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DETERMINING FACTORS FOR IMPROVED UPTAKE OF HARM REDUCTION SERVICES IN THE UNITED STATES: A STUDY OF INCLUSIVE, CULTURALLY SENSITIVE MESSAGING

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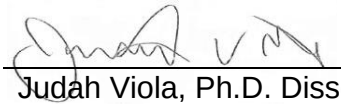

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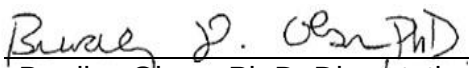

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DETERMINING FACTORS FOR IMPROVED UPTAKE OF HARM REDUCTION SERVICES IN THE UNITED STATES: A STUDY OF INCLUSIVE, CULTURALLY SENSITIVE MESSAGING

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ABSTRACT

Harm reduction refers to public health policies and programs aimed at decreasing the adverse consequences associated with drug use. While harm reduction services (e.g., syringe exchange programs) can mitigate health risks, marginalized groups face barriers to service access and utilization, partially due to ineffective messaging approaches that fail to align with cultural values and experiences. A one-size-fits-all approach to messaging can negatively impact service utilization, health outcomes, and health disparities. Ineffective communication can lead to poor adherence to treatment, poorer health outcomes, and increased adverse events.

Culturally insensitive communication contributes to stigma, mistrust, and lack of perceived relevance, discouraging service use. This provided empirical information required to develop equity-focused, culturally centered harm reduction messaging to enhance resonance, reduce stigma, and promote service utilization among racially/ethnically diverse people who use drugs and are affected by drug use. The researcher will conduct in-depth interviews with participants from underserved communities impacted by substance use. Interview questions elicited perspectives on barriers to harm reduction service use and recommendations for crafting messaging content to engage populations often excluded from one-size-fits-all health promotion efforts effectively. Findings will inform the creation of culturally sensitive messaging strategies consisting of language, values, visuals, dissemination channels, and engagement approaches specifically tailored to promote relevance and service access/uptake among marginalized subgroups. Centering community voices and cultural expertise, this research identified equity gaps and barriers to diverse populations' unique harm reduction needs.

INTRODUCTION

The opioid overdose epidemic, one of the most significant public health challenges of the last hundred years, has taken more lives than combined in World War I and II (Humphreys et al., 2022). Opioid overdose deaths in the US have risen dramatically in the past 16 years, creating an urgent national health crisis with no signs of immediate relief. In 2017, the President of the US officially declared the opioid epidemic a national emergency and called for additional resources to respond to the crisis (Keane et al., 2018).

Drug overdose deaths increased by nearly 30% from 2019 to 2020 and have quintupled since 1999. Almost 75% of the 91,799 drug overdose deaths in 2020 involved an opioid. From 2019 to 2020, there were significant changes in opioid-involved death rates; the opioid-involved death rates increased by 38%, prescription opioid–involvement death rates increased by 17%, and synthetic opioid-related death rates (excluding methadone) increased by 56% (CDC, 2021).

The United States is in the middle of the deadliest drug crisis. Fueled by the growing opioid epidemic, drug overdoses have now become the leading cause of death nationwide for people under the age of 50 years (State of Illinois Opioid Action Plan, n.d.). It is reported that 187 people die every day from an opioid crisis; between 1999–2020, more than 564,000 people died from an overdose involving any opioid, including prescription and illicit opioids, in the United States (CDC, 2021). The CDC estimates that 108,000 overdose-related deaths occurred in 2021, setting a record for the largest number of deaths and the largest single-year increase since surveillance began (Ahmad et al., 2022) at a mortality rate of almost 22 per 100,000 people (Humphreys et al., 2022). The rise in opioid overdose deaths can be outlined in three distinct waves – Wave 1: the rise in prescription opioid overdose death in the 1990s involving natural and semi-synthetic opioids and

methadone – wave 2 began in 2010 with a rapid increase in heroin overdose deaths and Wave 3 – started in 2013 with significant increases in overdose deaths involving synthetic opioids, particularly those involving illicitly manufactured fentanyl (CDC, 2021).

