible in the approach, and an openness to new avenues as the process unfolded.



Analysis

Analytic Strategy

A pragmatic approach to data analysis was used for this study (Neergaard et al., 2009). Six analytic strategies were used for analysis of interview and observation data: a) coding of data from notes, observations or interviews, b) recording insights and reflections on data, c)

sorting through data to identify similar phrases, patterns, themes, sequences and essential features d) looking for commonalities and differences among the data and extracting them for future consideration and analysis, e) gradually deciding on a small group or generalization that holds true for the data, and f) examining these data in light of existing knowledge (Neergaard, 2009). Data was stored on a password protected computer.

Data were analyzed iteratively and inductively from the first interview and observation. As categories emerged and constructs of interest were identified, matrix tables were created for cross-comparison (Maxwell, 1996), and the literature review began simultaneously with data collection. When data collection was ending, I had not yet uncovered an overarching theme. However, a chance encounter with a homeless man during the last days of fieldwork pointed to a recurring theme in the data. The homeless man explained his feeling of being a ghost in the world, ignored and looked through by others. He turned to the PI and asked, "Do you ever feel invisible?" There was a time where the PI encountered invisibility-- during outreach observations, most people who walked by syringe services outreach, “as people walk by, they do as usual. The ignore us, look right though us.” I had an epiphany this week that my observations of others prove what my homeless man said, “we are ghosts, invisible. People do not want to acknowledge we exist.” (Participant observation, March 15, 2020). This invisibility theme lived within the data and was the "red thread" (re-occurring theme) that had been eluding me for so long. Once discovered, a inductive analysis of the data continued (Graneheim, 2017).

Coding

The data set was independently reviewed by two coders, the PI and a medical school applicant who works at AHRC. Each coder combed through the data and pulled any data that related to the theoretical theme of invisibility (open coding) and compiled these data into a matrix table (Maxwell, 1996). Concurrently, we utilized open coding to search the data for any

responses that were related to the theme of invisibility. We created matrix tables independently that were compared for congruence and came to agreement on the data that fit within the broad theme of invisibility. Additionally, a constant review of the complete data set was performed by both coders so that context was considered throughout the coding process (Maxwell, 1996).

After we agreed upon the data independently compiled in the matrix tables, the tables were combined, and each reviewer coded the combined tables. Once we created these final tables, we compared our results to see if our original hypothesis of invisibility had been realized during open coding. Continuous discussion was essential to the clarification of the themes. Codes were combined into categories, and lastly, theoretical examination of the perception of being hidden was undertaken.

Participants would often begin the descriptions of the encounters with the events that led up to the discovery that someone had overdosed. For example, it was not uncommon for a server to mention that before they encountered a person who had overdosed, they would not have suspected that they were about to need life-saving interventions. There was this moment before each encounter where everything seemed *normal*. The day was not much different than any other, and then it was revealed that someone was in distress and needed to be rescued. This phenomenon felt like something hidden, as if the person was not visible. They were often quite visible, what was invisible was that they had used enough opioids to put them into overdose.

After these first codes were written and combined, we revisited the data to re-code with the new categories to assure congruence of the results. When we met again a week later, we agreed that the codes could be combined into new categories. For example, *blending in as normal*, *double living*, and *covers for using opioids/heroin* all had a common theme, of blending in, or

that a person could keep their opioid use concealed. There was one code that was not agreed upon initially: that *overdose,* and *artifacts* reveal things that are hidden.

Overdose and artifacts (e.g., syringes, drugs) reveal drug use, but the second coder also noted that these artifacts presented perceived dangers to the service industry workers, a code the PI had missed. When *artifacts* and *dangers* were combined, there was the congruence of the data, and the agreed upon category was danger" Additionally, we agreed that *treatment*, *services*, and *social problems* should be examined later, as these were not so much perceptions, but attitudes of how service industry workers felt services should be provided in L5P. After combining the codes into categories, we agreed to the final themes. Once the final themes were identified, we re-coded the data one last time to ensure intercoder reliability. The data was coded with the final themes independently and we had 98% interrater agreement on final coded themes. The themes were then presented to the actor to see if they agreed that the results were believable. The key actor further validated the results and we agreed to finalize the themes and definitions.

Conclusion

Research questions determine the method. For our study, qualitative methodology was clearly needed to understand the phenomenon of interest—"what is it like for laypeople to rescue strangers from an opioid overdose in a community setting with little or no training?" I was aware this phenomenon was occurring, and I was aware people were overdosing and dying in L5P, but I was not sure where to begin. By immersing myself in SSP with the AHRC, I was able to understand the needs of those that are working on the ground, dying in the streets, and finding a path to recovery. However, when it came time to choose a method, I was unsure of the approach. I felt it was necessary to do an ethnography because of the unique culture of the community, however, I did not want to be constrained by a rigid approach and even more rigid

ethnographic analysis. In my search to design a qualitative study that was appropriate for our question and participants, I found that to serve the best interests of the researchers and the participants, multiple qualitative methods, from multiple approaches, were necessary.

Blending qualitative methods can leave a researcher open to questions about rigor and trustworthiness (Graneheim & Lundman, 2004). However, our goal was to create a study that was ethical, community centered and participant centered. To accomplish this goal, I blended distinct qualitative methods because that is what the phenomena of interest required. Our results rang true not only for our participants, but also resonated with existing theories about the nature of stigma and its role as a barrier to harm reduction. Most importantly, participants indicated that the results accurately represent their thoughts and experiences and do justice to the complexity of living and working in L5P. To honor the commercial district of L5P and the participants, I would like to close with some unanalyzed data. These quotes came from the question: If you were to describe L5P to someone who has never been here before, how would you describe it (appendix A)?

> *"You can be driving through Little Five Points and you could be in any big city in the world. It just feels so open and diverse. I like being around people where I'm not judged by how I look. To me it's an open culture."*

> *"It seems like a lot of people that work in Little Five Points know each other or people who live nearby and interact with the people who are working there. It becomes a place where there's a lot of people who you do know their names."*

"Midtown used to belong to the gays. It doesn't anymore. We're kind of everywhere now. But we have a huge concentration of LGBTQ that live here (in L5P) and East Atlanta. And I've noticed lately, with the weather changing and people out walking, I'm seeing more same sex couples or gender-- you know, women-women, men-men holding hands and relaxing here. You can't do that in other parts of the city. You can't. Not for fear of being attacked or screamed at or something. Here it adds to the flavor."

"I would describe it as a very unique, bohemian-style community that sits in between two of the oldest Atlanta communities, Inman park, Candler park. And it's known for independent shopping, local bars, and restaurants in the heart and soul of Atlanta."

"It's so magical. I don't know. It's eclectic, and it's come as you are. And I feel like everybody is really open to each other. I don't know. It's hard to explain it to people that haven't been there. And I lived in other places that had eclectic neighborhoods, but they didn't have the same feeling that Little Five Points has. Little Five points has this very communal, we're all in it together feeling."

"I also feel like there's a lot of people who come to Little Five Points to just be freaky or weird for the day, or to stare at people who are weird to them."

"I think that's why people go to it like it's a tourist destination in Georgia. I think for some people it becomes a place where they feel like they belong and fit in for the first time, which I certainly felt like in Little Five. And then I feel like for other people, it's a place where they can go and laugh at the people who felt like they never belonged anywhere."

Chapter 2: Service Industry Workers Perceptions of the hidden and invisible nature of opioid and heroin use in Little Five Points, Atlanta

Study Context

In 2014, to address the increasing mortality of opioid overdoses in Georgia, standing orders were implemented to provide naloxone, an opioid antagonist to anyone who might encounter an opioid overdose (Mueller, Walley, Calcaterra, Glanz, & Binswanger, 2015). The Governor at that time, Nathan Deal signed the Senate Bill 121, Georgia 911 Medical Amnesty Law to provide legal protection to those who administer naloxone to those experiencing an opioid overdose. Included in this law were protections for those in possession of drugs or underage drinking, to assure that people would call EMS without fear of criminal charges (Georgia Drugs and Narcotics Agency, 2017). In the commercial district of Little Five Points (L5P) Atlanta, over 1,000 units of naloxone have been distributed for free to residents and community members including service industry workers via the Little Five Points Pharmacy in collaboration with the Georgia Department of Public Health (GDPH), the Atlanta Harm Reduction Coalition (AHRC), and Georgia Overdose Prevention (Febres-Cordero, 2021; Foundation, 2020). The AHRC also distributes free naloxone during their Sunday morning syringe service program (SSP) in L5P, and in 2020 dispensed over 28,000 overdose prevention kits that included naloxone throughout metro Atlanta (AHRC, 2020). The AHRC started as a grass roots initiative by community members (including Mona Bennett) who saw a need to dispose of used syringes and to provide sterile syringes to address the AIDS endemic in Georgia. Since AHRC's foundation, it has expanded its efforts to provide wrap around services including, Human Immunodeficiency Virus (HIV) screening and a community clinic that offers medication assisted therapy for those who wish to recover from opioid use. Among the community members

who have received naloxone are service industry workers (waiters/waitresses, bartenders, clerks, pharmacy workers, theater workers, etc.) in L5P. Service industry workers in L5P are keenly aware of the opioid epidemic as the epidemic has impacted many of them, either in their personal lives or as first responders when someone overdoses in the establishment in which they work.

Naloxone is now widely available in the United States, including in Georgia. However, naloxone alone does not reduce opioid overdose mortality. People who are at the scene of an opioid overdose must be able to recognize the signs of opioid overdose, respond with interventions such as rescue breathing and cardiopulmonary compressions and, if available, timely administration of naloxone (Adams, 2019). Knowing the signs of opioid overdose can mean the difference between life and death. Currently, laypeople who are thought to be likely to encounter opioid overdose are being trained to administer naloxone, including people who use drugs, family and friends of people who use drugs, people who utilize syringe exchange, people who are in prison, people in homeless shelters, harm reduction centers, drug treatment facilities and healthcare workers (Clark, Wilder, & Winstanley, 2014; Giglio, Li, & DiMaggio, 2015; McAuley, Aucott, & Matheson, 2015). However, for those in communities where overdose happens in public spaces, training is lacking, and interest in training service industry workers who are encountering an overdose is understudied (Wolfson-Stofko, Bennett, Elliott, & Curtis, 2017). Therefore, a harm reduction approach needs to be implemented into the spaces in which overdose occurs and targeted to those likely to respond to an overdose.

Harm Reduction

Harm reduction is a set of principles to reduce injury from behaviors commonly associated with increased mortality and disease transmission. Harm reduction does not require abstinence but acknowledges that people will participate in behaviors that negatively affect health. For example, the exchange of sterile syringes for used syringes for people who use

injection drugs is done to decrease transmission of blood-borne diseases such as HIV and Hepatitis C (HCV), thereby decreasing disease and mortality among people who use drugs (Des Jarlais, Arasteh, & Friedman, 2011; Turner et al., 2011). Additionally, SSP's have been found to decrease needle stick injuries among first responders (Groseclose et al., 1995) and remove syringes from the streets (Ksobiech, 2004). In Georgia, SSP's were made legal in 2019, but even with this new status, the GDPH proposed rulemaking concerning the running of SSP's has made clear the persistent stigmas surrounding injection drug use. The GDPH regulations for SSP's contains stigmatizing language to characterize the communities where the SSP's provide care. Included in the stigmatizing language is, keeping SSP's 1,000 feet away from any school (as if people who use injection drugs are a danger to children), the assumption that SSP's are dirty and must be inspected for cleanliness, and the constant use of "substance abusers" rather than person-centered language such as, "people who use drugs" throughout their policy regulations (GDPH, 2020). Additionally, no protection for those who exchange syringes were written into the new laws and policy, further exemplifying the persistent stigma associated with injection drug use and how those with power use language that stigmatizes people who use drugs.

Stigma

To avoid the stigma and judgment associated with drug use, many people who use injection drugs, namely heroin, have found ways to hide within our society. Goffman (1963) refers to these people within society as the *discreditable*, or those whose stigma can be concealed. People who inject drugs and use heroin are one of many groups who are considered discreditable. Those who are discreditable have adapted by learning to live a *double life,* as society has deemed them to be less desirable, immoral, dangerous, or weak (Goffman, 1963 p.3). For example, the Kalderash and Machwaya Rom Gypsies have adapted to blend into the dominant population to survive stigma for many generations (Silverman, 1982; Williams, Lerch,

& Lerch, 1982). Silverman (1982) posits that the Rom Gypsies have survived anti-gypsy sentiments by *boundary-crossing,* or more simply, remaining hidden and blending in with the dominant culture, therefore making their gypsy status invisible to others.

Williams (1982) notes that the Kalderash work to remain invisible due to the persistent stereotypes in communities outside their communes. Therefore, invisibility becomes the "modality of integration" in the dominant culture needed to survive (p.325). By playing the roles expected from the Gypsies within the dominant culture, they can remain hidden when not participating in their communal life in their chosen place, where they feel safe and will often return to places where they find refuge from stigma regardless of the desires of the surrounding communities in times of urban renewal (Williams, 1982 p.329).

Social Geography and Stigma

In social geography, Sibley (1981) talks about zones people fall into within cities, the *dominant* and the *hidden* (Sibley, 1981). The hidden zone create spaces where people experience a muted culture, often resulting from exploitation and unequal distribution of services that lead to inequities (Sibley, 1981). Within the urban spatial structure, the hidden/muted people cope with the urban environment by creatively using the spaces available to them regardless of how these spaces may be built to suit the dominant culture's needs (Sibley, 1981).

These adaptations have served many so-called discreditable populations in our society throughout our history, including women who work as prostitutes, sexual and gender minorities including people who identify as gay, lesbian, transgender, and bisexual (Goffman, 1963; Mayer et al., 2013), people who use Methadone maintenance (Woo et al., 2017) those with genital herpes (Breitkopf, 2004; Fortenberry, 2004), people with mental illness and their families (Corrigan, Watson, & Miller, 2006), and people who use alcohol and drugs (Yang, Wong, Grivel, & Hasin, 2017), to name a few. For many, there are considerable stressors to face

regardless of the ability to conceal stigma symbols (Goffman, 1963), most notably, the possibility of the stigma being revealed (Pachankis, 2007).

Method

We used qualitative descriptive methods to describe the perceptions of encountering an opioid overdose, to assess the needs of the L5Pcommunity, and to produce knowledge that can be used to inform future research and intervention design (Maxwell, 1996; Neergaard, 2009). The qualitative descriptive methodology is pragmatic and rigorous (Street et al., 2019), and this method may include elements of other qualitative methods without being constrained by a single approach; our study included elements of ethnography (participant observation) and phenomenology (criterion sampling) (Kim, Sefcik, & Bradway, 2017; Neergaard, 2009; Sandelowski, 2010). We engaged a community advisory board, triangulated methods, conducted member checks, and engaged in reflexivity to achieve rigor (complete methods described in Chapter 1, methods paper).

Ethics

The Emory Institutional Review Board (IRB) approved this study. Informed verbal consent was obtained before participation and before any follow-up interviews. For phone interviews, consent forms were mailed to the participant's homes, and signed consents were mailed back. Participants were asked for a photo (and consented to a photo release) for use in future health education seminars to humanize data.

Results

In Little Five Points (L5P), Atlanta, an urban milieu exists rarely found in the southeastern United States. Often referred to as the Haight-Ashbury of the South, this commercial district is well-known as a counterculture (in opposition to the dominant culture)

spring. Much like Haight-Ashbury in San Francisco, L5P's most recent incarnation was founded by a hippie counterculture. In the late 1960s into the early 1970s, those who strove for independence from the majority views of a conservative South began congregating in L5P after their stomping grounds around 10th and 14th (The Strip) street became too expensive (Hopkins, 1970). The hippies, artists, musicians, marijuana and LSD advocates moved into the then less desirable and more affordable neighboring communities surrounding L5P, including Edgewood, Candler Park (split from Edgewood in 1908), Inman Park (Atlanta's first residential neighborhood), Lake Claire, Poncey-Highland, Reynoldstown, Cabbagetown, Kirkwood, and Grant Park (Hartel, 2010). Little did the hippies know, their insurgence would, in time, cause the same gentrification that had befallen 10th and 14th street. The commercial district of L5P somehow has maintained its counterculture for the past 50 years, regardless of the shift in economic class in the surrounding neighborhoods.

