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Identifying and Addressing Racial Disparities at STEP's Suboxone Clinic
Program Requirements

Maye Ismail, RN

A DNP project submitted in partial fulfillment of the
requirements for the degree of

Doctor of Nursing Practice

Seattle University

2022

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Abstract

Problem: In 2017 the United States declared the opioid epidemic a public health emergency. Since then, the opioid epidemic has been worsening and the rate of overdose deaths by drugs has been rising. In 2020, 91,799 drug overdoses were reported compared to 70,630 overdose deaths in 2019. Death by opioid and synthetic opioid overdose is prevalent among all racial and ethnic groups, however, not all people have equal access to treatment. Buprenorphine is an effective first-line medication for opioid use disorder that reduces the risk of overdose and serious opioid related complications. People of color receive a significantly lower amount of buprenorphine prescriptions than their White counterparts. Barriers contributing to the inaccessibility of opioid use disorder treatment include clinic location, stigmatization, prescription affordability, and lack of clinician cultural literacy.

Intervention: The focus of the project is to identify and address barriers that contribute to the inaccessibility of buprenorphine at a Suboxone clinic and compare the identified barriers and solutions provided by patients and staff to the literature. Barriers are identified based on the experience of the clinic's patients and staff.

Measure: Semi-structured interviews of patients and staff questionnaires were completed to collect data regarding barriers and solutions to address said barriers.

Results: Barriers identified by the patients and staff that contribute to the inaccessibility of buprenorphine by non-White patients at the buprenorphine clinic are consistent with barriers expressed in the literature. These barriers include but are not limited to clinic location and transportation, stigmatization, prescription affordability, and lack of clinician cultural literacy.

Acknowledgements

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Identifying and Addressing Racial Disparities at STEP's Suboxone Clinic

The opioid crisis is a major public health problem that is devastatingly impacting the lives of millions of people throughout the United States (Human and Health Services, 2020). Opioids are invaluable short term treatment options for acute episodes of pain (Jones et al., 2018). However, the over-prescription, misinformation of its addictive properties, and misuse led the United States Government to declare the opioid epidemic a public health emergency in 2017 (Jones et al., 2018). Medication for opioid use disorder (MOUD), such as buprenorphine, have been effective in reducing the risk of overdose and serious opioid related mortality (Wakemen, 2020).

Although buprenorphine is effective in treating opioid use disorder (OUD), the majority of patients receiving buprenorphine prescriptions are White. Buprenorphine use among patients of color is significantly lower than their White counterparts. This is alarming because the prevalence of opioid use disorder among non-White populations, especially Black and Hispanic individuals, is high and increasing (Lagisetty et al., 2019). Barriers to MOUD access have contributed to the low numbers of non-White patients who receive buprenorphine. These barriers include buprenorphine clinic location, stigmatization, prescription affordability, and clinician cultural literacy barriers.

The STEP Clinic, a buprenorphine clinic in Seattle WA, follows the nation's trend of serving a disproportionately low number of non-White patients with substance use disorder. The purpose of this project is to identify and address racial disparities among non-White STEP patients.

Background

To understand treatment of opioid use disorder, the pathophysiology of OUD will briefly be reviewed.

Pathophysiology of Opioid Use Disorder

The usage of opioids activates the mesolimbic pathways, also known as the pleasure pathway, by attaching to the mu, kappa, and delta receptors. The attachment to the mu receptors leads to dopamine release. Dopamine is a neurotransmitter that produces euphoric and analgesic effects and is naturally released during exercise, sexual activity, and eating. The usage of exogenous opioids leads to the release of an excessive amount of dopamine. Chronic use of opioids causes the brain to require a greater amount of dopamine that cannot be achieved without exogenous opioids resulting in an overpowering desire to use opioids (Brown & Capili, 2020). The downregulation and the desensitization of the receptors result in opioid tolerance and the sudden reduction or discontinuation of opioids cause withdrawal syndrome (Shah, 2020). Those who experience withdrawal syndrome may experience physical symptoms such as dilated pupils, diarrhea, generalized pain, and psychological symptoms such as anxiety (Schuckit, 2016). The usage of opioids also disrupts the hypothalamic-pituitary-adrenal axis, also known as the HPA axis, which controls the body's response to stress (Brown & Capili, 2020). All these factors contribute to the extreme difficulty of overcoming opioid use disorder. Fortunately, treatment is available to assist people in managing this chronic disorder. The paper will focus on buprenorphine treatment.

Mechanism of Action of Buprenorphine

Buprenorphine is a medication that is approved by the US Food and Drug Administration for treatment of opioid use disorder (Coffa & Snyder, 2019). Buprenorphine is a partial mu opioid receptor agonist that effectively prevents opioid withdrawal symptoms and significantly reduces opioid cravings. Due to buprenorphine being a partial agonist, a ceiling effect is reached which prevents it from being used for euphoric effect. Buprenorphine cannot be displaced by full opioid receptor agonist, therefore limits the effects of opioids and heroin when used after buprenorphine administration. Buprenorphine is prescribed in primary care settings. Although follow up visits are mandatory for refills, daily visits are not required allowing patients to pick up their prescription after a follow up visit and self-administer medication at their desired location (Connery, 2015).

Effectiveness of Buprenorphine

Medication for opioid use disorder (MOUD) has been effective in reducing the risk of overdose and serious opioid related mortality when compared to no treatment, opioid antagonist therapy, inpatient treatment, and intensive outpatient behavioral interventions (Wakeman, 2020). A 2018 retrospective cohort study found that opioid related mortality rates decreased in half among adults who received either methadone or buprenorphine (Goedel et al., 2020). Another study conducted on 40,885 adults with opioid use disorder who were insured in Massachusetts between 2015 to 2017 compared the outcomes of adults who received buprenorphine or methadone treatment to adults who received no treatment (Wakeman, 2020). The study found that by three months of treatment, adults who received buprenorphine or methadone had a 76% reduction rate in overdose and a 32% reduction rate

in serious opioid related acute care use compared to no treatment. At 12 months, adults who received buprenorphine or methadone had a 59% reduction rate in overdose and a 26% reduction in serious opioid related acute care use compared to no treatment.

Literature Review

The search engines used to find scholarly publications were Google Scholar, PubMed, and CINAHL. The terms used to conduct the searches were “people of color”, “POC”, “non-White”, “Suboxone”, “substance use disorder”, “opioid use”, “buprenorphine”, “barriers” and “inaccessibility”. All publications reviewed and cited in this paper were within 7 years of publication.

Prevalence

The United States Government declared the opioid epidemic a public health emergency in 2017 due to over-prescription, misinformation of opioids addictive properties, and misuse (Jones et al., 2018). Eight to 12% of people who are prescribed opioids develop an opioid use disorder and four to six percent of people who misuse prescription opioids transition to heroin use (National Institutes of Health, 2020). In 2018, drug overdose was the cause of 67,367 deaths in the United States (CDC, 2020). In Washington State, approximately 700 people die from opioid overdose every year (National Institutes of Health, 2020). Projected trends show that 700,000 more individuals will die of opioid-involved overdose in the next decade (Goedel et al., 2020). Opioid use is the cause of other serious physical, mental, and social consequences such as infections from injections, depression, homelessness, and stigmatization (McCarberg, 2015).

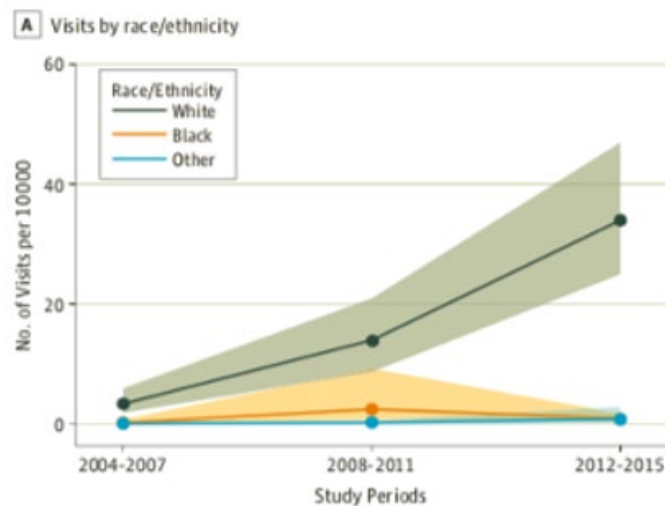
The rate of opioid misuse and opioid-related overdose deaths have increased among non-White people over the past years. In 2018, 1.2 million Black/African Americans were estimated to have opioid misuse (Chau, 2020). Between 2015 to 2016, the overdose death rate of Black/African Americans increased by 40% compared to the 21% increase in overdose death rate of the overall population (Chau, 2020). From 2018 to 2019, Black/African Americans experienced a 38% increase in deaths due to opioid overdose and between 2015 to 2017, almost all ethnic and racial groups experienced a significant increase in deaths due from opioids or synthetic opioids overdose (Laroche et al., 2021 & Lippold et al., 2019). These rates particularly increased among Black/African Americans in large central metro areas between the ages of 45-54 years whose death rate increased from 19.3 to 41.9 per 100,000 and 55-64 years whose death rate increased from 21.8 to 42.7 per 100,000 (Lippold et al., 2019).