This third wave is characterized not only by record numbers of opioid overdose deaths but also unprecedented racial inequities, with fentanyl-involved opioid overdose deaths disproportionately burdening black individuals (McDaniels, 2022). The third-wave overdose crisis also has distinct spatial characteristics. Specifically, opioid overdose deaths (OOD) (i.e., predominantly fentanyl involved) were more geographically concentrated than the OOD of previous waves (i.e., predominantly heroin or prescription opioids involved). The spatial epidemiology of opioid overdose was closely related to concurrent changes in its racial epidemiology, as the increase in clustering of OOD was more severe among black decedents (Banks et al., 2023).

After the COVID-19 pandemic disrupted the U.S. healthcare system, reducing access to substance abuse treatment and exacerbating social and economic stress that can worsen addiction, opioid use increased. Data show the highest numbers of fatal opioid overdoses ever reported in 2020 and 2021—69,061 and 80,926 fatalities, respectively—and opioids are now the main driver of drug overdose deaths. In addition to the toll on families and loved ones, opioid use imposes significant economy-wide costs. Adapting a methodology used by the CDC to estimate the cost of the opioid epidemic in 2017, the U.S Congress Joint Economic Committee (JEC) estimates the opioid epidemic cost $1.04 trillion in 2018, $985 billion in 2019, and nearly $1.5 trillion in 2020. The rise in fatal opioid overdoses in 2021 suggests that the total cost will likely continue to increase (Beyer, 2022).

The opioid epidemic is one of Illinois's most significant public health and public safety crises. Over 3,000 people died of overdoses in Illinois in 2021(State of Illinois Opioid Action Plan, n.d.), with an estimated 4% increase in February 2023(CDC, 2022). Polysubstance use and dangerous synthetic opioids, such as fentanyl, are responsible for increasing deaths. Synthetic opioids can be thousands of times more poisonous than heroin. To save lives, it is important to reach out and engage individuals at risk for both fatal and non-fatal overdose due to multiple drugs and to address the social inequities that underlie the racial disparities in overdose deaths. Beyond these deaths are thousands of non-fatal overdoses resulting in emergency department visits, hospital stays, and the pain suffered by individuals, families, and communities (State of Illinois Opioid Action Plan, 2022).

Since 2018, opioid overdose fatalities in Cook County have increased annually. In 2015, only 676 opioid-related fatalities were recorded, a fraction of the current total. These overdose deaths increased by 42% from 2019 to 2020, concurrent with the commencement of COVID-19-related lockdowns; the epidemic has been fueled by a spike in fentanyl in the drug supply and the isolation related to COVID-19-related lockdowns. Drug overdoses are now the leading cause of injury-related deaths (Geddes, 2022). The rate at which Cook County residents continue to die from opioid overdoses reached an all-time high last year. The Cook County Medical Examiner's Office reported that 2,000 individuals died of opioid overdoses in 2022, surpassing the previous record of 1,935 set by the previous year (Jimenez, 2023). The vast majority of opioid overdoses last year — 91% — involved fentanyl, the synthetic drug that’s often mixed with heroin but is 50 times more potent; deaths in the county involving fentanyl have been rising yearly for nearly a decade — from 103 in 2015 to 1,825 in 2022. There has been a 46% increase in overdose deaths

related to the animal tranquilizer xylazine, which caused at least 161 deaths in 2022. Xylazine was listed as a primary cause of death in more than 8% of all opioid-related deaths in the County in 2022 (Kariisa, 2023). In Cook County, overdoses have outnumbered murders since at least 2015, when there were 611 murders and 676 fatal overdoses. In 2022, men made up about 78% of the overdose deaths in Cook County; about 56% of those who died were African American men, Latinos accounted for under 15%, and whites about 29%, over 70% of the county's opioid deaths were in Chicago; grouping overdose data by race shows 55% of xylazine deaths involved Black victims and some scattered cases of overdoses involving the substance in collar counties. In 2021 and 2022, Black descendants accounted for most opioid overdose deaths in Cook County, where an estimated 22% of residents are African American. (Banks et al., 2023).

1.1. Effect of Illicit Drug Use

Psychoactive drugs are any chemical substance, natural or synthetic, that alters mood and the level of perception or brain functioning. These drugs can affect individuals, and their usage can lead to various physical, psychological, and social consequences. Drug addiction is a significant risk associated with illicit drug use, leading to severe physical and mental health problems and social and legal consequences.