The ability of L5P to retain its uniqueness is in part due to the efforts of those first hippies that established L5P as a haven for those who would not conform to the dominant culture. In a fight against the State-planned construction of two highways (I-485 and an extension of Stone Mountain Tollway), neighborhood community members, activists, and political characters came together to halt construction of the freeways and in 1991 came to an agreement with the government on plans to preserve the land that had been excavated in the early phases of construction. So infamous was the battle that spanned 30 years that it is the most well-known of Atlanta's freeway revolts.

This political savvy empowered many in L5P and the surrounding areas to create neighborhoods to their liking. From creating a local bank, establishing surrounding neighborhoods as historical, designing restrictions on building and rental codes in L5P, and

obtaining Neighborhood Commercial District (NCD) zoning, they secured a future that has endured for the past 50 years. Founded by a co-op, communal, and independent philosophies, L5P has remained primarily unchanged. Given this time to ferment, L5P has become well-established as the epicenter of counterculture in the southeastern United States.

The counterculture established in the 1970s in L5P evolved to include an underground syringe sale and exchange established in 1995 in response to the global epidemic of HIV (Bennett, 2014). The community saw a need and took it upon themselves to provide services to decrease transmission of HIV. Before the research was done and policy was implemented, community leaders in L5P understood that access to over-the-counter syringes for sale and exchange would reduce transmission of HIV and HCV (Cooper et al., 2011) and save lives. These actions are at the heart of harm reduction movements across the country, which were often in opposition to authority and state laws (Smith, 2012). In 2019, syringe exchange became legal in Georgia. In 2020, the Atlanta Harm Reduction Coalition (AHTC) provided SSP's in two Atlanta neighborhoods as it has done since 1995, the Bluff (located in between English Avenue and Vine City) and in L5P, legally. In 2020, The AHRC) collected 152,522 used syringes and distributed 173,954 sterile syringes (AHRC, 2020) through these two sites. Regardless of the need for people to have access to SSP's, harm reduction has been controversial as many in the healthcare industry, politics, and our society feel that SSPs enable "bad behavior" (Castillo, 2018).

Sample

The sample (N=15) for this study was predominately White, with varying ethnicities. Participants self-identified as Jewish, Irish American, Italian American, and Native American. The sample was primarily male, with a mean age of 43 years old (range 19-66), having some

college or were college-graduates, and worked in the neighborhood for five years or more (87%). In their roles as service industry works, participants were business owners, managers, restaurant servers, bartenders, parking attendants, pharmacy techs, pharmacists, and clerks. During interviews, many of the participants indicated that they lived near L5P in the past or present. Many participants (33%) lived in zip codes at least ten miles, and as many as 70 miles from L5P (Table 1). Many cited the lack of affordable housing as a deterrent from living near L5P.

The participants are not simply the statistics and demographics described above. They are complex people with unique life histories that shape their experiences in L5P and the ways they engaged with the interview questions. To understand them more fully, we also collected personal data such as pursuits outside of service industry work. Slightly more than half (8/15) of the participants did not consider themselves exclusively as service industry workers and pursued interests outside of their primary means of income. Outside interests primarily included artistic pursuits, including music, dance, and film. Additionally, in many of the interviews, the service industry workers acknowledged having intimate knowledge of drug use and opioid use either from personal, friends, work, or family exposures (93%). Groups and individuals with social ties, including intimate and personal knowledge of drug use and overdose, tend to respond inclusively to those who have overdosed (Jones & S., 1984).

> *I've known people who were overdosed, but then I also, of course, just within our community as well, within the server community and within just the service industry community, I've known people, not who have been very close to me, but who have been acquaintances, or I've been friends of other people who've overdosed. I mean, I think that's part of the nature of the service industry for a long time in Atlanta.* -Tula

These attributes (obtained with consent), along with others gained from the demographics survey and the interview data, provide a contextual description of participants, that is summarized in the table below.

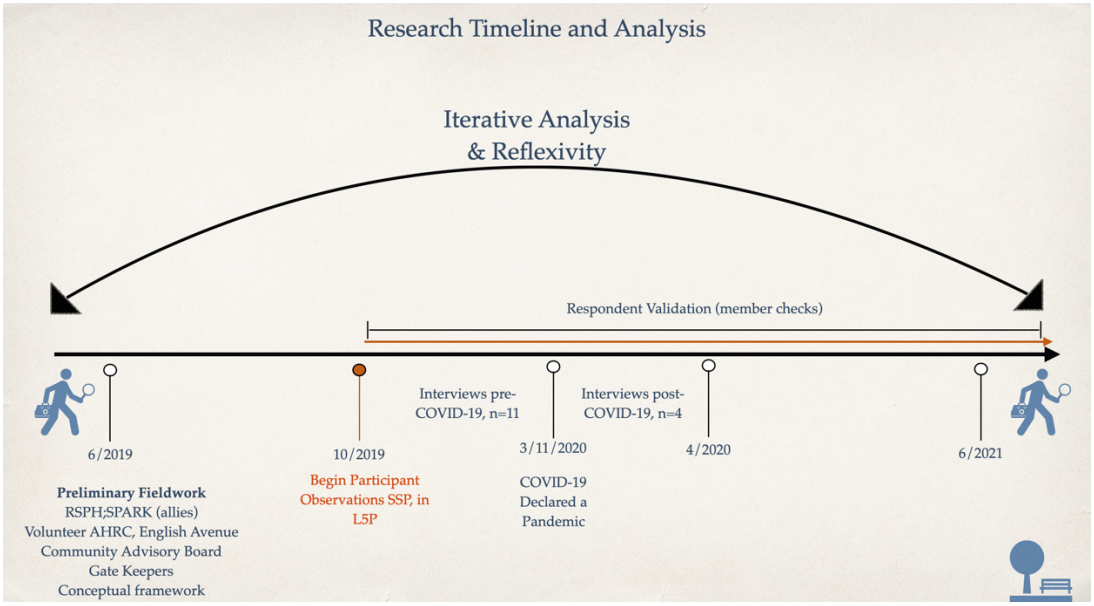
The Participants (with aliases)

Andy	A middle-aged mother with over 20 years in L5P. Has a domestic relationship with a person on Methadone maintenance and is a harm reduction advocate.
Daniel	A middle-aged queer person in recovery from heroin use with over 25 years' experience in L5P. Although Daniel advocates for harm reduction, he strives to shield others from the pain he has experienced from heroin use and rescue them from an opioid overdose.
Devin	A middle-aged father with over 20 years in L5P. He had a family member with addiction but did not claim to understand addiction and feels those who cannot overcome or accept their addictions are weak.
Tom	A young adult man with six years in L5P. A private person, not one to usually participate, but felt his story was important to tell. Incredibly empathetic and insightful.
Sam	A late adulthood bachelor with over 20 years in L5P and spent much of his youth in L5P and surrounding neighborhoods. Acknowledges he is jaded by years of negative experiences with homeless people and people who use heroin in L5P.
Heather	A young adult androgynous woman, with less than five years in L5P, avid cyclist and dancer. She seems to be trying to understand the complexities of urban drug use.

Alan	A young adult male who is wise beyond his years, an aspiring blade master with less than five years in L5P who has friends addicted to drugs and is a harm reductionist.
Melinda	A middle-aged sassy, southern woman and self-proclaimed recluse who pulls no punches. She says things as she believes them to be true and with conviction. Over 20 years in L5P.
Frank	A middle-aged cocky, confident, confrontational, funny, and smart father with more than 11 years in L5P.
Rose	A late adulthood woman interested in natural and herbal medicine, she is compassionate, caring, and does not hide her emotions with over 11 years in L5P.
Teddy	A late adulthood HIV positive LGBTQ man and a self-proclaimed “bear” and veteran, he is sweet and kind with more than six years in L5P.
Elvin	A young adulthood, soft-spoken man who has few words to share with over six years in L5P.
Kayla	A middle-aged community-minded woman in recovery from unspecified drug use loves L5P and is concerned with its welfare and growth with more than six years in L5P.
Tula	A middle -aged woman not in L5P as much as she used to be but feels a connection to L5P that persists throughout the years. Over six years in L5P.
Ben	A middle-aged confident, knowledgeable man who has had friendships with those in recovery, with more than 11 years in L5P.

Data collection

Data were collected whenever and wherever the participant was most comfortable. COVID-19 was declared a Pandemic on March 11, 2020, and once COVID-19 "stay at home" orders were implemented, interviews were conducted over the phone. A complete timeline is presented below.



We employed a semi-structured, open-ended interview guide. Interviews were recorded and transcribed by a professional service and then rechecked by the PI for accuracy. The interview guide included a question about the phenomenon itself, and we added 12 additional questions with probes to attempt to answer secondary and sub aims. Participant observations and fieldwork were informed by James Spradley's works (1979-1980) and David Fetterman (1998).

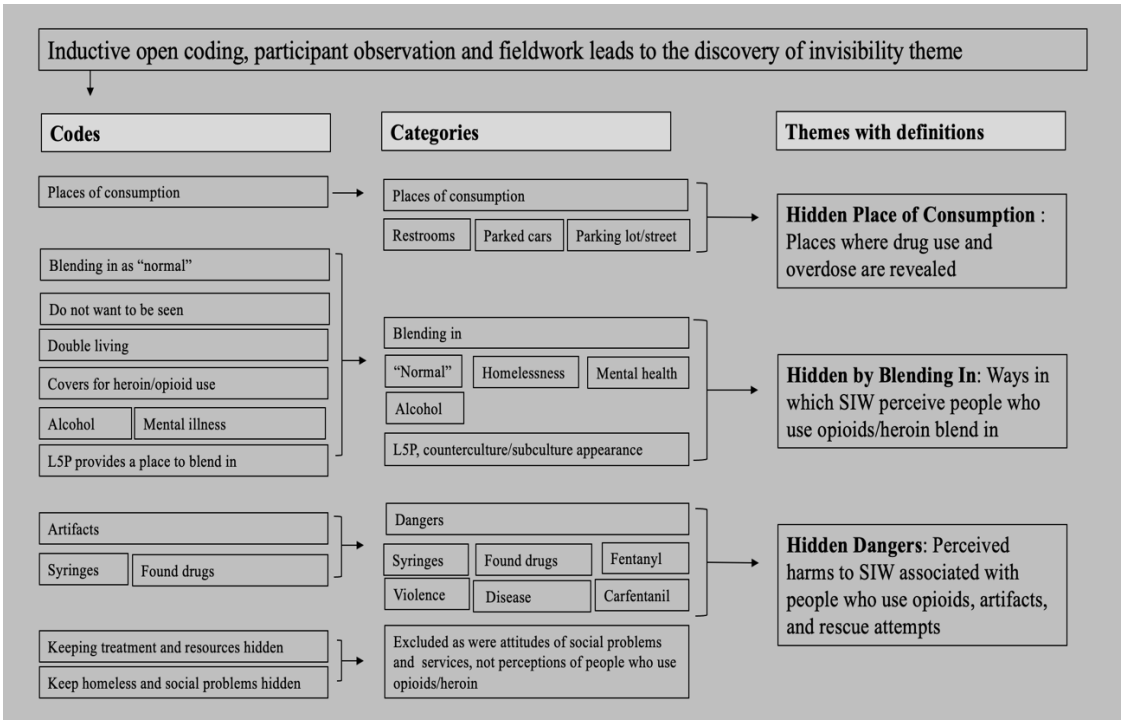
Interviews averaged 54 minutes pre-COVID-19 and 49 minutes post-COVID-19. The PI collected 13 hours of interview data. Observations were also recorded by the PI while volunteering with the AHRC syringe services program outreach (once a week) and included in field notes. As notes were reviewed, reflections on the day in outreach were also captured. Syringe service program and community outreach observations were done for a total of 44 hours.

An additional 12 hours of fieldwork was conducted throughout the neighborhood, including visits to establishments to bring the total hours in the field to 56 hours.

Analysis

Data were analyzed iteratively and inductively from the first interview and observation. As categories emerged and constructs of interest were identified, matrix tables were created (Maxwell, 1996), and the literature review began simultaneously with data collection.

Once the final themes were identified, we coded the data to ensure intercoder reliability. The data was coded with the final themes independently, and we had a 98% inter-rater agreement on the final coded themes. The themes were then presented to a key actor (informant) to see if they agreed that the results were believable. The key actor further validated the results, and we agreed to finalize the themes and definitions. A thematic analysis coding tree is presented below.



Results

Three themes were identified in our inquiry into the invisible and hidden nature of opioid use and overdose in our analysis: hidden places of consumption; hidden by blending in; and hidden dangers.

Theme 1: Hidden Places of Consumption

Restaurant, bar, and coffee shop restrooms for customers, parked cars, and the parking lots throughout L5P were all identified as places of perceived consumption of opioids and other drugs in our sample, with restroom use being the most common. Service industry workers confirmed or assumed drug consumption when assessing for overdose, rescuing from an overdose, and shared secondhand accounts. Many of the restrooms in retail establishments are off-limits, and restaurants and bars advertise restrooms as for customers only (no public restrooms); however, it was the customers who overdosed in many of the accounts. Many of the servers in our sample profiled those who asked to use the restroom, by their appearance (whether they are customers or not) for potential drug use on the premises and carried naloxone in anticipation of opioid overdoses. "*So, we had several people going in and out of our bathroom all the time to use drugs, and we kept like the revival stuff behind the bar."* -Tula

Assumptions that someone rescued from an overdose in an establishment, car, or parking lot used a nearby restroom for customers only to consume drugs were also common in our sample. "*So, I grabbed [Narcan]. And we ran out there. And luckily, the kid's car wasn't locked, but his car was running. And he had gone to ----, because he had his cup and everything. He had just used in the bathroom there. And then come back to our parking lot to leave, because it's easier to park in our parking lot than theirs."* -Andy

There were also secondhand accounts of frequent opioid use in customer bathrooms; all participants had heard stories of overdose and overdose deaths in neighboring businesses' bathrooms.

> *I've heard there was some guy in the bathroom once locked himself in the bathroom, so they had to break down the door or take the hinges off and take the door off to get to the guy inside..., one of the workers there he told me a story about--because the bathrooms have automatic lights, so they go off after a certain amount of time. And then some guy said in the bathroom was occupied, but the lights had gone out. So that means there had been no movement in there for like 15 or 20 minutes*. - Heather

Participants perceived that syringes provided in the neighborhood through syringe exchange or sale contribute to customer restrooms for drug consumption. Tom remarked, "*I feel like a lot of people show up, get their clean needles, and then look for the closest private-ish place to go shoot up. And that happens to be our bathrooms."* Restroom use was so prevalent in the accounts, one participant went so far as to label people who consume drugs in L5P as "bathroom people."

Additionally, participants recalled instances when opioid consumption and overdose were revealed in vehicles and parking lots. Others recounted times they were called to cars or the parking lot to assess for overdose. Opioid overdose rescue in the parking lot was familiar enough that others could identify when there was a need for assistance and decided whether to participate in rescue attempts with others. Participants showed remarkably keen insight into the reasons people might consume in public places, including the need for privacy and a desire to remain hidden when injecting heroin and other drugs, while also understanding the benefit of using in a public/community space. *"I think a lot of people use heroin (in L5P) because they*

know that they can be rescued if--and I think that maybe a reason they do it in public places is if something does happen, maybe someone will see them, and they'll get help. But if you do in your own house, nobody's going to call for help." -Tom

This insight may come from the counterculture nature of L5P. Many who live on the streets, work, or own businesses in L5P understand the need for privacy while also fulfilling a need to belong somewhere in our society. The independent nature of L5P lends itself to a type of privacy that may not be found in other commercial areas.

Theme 2: Hidden by Blending In

Service industry workers perceived that people who used opioids attempt to remain hidden in society. It is only when they overdose, and an attempt is made to rescue, that they are revealed as people who use opioids. There were specific ways service industry workers perceived that people who use opioids blend in, including intoxication and alcohol use, counterculture and subculture appearance, homelessness and untreated mental health conditions, and appearing as "normal."