Although OUD is prevalent among all racial/ethnic groups and effective treatment options such as buprenorphine are available, the majority of treatment is received by White patients. Non-White individuals are less likely than White individuals to encounter MOUD prescribing physicians and receive MOUD (Gibbons, 2021; Hollander et al., 2021; Kilaru et al., 2020). Lagisetty et al., (2019) combined data from the National Ambulatory Medical Care Survey and the National Hospital Ambulatory Medical Care Survey from 2004 to 2015 to display the race/ethnicity characteristics that are associated with office-based visits for buprenorphine treatment in the United States. The study found that between 2012 and 2015, 12.7 million buprenorphine prescriptions were received by White patients while only 363,000 buprenorphine prescriptions were received by other races/ethnicities. Figure 1, below, illustrates buprenorphine visits by race/ethnicity between 2004-2015 and displays the

significant increase of buprenorphine visits by White patients compared to the stagnantly low buprenorphine visits of Black and other racial/ethnic patients. Hansen et al., (2016) found that in New York City, buprenorphine treatment increased at a significantly higher rate in areas with the highest incomes and lowest percentage of Black, Hispanic, and low-income residents while Goedel et al., (2020) found the capacity to provide buprenorphine was higher in counties where White residents did not interact with Black/African American and Hispanic/Latino residents. Lack of access to MOUD can lead to detrimental consequences including death by overdose (Madras et al., 2020).

Figure 1

Buprenorphine Visits by Race/Ethnicity and Payment Type, 2004-2015



Barriers to Obtaining Buprenorphine

Although opioid use disorder is prevalent among all racial/ethnic communities, non-White people are less likely to access buprenorphine (Lagisetty et al., 2019). Barriers contributing to the inaccessibility of buprenorphine include but are not limited to, clinic location, lack of clinician cultural literacy, stigmatization, and cost/insurance.

Location of Buprenorphine Clinics

Goedel et al., (2020) conducted a nationwide population based cross sectional geospatial analysis that found the capacity to provide methadone was higher in US counties with a higher population density of Black/African Americans and Hispanics/Latino residents who were unlikely to interact with White residents. Concurrently, the capacity to provide buprenorphine was higher in counties with high density of White residents who were less likely to interact with Hispanics/Latinos and Black/African American residents. These findings show the serious inequities of access to MOUD based on the racialization of county lines (Goedel et al., 2020).

Although methadone clinics are more accessible in counties with larger density of Black/African Americans and Hispanic/Latinos, the disparity of buprenorphine clinics across segregated counties is concerning and problematic (Goedel et al., 2020). Methadone clinics place more restrictions on patients requiring daily dosage administration under clinician supervision while buprenorphine is administered from home unsupervised and requires weekly, biweekly, or monthly follow up visits. Regular methadone visits can be challenging for many patients with substance use disorder due to creating burdens in managing jobs or other obligations (Nolen, 2020). Methadone is also a highly stigmatized medication especially among Black/African American communities compared to buprenorphine (Chau, 2020).

Cost/Insurance

Lack of healthcare insurance is another major factor that contributes to the inaccessibility of buprenorphine since uninsured people are required to pay out-of-pocket for MOUD (Martin, 2021). Hispanic/Latinos and Black/African Americans are more likely to be

uninsured than Whites. In 2021, 23.6% of Hispanics/Latinos were uninsured and 11.8% of Black/African Americans were uninsured, while 7.5% of Whites were uninsured (Yang, 2021).

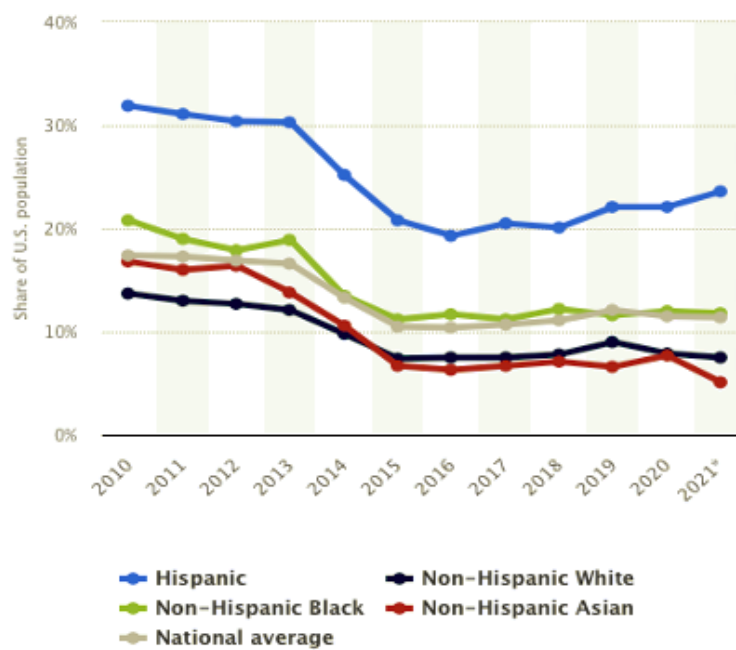
Figure 2, below, illustrates this trend. The price of brand name buprenorphine/naloxone sublingual films, Suboxone, can start from \$293.18 for a quantity of 30 strips while the generic buprenorphine/naloxone sublingual films can start from \$102.14 for a quantity of 30 strips.

Buprenorphine tablet prices start at \$27.86 for a quantity of 30 tablets (Martin, 2021). Some health care providers direct patients to coupons that can significantly reduce costs.

Nonetheless, cost still remains a major factor for many uninsured patients. Although Medicaid and the majority of private insurance covers buprenorphine, some healthcare providers remain discouraged from participating in prescribing buprenorphine to Medicaid patients due to low reimbursement rates (Miller, 2021).

Figure 2

Percentage of People Without Health Insurance in the US from 2010 to June 2021, by ethnicity



Clinician Cultural Literacy

Lack of clinician cultural literacy and respectful care towards patients of color with OUD can cause early termination of treatment (Madras et al., 2020). Engaging in treatment for opioid use disorder is difficult for all populations and is especially difficult for patients of color who experience a lack of respect and empathy from their clinicians, whose cultural context is misunderstood or ignored by clinicians, and in the context of a shortage of Black and Hispanic buprenorphine prescribers (Chau, 2020). Language barriers further exacerbate the issue. Patients whose primary language is not English may experience difficulty expressing their needs or connecting with their healthcare provider (Psychiatry & Behavioral Health Learning Network, 2019).

Stigmatization

Stigma from the provider is another major barrier experienced by non-White patients. Many clinicians, pharmacists, and staff have stigmatized attitudes towards people with substance use disorder and towards MOUD (Madras et al., 2020). However, people of color experience greater stigmatization due to their racial minority status, negative racial representation, and racial stereotyping (SAMHSA, 2020). Providers may express stigmatization towards patients with opioid use disorder by showing lack of empathy, less engagement, or by believing patients to be violent, manipulative, or unmotivated (Madras et al., 2020).