Table 1: Drug Classification and Effect

Classification of drugs	Type of Drug	Good Feeling Effect	Negative Effect	Long or Overdose Associated Harm
Stimulants	Cocaine, amphetamines, methamphetamine	Increase alertness, energy, and euphoria	Increased heart rate, elevated blood pressure, reduced appetite, and hyperactivity.	Insomnia, anxiety, paranoia, and aggressive behavior.
Depressants:	Heroin, opioids (e.g., oxycodone, hydrocodone), benzodiazepines, alcohol.	Calming effect, relaxation, and pain relief.	Drowsiness slowed breathing and a sense of euphoria.	Respiratory depression, coma, and death due to overdose.
Hallucinogens Designer / Club drugs	Lysergic acid diethylamide (LSD), psilocybin (magic mushrooms), MDMA (ecstasy), DMT, ketamine, Rohypnol	Euphoria heightened sensory perception and emotional closeness.	Alter perception, mood, and cognitive processes. Visual distortions, intense emotions, and an altered sense of time	Severe anxiety, panic attacks, and psychosis. Dehydration, confusion, memory problems, and dangerous behavior
Cannabis	Marijuana, hashish	Relaxation, altered perception, and euphoria	Increased appetite, dry mouth, and impaired motor skills.	Memory and cognitive deficits
Inhalants	Glue, paint thinners, aerosols		Dizziness, confusion, and impaired coordination	Damage to the brain, liver, kidneys, and peripheral nervous system.
Synthetic cannabinoids (Mimic Cannabis)	Spice, K2	Relaxation, altered perception, and euphoria	Increased appetite, dry mouth, and impaired motor skills.	Rapid heart rate, nausea, vomiting, anxiety, and hallucinations.

(Harvard et al., 2008)

1.2. Overview of Global Harm Reduction.

In the 1980s, harm reduction as a public health approach was first used in Merseyside, England. Due to the growing correlation between injecting drug use and the rise of HIV and hepatitis C virus (HCV) infections, there is a push to reduce drug injection. In response to the HIV/AIDS pandemic, however, the concept of harm reduction emerged in Europe in the 1980s. In

the early 1970s, Needle Exchange Programs (NEPs), a form of harm reduction, were introduced in the Netherlands. By providing clean needles and syringes to people who inject drugs (PWID), NEPs sought to prevent the spread of bloodborne diseases. This strategy was based on evidence demonstrating that sterile supplies could reduce the spread of HIV/AIDS and other infections. In the 1980s and 1990s, harm reduction philosophy acquired global traction. Countries like Switzerland, Germany, Australia, and Canada have implemented harm reduction strategies such as needle exchange programs, opioid substitution therapy, and supervised injection facilities. These nations understood the significance of addressing substance user's health and social consequences in tandem with law enforcement initiatives (Thomson, 2013).

The global expansion of harm reduction was propelled by the spread of HIV/AIDS and the need for effective prevention measures. The Joint Programme on HIV/AIDS of the United Nations (UNAIDS) and other international organizations have advocated for harm reduction as an integral part of comprehensive HIV prevention strategies. International conferences, such as the International Harm Reduction Conference, have facilitated the dissemination of best practices, research, and advocacy initiatives (Inciardi & Harrison, 1999). Harm reduction has expanded beyond needle exchange programs to include a more comprehensive array of interventions. These services include medication-assisted treatment (MAT), dissemination of naloxone, drug-checking services, outreach programs, and more. Harm reduction strategies have also been used to address issues other than substance use, including safer sex practices, harm reduction in prisons, and harm reduction in the context of sex work (Friedman et al., 2001).

1.3. Overview of Harm Reduction in the United States

Harm reduction has become an internationally recognized approach to public health that emphasizes pragmatic and evidence-based strategies to reduce the harm associated with drug use and other risky behaviors. In certain regions of the United States, harm reduction principles and practices have garnered recognition and support despite implementation challenges and variations between states. The United States has made progress in adopting principles of damage reduction. NEPs emerged in the late 1980s and early 1990s as one of the earliest forms of harm reduction in the United States. NEPs are intended to reduce the spread of bloodborne diseases, such as HIV/AIDS and hepatitis, among people who inject drugs (PWID) by exchanging used needles and syringes for clean ones. In 1988, San Francisco's NEP was the first program to be officially established in the United States, followed by programs in other cities. In the late 1990s and early 2000s, opioid-related overdose fatalities increased significantly in the United States (Des Jarlais, 2017).