Intoxication and alcohol use

Most of the study participants worked in an establishment where alcohol is sold. These participants often spoke of an inability to differentiate between alcohol use and opioid intoxication. As Frank recalls his encounter, "*I didn't get him this drunk. I don't remember this, so this is bad. And it wasn't a seizure, so we're like, OK, so this is OD for sure."*

Other participants recalled that ordering an alcoholic beverage was a way for the person encountered in overdose to pass as a customer. Bartenders in our sample perceived that alcohol intoxication and overdose could present in similar forms; however, they have difficulty differentiating between the two. "*Honestly, no, I feel really naive when it comes to this stuff.*

Yeah. No. If it wasn't the obvious [Tula found the person with a needle in their arm], I probably would have thought he was passed out drunk or something." -Tula. Alcohol use is not uncommon in L5P. In addition to a liquor store and convenience store that sells alcohol, there are many bars and restaurants in the area that serve alcohol. There are many scenes (i.e., music, art, skateboarding, etc.) within the subcultures of L5P that embrace alcohol as part of the culture. In L5P, it socially acceptable to consume large amounts of alcohol and exhibit behaviors associated with public drunkenness. This acceptability makes it possible to blend in with drinking when using other drugs, including heroin.

Counterculture and subculture appearance

L5P provides a place for counterculture and subcultures to exist. Many large cities have similar neighborhoods. L5P has been compared to Haight-Ashbury in San Francisco and The Village in New York City. For refugees of the dominant culture, particularly in the South, L5P is a haven for those considered by the mainstream as "weirdos." Service industry workers are keenly aware of this image from both internal and external perceptions. Having a space like L5P enables people to blend in, which may be unavailable in Atlanta's other areas. As Tom stated,

> *It's not like seeing people with these modifications to their bodies [tattoos and piercings] is anything out of the ordinary or even a red flag by itself. So, it does become difficult to, if you are trying to build a profile for this kind of person, it makes it difficult being where we are. It'd be one thing if you were in the middle of, I don't know, a very suburban area where that look isn't as common. That person might stick out like a sore thumb. In Little Five Points, it's much more difficult to just look at somebody and assume anything about their life.*

Homelessness and untreated mental health problems

Servers in the area shared experiences of encountering people that were homeless or needed mental health interventions. Others displayed frustration with the homeless population, implying that drug use and homelessness are synonymous. Mental illness often confounded perceived drug use. Heather elaborated on the inability to distinguish between symptoms of mental illness and drug use, "*and this dude was like-- I mean, we tried to get him out of the restaurant because he had no clothes on. But again, he kept saying he was not crazy, so what if he was just schizophrenic? What if he wasn't even on drugs?*"

Some in the sample had worked in the neighborhood for so long that they believed that they can see the progression from customer to homeless to person who uses drugs. Additionally, many participants attributed mental health deterioration to homelessness. In L5P, there has been a community of homeless people since the return of veterans from the Vietnam War. The welcoming nature of the counterculture vibe spoke to the veterans, and many have others joined them since, including traveling train hoppers, and homeless people who have migrated from downtown Atlanta.

In L5P, there are many pedestrians, and L5P was intentionally designed as a place to park and walk around all day. This brings an opportunity to have many needs met, including the need for food, water, money, and an ability to have social connectedness. During my observations, one of the remaining homeless Vietnam veterans was brought breakfast from someone who often spent time with him. In L5P, many homeless people have a symbiotic relationship with neighbors, business owners, and workers. They are part of the community. Many of the servers felt a connection with someone who was homeless or had their "favorites." Many of the people who are homeless are given nicknames and are known throughout the neighborhood. Nicknames

were often based on the homeless person's appearance. For example, “shipwreck” is a man who likes to tear his clothes up, therefore making him look like he is a survivor of a shipwreck. In L5P, we often saw servers who cared for those who are homeless while also keeping them hidden to make their businesses more welcoming for consumers. This was made apparent by numerous homeless people encountered during outreach who felt they were no longer wanted in the neighborhood as the business and property owners were constantly moving them from in front of establishments to behind them, with the threat of arrest for those who would not comply. One man had lived in front of a store front for over 20 years, but after a new sidewalk was laid down, he was forced to move from his usual spot. It should be noted that although it may have not been the cause of his death, this man died a few weeks later after being convinced to go to a nursing home.

There is no Normal

Although people tend to blend in until revealed does not mean that service industry workers do not profile and stereotype people who inject drugs and use opioids. When asked to describe a person who uses opioids, Devin stated “*I mean, a lot of times they're, like, super unhealthy looking, pale, pasty, skinny as fuck”*.

Service industry workers encounter hundreds of people a week. There are many reasons they might profile people. When someone walks in the door, they may assess whether they believe they will get a good tip from someone or be treated well based solely on their appearance or because they do not want people using drugs on their premises. But, for those who have worked in the industry long enough, they learn that this type of profiling has many flaws. As Alan explained *“some people look clean. Some people are really dirty. We see both ends of the*

spectrum, you know, and all of the in-betweens, and whatnot. Occasionally, there will be a surprise, like the people that blend in".

Service industry workers also note their expectations of what a person who uses opioids looks like are challenged when they discover someone older or younger than expected. Additionally, behaviors incongruent with their preconceived stereotype of people who use opioids confused some of the participants. "*He was always up, like high spirits, like high energy. He never seemed like he had that kind of downer personality that kind of goes along with, to me, with heroin use."* -Devin. Some service industry workers reported an increased ability to see people who used drugs and were perceived to be hidden as they become repeatedly exposed to opioid overdoses or had personal experience with opioid addiction and dependency. "*There's an old saying amongst drug users that drug users vibrate almost like aura if you will. They have a vibration about them and the color around them".* -Daniel

We must note that what is considered "normal" in L5P would probably be considered unusual in other communities. For the participants, it was normal to have personal relationships with people who use drugs within their counterculture, social circles, and families. Part of this counterculture is a drug culture. Servers in L5P are part of this culture. Part of what attracted them to working in L5P was a desire to not work for "the man" or become part of "the system." Some, or even most SIWs in L5P, do drugs or have a history of drug use of some kind. Many use caffeine, tobacco, alcohol, marijuana, and cocaine, among others. But L5P is not a drug den. Drug use is simply part of the culture. It is not perceived that you are bad if you participate in the drug culture. Many are experimenting with drugs, including drugs in their socializing. In particular, the marijuana culture is embraced in L5P, and marijuana can often be smelled in the air as people walk the streets.

Theme 3: Hidden Dangers

Syringes were the most common artifacts of drug use in L5P. Often discovered by service industry workers or recalled in neighborhood folklore, artifacts were noted by many as revealing that injection drug and opioid use had occurred in the area. Many fears were revealed when speaking about artifacts. Fears and stigma were coupled in many of these instances when recalling found artifacts. Fear of disease transmission, fear of unintentional overdose, and fear of violence were common and appeared to contribute to our service industry workers' persistent stigma, regardless of the accepting nature of service industry workers.

Disease transmission

Some service industry workers shared stories of collecting discarded syringes and neighbors coming to complain that discarded syringes were found on their properties in the surrounding residential neighborhoods. At the root of the conversation about discarded syringes was a fear of disease transmission. *"But we've definitely found needles and that kind of thing. And that's all around Little Five Points. I'll see needles just walking around, which is really scary".* -Kayla.

Participants had differing attitudes about and willingness to do rescue breathing. While some did not hesitate to say they would provide rescue breathing if necessary, others believed that people who overdose from opioid use are infected with diseases that providing rescue breathing.

> *And that's where my asshole tendencies come in, because I really don't give a shit. And I literally, at least in my head, the way I feel about it, I literally would stand over them and watch them die before giving them mouth to mouth. Because I don't know what diseases they might have. I have more to lose in life at that*

moment than they do. And I'm not going to risk myself to save someone who, unfortunately, I see as weak. -Devin

Post-2020, rescue breathing takes on a new challenge-- the genuine fear of transmission of Covid-19. However, the participants interviewed during Covid-19 still acknowledged the importance of providing rescue breathing, when necessary, even during a pandemic. "*I may be more hesitant [to do rescue breathing], but I think it's the right thing to do."* -Ben

Unintentional overdose: Fentanyl and Carfentanil and found drugs

The belief in the danger of overdose by providing interventions that require close physical contact with someone who is overdosing was identified in the sample. Fentanyl and carfentanil have changed the landscape of opioid overdose and undoubtedly brought the use of illicit opioids to the attention of many in L5P by increasing overdose mortality. As Alan is quick to point out, *"like today, you know, heroin is killing people, not only because you can have a plain old opioid overdose, but it's cut with fentanyl."* The invisible nature of drug residue was of concern "*Because especially if you're suspecting this person has got fentanyl in their system, that's the last thing you want is to contact with the, you know, mucus. We didn't know yet about the danger of carfentanil and wearing gloves [during a rescue attempt]."* -Teddy

Many in the sample have lost someone or knows of someone who died from a heroin overdose or from an overdose where fentanyl was later to be found to be in other drugs (namely cocaine). Even as we prepared this manuscript, a young man who frequented L5P died of a drug-related death rumored throughout L5P to have been from cocaine laced with fentanyl. Almost every week during syringe service outreach in L5P, we were told stories of people who had died that week, and fentanyl was almost always part of the conversation. People are afraid of fentanyl; they know how deadly it is and how it has ravished the community.

Fear of perceived violence

Our participants relayed assumptions that people who use drugs are violent. The fear of violence by those who use drugs is a barrier to opioid overdose rescue and a clear sign of stigma. Nonetheless, fear of violence was supported in the data and needed to be addressed to confront stereotypes of people who use drugs. **"***Every time I ride by there, there's always just people hanging around. And it's always people you just don't know. I mean, are they going to be violent? Are they not? I mean, it's rehab, so I'm hoping a lot of them are sober, but I don't know".* -Heather. Their inability to judge whether or not someone has violent tendencies also supports how the possibility of violence remains hidden and keeps people from intervening with those they may consider at risk for an overdose.

> *And I didn't have proof. I didn't have-- but it was my gut. Like, I knew. I was like-- and the guy he was talking to definitely looked like he was on heroin and was slow drinking. Like, ordered a drink, but I don't think I even finished it, that kind of thing. And like-- but I mean, there's nothing I really can do unless I can see it. Like, it's not like I can, you know? And who knows like how dangerous that particular person is, you know, or whatnot?* -Kayla

The people who work in L5P are aware of the many dangers in the neighborhood. People have been held up at gunpoint, raped, beaten, and even killed in L5P. Not to say that L5P is any more dangerous than other in-town areas in Atlanta, but for the people who work in the area, there is a need to be street smart. It is not uncommon for someone to be taking out the garbage alone late at night, securing large amounts of cash at the end of the day, or walking home late at night alone. There are many potential threats of

violence in the area, the service industry workers are aware of all these threats, and perhaps these fears play into the fears that people who are suspected to be using heroin will be violent.

Discussion

Three themes were identified in our inquiry into the invisible and hidden nature of opioid use and overdose in our analysis: hidden places of consumption; hidden by blending in; and hidden dangers. In our search to understand stigma, we discovered our results align with Jones et al. (1984), who built on the work of Goffman (1963) to understand social stigma and those who are *discreditable*, or those whose stigma can be concealed. Jones (1984) defines the six dimensions of stigma (concealability, course, disruptiveness, aesthetic qualities, origin, and peril). The four dimensions that align with our results (concealability, disruptiveness, aesthetic qualities, and peril), and the work of Goffman (1963) as they are relevant to our results are discussed below.

Concealability

The concealability dimension posits the following questions: Is the condition hidden or obvious, and to what extent is the visibility controllable? (Jones & S., 1984, p.24). The belief that those who use injection drugs and use opioids can conceal their use was a surprise finding in our sample as we were focused our interview guide on rescue attempts and lifesaving interventions. Stereotypes of people who inject drugs, namely heroin, have been ingrained into our communities for decades. In our archival research into the history of heroin use in L5P, we found many disturbing and stigmatizing images of persons who use heroin. As Jones (1984) notes, "the characteristics of *marks* (stigmatized attributes) that make some irrevocably obvious to all involved in a relationship, while others remain completely undetected to some participants,

generally the potential *markers* (those to whom the mark may be revealed)" (p.27). The sample participants had their ideas of what a person who uses heroin must look like or how they are expected to behave.

These stereotypes were challenged in every overdose reversal account given by the participants. Beliefs included that people who use opioids can remain hidden by not conforming to dirty, disheveled, or poor visual stereotypes. Participants acknowledged that they are now aware of the spectrum of people who use opioids, defying stereotypes. Why and how do these false beliefs persist in our society? According to Pettigrew (1979), the more widely shared a stereotype is, the more difficult it is to change (1979). From a cognitive perspective, it is thought that we look for attributes to confirm stereotypes, and the more confirming evidence we find, the more we believe the stereotype is correct (Snyder, 1981). Jones (1984) argues that the complexity of the world we live in is why we hold on to these false beliefs. We see what we need to see, mostly to convince ourselves that neither we nor the people we know, and love could succumb to addiction as ruthless as heroin addiction. It is no wonder that people who are addicted to heroin work to hide their addiction from society. As Goffman (1963) reminds us, "the stigma placed on an individual is dependent on the degree of visibility the of the mark, or how concealable" (p.51). Service industry workers' attitudes demonstrate this belief that people tend to hide their opioid use to avoid the stigma that comes with opioid use, which in turn reinforces the stigma.

It is important to note that this stigma is so strong that families that are aware of drug use in their homes often hide the fact that a family member is dependent on drugs to avoid the social stigma that comes with drug use (Corrigan, Watson, & Miller, 2006). Goffman (1963) speaks of *passing* and the *double life/living*, "moving in two circles, each of which is unaware the other

exists" (p.71). Individuals leading a double life must decide "to display or not to display; to tell or not to tell; to let on or not to let on; to lie or not to lie; and in each case, to whom, how, when, and where" (Goffman, 1963 p.42).

Disruptiveness

Jones (1984) provides some insights into the dimension of disruptiveness that are relevant to our findings. Firstly, "does the stigma block or hamper interaction or communication?" (p.24), and then we must consider, concerning communities and relationships, the more apparent the mark, the more disruptive the stigma. People rescue because of an ethical duty to save another human being. There is also little communication after the fact. Laypeople in our sample who rescued someone overdosing had little support after the encounter, were left not knowing if the person survived, and were never acknowledged for their effort to save someone's life. This left many in our sample questioning, whose responsibility is it to rescue someone from an overdose? Some people felt it was the responsibility of those who provide sterile syringes for exchange and sale, and others felt it was a duty that can be fulfilled by any human who cannot stand by and watch someone die.

It is also important to note that in L5P, the community is exhibiting a *boundary crisis,* or in other words, a threat to the “normal” by the deviant behavior (Jones & S., 1984,p.96). Since the addition of fentanyl into the heroin supply in the area, overdose has become more common. Service industry workers have been responsive to overdose in the L5P community. It is possible that as more overdoses are revealed, local business owners may become more accepting of harm reduction measures that could contribute to successful interventions for overdose rescue and work to expel people who use drugs from the community they rely on: Goffman, 1963 (p.81). In Atlanta, in general, there seems to be an ongoing agenda to hide the imperfections related to

social determinants of health like drug use and homelessness. However, there are many spaces in L5P for services that could benefit the community, and there are many people, including neighbors and business owners, who understand that policing social problems does not work.

Aesthetic Qualities

Jones (1984) defines the value of aesthetic qualities as to what extent the mark makes the possessor repellent, ugly, or upsetting. (p.24) Furthermore, the more familiar the condition, the more tolerant a community is to the mark (p.92). Many of the people who responded to overdose were surprised to find the person who needed rescuing "looked like me," or was "in a nice car," or "was young" or "was normal looking." It is also possible that the area is less policed as it is predominately white, making it more "comfortable" for those who need refuge from the police. In preparation for participant observations in L5P, I spent five months volunteering with the ARCH in Vine City, Atlanta. Although AHRC serves both areas with the SSP, the two communities could not be more different. Vine City is predominately a Black community that is also poor. L5P, in contrast, is a predominately white community and is one of the most expensive areas to live in Atlanta. In the time spent in Vine City, we observed markedly more frequent police presence than in L5P. The people we served in Vine City were also more fearful of police involvement, and as noted by outreach specialist, Mona Bennett, when the police are around, there is less participation in syringe exchange (Oni, 2015).