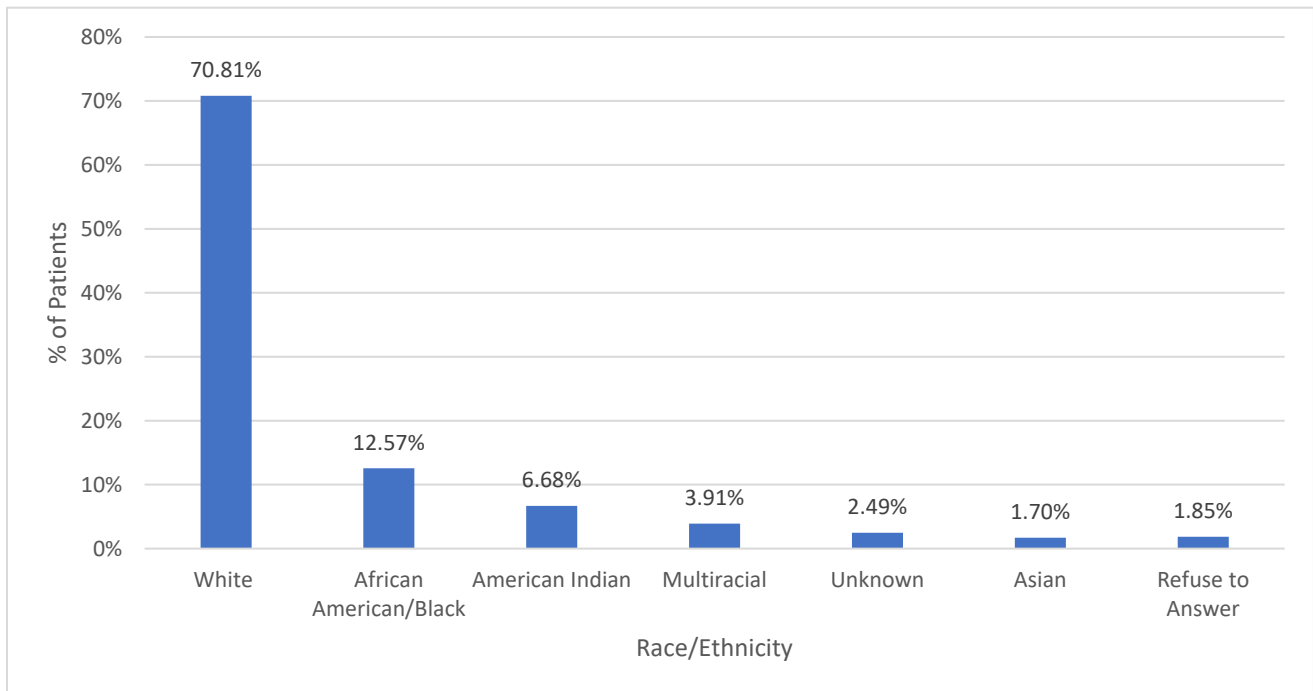
Purpose of the Project

This project intends to address the racial disparities in buprenorphine treatment experienced by non-White patients at a low barrier, harm reduction buprenorphine clinic in

Seattle, WA called The STEP Clinic, also referred to as STEP. Details of The STEP Clinic are discussed further below.

The STEP Clinic follows the nation's trend of serving a disproportionate number of non-White patients. Figure 3, below, illustrates that as of March 1, 2020, 70.81% of The STEP Clinic's patient population are White while 12.57% are African American/Black, 6.68% are American Indian, 3.91% are multiracial, and 1.70% are Asian. The remaining 1.85% of patients refused to self-identify their race or ethnicity while 2.49% races/ethnicities are unknown. The data and literature support a clear disparity of buprenorphine treatment among racial and ethnic minorities.

The purposes of this project are to 1) collect information from non-White patients who have previously received buprenorphine prescriptions from The STEP Clinic or are currently receiving medication prescriptions from the STEP clinic to understand a) potential barriers that cause them difficulties in receiving their buprenorphine prescription and b) feasible solutions patients and staff believe the STEP clinic can implement to make it easier for non-White patients to receive treatment at STEP, and; 2) to compare the collected data from staff and patients to the literature to determine feasible solutions The STEP Clinic can implement to remove barriers contributing to the inaccessibility of buprenorphine treatment and ultimately increase enrollment and retention rate of non-White patients at The STEP Clinic who can benefit from buprenorphine.

Figure 3*STEP Clinic Demographic as of March 2020*

Note: The majority of STEP patients identified as White while a small minority of STEP patients identified as other races/ethnicities.

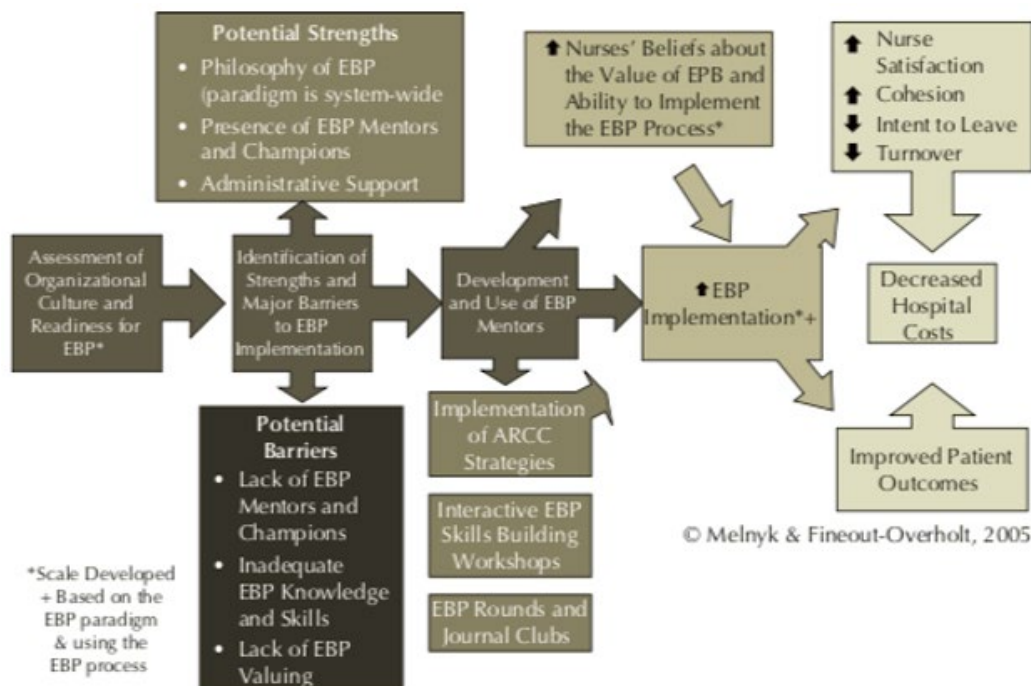
Theoretical Framework

The theoretical framework that was implemented in this project is the Advancing Research and Clinical Practice through Close Collaborations model. ARCC is used to provide health care organizations and clinical settings with an organized conceptual framework that can guide system-wide implementation and sustainability of evidence-based practice to achieve quality outcomes. The model has five steps: 1) assessment of cultural organizational readiness for implementation in the healthcare system, 2) identification of facilitators and barriers of the EBP process in the organization, 3) identification of EBP mentors, 4) implementation of the evidence into organizational practice, 5) evaluation of the outcomes resulting from the practice

change (Rycroft-Malone & Bucknall, 2010). Figure 4, below, illustrates the five steps of the ARCC model. The ARCC guided this project due to its reliance on clinical expertise provided by STEP staff, patient preferences and values provided by STEP patients, and evidence-based research provided by the literature. This project was able to assess the readiness of The STEP Clinic by receiving approval and support to conduct the study. This project was also able to achieve step 2 and step 3 but identifying barriers in the organization that contribute to the inaccessibility of buprenorphine to non-White patients and identifying a facilitator, the author of this project, to organize strategies to implement EBP practice in the clinic. Step 4 and 5 were not achieved but the study encourages The STEP Clinic to complete the remaining steps.

Figure 4

ARCC Framework Steps for Implementing Evidence-Based Practice



Note: The image displays the five steps of the ARCC framework for implementing EBP at an organization. This study was able to achieve the first three steps.

Methods

This project is a quality improvement study with a pre-implementation analysis of patient demographic (race/ethnicity). Data was collected from STEP patients and STEP staff through semi-structured interviews and a questionnaire respectively to identify barriers experienced by non-White patients at the STEP Clinic. Patients and staff who participated in this study also suggested solutions that address the identified barriers.