In response, programs for distributing naloxone and other harm-reduction strategies were implemented to prevent fatal opioid overdoses. Naloxone is an opioid antagonist that can swiftly reverse the effects of an opioid overdose, and its distribution has been instrumental in saving lives. In supervised injection facilities, also known as safe injection sites or overdose prevention sites, individuals can use drugs under the supervision of medical personnel. Due to legal and political obstacles, no SIFs exist in the United States. However, several cities, including Seattle, San Francisco, and Philadelphia, have investigated the possibility of establishing such facilities. MAT integrates medications, such as methadone and buprenorphine, with counseling and behavioral therapies to treat opioid use disorders. In recent years, the availability and accessibility of

medication-assisted treatment (MAT) have staggered due to initiatives to reduce treatment barriers and expand medication access (Dupont, 1996).

Diverse advocacy groups and organizations have been instrumental in promoting harm reduction principles and policies in the United States. Organizations like the Harm Reduction Coalition have advocated for evidence-based practices and influenced local, state, and federal policy. It is important to observe that harm-reduction strategies have yet to be adopted and implemented uniformly across the United States. While some states and cities have been more receptive to harm reduction strategies due to ideological, political, and legal considerations, others have been more resistant. Harm reduction in the United States reflects an evolving understanding of substance abuse issues and the need for comprehensive approaches that prioritize public health and the well-being of drug users (Gavulic & Dusetzina, 2021).

1.3.1. The Biden-Harris Administration's Statement of Drug Policy Priorities for Year One

The overdose and addiction crisis has taken a heartbreaking toll on far too many Americans and their families. From 2015 to 2019, overdose deaths rose 35 percent, reaching a historic high of 70,630 deaths in 2019. This is a greater increase rate than any other type of injury and death in the United States. Though illicitly manufactured fentanyl and synthetic opioids other than methadone (SOOTM) have been the primary drivers behind the increase, overdose deaths involving cocaine and other psychostimulants, like methamphetamine, have also risen in recent years, particularly in combination with SOOTM. New data suggest that COVID-19 has exacerbated the epidemic, and increases in overdose mortality6 have underscored systemic inequities in our nation's approach to

criminal justice and prevention, treatment, and recovery (Administration SAMHSA, 2022 [September 2023]).

President Joe Biden made clear that addressing the overdose and addiction epidemic is an urgent priority for his administration. In March 2022, the President signed the American Rescue Plan, which appropriated nearly $4 billion to enable the Substance Abuse and Mental Health Services Administration and the Health Resources and Services Administration to expand access to vital behavioral health services. President Biden has also said that people should not be incarcerated for drug use but should be offered treatment. The President has also emphasized the need to eradicate racial, gender, and economic inequities in the criminal justice system. These drug policy priorities, which are statutorily required to be submitted to Congress by April 1 of the first year, take an audacious approach to reducing overdoses and saving lives. The priorities serve as guidelines to ensure that the federal government promotes public health and public safety interventions supported by empirical evidence (The White House, 2022).

The priorities also underscore several cross-cutting aspects of the epidemic, focusing on promoting harm reduction and ensuring racial equity in drug policy.

- Priority 1: Expanding access to evidence-based treatment: The commitment is to achieve universal coverage, which will help provide more people with substance use disorders with the care they need, considering that people with substance use disorders have faced stigma and other barriers inside and outside health care and addiction services. Greater support, regulatory oversight of providers and prescribers of medications for opioid use disorder (MOUD), and attitudes toward individuals with substance use disorders may cause healthcare providers to be reluctant to provide services to those in need.