There are also those in L5P who do not attempt to hide their stigma symbols. Among them are the "train kids" (figure 1) (those who hop trains and gravitate to L5P when they are in town), the homeless population, and those with untreated mental illness. Sometimes these attributes intersect. Goffman (1963) would argue that people choose the company of those with similar stigmas (p.81). This seems to be the case in L5P. To be "marked," the behavior needs to

be extreme to be noticed because of the tolerance of alcohol inebriation, drug use, homelessness, and untreated mental illness in the area. This tolerance may be considered a weakness and a strength in L5P, depending on who is being asked. When speaking with servers, bartenders, and clerks, being different was something to be proud of in the community. However, among business managers and owners, there was no consensus. Of little doubt is the need for increased social services in the area and the need to train people to differentiate between those who need interventions and those who do not. Just because someone looks different or is homeless does not mean they require services and interventions. However, the ability to tell if someone is sleeping or intoxicated on alcohol versus overdosing on heroin is essential. Our data highlight the need for identification of overdose.

Jones (1984) notes that "groups become less tolerant when they perceive their existence is threatened" (p.97). The landscape of Atlanta and L5P is changing. L5P must now contend with the gentrification of in-town neighborhoods and the addition of the Beltline, a former railway corridor that has been renovated to be a multi-use trail that includes new residential and commercial real estate. There is more competition for business and the desires of those who spend millions on a property that surrounds L5P threatens this independent commercial district from housing the many people who are considered undesirable. The push to balance gentrification and commercialism with existing social problems such as drug use, opioid overdose, homelessness, and untreated mental illness, threatens the very nature of L5P. As Goffman argues, "social settings establish the categories of people who are likely to be encountered there" (Goffman, 1963, p.2), and "depressed economics increases stress and increased stress decreases tolerance" (Jones, 1984, p.99). There is increased pressure to compete with areas that people consider new, clean, or inherently better than L5P. However, so many

homeless people feel they are a part of a community in L5P and have nowhere else to go or, quite frankly, prefer living in the street there. As a reminder, the Kalderash will often return to places where they find refuge from stigma regardless of the desires of the surrounding communities in times of urban renewal (Williams, 1982, p.329). Within the urban spatial structure, hidden people cope with the urban environment by creatively using the spaces available to them regardless of how these spaces may be built to suit the dominant culture's needs (Sibley, 1981). L5P has become their home, it is where they feel safe, and without this area, they may be forced further and further out of the places that support them with food, money, and safety.

This is an essential issue for the people in this study, both the service industry workers and the people they encounter. L5P is home to counter cultures (in opposition to the dominant culture) and subcultures (different from the dominant culture) found in few places in Atlanta. These spaces are vital because they are tolerant of different people and sometimes even practice active acceptance. These spaces also serve to reveal what is not working about the dominant spaces. Spradley (1970) argues that describing marginalized communities is the best evidence that there is no "melting pot" but rather a dominant hegemonic culture that creates norms and then a counterculture for those who do not fit (Spradley, 1970, p.3). In this sense, L5P also demonstrates the limits of that acceptance because it also exists in opposition to the more profound marginalization and stigmatization of Vine City people who are predominately Black people. In times where dominant cultures and ethnic groups suppress, incarcerate, and even kill those who are not part of a dominant culture, it is imperative to recognize that there are many cultures and ethnicities in our society, and those that are in the subordinate culture and ethnic groups are no less human or deserving of compassion and inclusion. How L5P will respond to

the changing landscape has yet to be seen. However, this area has shown remarkable resilience in the past, and many are hopeful that this eclectic commercial district will survive as the city changes.

Peril

Jones (1984) offers many insights regarding the hidden dangers perceived by others that contribute to stigma. Among them are, "what kind of danger is posed by the mark and how imminent or serious is it?" (p.24) "What is the threat to the markers, and how exposed to danger do they feel?" (p.81). Peril may be psychological as well, reminding us that "our secure experience of everyday life is an illusion" (p.89). Many of these concepts emerged in our study concerning fears and stigma surrounding rescuing people from an opioid overdose. Among these fears was a fear of disease transmission during overdose rescue attempts, especially regarding rescue breathing.

Fears of violence from people who use drugs were common in our sample, especially regarding post-naloxone administration. In 2020, Parkin et al. published qualitative interviews of people who had reversed an overdose using naloxone and found that people whose opioid overdose is reversed with naloxone administration had a wide range of unpredictable reactions. Reactions ranged from "rage" (angry and or aggressive outbursts), "withdrawal symptoms" and "not rage, not withdrawal," which were described as short-lived harmless conditions such as emotional and physical discomfort (Parkin et al., 2020). The rage response aligns with our findings of danger, in that people may be hesitant to rescue with naloxone if they fear that the person may become violent when they are revived. This phenomenon of related behavioral toxicity is thought to be a response to "over-antagonism" from naloxone; however, with the nasal

Narcan being provided to the community, this reaction would be unlikely as the antagonist is given in small doses over time (Neale & Strang, 2015).

The participants understand how dangerous fentanyl and carfentanil is to those who use drugs, and they have somehow come to believe it is hazardous for the rescuer. This finding is important because it is not valid. We triangulated this finding with the pharmacist at Emory University School of Nursing to understand if this fear was warranted. The pharmacist, Dr. Kenneth Mueller, informed us that a rescuer could not overdose from providing rescue breathing or CPR to someone who has overdosed on fentanyl or carfentanil. When asked if there is a danger from overdosing if contacting a fentanyl patch, from residue on an injection site, or mucus, the pharmacist assured us this is also impossible. Fentanyl patches are slow-release and would not cause an overdose with contact, and it would be unlikely that residue at an injection site, in mucus, or around nares (if inhaled) would be strong enough to cause an overdose during a rescue attempt. Some in the sample keep latex gloves on hand for overdose rescue over fears of contact with fentanyl and carfentanil as advised by local police. It is interesting that the police are the people who are instigating this fear among the service industry workers. This in an example of how stigma is used to create more barriers and to create fear. The police are public servants, by spreading misinformation about the danger of fentanyl and carfentanil, they are using their power to contribute to the ongoing stigma of opioid overdose in L5P (Link & Phelan, 2014).

Limitations

This study has several limitations that need to be considered before more comprehensive policy or intervention suggestions can be made. Before we began the study, we were cognizant of the possibility of social desirability bias (the desire to give the socially acceptable answer) as a

threat to this study's validity (Bergen & Labonte, 2019). In the third interview, we conducted, social desirability bias was identified when a participant contradicted themselves at the end of the interview. Throughout, their responses were supportive of harm reduction efforts in L5P. However, they made their feelings clear in the last moments of our discussion by saying all people who use heroin “should die." The interview guide probes were updated to address this concern (Bergen & Labonte, 2019). Probes recommended to decrease this bias included: Can you tell me more about that? Can you explain more why you feel this way? What do you think are the reasons that might be (or not be) acceptable? If someone hesitated in an interview, it was imperative to remind them there was no right or wrong answer and encourage them to speak freely. Before each interview, we reminded people that their consent process included the option to have material removed from the record and that all quotes would be de-identified. However, as we were collecting ethnographic photos and descriptions from a small area, all the participants were aware of the possibility of identification within our study. They were encouraged to participate only if they were comfortable with the possibility of being identified.

Additionally, our sample consisted of servers that responded to an overdose. Throughout the interviews, many of our participants noted that not everyone in L5P wishes to participate in harm reduction efforts. We triangulated this data by visiting some of the establishments that were rumored to be disinterested. We found this to be true. When we asked one of these establishments if they were interested in receiving Narcan training, the response was, "we decided not to deal with that (overdose rescue)." When challenged and asked, "What if you are not given a choice? What if someone overdoses in your establishment?" we were told they were still not interested. By interviewing only people who respond to opioid overdose with a rescue

response, we have not captured all the service industry workers' perspectives in L5P. This extended inquiry would be necessary before planning any intervention.

Conclusion

Stigma has the power to be used for exploitation, control, and exclusion of others (Link & Phelan, 2014). L5P is a place people go when they have been excluded from their lives, or no longer wish to be part of the dominant culture. People who no longer wish to be exploited, controlled, and who are excluded end up in spaces like L5P, because ultimately as human beings they all want to be somewhere they feel they belong. The concept that stigma is considered a social determinant of public health and a "driver of population health" has been established for many years (Hatzenbuehler, Phelan, & Link, 2013). As a society we are coming to see that stigma is a barrier to recovery (Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001) and so many have been lost to the opioid epidemic, that confronting the stigma associated with drug use has become part of the agenda to overcome the opioid epidemic. We found the invisible and hidden nature of drug use in L5P to be part of the commercial district's landscape. However, the stigma that creates a need for concealability and the hidden nature of opioid use comes with a cost to the individual, who is at risk of overdosing alone or being outed and having to deal with the public shame of addiction, for families as they lack social support to cope with addiction, and in communities, as this concealability creates barriers to care, recovery, and rescue from an opioid overdose.

Appendix, Tables and Figures

Appendix A

(Before every interview I tell everyone that if there is something they decide during or after the interview to be struck from the record that is ok, and that all quotes are de-identified. This info is in the consent, but I fell it bears repeating).

- General probes to decrease social desirability bias: (Bergen & Labonte, 2019)
- Can you tell me more about that?
- Can you explain more why you feel this way?
- What do you think are the reasons that might be (or not be) acceptable?
- If someone hesitates to remind them there is no right or wrong answer and please speak freely.

1. Can you tell me the story of your most memorable experience of encountering an overdose in L5P? (If more than one can try to get a recollection of each encounter, in the original proposal it was----the most memorable).
    - Who was there?
    - Where did it happen?
    - What time of the day was it?

2. How did encountering an overdose make you feel?
    - What did you do after?
    - If you left work, what did you do after you left?

3. Have you heard of other stories of an overdose in L5P?

4. Do you currently have access to naloxone in your place of work? If so, how do you feel about using naloxone in an overdose situation?

    - Where is the Narcan kept at work (if it is available)?
    - Do you feel well-prepared to use Narcan if you encounter again? Why or why not?
    - Would you want more training?

5. Have you or anyone at work put any protocols or procedures in place at work to handle overdose?

6. Do you know how to identify an OD? Tell me what you know about?
    - Tell me what you know about CPR/rescue breathing and OD?
    - Would you do rescue breathing on someone overdosing? Why or why not?
    - Would you go to a CPR training if it were free (AHA includes Narcan training n CPR class)?

7. How do you feel about (harm reduction strategies) in L5P?

    - How would you feel about having a sharps container in your place of work? Why or why not?
    - Tell me what you know about SIF?
    - How would you feel about a SIF in L5P?
    - Some people might say that by providing a safe injection facility that people are more likely to continue injecting drugs rather than seeking treatment, do you think this is true?
    - Tell me what you know about MAT clinic?
    - How would you feel about one in L5P? Why yes or no?

8. What do you think of the idea that by providing the harm reduction services we talked about people are more likely to continue to inject drugs rather than seek treatment (endorsement of drug use)?

9. What do you think of the idea that PWID come to L5P to inject drugs because they believe they will be rescued if they overdose (safety net)?

10. What is your understanding of Good Samaritan Laws?
    - Good Samaritan (protects rescuer)
    - Don't run call 911 (protects persons with drugs on them)

11. How do you feel about people who inject drugs?
    - Why do you think you feel this way?

12. If you were to describe L5P to someone who has never been here before, how would you describe it?
    - How has the neighborhood changed since you have been here?
    - Why do you think people use heroin in L5P?
    - What do you think L5P will be like in the future?
    - What is your vision of a perfect L5P?

13. Is there anything else you would like to add?
    - Alternatively, is there anything else I should have asked that I did not think to ask you?
    - Maybe more importantly do you have any ideas of how we could make a change?

Table 1 Demographics

Categories	Frequency	%
Gender		
Men	9	60
Women	6	40
Age		
18-24	2	13
25-34	2	13
35-44	5	33
45-54	3	20
55-64	1	7
65+	2	13
Race		
White	14	93
Native American	1	7
Level of Education		
High School Degree or Equivalent	3	20
Some College	7	47
4-year college or graduate degree	5	33
Years Worked in L5P		
1-5	2	13
6-10	5	33
11-15	3	20
16-20	1	7
21-25	4	27
County of Residence		
Fulton	6	40
Dekalb	8	53
Athens-Clarke	1	7

Figure 1 Theoretical Framework

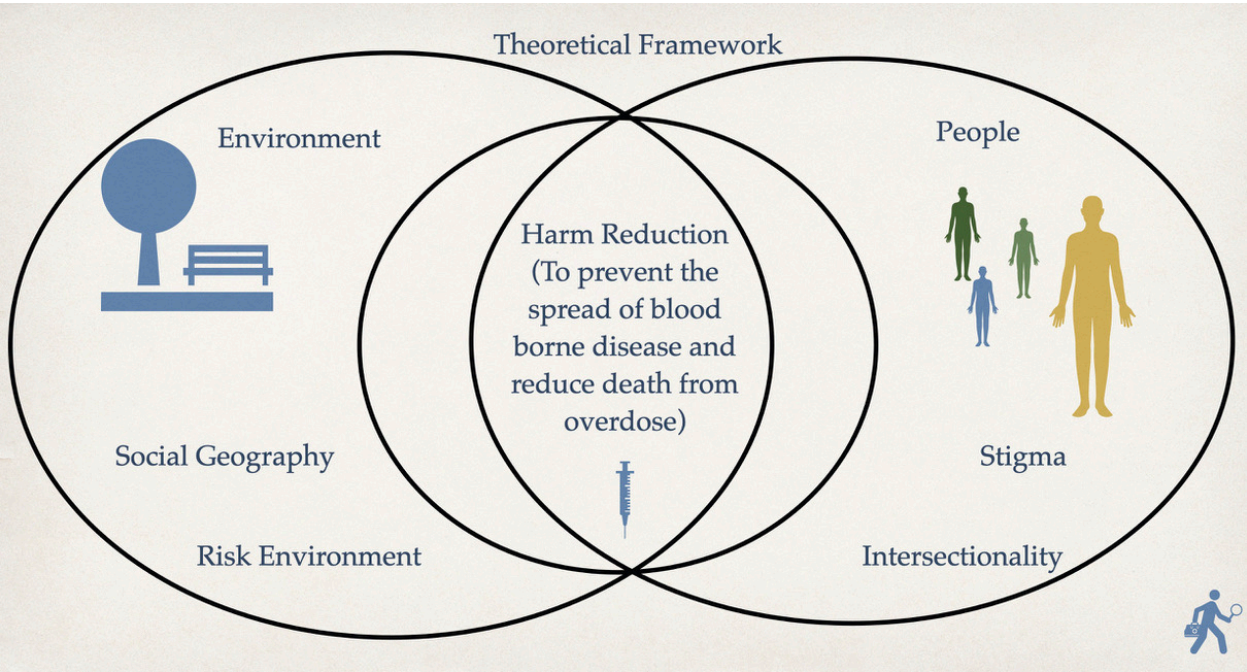


Figure 2 Train kid in L5P. Photo by SFC


STAR
OPEN

Chapter 3: Designing a Graphic Novel: Engaging Community, Arts, and Culture into Public Health Initiatives

Abstract

The opioid epidemic was declared a national public health emergency in 2017. In Georgia, standing orders for the opioid antagonist, naloxone, have been implemented to reduce mortality from opioid overdoses. Service industry workers in the Atlanta, Georgia, inner-city community of Little Five Points (L5P) have access to naloxone, potentially expanding overdose rescue efforts in the community setting. To explore the issues facing L5P, our research brings together qualitative descriptive inquiry, ethnography, community-based research, a community advisory board, and a local artist to maximize community dissemination of research findings through a graphic novel that describes encountering an opioid overdose. This format was chosen due to the ethical responsibility to disseminate in participants' language and for its potential to empower and educate readers. This paper describes the process of working on this study with the community and a local artist to create sample pages that will be tested for clarity of the message in a later phase. Working with an artist has revealed that while dissemination and implementation for collaboration begin before findings are ready, cross-collaboration with the artist requires early engagement, substantial funding, artist education in appropriate content, member checking to establish community acceptability altering illustrations that reinforce negative stereotypes. By sharing the experiences of actions taken during an opioid overdose in L5P through a graphic novel, we can validate service industry workers' experiences, acknowledge their efforts to contribute to harm reduction, and provide much-needed closure to those who encounter opioid overdoses in the community.

This paper presents the process of working with a local artist to develop images for a graphic novel that will disseminate findings of an ongoing community-engaged research project and their associated educational messages. The study, set in Little Five Points in Atlanta, Georgia, explores the experience of service industry workers (restaurant workers, bartenders, clerks, and pharmacy workers) in opioid overdose intervention. As qualitative data were being analyzed and key thematic categories emerged, the research team, study participants, and Community Advisory Board (CAB) became excited about the idea of using a graphic novel to disseminate findings and the associated educational messages to the service worker community. Here we explore the process of bringing a local artist into the study, the ethical and creative issues it raised, and the ways that graphic novels may address stigma and harm reduction for health promotion in the midst of an opioid crisis.