Project Setting

This project was conducted at The STEP Clinic. STEP is an acronym for support, treatment, engagement, and pride. The STEP Clinic is a low barrier, harm reduction clinic that is partnered with the Hepatitis Education Program (HEP). The STEP Clinic's mission is to improve the health of the community by providing high quality, caring, culturally appropriate primary health care that addresses patients' needs regardless of ability to pay. Together, HEP and STEP provide a variety of medical services including buprenorphine prescription for opioid use disorder, syringe service program, vaccinations, infections disease testing including HIV, Hepatitis C, and sexual transmitted infections, and provide hepatitis C management. The STEP Clinic is located in the Central District neighborhood and is affiliated with a larger organization, Country Doctor Community Clinic (Country Doctor Community Clinic, 2021).

Participants

Participants in this study were STEP patients who met the inclusion criteria and STEP staff regardless of race/ethnicity. Patients eligible to participate in the study were patients of The STEP Clinic who were receiving buprenorphine treatment or have previously received buprenorphine treatment and identify as "Black/African America", "American Indian/Alaska

Native”, “Asian”, “Native Hawaiian/Other Pacific Islander”, “Multiracial”, “Hispanic”, or “Other” under the racial/ethnic demographic in their Electronic Medical Record (EMR). Patients who identified as “White”, “Unknown”, or “Refused to answer” were excluded from the study.

Patients who did not receive a buprenorphine prescription were also excluded from the study.

All staff of the STEP Clinic were eligible to participate in the study regardless of race/ethnicity. This enables staff to report the barriers they have witnessed patients of color experience at STEP and recommend solutions that address these barriers based on their own expertise.

Patient Data Collection and Recruitment

An Excel sheet of all STEP patients who received care from the year 2020 to 2022 and who did not identify as “White”, “Unknown”, or “Refuse to answer” was generated by the Country Doctor Community Clinic’s (CDCC) EMR team and sent to the principal investigator (PI). The PI reviewed the patients on the Excel sheet to ensure potential participants met inclusion criteria. The PI deleted patients from the Excel sheet who did not receive a buprenorphine prescription from STEP. Once the PI reviewed and confirmed that all patients met the inclusion criteria, the PI began conducting semi-structured interviews at the PI’s private home using the 8X8 application. The 8X8 application allowed the PI to contact patients using CDCC’s phone number to maintain the PI’s privacy. Each patient was contacted a maximum of three times. Patients who did not answer after the third attempt were removed from the Excel sheet provided by the EMR team. Each attempt to contact patients was completed during different times of the day (morning, afternoon, evening) to accommodate patients’ work or school

schedules. The PI did not leave voice messages to prevent traces of the study. Two weeks were allotted to complete patient semi-structured interviews.

Once the PI successfully reached potential participants, the PI read the approved script attached to the semi-structured interview form (Appendix A) explaining the purpose of the study to patients. The PI then asked patients for verbal consent to participate. Once consent was given, the semi-structured interview was conducted. Data collected from participants was recorded on an Excel sheet. No direct patient identifiers (name, date of birth, medical record number) were documented or attached to the collected data. Patients' direct identifiers were removed from the Excel sheet provided by the EMR team after the patients were either successfully contacted or received three unsuccessful phone calls. All phone calls with patients were completed by the PI. The Excel sheet provided by the EMR team was secured on the PI's password protected laptop. No monetary incentives were provided to participants.

Staff Data Collection and Recruitment

STEP staff were invited to participate in the study via CDCC primary distribution email. A Google Form questionnaire (Appendix B) was attached to the email (Appendix C). Staff were informed completing the questionnaire was optional. No staff identifiers (names, emails, phone numbers) were documented or attached to the answers. Details of the study were provided in the questionnaire. It was also stated that by answering and submitting the questionnaire, the staff member was providing consent to participate in the study. The data of the participants was organized in an Excel sheet. The PI holds sole access to the Google Form results of the participants and the Excel sheet with the collected data. The Google Form and Excel sheet were

secured on the PI's password protected laptop. No monetary incentives were provided to participants.

Instruments and Tools

The patient semi-structured interview (Appendix A) and staff questionnaire (Appendix B) were created by the PI and reviewed and approved by the PI's faculty advisor and site liaison. They were designed to inquire participants about barriers typically experienced by non-White patients who receive buprenorphine. Questions were based on barriers experienced by non-White patients found in the literature. Each instrument provided the opportunity for participants to add additional information regarding their experience at The STEP Clinic.

Results

Eight patients completed the semi-structured interview, and eight STEP staff completed the questionnaire. This is a qualitative study that utilized interviews and a questionnaire to discuss participants' opinions and perspectives; therefore, no quantitative test was needed to analyze data. The PI reviewed participants' answers and summarized the findings. Bar graphs were created to improve ease of understanding the findings.

The findings from the patients and staff are summarized in Figure 5. The prevalence of barriers reported varied between staff and patients. All staff identified at least one barrier while two patients reported to have experienced no barriers when accessing their buprenorphine at The STEP Clinic. "Stigmatization of patients by their own community" was agreed upon unanimously by staff to be a barrier experienced by non-White STEP patients while the most frequently reported barrier by patients was "other issues" which were reported by 62.5% of patients. The least frequently reported barrier from staff was "mandatory

appointments with the STEP provider”, which was reported by 50% of staff, while the least frequently reported barriers from patients were “payment/insurance” and “clinic environment/staff”. “Clinic environment/staff” was the barrier with the greatest incongruence between staff and patients, with 87.5% of staff reporting this as a barrier while only 12.5% (one patient) reporting to have experienced it as a barrier.

Figure 5

Barriers Experienced by Non-White Patients at The STEP Clinic Reported by Patients and Staff

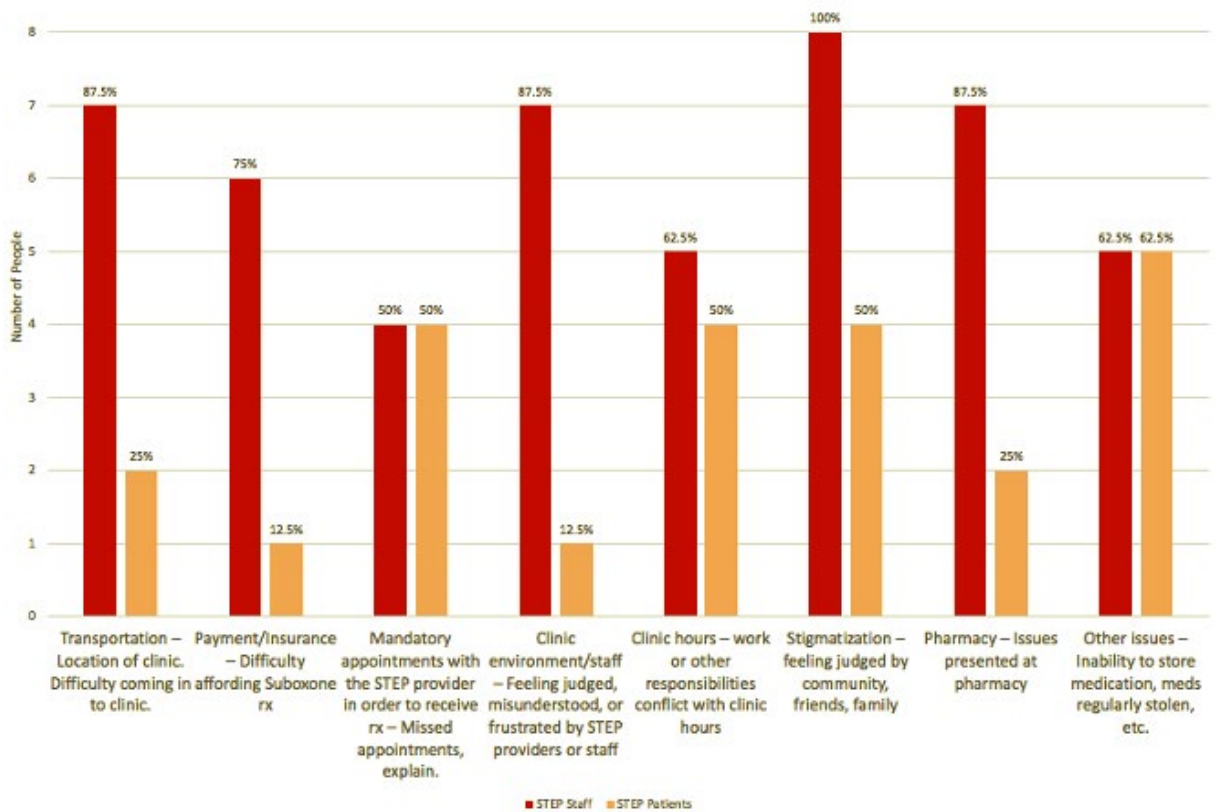


Figure 5: The graph displays the percentages of participants who reported the categories as barriers experienced by non-White patients at STEP. The red graphs represent the frequencies these categories were reported by staff while the orange graphs represent the frequencies these categories were reported by patients.