- Priority 2: Advancing racial equity in our approach to drug policy: emphasized the need to eradicate racial inequities in the criminal justice system and has stated that people should not be incarcerated for drug use but should be offered treatment instead. Executive Order 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, directs agencies to pursue a comprehensive approach to advancing equity for all, including people of color and others historically underserved, marginalized, and adversely affected by persistent poverty and inequality.29 Such inequalities manifest in disparate access to care, differential treatment, and poorer health outcomes. For many people with substance use disorders, access to care in the United States is inadequate, but for Black, Indigenous, and People of Color (BIPOC), the situation is worse.
    - A recent study showed that Black individuals generally entered addiction treatment 4-5 years later than White individuals, and this effect remained when controlling for socioeconomic status. In Latino communities, those needing substance use disorder treatment were less likely to access care than non-Latino individuals. This discrepancy in treatment access is important to address at a time when rates of overdoses are increasing for some communities of color.
- Priority 3: Enhancing evidence-based harm reduction efforts: Access to quality health care, treatment, and recovery support services is essential for people with substance use disorders. However, formal care systems are often inaccessible for some people with chronic conditions. Their first point of contact may be through organizations that offer low-barrier services, including harm reduction. Such services meet people where they are. These

services include lifesaving and evidence-based interventions such as providing the overdose antidote naloxone, sterile syringes, fentanyl test strips (FTS), and testing for the human immunodeficiency virus (HIV) and Hepatitis C virus. Research has shown that syringe services programs (SSPs) reduce HIV prevalence.

They also have the potential to connect at-risk populations to needed care. Harm-reduction organizations provide a key engagement opportunity between people who use drugs (PWUD) and health care systems, often employing peer support workers. Regular engagement between harm reduction staff and PWUD builds trust, allowing for an ongoing exchange of information, resources, and contact. This relationship can encourage individuals to pursue a range of treatment options, including MOUD induction, psychosocial treatment, and long-term recovery. Harm reduction staff can build patient trust over time and are uniquely positioned to encourage PWUDs to request treatment, recovery services, and health care (The White House, 2022).

LITERATURE REVIEW

Accessing Equitable and Culturally Competent Healthcare for People with Substance Use Disorder in Communities of Black, Indigenous People of Color (BIPOC)

Multiple factors contribute to disparities in accessing affordable and quality healthcare in the U.S. (Askim-Lovseth & Aldana, 2010). Millions of individuals and families do not have health insurance coverage. Medical costs can be prohibitively expensive without insurance, making it difficult for many people to seek necessary medical care. The United States has one of the highest healthcare costs in the world. Even for those with insurance, out-of-pocket expenses, deductibles, and copayments are often substantial, leading some individuals to delay or forgo essential medical treatments (Satcher, 2011).

Healthcare access varies depending on location, with rural and underserved areas facing challenges with sufficient healthcare facilities and providers. This geographic disparity can lead to reduced access to healthcare services for residents in these regions. Some areas may have a shortage of specialized medical professionals, leading to wait times or the need to travel long distances to see a specialist; this limited access can be associated with socioeconomic disparity. Minority populations, including Black, Hispanic, and Indigenous communities, often face higher rates of chronic diseases and lower health outcomes than white Americans. These disparities are often linked to systemic factors such as poverty, discrimination, and unequal access to healthcare services that brew health disparities (Ghoshal, 2021).

2.1. Racial Disparities in Substance Use Disorder Care

BIPOC communities often face higher rates of drug use disorder than white communities (Reif, 2012). However, they are less likely to receive adequate treatment and support. This racial disparity reflects broader systemic inequities in healthcare access and resources. Often, stigmatization of drug use disorder and addiction is prevalent in society. BIPOC individuals with substance use disorders may experience additional layers of stigma and discrimination based on race and ethnicity, deterring them from seeking help and support (Chan & Saewyc, 2022). The lack of culturally competent care has made cultural competence essential in effective and sensitive care. Unfortunately, the healthcare system has historically struggled to provide culturally appropriate treatment and support for BIPOC individuals with drug use disorders, leading to lower treatment retention rates and poorer outcomes. BIPOC communities, particularly those in low-income areas, may have limited access to substance abuse treatment facilities and services (Hughes et al., 2022).