Background

More than 700,000 people died from a drug overdose in the United States between 1999 and 2017 (Centers for Disease Control and Prevention [CDC], 2019). Around 68% of the 70,200 drug overdose deaths in 2017 involved an opioid (CDC, 2019). Specifically, in Georgia, the Georgia Department of Public Health (GDPH) has declared the opioid epidemic a public health emergency and has reported an increase in opioid-related deaths of 245% from 2010 to 2017 (GDPH, 2018).

Naloxone hydrochloride (more commonly known by the brand name Narcan), is an opioid antagonist and standard of care for opioid-induced respiratory depression (Mueller, Walley, Calcaterra, Glanz, & Binswanger, 2015). To address the increasing mortality of opioid overdoses in Georgia, standing orders authorizing pharmacists and healthcare professionals to

distribute naloxone without a physician prescription were implemented throughout the state in 2014. Roughly 150 of the 873 opioid overdose deaths in Georgia in 2018 occurred in either Fulton or Dekalb counties (Prescription Drug Monitoring Program [PDMP], 2018). Little Five Points (L5P) Atlanta, a retail district surrounded by intown neighborhoods, straddles the dividing line between these two counties. In L5P, over 1,000 units of naloxone have been distributed for free to residents and community members via the Little Five Points Pharmacy in collaboration with the GDPH, the Atlanta Harm Reduction Coalition (AHRC), and the grassroots organization Georgia Overdose Prevention (Foundation, 2020).

Naloxone and Layperson Response to Opioid Overdose

According to the Surgeon General of the United States, providing opioid overdose education, including learning the signs of an opioid overdose and administrating naloxone, reduces overdose mortality (Adams, 2019). In response to overdose in the community, many businesses in L5P have naloxone on hand, and service industry workers administer this opioid antidote in response to overdoses in or near their workplaces (Regan, 2018). When a community overdose occurs, service industry workers are often the default first responders when restrooms, in their workplaces, are used as private spaces for injecting drug use for those in need (Wolfson-Stofko, Bennett, Elliott, & Curtis, 2017). Although it is rare that service industry workers are trained to intervene, research has shown that with adequate training and education in naloxone administration, bystanders increase the odds of overdose recovery compared to those with little or no training (Giglio, Li, & DiMaggio, 2015). The recent availability and distribution of naloxone in L5P make this community a unique site to engage laypeople who administer naloxone to identify gaps in education regarding naloxone administration.

Parent Study Methods

Drawing on the strengths of the L5P community, our study used qualitative descriptive technique and ethnographic fieldwork to describe the experience of encountering an opioid overdose. Qualitative descriptive methods and analysis, with results presented thematically, are commonly used in nursing to present readers with descriptive summaries (Kim, Sefcik, & Bradway, 2017). Using a constructivist paradigm as our lens, we presumed each person who had encountered and participated in an opioid overdose rescue would have a unique story to tell as their past experiences and exposure to opioids, overdose, and experience in L5P would shape their realities (Guba, 1994). Individual semi-structured interviews with service industry workers were completed to provide thick, rich description (Creswell, 2007). Participant observation of the syringe service program in L5P was carried out as we collected interview data. Working with harm reduction specialists and providing syringe services to people who inject drugs gave us a better understanding of the phenomenon of opioid use (primarily heroin) and opioid overdose in L5P. By triangulating data this way, we captured different perspectives of the phenomenon, therefore enhancing internal validity (Merriam, 2009, Spradley, 1980). Discussion with the CAB, made up of five members of the L5P community, and member-checking with study participants were performed throughout data collection and analysis to ensure that we understood the meaning of the data and that the participants were being represented fairly (Merriam, 2009; Spradley, 1980).

Criterion sampling (Moser & Korstjens, 2018) was employed to recruit five seed participants who had encountered opioid overdoses; they recruited others via snowball sampling until data saturation was achieved (Maxwell, 1996). We used iterative qualitative descriptive analysis to interpret the narrative responses of descriptions of opioid overdose encounters in a community setting (Kim et al., 2017; Neergaard, 2009; Sandelowski, 2000). Open coding of data

by two independent coders led to categories associated with the encounters; categories were consolidated in tables, and a matrix approach was used to compare and contrast data across categories to identify themes (in progress) (Kim et al., 2017; Maxwell, 1996; Saldaña, 2016). Intercoder reliability was assured as each coder worked independently. During weekly meetings, emerging codes were clarified and combined until consensus was achieved (ongoing) (Hamilton, Sandelowski, Moore, Agarwal, & Koenig, 2013). Additionally, discrepant and negative case analysis (looking for data that does not align or is different from the rest) review was done to ensure that all potential codes were captured (Hamilton, 2019; Merriam, 2009).

Emerging Study Findings

Fifteen service industry workers completed one-on-one interviews from October 2019 to April 2020. A 13-item interview guide directed the semi-structured interviews with open-ended questions that captured descriptions of overdose encounters, participants' knowledge regarding naloxone administration, and their ability to identify opioid overdoses and administer life-saving procedures. Early categories emerging from the iterative data analysis thus far include "encounters of an opioid overdose,"; "how it made me feel,"; and "harm reduction strategies."

The initial data analysis revealed that service industry workers had variable degrees of training or preparation for identifying opioid overdose or responding in a community setting. Many in the sample had difficulty understanding the importance of timely administration of naloxone, rescue breathing, and CPR. Additionally, some participants did not administer the life-saving drug when it was available in their establishment due to the stressful nature of an opioid overdose incident. Participants also revealed the persistence of stigma about people who use opioids and inject drugs and discussed their own feelings of anger, frustration, fear, guilt, and helplessness when faced with an overdose or death. Even this early in the analysis, it was clear that dissemination of results needed to include a method that would provide education as well as

realistic and respectful representation of participants and their community. A graphic novel quickly emerged as the preferred method.

Why We Chose the Graphic Novel Format for Dissemination

Little Five Points is recognized as a community that has embraced the graphic arts, including graffiti, for decades (ASAM, 2020) (See Figures 1 – 3 in Supplemental Content). The Little Five Points Alliance celebrates the community's diverse arts culture with street art and community activities, such as photo contents (Alliance, 2020). Within L5P's arts culture are many sub-cultures, including an indie art, music, and theater subculture, a piercing and tattooing subculture, and a vibrant comic book culture.

The idea of using a graphic novel to disseminate research findings and their related educational messages emerged during iterative analysis of field notes. Following the study's established protocols, the PI presented the idea to the CAB and study participants to ensure appropriateness. Both groups enthusiastically supported the idea of creating a graphic novel to disseminate results and messages back to service industry workers in L5P. The CAB also recommended adapting images from the final product to create posters and murals that can be incorporated into the landscape of L5P, ensuring dissemination to the entire community. All partners – researchers, participants, and CAB members – were excited about the graphic novel idea's cultural relevance and educational potential.

In addition to the buy in from the CAB and key stakeholders in the community, there is a body of literature that confirms the use of art as a form of communication that can be utilized to build community resilience by sharing visual narratives. These narratives increase communities' capacity for healing, fulfill the ethical responsibility of culturally appropriate dissemination, can empower and heal (by sharing stories), and have the potential to educate readers (Sonke, 2019). Graphic arts in particular are an accessible and adaptable means to communicate messaging on

health. They can impact communities and individuals on both emotional and social levels by combining visual and narrative stories that decrease feelings of isolation and educate on practical skills (Myers & Goldenberg, 2018). Comics and graphic arts are effective, educational, engaging, and acceptable to young people and adults (Ashwal & Thomas, 2018). Graphic novels are emerging as a powerful tool in addressing complex social, political, economic, and environmental impacts on public health, both domestically and globally (Hamdy & Nye, 2019). Graphic novels can address complex and often stigmatized mental health issues and medical conditions that are often internalized and misunderstood by acknowledging individuals' experiences (Tschaepe, 2018). Complex human experiences can be expressed in the medium of graphic novels, including death and loss (Weaver-Hightower, 2017), trauma (Leone, 2018), and schizophrenia diagnosis (Powell, 2008). Additionally, graphic arts fulfill the need to disseminate scientific findings to communities in a language accessible beyond academia.

Disseminating with Art in Little Five Points

We chose the *Patient-Centered Outcomes Research Institute* (*PCORI) Dissemination Framework* to guide the creation, dissemination, and implementation of a community-centered and tailored educational resource (Esposito, 2015). The PCORI framework includes several phases, including evidence assessment, partner engagement, dissemination, implementation, and evaluation. This paper addresses the first two stages of the framework as we began working with a local graphic artist to explore the process of disseminating study results in the form of a graphic novel.

During the evidence assessment phase, the research team identified evidence emerging during the iterative data analysis that responded to stakeholders' concerns and was confirmed via member checking and CAB review. The selected themes and relevant educational messages were then discussed in detail with the artist. Meetings between the principal investigator (PI)

and the graphic artist facilitated discussions of the findings, implications of participants' accounts and representations, and ways to avoid stigmatizing images.

The second PICORI phase, partner engagement, is ongoing as community partners who would benefit from disseminating the study findings are identified. Community partners include key stakeholders in the L5P community, including service industry workers, the Little Five Points Business Association, and the Atlanta Harm Reduction Coalition. This cross-sector collaboration between community members, the artist, and the research team is especially important for this project which is committed to disseminating results to service industry workers and the broader community in the most authentic and ethical manner possible. These community partners and study participants have the real-life experience of dealing with opioid overdose, naloxone administration and life-saving procedures such as CPR and rescue breathing, but without training and support. It is imperative that dissemination of the study results represent their experience, as well as provide needed education, in ways that are inclusive and engaged.

Working with a Community Artist

Because the idea of dissemination through a graphic novel emerged during the study, financial support for an artist was not included in the original research budget. Fortunately, a fellowship grant was available to pay the artist to work with the team to draft sample pages for the proposed graphic novel.

After obtaining IRB approval and while data were still in the process of iterative analysis, the Principal Investigator (PI) began meeting with the artist to discuss emerging findings and the key educational messages for community dissemination. Access to de-identified interview data was considered essential for the artist to understand the experiences of study participants. As they discussed the participant accounts, the PI and the artist also discussed how to respectfully represent people who inject drugs and use opioids to avoid contributing to the stigma faced by

this community. From the start and throughout the collaboration, the PI and the artist had lengthy discussions about opioid use and overdose to uncover their own explicit and implicit bias and assumptions about people who use opioids.

The first set of de-identified data shared with the artist related to the emerging category of "encounters of an opioid overdose." In these accounts, four participants discussed their encounters with an overdose and their attempts to rescue or revive people. After discussing and reviewing the data, the PI asked the artist to draw from these encounters for the first illustrations. When the drafts were received, the PI realized the need to provide the artist with more technical background regarding the health-specific components of the educational message. For example, the image of the person administering CPR showed the responder straddling the person who had overdosed rather than providing chest compressions from the side (Figure 1). From this first exchange, the PI realized that providing technical scientific background to the artist needed to be part of the workplan of this new collaboration.

In order to determine community acceptability, the redrafted page was shown to the CAB and the service industry workers who had provided the original narrative data. This proved to be another critical step. Although the new illustration addressed the PI's previous healthcare content concerns, the interview participants had concerns that the images were not representative of service industry workers in Little Five Points. In particular, they noted that the illustrated characters were too young and lacked L5P's diversity of skin color, age, and body shapes (Figure 2).

When this feedback was shared with the artist, it was determined that background material describing the people telling the stories could help inform the development of more appropriate images. Thus, with participants' explicit consent, demographic data and headshots

were provided to the artist. The PI and the artist agreed that the next images would draw from this background information to represent greater diversity and closer alignment with “real people” in L5Ps but that readers should not be able to identify anyone from the illustrations. (Figure 3).

As the relationship between the artist, the PI, and study participants developed, a viable feedback system emerged. This is evident in development of a page based on data from the emerging category "harm reduction strategies." To develop this page, the PI provided the artist with narrative data. They discussed the research team’s interest in using the page to educate about the Georgia Medical Amnesty Law, known as "Don't Run, Call 911", which protects people on the scene of an overdose from criminal charges if they are found to possess drugs or are drinking underage. When the artist completed this page, the PI sent it to the participant who had provided the narrative and to the CAB for review and feedback. The participant was asked if the images were representative of their encounter, if they had concerns about being identified, and if they had suggestions for alterations. Even after the images were approved by the participant and the CAB, the PI recognized a negative stereotype in the drawing (the man driving the car looks sinister, implying those associated with an opioid overdose are bad) (Figure 4).

In debriefing the feedback, the PI and the artist discussed the importance of avoiding stereotyping in the illustrations, even when drawing from potentially upsetting data. The next version was approved by everyone (Figure 5).

Implications for Research and Cross-Collaboration

Our experience identified that cross-collaboration with an artist requires early engagement, substantial funding, artist education in appropriate content, member checking to establish community acceptability, and altering illustrations that reinforce negative stereotypes. Early engagement by including community members in data analysis and dissemination

throughout the iterative process is vital. In a study of Alaskan Native youth, early engagement in creating a comic was found to create a more robust and authentic product that helped raise awareness of health topics that affect their community (Montgomery, Manuelito, Nass, Chock, & Buchwald, 2012). Including community members and the artist in all stages of the research process allows for a greater understanding of the phenomenon and opportunities for discussions surrounding sensitive topics that might otherwise remain hidden within a community.

Access to funding is a substantial barrier to creating a graphic novel or comic to disseminate research findings. Although funding mechanisms exist for research expenses, there is an added cost to working with an experienced, established graphic artist. Costs vary, with the artist we worked with quoting a minimum budget of $20,000 USD to produce a complete graphic novel, but the most sophisticated graphic novel, a motion comic, can cost up to $150,000 USD (Willis et al., 2018). Funding should be considered when designing a research study that aims to disseminate through this art form.

We also found that attention to providing adequate health promotion content for the artist was critical to the process and products. During our literature review there was a dearth of information on the pragmatics of working with an artist who is not trained in the health sciences. Future research should be explicit about processes for working with artists that may overcome this challenge to successful cross-collaboration.

Member checking to establish community acceptability is a method we are comfortable with in our collaboration as it is part of our existing methods. However, it should be mentioned that when taking on a graphic novel as a tool for dissemination, there are increased concerns regarding the identification of participants. Participants should receive informed consent at every stage of dissemination (Gupta, 2013), and if there are concerns about being identified, they must

be dealt with swiftly. When collaborating in a community setting, trust between the researcher and the participants should never be taken for granted. Every effort should be made to protect participants' confidentiality and privacy, especially when sensitive topics are being explored (Maxwell, 1996).

Alterations of illustrations were commonly required when working with the artist. Even with detailed pre-briefings on content and messaging, modifications were needed before finalizing the pages. Our assumptions about the local artist's knowledge and understanding of the phenomenon of opioid overdose and rescue were identified when the first drafts were received. With each iteration, small changes were necessary to convey the data appropriately. The time needed to send, receive, and edit pages should be considered when working out a timeline for cross-collaborative projects with health professionals, artists, and community members.

As we move forward, we aim to answer the call by researchers and scientists to engage arts and culture into public health initiatives. We will continue to work with local artists, collaborate with our community, and partner with local organizations and key stakeholders (Sonke, 2019). By continuing this work in and around L5P we hope to contribute to a better understanding of the opioid epidemic and naloxone administration to save lives not only in L5P, but in other communities with a high burden of opioid overdose as well. We must make every effort to support these service industry workers – who serve as first responders – to decrease mortality from the opioid epidemic. Findings disseminated in a culturally appropriate graphic and narrative language, using participants' experiences, will support future interventions tailored to laypeople in community settings where opioid overdose is common.