STEP Staff Results

All staff unanimously agreed that patients who identify as non-White experience greater barriers to accessing Suboxone at The STEP Clinic than their White counterparts.

Transportation and Clinic Location

Transportation and clinic location were reported to be challenges experienced by non-White patients when accessing their buprenorphine and services at STEP by 87.5% of staff. Two staff participants reported that The STEP Clinic is located in a gentrified area and the majority of STEP patients come from low-socioeconomic backgrounds and cannot afford to live within walking distance of the clinic, therefore these patients have to take the public transit system. The public transit system can be an inconvenience due to multiple transfers, long commute hours, and the cost of fares. One staff participant reported the clinic is not connected to a good transportation system that can be offered to patients who cannot walk or drive to the clinic. This staff participant also noted that the clinic is not flexible in transitioning mandatory follow up visits from in-person to phone visits to meet the needs of the patient population served. Another staff participant reported the clinic should be located further south to be more accessible to the targeted patient population.

Payment and Insurance

Seventy five percent of staff participants believe payment and insurance are challenges experienced by non-White STEP patients. One staff participant reported that in general non-White people have greater rates of incarceration and insurance is suspended during the period of incarceration. This can make it difficult for patients to cover their buprenorphine prescription after release. The staff participant also noted that non-White patients have higher rates of

being uninsured. The lack of healthcare coverage can cause their buprenorphine prescriptions to be unaffordable.

Mandatory Appointments and Clinic Hours

Half of staff participants reported that mandatory appointments with the provider in order to receive a buprenorphine prescription is a challenge to non-White patients while 62.5% of staff participants reported that clinical hours are a barrier to suboxone. Staff participants did not expand on barriers caused by mandatory appointments and clinic hours. However, three participants reported that the urinary drug screens (UDS) during in-person visits acts as a barrier to non-White patients. A participant noted that UDS results can cause patients to feel judged, stigmatized, shame, and fear of discharge from the program or involvement of law enforcement. Judgement and stigmatization are discussed in the sections below.

Clinical Environment and Staff

The clinic environment and staff were reported to be a barrier by 87.5% of staff participants. Seven staff participants explained that the lack of non-White providers (physicians, nurse practitioners, physician assistants) can create barriers to care. One staff participant noted that non-White patients do not see themselves represented in the care team due to a majority White staff, especially White providers. Another staff participant reported that White providers cannot culturally relate to patients of color. Five staff participants highlighted that The STEP Clinic is mostly a White space due to its predominantly White patient population and White staff. Two staff participants explained this can make the clinic unwelcoming and uncomfortable for patients of color.

Several staff participants discussed judgment, distrust, and stigma from the STEP staff experienced by non-White patients. One staff participant reported that Black patients are scrutinized more heavily for substance use and for substances found in their UDS screenings than their White counterparts. Two staff participants reported that concerns expressed by non-White patients are often not listened to. One staff participant reported that several Black patients who expressed frustration with The STEP Clinic were dismissed or treated as “difficult.” These patients also received shortened prescriptions due to concerns about other substance use and were asked to come in for visits more frequently than other patients. This staff participant reported these patients were monitored more closely than other patients in similar situations. Another staff participant reported that non-White people may not seek care at STEP due to fear of their healthcare provider involving law enforcement or taking a punitive approach to their care compared to their White counterparts. One participant reported that non-White patients, especially Black patients, are more often accused of divergence, which is the unlawful distribution of prescribed medication from the person it was prescribed to another person, and are not trusted by staff or providers. This staff participant noted The STEP Clinic is a low-barrier clinic, therefore patients should not be tracked whether they take their medication nor judged if they dispense their buprenorphine prescription or use other substances.

Stigmatization from Community

All staff participants reported that stigmatization of patients by family, friends, and communities is a barrier experienced by non-White patients to accessing buprenorphine at The STEP Clinic. One staff participant reported that they noticed patients from immigrant communities tend to face greater stigma and less support from their family and friends than

other non-White patients. Another staff participant reported that non-White patients often feel judged and believe that people think of them as “drug addicts.” This staff participant reported that often times, non-White patients will report to STEP staff their employment history or educational background and explain that they are productive members of society who are trying to do the right thing by receiving OUD treatment but feel that they experience extra obstacles.

Pharmacy

Pharmacy issues were reported by 87.5% of staff participants to present challenges to non-White patients in accessing buprenorphine. Four staff participants reported that non-White patients are judged or treated more poorly than their White counterparts when picking up their buprenorphine prescription at certain pharmacies. One staff participant reported that non-White patients frequently experience microaggression and racism at pharmacies. Examples and scenarios were not provided. Another staff participant reported that pharmacy staff request the ID of non-White patient when picking up their buprenorphine prescription more often than their White counterparts. This staff participant also noted that non-White patients are less likely to inform a nurse or provider when their prescription requires a prior authorization to be filled and will instead fill the lower dose that does not require the additional steps.

Other Issues

Finally, 87.5% of staff participants reported that there are other issues that present challenges to non-White patients in accessing buprenorphine. Two staff participants reported historical trauma: general mistrust of medical providers due to historical treatment and trauma

of people of color. Four staff participants reported that systemic racism created barriers for all non-White people in accessing all medical and social services including The STEP Clinic. Two staff participants reported cultural and language barriers. One of these staff participants explained that there is not enough literature about The STEP Clinic's services in other languages and that STEP services are not easy to navigate for non-English speakers. Two staff participants also noted that there is not enough discussion at the clinic among staff about cultural competency. Another staff participant reported that there is a lack of culturally relevant and appropriate counseling support for non-White patients. One staff participant reported that obtaining buprenorphine is a complicated and tedious process especially when racial barriers experienced by non-White STEP patients are not taken into consideration. Five staff participants reported a lack of outreach, community awareness of STEP services, and collaboration with other organizations that center non-White communities and populations. Two staff participants reported internalized shame experienced by patients is a challenge and one staff participant noted past negative experience with medical services and medical providers can create barriers to accessing treatment at STEP.

STEP Patient Results

This section will address the results of the patients' semi-structured interview (Appendix A). Eight out of forty-three eligible patients participated in this study. When patients were asked about barriers to buprenorphine that they experienced at The STEP clinic, they responded with varying degrees (Figure 5). Six patients reported to have experienced at least one barrier contributing to the inaccessibility of buprenorphine at The STEP Clinic while two patients reported to have experienced no barriers at The STEP Clinic. All patients who

participated in this study reported they would recommend The STEP Clinic to other community members.

Transportation and Clinic Location

Transportation and location of the clinic were reported as barriers by 25% of the patient participants. Six of the patient participants reported they either lived close to the clinic or used to live close when they received STEP services. The two patient participants who reported transportation and location of the clinic as an issue have established care elsewhere due to the distance of the clinic from their home and the inconvenience of the public transit system.

Payment and Insurance

One patient participant (12.5%) reported that insurance was a barrier to accessing their buprenorphine prescription. The patient participant did not expand on their experience.

Mandatory Appointments and Clinic Hours

Half of patient participants reported that mandatory appointments and clinic hours were barriers to receiving care at the STEP Clinic. Two patient participants explained they had difficulties accommodating childcare therefore struggled to make in-person follow up visits to obtain a buprenorphine prescription. One patient participant reported the limited hours and clinic days made it difficult to obtain a buprenorphine prescription due to clinic hours coinciding with work schedule. Another patient participant found the in-person visits were a hassle and unnecessary.