Geographic barriers can prevent individuals from accessing the help they need (Reif, 2012). Instead of receiving treatment and support, individuals with drug use disorders from BIPOC communities may face incarceration due to punitive drug policies. This perpetuates a cycle of disadvantage, further reduces access to effective treatment, and encourages criminalization and incarceration. For six decades, Black and Brown Americans have faced punitive drug policies and law enforcement and demonization in the media as inner-city “junkies” and “crackheads.” In contrast, the more recent response to opioid use in predominantly White communities has included bipartisan calls for treatment and overdose prevention (Hughes et al., 2022).

2.2. Structural Racism

Structural racism, "the totality of ways in which societies foster racial discrimination through mutually reinforcing systems of housing, education, employment, earnings, benefits, credit, media, health care, and criminal justice," is pervasive in the United States, impacting all systems including addiction treatment (Chatterjee et al., 2022). The social issue of healthcare access in the United States has been a subject of ongoing debate, and calls have been made for reform to ensure that all Americans can access affordable and quality healthcare without facing significant financial burdens. Racially charged polarities in past and present policies and attitudes on substance misuse have led to discrimination and treatment disparities for Black, Indigenous, and People of Color (BIPOC) individuals with Opioid Use Disorder (OUD), which include choice of access to treatment medications (Ghoshal, 2021). Opioid use and opioid-related overdose continue to rise among racial/ethnic minorities. Social determinants of health negatively impact these communities, possibly resulting in poorer treatment outcomes.

Research is needed to investigate how to overcome the disproportionate and deleterious impact of social determinants of health on treatment entry, retention, drug use, and related outcomes among racial/ethnic minorities (Burlew et al., 2021). Policymakers, healthcare providers, and advocates continue to work towards improving healthcare access and addressing the underlying factors contributing to the disparities in the system. Access to treatment and support for people with drug use disorder in BIPOC (Black, Indigenous, and People of Color) communities is a social issue due to significant disparities and barriers hindering their ability to receive equitable and effective care (Gussow, 2006).

2.3. Socioeconomic and Communication Barriers

The socioeconomic factors in BIPOC communities are more likely to be experiencing poverty and limited healthcare and social services access (Hulsey, 2022). Economic disparities can make it challenging to afford treatment, medications, and necessary support for drug use disorders. Language barriers can hinder effective communication and understanding between healthcare providers and BIPOC individuals seeking help for drug use disorder. This can lead to misdiagnosis or inadequate treatment plans. Historical and contemporary mistreatment of BIPOC communities by the healthcare system and government authorities has eroded trust. As a result, some individuals may be hesitant to seek help for fear of being mistreated or misunderstood, making the lack of trust in the healthcare system a vicious circle that continues to require lasting solutions (Kagotho et al., 2020).

2.4. Societal Implications of Stigma toward Addiction and Discrimination

Marginalized communities often experience higher rates of trauma and adverse life events, which can contribute to developing drug use disorders (Creed, 2017). Addressing trauma and providing trauma-informed care is crucial in the treatment process. Addressing the social issue of access to treatment and support for people with drug use disorders in BIPOC communities requires comprehensive and targeted efforts (Urbanoski et al., 2018). This includes increasing funding for culturally competent treatment programs, destigmatizing addiction, reforming punitive drug policies, promoting community-based support services, and involving community members in developing solutions (Hulsey, 2022). Additionally, efforts to address broader socioeconomic and racial disparities in the United States are essential to improving healthcare access and outcomes for all individuals, regardless of their racial or ethnic background (Chatterjee et al., 2022).

2.5. Cultural Competence

Efforts to expand engagement with harm reduction interventions among historically marginalized communities require moving beyond superficial understandings of culture towards models fostering meaningful cultural competence (Sue, 2001). Well-intentioned quick fixes like targeted advertising or hiring a diversity director breed deeper disillusionment when failing to challenge status quo power imbalances. As Campinha-Bacote (2002) outlined in her seminal Process of Cultural Competence model, skillfully navigating diverse cultural contexts demands perseverant humility in seeking first to comprehend nuances beyond surface-level awareness.