Figures and Images

Image 1 *Artist JEKS, and Jonathan Mannion collaborated to create this mural of Andre Benjamin "Andre 3000" and Antwan Patterson "Big Boi" of OutKast as part of the OUTERSPACE Project in 2019 (mural based on Jonathan Mannion photos). A public art mural project to enhance outdoor spaces (http://www.outerspaceproject.com/). Photo by Julie Odom*

Image 2 *Atlanta artist, Chris Veal (https://chrisvealart.bigcartel.com/). Photo by Julie Odom*

Image 3 *Atlanta and New Orleans artist Paul Athol's street art for the Atlanta Custom Gold establishment in Little Five Points "Bizarre". Photo by Julie Odom*

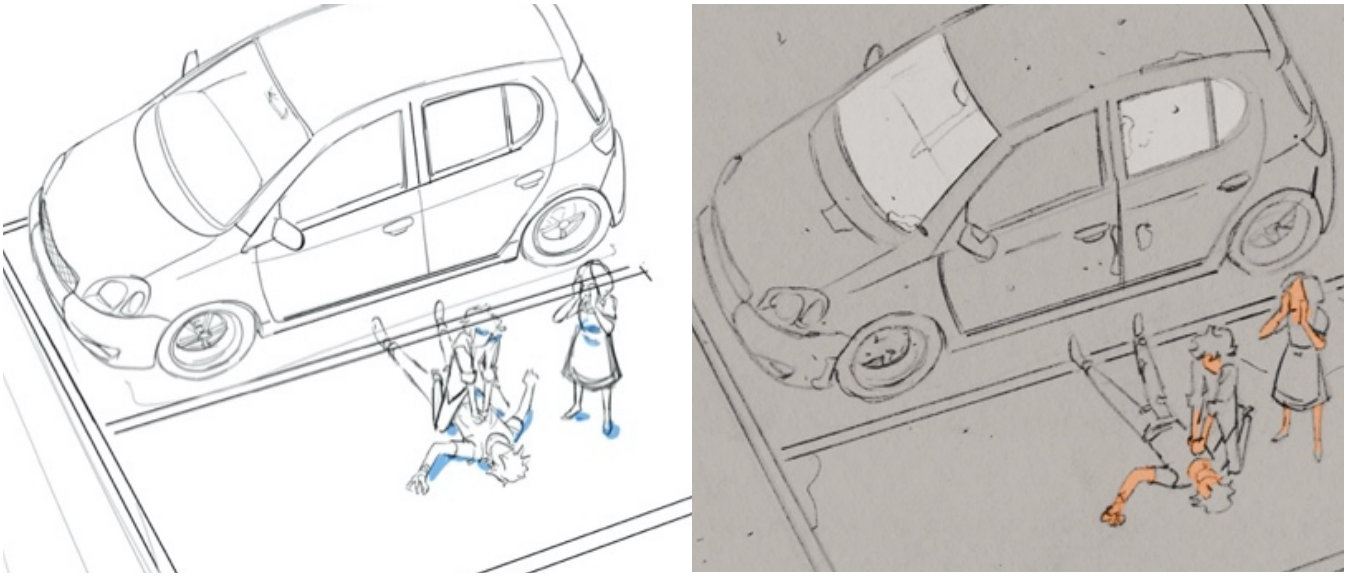


Figure 1 Improper positioning during CPR (left panel, straddleing of person overdosing) reveals the need for artist education in life-saving procedures.

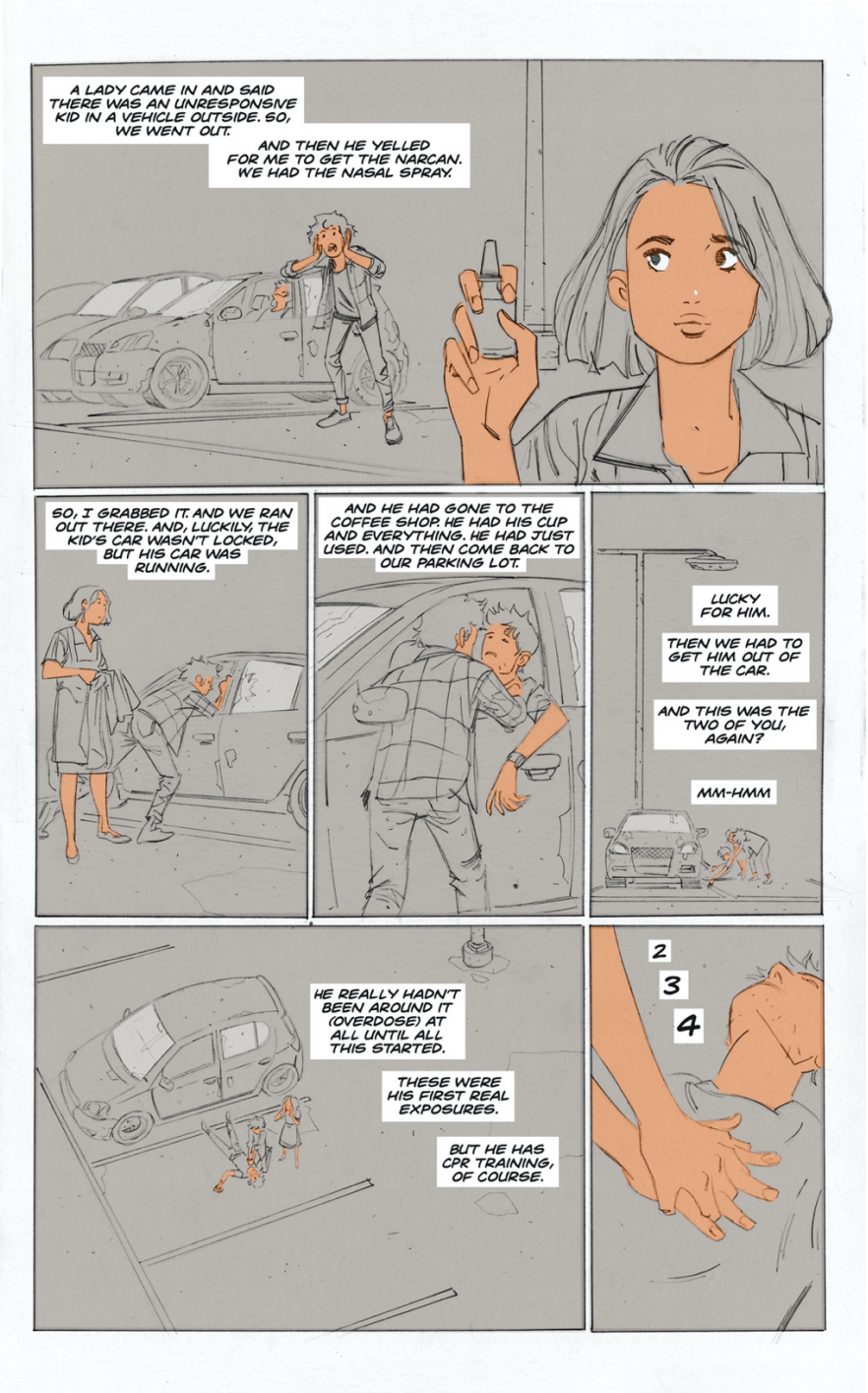

A LADY CAME IN AND SAID THERE WAS AN UNRESPONSIVE KID IN A VEHICLE OUTSIDE. SO, WE WENT OUT.
AND THEN HE YELLED FOR ME TO GET THE NARCAN. WE HAD THE NASAL SPRAY.
SO, I GRABBED IT. AND WE RAN OUT THERE. AND, LUCKILY, THE KID'S CAR WASN'T LOCKED, BUT HIS CAR WAS RUNNING.
AND HE HAD GONE TO THE COFFEE SHOP. HE HAD HIS CUP AND EVERYTHING. HE HAD JUST USED. AND THEN COME BACK TO OUR PARKING LOT.
LUCKY FOR HIM.
THEN WE HAD TO GET HIM OUT OF THE CAR.
AND THIS WAS THE TWO OF YOU, AGAIN?
MM-HMM
HE REALLY HADN'T BEEN AROUND IT (OVERDOSE) AT ALL UNTIL ALL THIS STARTED.
THESE WERE HIS FIRST REAL EXPOSURES.
BUT HE HAS CPR TRAINING, OF COURSE.
2
3
4

Figure 2 *Community members found the illustration to be unrepresentative of service industry workers in L5P (during member checks), prompting us to identify community acceptability as a new aim for our project.*

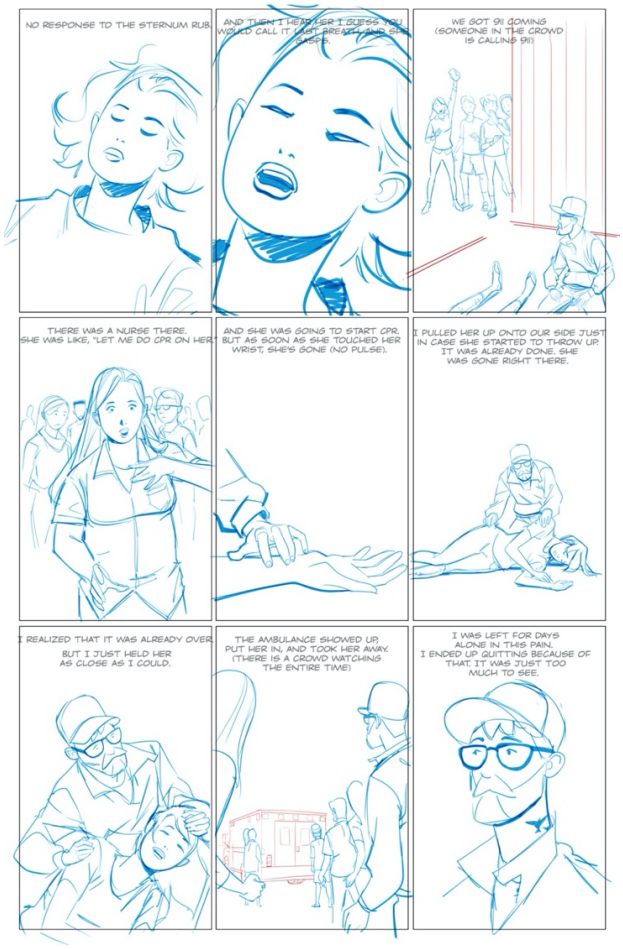
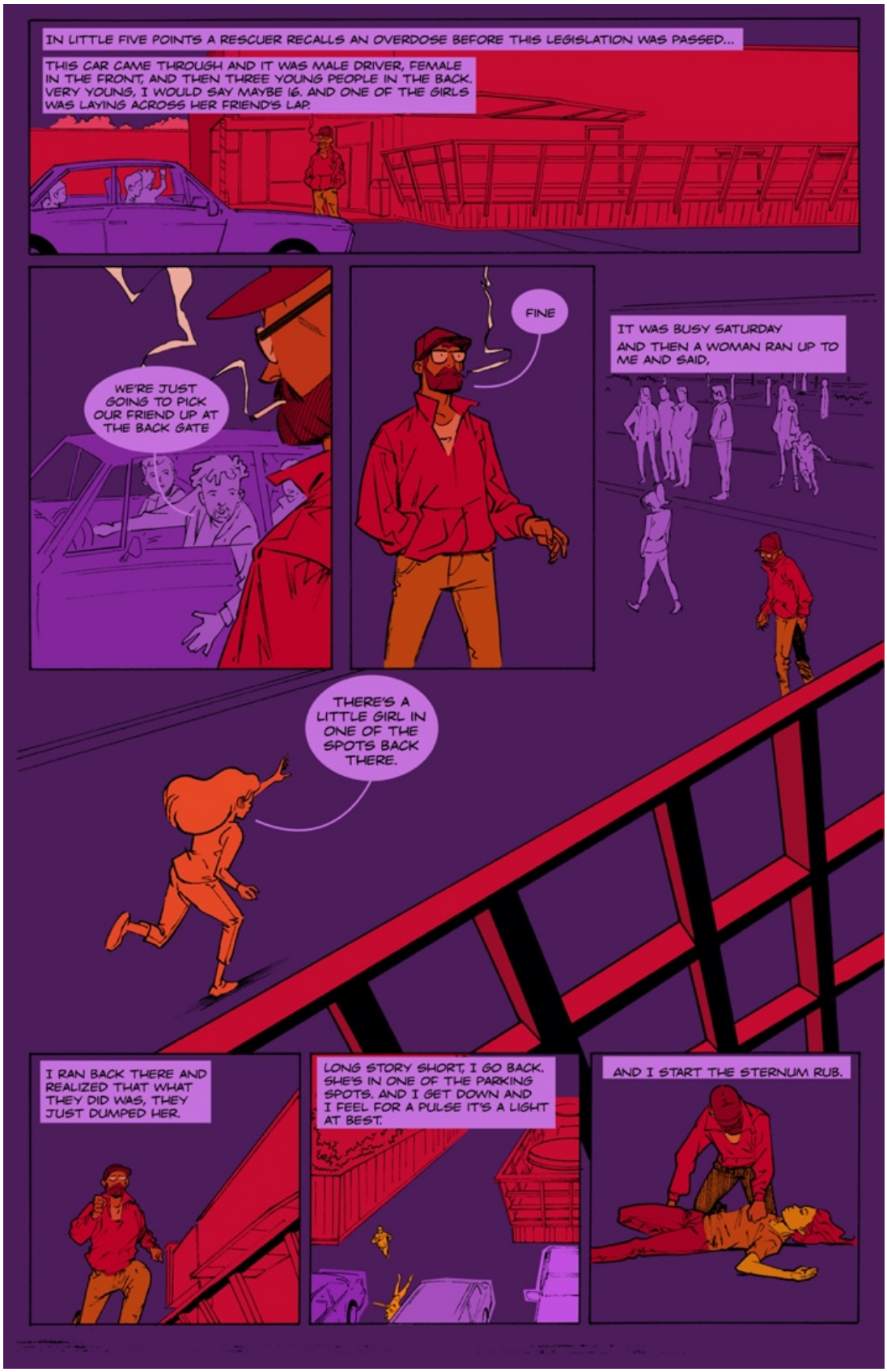


Figure 3 *Artwork evolves to be more inclusive of diversity of age, and body shapes.*

Figure 4 *Member check reveals that the illustration is acceptable to the participant who provided the narrative, however, the PI has concerns of the potentially stigmatizing representation of a potential drug user in the pages (person driving the car looks sinister), resulting in a debrief to uncover assumptions and bias when working with potentially upsetting data.*

Figure 5 *Final pages after stigmatizing representation removed.*




NO RESPONSE TO THE STERNUM RUB.
AND THEN I HEAR HER I GUESS YOU WOULD CALL IT A LAST BREATH, AND SHE GASPS.
WE GOT 911 COMING
THERE WAS A NURSE THERE. SHE WAS LIKE,
LET ME DO CPR ON HER.
AND SHE WAS GOING TO START CPR. BUT AS SOON AS SHE TOUCHED HER WRIST, SHE'S GONE.
I PULLED HER UP ONTO OUR SIDE JUST IN CASE SHE STARTED TO THROW UP.
IT WAS ALREADY DONE. SHE WAS GONE RIGHT THERE.
I REALIZED THAT IT WAS ALREADY OVER.
BUT I JUST HELD HER AS CLOSE AS I COULD.
THE AMBULANCE SHOWED UP, PUT HER IN, AND TOOK HER AWAY.
I WAS LEFT FOR DAYS ALONE IN THIS PAIN. I ENDED UP QUITTING BECAUSE OF THAT. IT WAS JUST TOO MUCH TO SEE.

Conclusion

It takes a village

Conducting immersive, reflexive, ethical research in a community setting requires collaboration from many disciplines and support from within the community. To engage people in community research, I worked to build rapport and establish trust. Identifying the needs and goals within the community is vital to having an ethical community study. In L5P, Atlanta, there are many subcultures. It is impossible to represent them all in this dissertation work. However, with this study, we have laid the groundwork to begin working with the community first to identify the experiences of people who rescue strangers from an opioid overdose. In addition, we have identified critical social constructs that must be addressed when confronting the opioid epidemic, including homelessness, untreated mental illness, fears of people who use opioids, artifacts of drug use, gentrification, and the privileges of being part of a white community.

Why L5P?

This study began with my insider knowledge of L5P. If I had rescued someone from an overdose, had others? I knew there was a community of people who use heroin in L5P, and I knew people who use injection drugs could purchase ten packs of syringes in L5P (harm reduction, decrease spread blood-borne disease). I learned how stressful it was to rescue someone with no training. I had fought with the people who were with the person who was overdosing during my experience to allow me to save someone from an overdose as I saw them ditch their drugs in the trash can near us for fear of arrest. I was able to rescue because I was taking an anatomy and physiology course and recognized cyanosis (lack of oxygen to tissues, resulting in discolored skin) which combined with the knowledge that people use opioids in L5P.