Clinical Environment and Staff

One patient reported that the clinic's environment and staff were barriers to their treatment at the STEP Clinic. The patient participant felt mistreated by staff. The remaining

87.5% who were interviewed reported that they felt very supported and welcomed by staff. Four patient participants believed that the STEP staff were very committed to their patients' care. Three patient participants felt welcomed to walk into the clinic at all times. One patient participant stated the STEP staff were very knowledgeable and provided them with great medical resources when transitioning care to another state. Another patient reported that non-White people usually don't feel welcomed in a predominantly White space, however the STEP staff made the participant feel very cared for.

Stigmatization from Community

Half of the patient participants reported that stigmatization from family, friends, and communities are a barrier for non-White patients in accessing their buprenorphine prescription at The STEP Clinic. One patient participant reported they withheld informing family and friends about their opioid use disorder history and buprenorphine treatment to avoid judgement. Another patient reported that only one family member is aware of their opioid use disorder and buprenorphine treatment.

Pharmacy

Pharmacy issues were reported by 25% of participants as being barriers to buprenorphine access. These patients reported to have experienced challenges at pharmacies when attempting to fill their buprenorphine prescription. Two patient participants reported to have faced poor treatment by pharmacy staff when attempting to fill buprenorphine. Both patient participants switched pharmacies.

Other Issues

Finally, 62.5% of patient participants reported that there are other issues that present challenges to accessing buprenorphine. Three patient participants stated that internalized shame from missing appointments or not adhering to buprenorphine make it difficult to return to the clinic. One patient participant expressed disappointment in self and reported that the STEP team spent a lot of time in developing a personalized plan, therefore when the participant missed a couple of appointments, the participant felt too ashamed to return to clinic.

Solutions Provided by Participants

Staff and patient participants in the study were requested to provide feasible solutions to address the identified barriers. The solutions of all participants, staff and patients, are summarized below to minimize repetition of solutions.

UDS and In-Person Visits

Two staff participants suggested the elimination of the UDS requirement, and a third staff participant reported that STEP should be more flexibility around UDS especially among non-White patients due to the negative feelings the UDS may provoke. A staff participant reported in-person visits should be eliminated while two staff participants suggested greater flexibility in transitioning in-person visits to phone visits. One staff participant and two patient participants suggested extending clinic hours and adding additional clinic operation days.

Transportation and Location

Two staff participants reported The STEP Clinic must develop an accessible transportation support system for patients while another staff participant reported that the STEP Clinic should move to a location that is reflective of the patient population served. One

staff suggested greater flexibility in transitioning in-person visits to phone visits while another participant stressed the need for buprenorphine clinics closer to patients' homes.

Pharmacy and Prescription

A staff participant reported patients should be provided with longer prescriptions to minimize trips to the pharmacy. This staff participant also reported that The STEP Clinic should establish a pharmacy within the clinic where patients can pick up their prescription instead of having to visit another pharmacy. Another staff participant reported a need to develop better relationships with pharmacies frequented by STEP patients and request patient feedback to identify problematic locations (pharmacies) or individuals (staff).

STEP Staff

Three staff participants reported a need for more diverse staff who could relate to non-White patients and have deeper cultural understanding. A staff participant also suggested employing multilingual staff to ameliorate the language barriers experienced at The STEP Clinic. Three staff participants discussed the importance of providing continuous education about caring for patients of color with substance use disorder to all providers and staff. A staff participant suggested that providers should be educated not to judge patients on whether patients take their buprenorphine or other non-prescribed substances. A patient participant reported STEP staff should learn how to trust Black patients since the lack of trust creates a negative experience for patients and deters patients from treatment.

Patient Feedback

Five staff participants reported the need to develop an improved system to obtain continuous feedback from patients to improve services, address patient concerns, and resolve

issues and challenges. One staff participant reported that patients could be more successful if staff worked with them to understand the patients' needs and priorities.

Outreach and Collaboration

Five staff participants and four patient participants reported that outreach to non-White organizations and communities should be improved. One staff participant suggested collaborating with organizations such as People of Color Against Aids Network (POCAAN) and Seattle Indian Center/Chief Seattle Club. The organizations provide marginalized communities in the King County area with resources of services and community programs. Two staff participants reported that The STEP Clinic should collaborate with Entre Hermanos, a non-profit organization that provides disease prevention, support services, education, and advocacy to the Latinx LGBTQ community. One staff participant noted that Entre Hermanos is located in the same building as The STEP Clinic, yet no partnership was established with the organization. One staff participant suggested employing patients who regularly access services on an outreach team to inform other individuals with substance use disorder about the clinic's services. Three patient participants reported that they learned about The STEP Clinic through word of mouth. Four of the patient participants reported that their community would benefit from STEP services, but most people are unfamiliar with buprenorphine or unaware of the existence of The STEP Clinic. Those patient participants stressed the importance of community outreach.

Structural Changes

Two staff participants reported the presence of systemic issues that must be addressed at a policy level. One staff participant reported there is only so much the STEP staff can accomplish alone. This staff participant stressed that change must come from the

administrative level and without administrative support, STEP staff will have limited success in implementing structural changes.

Other Suggestions

Three staff participants discussed the importance of offering housing, employment, and mental health resources to patients. A staff participant suggested that the clinic space should be more welcoming to patients by providing more comfortable seating, allowing patients to spend more time in the clinic lobby, and making the clinic more accessible to patients with mobility impairments. This staff participant reported that the building's lift is very inaccessible to patients and in order for patients to access the entrance, they must have a phone to request access from the clinic. The staff participant also suggested providing services at patients' homes to eliminate barriers to transportation. A patient participant suggested providing higher quality snacks for patients waiting in the lobby.

Discussion

The aim of this study was to identify, and address barriers experienced at The STEP Clinic by non-White patients. This study found that barriers discussed in the literature: clinic location, lack of clinician cultural literacy, stigmatization, and prescription affordability, are experienced by non-White patients at The STEP Clinic according to STEP staff and patients. The sections below will discuss the differences and similarities of the barriers reported by the patients, staff, and literature and discuss solutions provided by patient and staff participants of the study and the literature.

Transportation and Location

Contrary to the STEP staff participants, the majority of patient participants reported the location of The STEP Clinic was convenient. Nonetheless, as previously stated in the literature review, buprenorphine clinics are predominantly located in US counties with a greater density of White residents than Black/African American or Hispanic/Latinos (Goedel et al., 2020). Staff participants recognized that The STEP Clinic is located in a gentrified area that is not reflective of the majority of STEP's patient population who come from lower socioeconomic backgrounds. Therefore, many STEP patients are unable to afford to live close to the clinic. A study found that telehealth is necessary to close the gap of MOUD and reduce mortality after Covid-19 (Wang, 2021). This study supports the staff participants' suggestion of utilizing phone or virtual visits to conduct follow up appointments instead of in-person visits which eliminates transportation and location barriers. Staff participants' suggestion of establishing a transportation system for patients is also supported by a study conducted by Chaiyachati, (2018) which found that no-show rates for primary care appointments decreased after the implementation of a ride-share based transportation support system. Transitioning in-person visits to phone visits may be a more feasible solution than developing a transportation system since this solution requires no additional resources.

Payment and Insurance

Similar to transportation/location, payment and insurance was reported as a barrier more frequently by staff participants than patient participants. The literature supports a staff participant's concerns about the higher prevalence of uninsured non-White people compared to their White counterparts (Yang, 2021). Solutions were not provided by patients or staff

participants. However, a study suggested healthcare coverage can increase among eligible Medicaid patients if they are provided with enrollment assistance by qualified and trained staff (Artiga et al., 2016). STEP staff can help assist patients with basic insurance issues such as enrollment and connect patients with additional insurance resources if needed. This will require spending additional time with patients but may reduce the payment and insurance barriers and increase the insurance rate among non-White patients at STEP.

Clinic Environment and Staff

The frequency that clinic environment/staff was reported as a barrier experienced by non-White STEP patients contrasted greatly between patient and staff participants. Seven out of eight staff participants reported this factor to be a barrier compared to one patient participant. When asked to expand about their experience, patient and staff participants discussed judgement, stigmatization, and distrust of non-White patients specifically Black patients by providers, shortage of a diverse staff, and fear of healthcare providers involving law enforcement or taking a punitive approach to non-White patients' care compared to their White counterparts.