Thus, immersive cultural engagement must inform localized tailoring of evidence-based harm reduction outreach if services hold hopes of reaching those long relegated to society's periphery (Bhui et al., 2007). As stressed through frameworks like Kreuter and McClure's (2004) cultural sensitivity schema, health communications require resonance with lived realities. Such competencies enable paradigm shifts, allowing communities to guide solutions anchored in their wisdom versus establishing assumptions about what marginalized groups purportedly lack (Frederick et al., 2014). The path forward acknowledges that culture is the conduit through which people restore meaning and purpose from pain.

2.6. Language, Messaging, and Cultural

Culture represents customs, values, shared beliefs, and learned behaviors common to and valued by a group. For many, culture primarily encompasses race/ethnicity or gender identity, yet culture encompasses many contexts, including race/ethnicity, gender identity, sexual orientation, religious affiliation, geography, political affiliation, age, socioeconomic status, organization

affiliation, and more. As such, culture shapes how interventions are conceptualized and influence what and how the implementation is strategized to optimize community participation and benefits (Clark, 2019).

Cultural respect necessitates a comprehensive understanding of the community's needs (Franck & Rainer, 2012). The greater the degree to which services align with the cultural and linguistic preferences of the target population and resolve any specific cultural barriers, the more effective they will be. Addressing language, messaging, cultural needs, and conditions can improve the efficacy and cultural sensitivity of harm reduction services; it is essential for developing services, messages, and programs that are not only culturally sensitive but also effective in meeting the specific needs of diverse cultural groups (Graham & Andreasen, 1997). The changes and considerations ensure that harm reduction services are accessible, applicable, and well-received by diverse communities and populations, promoting safer behaviors and healthier outcomes. The goal is to reduce barriers and provide positive, relevant services that align with the target populations' cultural practices and experiences (Hughes et al., 2022).

2.6.1. **Cultural Needs and Conditions**

Community intervention and development efforts have often taken a deficit-oriented perspective, focusing on distressed communities' problems, needs, and shortages. This frequently results in dependence on outside resources and overlooks latent strengths and assets that could be mobilized. John P. Kretzmann and John L. McKnight (1993) presented a bold vision for an alternative model that builds communities from the inside out by mapping and mobilizing the skills, capacities, and resources already rooted in people within these communities. Their book

outlines an asset-based approach that prioritizes identifying and mobilizing pre-existing community strengths and resources instead of depending on external aid. This perspective is invigorating because it enables communities to initiate their revitalization from within; the approach has become seminal. It offers both conceptual grounding and practical strategies for identifying and connecting community assets in a way that empowers communities to lead their regeneration and problem-solving.

Such indigenous strengths have immense potential to fuel local strategies that leverage unique opportunities within each community's ecology. Adopting a strengths-based perspective facilitates the release of intrinsic energy, passion, and creativity. Furthermore, the guide encourages mapping citizen associations, less formal groups that play a crucial role in problem-solving and shared interests within a community. The foundational ethos Kretzmann and McKnight (1993) put forth in their transformative text “Building Communities from the Inside Out” carries profound resonance when examining pathways to extend harm reduction outreach through cultural attunement rather than problematic assumptions. Their central thesis mirrors what members of marginalized groups frequently declared in frustration around substance use messaging – solutions cannot be sustainably “brought in” externally without recognizing resident capacities. Authentic change hinges on assets innately held by communities themselves (Kretzmann & McKnight, 1993).

- **Language and Literacy Considerations:**
    - Condition: Limited proficiency in English and low health literacy levels among some marginalized individuals have hindered their understanding of harm reduction messaging and the ability to access available healthcare services.

  - Needs: Translate harm reduction materials into multiple languages commonly spoken in the community. Use plain language and visuals to enhance understanding and ensure information is accessible to individuals with varying literacy levels.

- **Equitable Access to Naloxone and Harm Reduction Services:**
  - Condition: The limited access to naloxone and harm reduction services can contribute to opioid fatalities.
  - Needs: Community leaders continue to advocate to make naloxone and harm reduction services readily available in marginalized communities, including through community distribution programs and harm reduction centers.
    - **Language** - Hire staff and peer workers who speak the target population's language. Provide translations of brochures, signage, forms, and other materials into commonly spoken languages.
    - **Messaging** - Avoid stigmatizing language. Use messages that reinforce the dignity and humanity of people who use drugs. Ensure imagery and messaging align with cultural values. For example, emphasize family well-being in messaging for Latino communities.
    - **Cultural Needs** - Provide space for spiritual practices. Accommodate dietary restrictions. Allow gender-specific spaces or same-gender providers. Respect cultural norms around eye contact, physical touch, the concept of time, etc.