The nurse who came to help me with rescue breathing was the reason the person survived. I saw the people who were with the person who overdosed retrieve their drugs after the EMT and police left the scene. And most importantly, I never forgot the experience. This experience and the experience of losing many friends and acquaintances to heroin overdose shaped my views surrounding heroin use. And I had questions, namely, had it shaped other's views on the opioid epidemic?

Preliminary Work

During my preliminary work, I used my insider status to identify five seed participants who had intervened in an opioid overdose rescue attempt. I discovered there was an underground syringe exchange in L5P since 1995. I found allies in the SPARK group at the Rollins School of Public Health and The Atlanta Harm Reduction Coalition. I began volunteering in English Avenue, aka, The Bluff, to immerse myself in the world of harm reduction in Atlanta. I started my research by serving people in active injecting drug use. Concurrently, I began my education in harm reduction. My primary harm reduction mentors were Mona Bennett and Hannah Cooper. I also started work with Dr. Kylie Smith to investigate the history of heroin use in L5P to inform how L5P became a subculture where drug use is tolerated and even accepted. I called upon my qualitative research teacher, Dr. Hamilton, to have lunch with me in L5P to discuss methods. I used all the resources available to me. Having the privilege of being a Laney Graduate student and having a home at the Nell Hodgson Woodruff School of Nursing were instrumental in achieving my goals.

Approach

My primary training in qualitative work during my PhD studies was in qualitative descriptive methods. However, L5P has such a rich culture that I knew that an ethnography would be necessary to do the community justice. A compromise was made when Dr. Hannah Cooper suggested triangulating methods with participant observation, an ethnographic approach. Drawing on the qualitative tradition, I started reading to educate myself on qualitative methods, identify the theoretical lens, and craft aims with "what I think is going on?". My study was highly influenced by Maxwell, whose writing inspired me to take on qualitative research to answer the research questions that I had formulated.

Theoretical framework

The theoretical framework that emerged for this study was informed by concepts from across the social and health sciences disciplines including risk environment (Rhodes, 2002), intersectionality and risk environments (Collins, Boyd, Cooper, & McNeil, 2019), harm reduction (Boucher et al., 2017; Smith, 2012; Switzer, Guta, de Prinse, Chan Carusone, & Strike, 2015), social geography (Jackson, 1984), and stigma (Goffman, 1963; Jones et. al, 1984 Link & Phelan 1996-present). As I reviewed the literature and identified the phenomenon of interest, the aims took form. The primary aim was to describe the phenomenon of encountering an opioid overdose in a community setting (Little Five Points, Atlanta), as experienced by service industry workers with the secondary aims to assess the current availability and accessibility of Naloxone among service industry workers in Little Five Points and to explore attitudes and beliefs surrounding evidence-based practices that decrease the spread of disease.

Reflexivity and ethics

As I had over 20 years of experience working within the culture of Little Five Points, my *emic* perspective would have to be addressed. Some may have considered me an insider or native. Although I had left L5P five years before beginning the study, there was a question of if I was already a *native.* In ethnography studies going *native* is thought to be a liability, as you lose objectivity ((Fetterman, 1998). However, there are benefits to being more of an insider than an outsider, including the ability to access the community, be trusted within the community, and identify key actors, community advisors, and potential participants (Fetterman, 1998). To confront this ethical dilemma of being considered an insider without objectivity, I strove to make as many connections in the community as possible. In addition to SPARK, and AHRC, I met with gatekeepers and key stakeholders in the L5P community, including the then president of the L5P business association, to make my presence known. L5P is a small community. I recognized that once I began my work in the community, word would get out. I wanted people to know I was there and to know why I was there. The community advisory board (CAB) was also crucial in getting access to information in L5P. I then had the ethical dilemma of what to record in this dissertation and what to leave out. Working in communities is a privilege, and losing trust would certainly create barriers to finding participants. I had to walk a fine line. What do people need to know, and what do I need to keep to myself? There were many private or potentially damaging details that I had to keep to myself. There are many key stakeholders in the L5P neighborhood, including business association members, local business owners, people in recovery from heroin use, and service industry workers. Additionally, I was working with people who were in active heroin use. Although I did not collect data from the SSP clients, there are many notes from

fieldwork with the SSP. As I move into the subsequent phases of dissemination, I will have to make some hard choices. What is publishable, and what is private? Even with IRB approval to collect fieldwork data, I will be confronted with many decisions to test my ethics as a researcher.

Stigma

Two pieces of data inspire me to continue working as a harm reduction nurse and researcher. First from Mona Bennett, “You cannot get someone to recovery if they are dead." As I did this work in the Bluff and L5P, it was sometimes difficult to see people in active heroin use. During my dissertation work, I went to a social event where many people there were in recovery from heroin use. It was not until that moment that I understood what Mona was saying. In doing this work, recovery from heroin use is the goal, but so many are lost to overdose along the way that it is easy to lose sight of recovery. Spending time with people in recovery became a form of self-care. I attended any recovery conference and event I could to sustain me during this work. I found that having hope for recovery while meeting people where they are is a balancing act. You cannot force people into recovery. Harm reduction principles are a way to keep people healthy so that they will be alive for recovery one day when they are ready.

The second quote that keeps haunting me is Daniel, who said this to me during our interview, *“Everything is based on a stigma in this discussion. Needles. As soon as you say needle, they don't care if you snorted. They don't care if you drink it. But as soon as you say a needle, that's the line.”* During my work with AHRC, we were often on what Mona called a "syringe diet." According to Mona, people do not want to contribute funds for harm reduction efforts to purchase syringes. This stigma surrounding syringes acts as a barrier to SSP in Atlanta.

Finding a way to decrease the stigma surrounding injection drug use needs to be addressed to continue the work of the SSP.

The question of how to disseminate findings was a question we considered from early in the study. The idea for the graphic novel emerged during this work. As I was immersed in the culture of L5P, immersed in the community, with the people, many of whom are musicians and artists, surrounded by art and culture, the idea emerged from the work in the field. One day after many hours in L5P and combing through the data, I had to take a break. It was so overwhelming. I had just finished an interview with a participant who was shattered by their experience of opioid overdose rescue. I needed a break. I walked outside, looked at the trees, listened to the birds singing, and cleared my mind. As I did this, I had an image of the encounter. I saw the whole rescue in my head, and as I did, the participants turned into comic book characters. I can only attribute this to the immersive nature of this work. I had been exposed to so much street art, graffiti, and outreach that took place outside of the local comic and music shop. All these attributes came together and inspired the idea to disseminate in the graphic novel form. I was excited about this finding and presented it to the CAB, the key actor, and some participants. I immediately had buy-in from the key stakeholders. This novel form of dissemination would draw me further into the art subculture in L5P by introducing me to a graphic novelist (sequential artist).

My search for the artist began in L5P. I was aware of an artist in L5P named Ashley Anderson. I reached out to him for a meeting in L5P. We met at one of the restaurants there, and I told him about the study and the dissemination project. He was not confident that he could do this work but referred me to a local artist trained at SCAD in sequential art, Joseph Karg. I met Joseph a week later in a coffee shop, and I presented him with the work I had begun. We had an

instant rapport and talked for hours about presenting the findings while striving to confront the stigma associated with injection drug use ethically. After this meeting and an amendment to the IRB, I sent Joseph the first de-identified data. The initial pages were presented to the key stakeholders in L5P, and we received positive feedback and excitement for the final product. This work is in the first stages but shows so much promise. This is an appropriate way to disseminate in L5P (Febres-Cordero et al., 2021). It is acceptable and can train people to recognize an overdose, to implement life-saving procedures including Narcan administration, and to confront stigma.

Next Steps

These first papers only scratch the surface. There are 350 pages of text to be analyzed. We have the next set of data analyzed, which identifies attitudes, knowledge, and beliefs surrounding Narcan administration and availability and the acceptability of harm reduction strategies, including medication-assisted therapies and safe injection facilities in L5P. There is enough material from this work to write a book. Soon, I would like to expand inclusion criteria to include, Police, EMT, and people who live in the surrounding neighborhoods. There is still much work to be done in L5P and throughout Atlanta and the Southeastern United States. Policies need to change; we must strive to decriminalize paraphernalia and drug use. As a harm reduction nurse, I have found a calling to decrease stigma in communities confronted with heroin use and overdose, to work to educate on the need for services in communities that experience opioid overdoses, and to keep people who use drugs healthy, so that one day they can find a path to recovery.

References

Adams, J., U.S. Surgeon General. (2019). *U.S. Surgeon General's advisory on naloxone and opioid overdose*. Retrieved from https://www.hhs.gov/surgeongeneral/priorities/opioids-and-addiction/naloxone-advisory/index.html

Agar, M. (1973). *Ripping and Running: A formal ethnography of urban heroin addicts*. New York Semina Press.

Atlanta Harm Reduction Coaltion (AHRC). (2020). *AHRC Annual Report 2020*. Retrieved from

Alliance, L. F. (2020). Beautify L5P. Retrieved from https://l5pa.com/beautify-l5p

Association, American. Heart. (2019). Basic Life Support. Retrieved from https://cpr.heart.org/en/cpr-courses-and-kits/healthcare-professional/basic-life-support-bls-training

ASAM. (2020). Atlanta Street Art Map. Retrieved from https://streetartmap.org/atlanta-street-art-maps/little-five-points-street-art-map/

Ashrafioun, L., Gamble, S., Herrmann, M., & Baciewicz, G. (2016). Evaluation of knowledge and confidence following opioid overdose prevention training: A comparison of types of training participants and naloxone administration methods. *Subst Abus, 37*(1), 76-81. doi:10.1080/08897077.2015.1110550

Association, A. H. (2019). Basic Life Support. Retrieved from https://cpr.heart.org/en/cpr-courses-and-kits/healthcare-professional/basic-life-support-bls-training

Atlanta Street Art Map. (2020). *Little Five Points.* Retrieved from https://streetartmap.org/atlanta-street-art-maps/little-five-points-street-art-map/

Ashwal, G., & Thomas, A. (2018). Are Comic Books Appropriate Health Education Formats to Offer Adult Patients? *AMA Journal of Ethics, 20*(1), 134-140. doi:10.1001/journalofethics.2018.20.2.ecas1-1802

Bebinger, M. (2017). Public Restrooms Become Ground Zero In The Opioid Epidemic. Retrieved from https://www.npr.org/sections/health-shots/2017/05/08/526523520/public-restrooms-become-ground-zero-in-the-opioid-epidemic

Bergen, N., & Labonte, R. (2019). "Everything Is Perfect, and We Have No Problems": Detecting and Limiting Social Desirability Bias in Qualitative Research. *Qual Health Res*, 1049732319889354. doi:10.1177/1049732319889354

Boucher, L. M., Marshall, Z., Martin, A., Larose-Hebert, K., Flynn, J. V., Lalonde, C., . . . Kendall, C. (2017). Expanding conceptualizations of harm reduction: results from a qualitative community-based participatory research study with people who inject drugs. *Harm Reduct J, 14*(1), 18. doi:10.1186/s12954-017-0145-2

Brinkmann, S. K., S (2006). Confronting the ethics of qualitative research. *Journal of Constructivist Psychology, 18*(2), 157-181. doi:10.1080/10720530590914789

Centers for Disease Control and Prevention (CDC) (2019). Understanding the Epidemic. Retrieved from https://www.cdc.gov/drugoverdose/epidemic/index.html

Centers for Disease Control and Prevention (CDC) (2012). Community-based opioid overdose prevention programs providing naloxone - United States, 2010. *MMWR Morb Mortal Wkly Rep, 61*(6), 101-105.

Centers for Disease Control and Prevention (CDC) (2020). Opioid Overdose: Understanding the Epidemic.. *Retrieved from:*

https://www.cdc.gov/drugoverdose/epidemic/index.html#:~:text=The%20number%20of%20drug%20overdose,rates%20increased%20by%20over%206%25.

Coalition, H. R. (2020). ALERT: Mouth-to-mouth resuscitation is essential in responding to opioid overdoses. Retrieved from https://harmreduction.org/wp-content/uploads/2012/02/alert-hands-only-cpr.pdf

Collins, A. B., Boyd, J., Cooper, H. L. F., & McNeil, R. (2019). The intersectional risk environment of people who use drugs. *Soc Sci Med, 234*, 112384. doi:10.1016/j.socscimed.2019.112384

Cooper, H., Friedman, S. R., Tempalski, B., Friedman, R., & Keem, M. (2005). Racial/ethnic disparities in injection drug use in large US metropolitan areas. *Ann Epidemiol, 15*(5), 326-334. doi:10.1016/j.annepidem.2004.10.008

Corrigan, P. W., Watson, A. C., & Miller, F. E. (2006). Blame, shame, and contamination: the impact of mental illness and drug dependence stigma on family members. *J Fam Psychol, 20*(2), 239-246. doi:10.1037/0893-3200.20.2.239

Coughlin, S. S. (1990). Recall bias in epidemiologic studies. *J Clin Epidemiol, 43*(1), 87-91. doi:10.1016/0895-4356(90)90060-3

Crabtree, A., Mercer, G., Horan, R., Grant, S., Tan, T., & Buxton, J. A. (2013). A qualitative study of the perceived effects of blue lights in washrooms on people who use injection drugs. *Harm Reduct J, 10*, 22. doi:10.1186/1477-7517-10-22

Creswell, J. W. (2007). *Qualitative Inquiry & Research Design: Choosing Among Five Approaches*. Thousand Oaks: Sage Publications.

Doe-Simkins, M., Quinn, E., Xuan, Z., Sorensen-Alawad, A., Hackman, H., Ozonoff, A., & Walley, A. Y. (2014). Overdose rescues by trained and untrained participants and change

in opioid use among substance-using participants in overdose education and naloxone distribution programs: a retrospective cohort study. *BMC Public Health, 14*, 297. doi:10.1186/1471-2458-14-297

Emory University, I. R. B. (2021). Sociobehavioral Research\Minimal Risk Studies. Retrieved from http://www.irb.emory.edu/forms/socio.html

Esposito, D., Heeringa, J., Bradley, K., Croake, S., Kimmey, L. (2015). PCORI Dissemination & Implementation Framework. *Mathematica Policy Research*.

Fairbairn, N., Coffin, P. O., & Walley, A. Y. (2017). Naloxone for heroin, prescription opioid, and illicitly made fentanyl overdoses: Challenges and innovations responding to a dynamic epidemic. *Int J Drug Policy, 46*, 172-179. doi:10.1016/j.drugpo.2017.06.005

Febres-Cordero, S., Sherman, A. D. F., Karg, J., Kelly, U., Thompson, L. M., & Smith, K. (2021). Designing a Graphic Novel: Engaging Community, Arts, and Culture Into Public Health Initiatives. *Health Promot Pract, 22*(1_suppl), 35s-43s. doi:10.1177/1524839921996405

Fetterman, D. M. (1998). *Ethnography: Step by Step. Applied Social Reseaech Methods Series 2nd ed.* (Vol. 17). London, New Delhi: Sage Publications Inc.

Foundation, G. P. (2020). Opioid Safety Champions! [Press release]. Retrieved from http://www.gpha.org/champion-bios/

Frank, L., Basch, E., & Selby, J. V. (2014). The PCORI perspective on patient-centered outcomes research. *JAMA, 312*(15), 1513-1514. doi:10.1001/jama.2014.11100

Gorgia Department of Public Health (GDPH). (2018). *Multi-Stakeholder Opioid & Substance Use Response Plan*. Retrieved from Georgia:

Gorgia Department of Public Health (GDPH). (2019). *Opioid Overdose Surveillance Preliminary Report*

The Georgia Department of Public Health (GDPH) (2020). *Notice of proposed rulemaking: Proposed new public health regulations "Syringe Service Programs".* Retrieved from

Gorgia Department of Public Health (GDPH). (2020). *Notice of proposed rulemaking: Proposed new public health regulations "Syringe Service Programs".* Retrieved from

Georgia Drug and Narcotics Agency (2017). Govenor Deal signs Naloxone Bill into law-expanding access to an emergency tool to parents to help fight the opioid epidemic. Retrieved from: https://gdna.georgia.gov/press-releases/2017-06-26/governor-deal-signs-naloxone-bill-law-expanding-access-emergency-tool#:~:text=Naloxone%20does%20not%20produce%20a,to%20someone%20experiencing%20an%20overdose.