These barriers reported by the patient and staff participants have also been reported in the literature. Shortage of Black/African American and Hispanic/Latino buprenorphine prescribers has caused additional difficulty for non-White patients' experience when accessing buprenorphine compared to White individuals due to White healthcare providers misunderstanding or ignoring cultural context (Chau, 2020). Staff and patient participants suggested employing staff with diverse cultural backgrounds that are representative of the patient population served. SAMHSA (2020) supports this suggestion reporting that an increase

of Black/African American and Hispanic/Latino providers can help bridge cultural gaps in healthcare. When recruiting new hires, The STEP Clinic must seriously take into consideration employing qualified non-White healthcare providers. This is a feasible solution that can help alleviate some of the barriers non-White patients experience with White healthcare providers.

Staff participants' recommendation of employing multilingual staff to ameliorate language barriers and provide staff with continuous education on culturally competent and compassionate care of patients of color with OUD are supported by the literature and can help address barriers non-White patients experience at the clinic and by staff (Chau, 2020; Madras et al., 2020; Psychiatry & Behavioral Health Learning Network, 2019). Educational modules and training should be implemented for all new and current staff members of STEP. SAMHSA (2020) recommends *A Treatment Improvement Protocol: Improving Cultural Competence* published by SAMHSA as a tool to improve cultural competency and address implicit racial biases, judgement, and stigmatization of non-White patients. This is a free tool that can be accessed online, and therefore requires no additional resources or funds to implement. Updated and new modules, workshops, and training that focus on providing care to patients of color with OUD should be further looked into by The STEP Clinic and offered to STEP providers and staff.

Mandatory Appointments and Clinic Hours

The number of staff and patient participants who reported that mandatory appointments and clinic hours as barriers experienced by non-White patients was very similar. Half of both patients and staff participants reported mandatory appointments as a barrier while five staff participants and four patient participants reported clinic hours a barrier to buprenorphine. Patient participants discussed the difficulties of showing up to in-person

appointments due to poor childcare accommodations and work schedules that conflict with limited clinic hours, while staff participants discussed barriers caused by mandatory urinary drug screens (UDS) during in-person visits. The literature review supports staff participants' suggestion of transitioning in-person visits to phone visits to eliminate barriers caused by transportation and in-person appointments barriers such as childcare accommodations (Wang, 2021). A study conducted by Pytell and Rastegar (2021) found that UDS cause feelings of distrust, shame, and stigmatization among patients with substance use disorder further validating the staff participants' concerns about UDS. Although the study does not support the total elimination of UDS, it does recommend healthcare providers to stop routine UDS for patients receiving MOUD and instead adopt "targeted UDS" which is requesting UDS from patients who can benefit from it such as patients exhibiting potential toxic effects from an unknown substance, help guide initiation of OUD treatment, or for patients who may benefit from positive reinforcement of UDS (Pytell & Rastegar, 2021). The STEP Clinic's implementation of "targeted UDS" instead of routine UDS may be a feasible solution to address the negative experience patients face during in-person visits and would require no additional resources. The utilization of phone visits instead of in-person visits is also another feasible solution for patients with access to mobile phone who are unable to make their in-person appointments due to various barriers.

Stigmatization from Community

Similar to most categories, stigmatization from community members was reported as a barrier by staff participants more frequently than patient participants. In fact, all staff participants reported this category to be a barrier compared to half of the patient participants.

Studies have found that non-White people with substance use disorder experience greater stigmatization by society and healthcare providers compared to their White counterparts due to their minority racial status, negative racial representations, and racial stereotyping (Madras et al., 2020 & SAMHSA, 2020). However, non-White people with substance use disorder also experience stigma from their own communities due to a lack of understanding of substance use disorder as a disease and the misunderstanding of treatment options (SAMHSA, 2020).

Staff and patient participants also discussed internalized stigma as a barrier non-White patient experience at The STEP Clinic. This barrier has also been reported in the literature. A study found that internalized, anticipated, and enacted stigma are barriers to buprenorphine and methadone treatment especially among racial minority communities (Anvari et al., 2022). The study states reducing the stigma surrounding buprenorphine and methadone is crucial to improving MOUD outcomes.

Patients and staff participants did not provide solutions that address the stigmatization non-White patients experience from their communities or their internalized stigma. However, a study suggests the first step to addressing misinformation and reducing stigma is by mobilizing trusted community leaders to discuss stigmatized health issues (SAMHSA, 2020). This requires outreach, which is discussed in a later section. Another study stresses the importance of focusing on the role of language and how it can reinforce negative perceptions about opioid use disorder (National Academies of Medicine, 2019). The study recommends avoiding terms such as “substance abuser” or “medication assisted treatment” and instead use terms such as “person with substance use disorder” and “pharmacotherapy” respectively which have been

shown to produce more positive association. Language used at the clinic can shape a patient's perception of self, substance use, and treatment. This reinforces the importance of continuous education on management and care of patients with substance use disorder as stated in the previous section.

Pharmacy

Although both patients and staff participants reported pharmacy as a barrier experienced by non-White patients at STEP, this barrier was reported more frequently by staff participants than patient participants. Both staff and patient participants reported poor treatment by pharmacy staff when non-White patients fill buprenorphine prescription. As previously stated, the literature reports that clinicians, pharmacists, and staff have stigmatized attitudes towards people with substance use disorder and towards medication for opioid use disorder (Madras et al., 2020). In fact, Burgess et al. (2021) reported that pharmacists and pharmacy technicians are the most frequent perpetrators of stigmatizing patients with opioid use disorder. These findings alongside the racial stigma and racial stereotyping non-White patients experience can create a significant barrier to accessing buprenorphine (SAMHSA, 2020).

Staff participants recommended providing patients with a higher quantity of buprenorphine to reduce pharmacy visits and opening a pharmacy at The STEP Clinic. One staff participant suggested developing better relationships with pharmacies frequented by STEP patients and requesting patient feedback to identify problematic pharmacies and staff. The literature supports the suggestion of improving relationships between pharmacists and providers. Cooper et al. (2020) recommends conveying community forums for pharmacists and

providers to resolve conflicts over buprenorphine access, discuss clear prescribing and dispensing guidelines, and provide education from both providers and pharmacists about buprenorphine. The study suggests this may build common standards, enhance trust between the two professions, and improve understanding of best practice. The study also reports continuing education on stigma reduction is necessary for all professions. Although hosting a community forum with other pharmacies would be very beneficial, it will require many resources including time, funding, and additional staffing to take on this project. Feasible solutions to address poor treatment of patients with substance use disorder by pharmacy staff were not found in the literature. Nonetheless, the staff participants suggestion of requesting feedback to identify the pharmacies where patients experience poor treatment, and the perpetrating staff should be considered by The STEP Clinic. Providers can avoid sending prescriptions to the identified pharmacies or follow up with management about the poor treatment STEP patients endure. This solution will not require additional funds but will require staff time.

Other Issues

Five staff participants and five patient participants reported the presence of other issues that create barriers to non-White patients at STEP to accessing their buprenorphine.

Lack of outreach and collaboration with other organizations that center non-White communities was the most reported barrier among staff participants. Internalized shame was the most common barrier patient participants reported. Internalized shame was addressed in a previous section. SAMHSA, (2020) discusses the importance of outreach by highlighting that providing buprenorphine at a clinic is not effective without outreach and community relations.

Multiple staff participants listed organizations they believe The STEP Clinic should foster partnerships with to expand services to non-White patients. The organizations mentioned were People of Color Against Aids Network (POCAAN), Seattle Indian Center, Chief Seattle Club, and Entre Hermanos. SAMHSA (2020) supports this feasible solution stating that developing multi-sectoral, diverse community partnership and involvement is crucial in prevention, treatment, and recovery strategies.

Dissemination

Findings were presented to STEP Staff via Microsoft Teams. The report was disseminated via email to all STEP staff, stakeholders, and the clinical supervisor to review. STEP staff agreed to review the report before a round table meeting (all staff meeting). The findings will further be discussed during the meeting. A physical copy of the findings will also be provided as resource to The STEP clinic.

Limitations

The sparse literature on the specific barriers non-White people experience when accessing their buprenorphine was a limitation in this study. Another limitation was that not all patients of color were able to participant. Patients from the Middle East/North Africa were unable to participate in the study since their race is categorized as “White” in the census bureau.

Limitations were also experienced upon data collection. A total of 43 patients between 2020 to 2022 met the inclusion criteria of the study. However only eight patients were reached and consented to participate. Many patients who met the inclusion criteria did not have a phone number documented in their EMR, changed their phone number, or their phone number

was no longer in service. Multiple patients were incarcerated and unreachable. The patients who did agree to participate had an overall positive experience with STEP services and the frequency of barriers they reported was much lower than the staff participants reported barriers (Figure 5). These findings may be explained by non-response bias which is a bias that occurs when there is a significant difference between those who responded to interviews and those who did not (Compton et al., 2019). The patients who participated may have overrepresented a positive experience at The Step Clinic and patients who refused to participate or who were not reached may have had a negative experience. To overcome these limitations, The STEP Clinic should plan for ongoing opportunities to gather feedback from patients as part of their routine care encounter. This will expand the sample size and therefore present data that is more representative of the patient population.

Implications for Practice

This project aimed to identify the barriers experienced by non-White patients at STEP and collect solutions that can be implemented by STEP to address racial disparities that contribute to the inaccessibility of buprenorphine non-White patients experience. This project is intended to be a guide for all STEP providers and staff and to help providers and staff recognize the presence of racial disparities at The STEP Clinic, understand the barriers experienced by non-White patients, use this project as a resource when discussing racial disparities at The STEP Clinic, and provide a list of solutions that can be implemented to improve non-White patients' accessibility to buprenorphine. Advanced registered nurse practitioners, registered nurses, and physicians are extremely important patient advocates due to their direct care of patients at The STEP Clinic. It is important for these healthcare providers

to review the barriers and solutions discussed in this study to determine direct actions they can take to improve their care of non-White patients, discuss these barriers with patients, discuss other barriers that were not mentioned in this study with patients, and to advocate for policy change by leadership that can support improving access to buprenorphine to non-White patients.

This project should not come to a halt once these barriers and solutions are reviewed and discussed. Providers and staff must advocate for leadership support to implement long-term solutions that will ease and improve care of non-White patients at The STEP Clinic. It is essential for leadership to be onboard. Without policy change by leadership, STEP staff are limited to what can be achieved to address barriers and increase accessibility.

Constant feedback from patients must be received to determine accessibility improvements and to identify additional barriers that were not revealed in this study. The enrollment and retention rate of non-White STEP patients' post-implementation should be acquired and compared to the pre-implementation rate to determine if addressing the identified barriers affected enrollment and retention rates at STEP. Finally, healthcare providers from other organizations can utilize this study to review potential barriers their non-White patients may experience in other healthcare facilities.

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Appendix A

Patient Semi-Structured Interview Script:

Hello,

My name is Maye. I am a nurse and nurse practitioner student working with the STEP Clinic. I am calling you because you were a patient of our and I am working on a project to improve suboxone accessibility at the STEP Clinic to people who identify as non-White. I would love to hear about your experience at STEP so we can improve our service. Would you be interested in completing a five-minute interview? It would not impact your medical care at STEP in any way.

No: That's totally fine! If you don't have the time right now, we can always schedule a time when I call you back. But if you're not interested, that is okay!

- Not interested.
- Yes, lets schedule a time!

Before we start the interview, I do want to let you know that I will be not be documenting your name or address. The STEP providers and staff will not know that you took part in this study. You do not have to disclose any details of your medical history, current or past substance use, or involvement with law enforcement/the justice system if you do not wish too. You can also stop the interview at any time, and it will have no effect on the services you receive from STEP.

Do I have your consent to proceed with the interview?

Semi-Structured Interview – Patients

1. How long have you been a STEP patient?
2. How is/was your experience receiving your Suboxone prescription (rx) at STEP?
3. What are some factors that make it easy to access your Suboxone rx at STEP?
No barriers
4. What are some challenges or difficulties you experience in accessing your suboxone rx at STEP?
5. Do you believe any of the following have created challenges in obtaining your prescription? If yes, please explain.
 - a. Transportation – Location of clinic. Difficulty coming in to clinic.
 - b. Payment/Insurance – Difficulty affording suboxone rx
 - c. Mandatory appointments with the STEP provider in order to receive rx – Missed appointments, explain.

- d. Clinic environment/staff – Feeling judged, misunderstood, or frustrated by STEP providers or staff
 - i. IF YES:
 - a. How would you describe your relationship with the STEP staff (provider, nurse, clinic coordinator, patient care navigator)?
 - b. Do you feel welcomed at the STEP Clinic? Please explain.
 - c. Have you experienced language or cultural barriers at STEP? Please explain.
 - e. Clinic hours – work or other responsibilities conflict with clinic hours
 - f. Stigmatization – feeling judged by community, friends, family
 - g. Pharmacy – Issues presented at pharmacy
 - h. Other issues – Inability to store medication, meds regularly stolen
6. How can we improve your experience at the STEP Clinic?
7. Would you recommend the STEP clinic to other community members? Please explain.
8. Do you have any other thoughts, questions, or comments?

Appendix B

Staff Questionnaire:

DNP Project STEP Staff Survey: Identifying and Addressing Racial Disparities at STEP's Suboxone Clinic

Data from March 2020 shows that over 70% of STEP patients identify as White while 12.57% identified as Black, 6.68% American Indian, 3.91% multiracial and 1.70% Asian. The literature shows that non-White communities have been greatly impacted by substance use disorder (SUD) however are less likely to receive buprenorphine treatment. One study found that in 2018, 1.2 million non-Hispanic Blacks were estimated to have opioid misuse (Chau, 2020). However, between 2012 and 2015, 12.7 million of buprenorphine prescriptions were received by White patients while only 363,000 buprenorphine prescriptions were received by other races/ethnicities (Lagisetty et al., 2019).

The purpose of this project is to identify and address factors at the STEP clinic that may be causing barriers to patient of color. This survey is anonymous.

By completing this questionnaire, you are consenting to participant in the study. Based on your experience:

1. Do you believe patients who identify as non-White experience greater barriers in accessing their Suboxone rx at the STEP clinic? Please explain.
2. What are some of the challenges you believe non-White patients experience in accessing their rx?
3. In your experience working with patients, do you believe any of the following have created challenges for non-White patients in obtaining their Suboxone rx? Please select the boxes that apply:
 - Transportation – Location of clinic. Difficulty coming in to clinic.
 - Payment/Insurance – Difficulty affording Suboxone rx
 - Mandatory appointments with the STEP provider in order to receive rx – Missed appointments, explain.
 - Clinic environment/staff – Feeling judged, misunderstood, or frustrated by STEP providers or staff
 - Clinic hours – work or other responsibilities conflict with clinic hours
 - Stigmatization – feeling judged by community, friends, family
 - Pharmacy – Issues presented at pharmacy
 - Other issues – Inability to store medication, meds regularly stolen, etc.
4. Please expand on the option(s) you selected above.
5. How do you think these challenges/difficulties can be improved?
6. Any other thoughts, questions, or comments?

Appendix C

Hello everyone,

As you may know, I have been working on my DNP project at the STEP Clinic. The purpose of the project is to identify and address barriers experienced by current and previous STEP patients who identify as "non-White". This past month, I was able to interview some of our past and current patients. I would love for your input as well.

Please take 5 minutes to complete this survey. Ideally, it would be great to get them all in by **April 11th** but let me know if you need more time. These surveys are anonymous.

Thank you for your time and support!
Maye

https://docs.google.com/forms/d/e/1FAIpQLSebVXQAqInIqy8ad5C6Jvf2_k1b7_uPpUwU-4Cs7FtTqQCdHg/viewform?usp=sf_link

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The purpose of this project is to identify and address barriers at the STEP clinic that impede opportunities for patients of color. This survey is anonymous. By completing the questionnaire, you are invited to participate in the study based on your experience.

Do you believe patients who identify as non-White experience greater barriers in accessing their Suboxone treatment at the STEP clinic? Please explain.

DNP Project STEP Staff Survey : Identifying and Addressing Racial Disparities at STEP's Suboxone Clinic

Data from March 2020 shows that over 70% of STEP patients identify as White while 12.57% identified as Black, 6.68% American Indian, 3.91% multiracial and 1.70% Asian. The literature shows that non-White communities have been greatly impacted by substance use disorder (SUD) however are less likely to receive buprenorphine treatment. One study

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