Gibson, E. K., Exner, H., Stone, R., Lindquist, J., Cowen, L., & Roth, E. A. (2011). A mixed methods approach to delineating and understanding injection practices among clientele of a Victoria, British Columbia needle exchange program. *Drug Alcohol Rev, 30*(4), 360-365. doi:10.1111/j.1465-3362.2010.00219.x

Giglio, R. E., Li, G., & DiMaggio, C. J. (2015). Effectiveness of bystander naloxone administration and overdose education programs: a meta-analysis. *Inury Epidemiology, 2*(1), 10. doi:10.1186/s40621-015-0041-8

Glaser, B. G., Strauss A. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago, IL: Aldine Publishing Co,.

Goffman, E. (1963). *Stgma: Notes on managment and spoiled identity*. Englewood Cliffs: Prentice-Hall inc.

Gonzalez-Guarda, R. M., Jones, E. J., Cohn, E., Gillespie, G. L., & Bowen, F. (2017). Advancing Nursing Science Through Community Advisory Boards: Working Effectively Across Diverse Communities. *ANS Adv Nurs Sci, 40*(3), 278-288. doi:10.1097/ans.0000000000000167

Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today, 24*(2), 105-112. doi:10.1016/j.nedt.2003.10.001

Green, T. C., Heimer, R., & Grau, L. E. (2008). Distinguishing signs of opioid overdose and indication for naloxone: an evaluation of six overdose training and naloxone distribution programs in the United States. *Addiction, 103*(6), 979-989. doi:10.1111/j.1360-0443.2008.02182.x

Guba, E. G., & Lincoln, Y. S. (1994). *Competing paradigms in qualitative research* Thousand Oaks, CA: Sage.

Gupta, U. C. (2013). Informed consent in clinical research: Revisiting few concepts and areas. *Perspectives of Clinical Research, 4*(1), 26-32. doi:10.4103/2229-3485.106373

Hadjistavropoulos, T., & Smythe, W. E. . (2001). Elements of risk in qualitative research. *Ethics & Behavior, 10*, 163-174.

Hamdy, S., & Nye, C. (2019). Comics and revolution as global public health intervention: The Case of Lissa. *Global Public Health*, 1-21. doi:10.1080/17441692.2019.1682632

Hamilton, J. B., Sandelowski, M., Moore, A. D., Agarwal, M., & Koenig, H. G. (2013). "You need a song to bring you through": the use of religious songs to manage stressful life events. *Gerontologist, 53*(1), 26-38. doi:10.1093/geront/gns064

Hamilton, J. B. (2019). Rigor in Qualitative Methods: An Evaluation of Strategies Among Underrepresented Rural Communities. *Qual Health Res*, 1049732319860267. doi:10.1177/1049732319860267

Hammersley, M. A., P. (1995). *Ethnography: principles in practice* (Vol. 2nd ed.). London: Routledge.

Hartel, R. (2010). *The Highs and Lows of Little Five: A History of Little Five Points*. Charleston, SC: The History Press.

Hatzenbuehler, M. L., Phelan, J. C., & Link, B. G. (2013). Stigma as a fundamental cause of population health inequalities. *Am J Public Health, 103*(5), 813-821. doi:10.2105/ajph.2012.301069

Hopkins, S. (1970). Hippies gradually leaving 10th street for new areas. *The Atlanta Constitution*. Retrieved from https://login.proxy.library.emory.edu/login?url=https://search-proquest-com.proxy.library.emory.edu/docview/1563743531?accountid=10747

Husserl, D. (1982). *Ideas pertaining to a pure phenomenology and to a phenomenological philosophy*. The Hague ; Boston : Hingham, MA, USA: M. Nijhoff ; Distributors for the U.S. and Canada, Kluwer Boston.

Irvine, M. A., Buxton, J. A., Otterstatter, M., Balshaw, R., Gustafson, R., Tyndall, M., . . . Coombs, D. (2018). Distribution of take-home opioid antagonist kits during a synthetic opioid epidemic in British Columbia, Canada: a modelling study. *Lancet Public Health, 3*(5), e218-e225. doi:10.1016/s2468-2667(18)30044-6

Jackson, P. S., S.J. (1984). *Exploring Social Geography*. London: George Allan and Unwin Ltd.

Jones, E. E., Farina, A., Hastorf, A. H., Markus, H., Miller, D. T., Scott,, & S., A. (1984). *Social stigma: The psychology of marked relationships*. New York: Freeman.

Kelley, C. (2016). Drawn to Success: Comic shops continue to thrive in digital age. Retrieved from https://atlantaintownpaper.com/2016/04/drawn-to-success-comic-shops-continue-to-thrive-in-digital-age/

Kim, H., Sefcik, J. S., & Bradway, C. (2017). Characteristics of Qualitative Descriptive Studies: A Systematic Review. *Res Nurs Health, 40*(1), 23-42. doi:10.1002/nur.21768

Kolodny. (2015). The prescription opioid and heroin crisis: A public health approach to an epidemic of addiction. *Annual Review of Public Health, 36*, 559-574.

Krieger, N. (2012). Methods for the scientific study of discrimination and health: an ecosocial approach. *Am J Public Health, 102*(5), 936-944. doi:10.2105/ajph.2011.300544

Ksobiech, K. (2004). Return Rates for Needle Exchange Programs: A Common Criticism Answered. *Harm Reduct J, 1*(1), 2. doi:10.1186/1477-7517-1-2

Leone, J. M. (2018). Drawing Invisible Wounds: War Comics and the Treatment of Trauma. *Joural of Meicald Humanities, 39*(3), 243-261. doi:10.1007/s10912-017-9442-8

Link, B. G., & Phelan, J. (2014). Stigma power. *Soc Sci Med, 103*, 24-32. doi:10.1016/j.socscimed.2013.07.035

Link, B. G., Struening, E. L., Neese-Todd, S., Asmussen, S., & Phelan, J. C. (2001). Stigma as a barrier to recovery: The consequences of stigma for the self-esteem of people with mental illnesses. *Psychiatr Serv, 52*(12), 1621-1626. doi:10.1176/appi.ps.52.12.1621

Magnani, R., Sabin, K., Saidel, T., & Heckathorn, D. (2005). Review of sampling hard-to-reach and hidden populations for HIV surveillance. *AIDS, 19 Suppl 2*, S67-72. doi:10.1097/01.aids.0000172879.20628.e1

Maxwell, J. A. (1996). *Qualitative Research Design: An Interactive Approach*. Thousand Oaks: Sage Publications.

Merriam, S. B. (2009). *Qualitative Research: A Guide to Design and Implementation*. San Francisco: Jossey-Bass.

Montgomery, M., Manuelito, B., Nass, C., Chock, T., & Buchwald, D. (2012). The Native Comic Book Project: native youth making comics and healthy decisions. *Journal of Cancer Education, 27*(1 Suppl), S41-46. doi:10.1007/s13187-012-0311-x

Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *Eur J Gen Pract, 24*(1), 9-18. doi:10.1080/13814788.2017.1375091

Mueller, S. R., Walley, A. Y., Calcaterra, S. L., Glanz, J. M., & Binswanger, I. A. (2015). A Review of Opioid Overdose Prevention and Naloxone Prescribing: Implications for Translating Community Programming Into Clinical Practice. *Substance Abuse, 36*(2), 240-253. doi:10.1080/08897077.2015.1010032

Myers, K. R., & Goldenberg, M. D. F. (2018). Graphic Pathographies and the Ethical Practice of Person-Centered Medicine. *AMA Journal of Ethics, 20*(1), 158-166. doi:10.1001/journalofethics.2018.20.2.medu2-1802

Neale, J., & Strang, J. (2015). Naloxone--does over-antagonism matter? Evidence of iatrogenic harm after emergency treatment of heroin/opioid overdose. *Addiction, 110*(10), 1644-1652. doi:10.1111/add.13027

Neergaard, M. A., Oleson, F., Andersen, R.S., Sondergaard, J. (2009). Qualitative description - the poor cousin of health research? *, 9*, 52. doi:10.1186/1471-2288-9-52

Oni, A., Kamkoong, H. (Writer). (2015). A Syringe Exchange Love Story with Atlanta Harm Reduction Coalition. In: North Carolina Harm Reduction.

Parkin, S., & Coomber, R. (2010). Fluorescent blue lights, injecting drug use and related health risk in public conveniences: findings from a qualitative study of micro-injecting environments. *Health Place, 16*(4), 629-637. doi:10.1016/j.healthplace.2010.01.007

Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods* (3 ed.). London: Sage Publications.

Parkin, S., Neale, J., Brown, C., Campbell, A. N. C., Castillo, F., Jones, J. D., . . . Comer, S. D. (2020). Opioid overdose reversals using naloxone in New York City by people who use opioids: Implications for public health and overdose harm reduction approaches from a qualitative study. *Int J Drug Policy, 79*, 102751. doi:10.1016/j.drugpo.2020.102751

Pettigrew, T. F. (1979). Racial Change and Social Policy. *The ANNALS of the American Academy of Political and Social Science, 441*(1). doi:doi.org/10.1177/000271627944100109

Powell, N. (2008). *Swallow me whole*. Marietta, GA: Top Shelf Productions.

Prescription Drug Monitoring Program (PDMP) (2018). *Opioid Overdose Surveillance Preliminary County Level Data Tables Georgia*. Retrieved from https://dph.georgia.gov/epidemiology/drug-surveillance-unit

Regan, T. (2018, June 22, 2018). Pharmacist, employee save two men who overdosed outside store. *The Atlanta Journal Constitution*.

Rhodes, T. (2002). The 'risk environment': a framework for understanding and reducing drug-related harm. *International Journal of Drug Policy, 13*, 85-94. Retrieved from https://doi.org/10.1016/S0955-3959(02)00007-5

Robertson, M. H., & Boyle, J. S. (1984). Ethnography: contributions to nursing research. *J Adv Nurs, 9*(1), 43-49. doi:10.1111/j.1365-2648.1984.tb00342.x

Ruud, M. P., Raanaas, R. K., & Bjelland, M. (2016). Caregivers' perception of factors associated with a healthy diet among people with intellectual disability living in community residences: A Concept mapping method. *Res Dev Disabil, 59*, 202-210. doi:10.1016/j.ridd.2016.09.006

Saldaña, J. V. (2016). *'The' coding manual for qualitative researchers*. Los Angeles ; London ; New Delhi ; Singapore ; Washington DC: SAGE.

Sandelowski, M. (2000). Whatever happened to qualitative description? *Res Nurs Health, 23*(4), 334-340.

Sandelowski, M. (2010). What's in a name? Qualitative description revisited. *Res Nurs Health, 33*(1), 77-84. doi:10.1002/nur.20362

Sato, S., Suzuki, S., Lee, X. P., & Sato, K. (2010). Studies on 1-(2-phenethyl)-4-(N-propionylanilino)piperidine (fentanyl) and related compounds VII. Quantification of alpha-methylfentanyl metabolites excreted in rat urine. *Forensic Sci Int, 195*(1-3), 68-72. doi:10.1016/j.forsciint.2009.11.014

Sibley, D. (1981). *Updating Urban Geography: Hidden Groups in the City* (Vol. 7): Geographical Association.

Silverman, C. (1982). Everyday Drama: Impression Management Of Urban Gypsies. *Urban Anthropology, 11*(3/4), 377-398. Retrieved from www.jstor.org/stable/40552982

Small, W., Rhodes, T., Wood, E., & Kerr, T. (2007). Public injection settings in Vancouver: physical environment, social context and risk. *Int J Drug Policy, 18*(1), 27-36. doi:10.1016/j.drugpo.2006.11.019

Smith, C. B. R. (2012). Harm reduction as anarchist practice: a user's guide to capitalism and addiction in North America. *Critical Public Health, 22*(2), 209-221. doi:10.1080/09581596.2011.611487

Smythe, W. E., & Murray, M. J. . (2000). Owning the story: Ethical considerations in narrative research. *Ethics & Behavior, 10*, 311-333.

Snyder, M. (1981). *On the self-perpetuating nature of social stereotypes*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Sonke, J., Golden, T., Francois, S., Hand, J., Chandra, A., Clemmons, L., Fakunle, D., Jackson, M.R., Magsamen, S., Rubin, V., Sams, K., Springs, S. (2019). *Creating Healthy Communities through Cross-Sector Collaboration [White paper].*

Spradley, J. P. (1970). *You owe yourself a drunk: An ethnography of urban nomads*. Long Grove, Illinios: Waveland Press, Inc.

Spradley, J. P. (1979). *The Ethnographic interview*. New York: Harcourt Brace Jovanovich College Publishers.

Spradley, J. P., & Mann, B. J. . (1974). *The cocktail waitress: Woman's work in a man's world.* New York: Wiley.

Spradley, J. P. (1980). *Participant Observation*. Illinois: Waveland Press, Inc.

Street, A. E., Shin, M. H., Marchany, K. E., McCaughey, V. K., Bell, M. E., & Hamilton, A. B. (2019). Veterans' perspectives on military sexual trauma-related communication with VHA providers. *Psychol Serv*. doi:10.1037/ser0000395

Substance Abuse Research Alliance (SARA) (2017). *Prescription Opioids and Heroin Epidemic in Georgia - A White Paper*. Retrieved from https://www.sara-ga.org/impact

Switzer, S., Guta, A., de Prinse, K., Chan Carusone, S., & Strike, C. (2015). Visualizing harm reduction: Methodological and ethical considerations. *Soc Sci Med, 133*, 77-84. doi:10.1016/j.socscimed.2015.03.040

Tenny, S., Brannan, G. D., Brannan, J. M., & Sharts-Hopko, N. C. (2020). Qualitative Study. In *StatPearls*. Treasure Island (FL): StatPearls Publishing

Tschaepe, M. (2018). Representations of Patients' Experiences of Autonomy in Graphic Medicine. *AMA J Ethics, 20*(1), 122-129. doi:10.1001/journalofethics.2018.20.2.peer2-1802

Vindrola-Padros, C., & Vindrola-Padros, B. (2018). Quick and dirty? A systematic review of the use of rapid ethnographies in healthcare organisation and delivery. *BMJ Qual Saf, 27*(4), 321-330. doi:10.1136/bmjqs-2017-007226

WABE. 90.1 (Producer). (2014). *The Atlanta Harm Reduction Coalition: Mona Bennett*

Weaver-Hightower, M. B. (2017). Losing Thomas & Ella: A Father's Story (A Research Comic). *J Med Humanit, 38*(3), 215-230. doi:10.1007/s10912-015-9359-z

Wheeler, E., Jones, T. S., Gilbert, M. K., & Davidson, P. J. (2015). Opioid Overdose Prevention Programs Providing Naloxone to Laypersons - United States, 2014. *MMWR Morb Mortal Wkly Rep, 64*(23), 631-635. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4584734/pdf/631-635.pdf

Wide-ranging online data for epidemiologic research, (WONDER) (2017). Retrieved from: http://wonder.cdc.gov

Wide-ranging online data for epidemiologic research, (WONDER) (2020). CDC, National Center for Health Statistics; 2020 [Press release]. Retrieved from http://wonder.cdc.gov

Williams, P., Lerch, O., & Lerch, M. (1982). The Invisibility Of The Kalderash Of Paris: Some Aspects Of The Economic Activity And Settlement Patterns Of The Kalderash Rom Of The Paris Suburbs. *Urban Anthropology, 11*(3/4), 315-346. Retrieved from http://www.jstor.org/stable/40552980

Willis, L. A., Kachur, R., Castellanos, T. J., Nichols, K., Mendoza, M. C. B., Gaul, Z. J., . . . Sutton, M. Y. (2018). Developing a Motion Comic for HIV/STD Prevention for Young People Ages 15-24, Part 2: Evaluation of a Pilot Intervention. *Health and Community, 33*(3), 229-237. doi:10.1080/10410236.2016.1255841

Wodak, A. (2012). Drug law reform: when bad policy is good politics. *Lancet, 380*(9854), 1624-1626. doi:10.1016/s0140-6736(12)61847-9

Wide-ranging online data for epidemiologic research (WONDER) (2020). CDC, National Center for Health Statistics; 2020 [Press release]. Retrieved from http://wonder.cdc.gov

Wolfson-Stofko, B., Bennett, A. S., Elliott, L., & Curtis, R. (2017). Drug use in business bathrooms: An exploratory study of manager encounters in New York City. *International Journal of Drug Policy, 39*, 69-77. doi:10.1016/j.drugpo.2016.08.014