- **Conditions -** Recognize varying levels of acculturation and experiences of trauma or racism that may impact trust. Home or community-based services may be preferred. Consider treatment approaches like acupuncture for some Asian groups.

Examples:

a. An opioid recovery program hires peer support workers from the local Latino community who can relate to the experiences of new immigrants.
b. A harm reduction service has discreet, indirect messaging about HIV testing to reduce stigma for African American men who have sex with men.
c. A syringe access site offers a room for Native Americans to participate in traditional healing rituals led by tribal elders.
d. An outreach worker avoids direct eye contact and keeps adequate distance when engaging with Muslim women in hijab, showing respect for cultural norms.

2.7. Cultural Competence – Message Framing in Harm Reduction Service Utilization.

Social determinants of health, such as working and living conditions and quality healthcare access, are not the same for everyone. Health inequities pose a serious challenge to the healthcare community, but healthcare providers have a powerful tool at their disposal: cultural competence with cultural message framing as a focus (Kagotho et al., 2020). Cultural competence in harm reduction addresses the disparities that people of racially and culturally diverse backgrounds often experience. It can ensure that all patients get the care they need to live healthier lives. Differences

between healthcare providers and patients can affect communication (Hulsey, 2022). This can, in turn, impact clinicians' and patients' decisions about treatment. Cultivating skills that improve cross-cultural communication can play an important role in delivering equitable care and building teams with healthcare professionals who reflect diversity. Language accessibility is also crucial. Language barriers keep patients from accurately describing their symptoms and providers from explaining diagnoses. Language barriers can also create unsafe and inappropriate situations in other ways for the patient populations served, which can also improve cross-cultural communication (Satcher, 2011).

2.8. Culture – Sensitive Messaging

The goal of culturally sensitive messaging is to remove barriers that prevent PWUDs from receiving the necessary care. The consideration for a disparity in information comprehension resulting from a one-size-fits-all approach to messaging will negatively impact the utilization of available services, health outcomes, and health disparities (Boutin-Foster et al., 2008).
When communication is not culturally sensitive, patients and families are less likely to be satisfied with their perceptions and experiences of care, there is an increased risk of miscommunication, and cultural disparities may result, leading to poor adherence to treatment, poorer health outcomes and an increased prevalence of adverse events (Brooks et al., 2019).

Message framing for the adoption of harm reduction services that are culturally sensitive involves adapting communication strategies to effectively engage diverse populations, taking into account their distinct cultural norms, beliefs, and values (Burke & Burke, 2022). This strategy is likely to reduce barriers and increase the use of harm-reduction services among people of various cultural backgrounds. Acceptance of harm reduction services requires an awareness of cultural

diversity, the use of appropriate language and visuals, community engagement, and the removal of cultural barriers. By recognizing and appreciating cultural differences, these messages can break down barriers and increase acceptance and use of harm reduction services among diverse populations (Brooks et al., 2019).

When culturally sensitive message framing is not considered or aligned with the awareness and campaign design for service adoption for harm reduction services, the information presented to PWUDs may not resonate, resulting in miscommunication and misunderstanding (Tulane University, 2021). This may cause individuals to misinterpret the intended message or fail to comprehend the significance of harm reduction services, resulting in low participation rates. Insensitive messages may perpetuate the stigma and humiliation associated with seeking assistance for substance abuse or risky behaviors (Moore et al., 2020). This may discourage individuals from utilizing harm reduction services, as they fear being judged or discriminated against for their choices.

Messages that do not align with cultural norms and values may be perceived as irrelevant or detached from the target population's experiences and realities. Therefore, individuals may need to perceive the relevance of the services to their lives, reducing their motivation to participate in the campaign. Numerous difficulties can result from ignoring or neglecting culturally sensitive message framing in designing awareness and service uptake campaigns for harm reduction services (Brooks et al., 2019). These obstacles include miscommunication, stigmatization, limited relevance, mistrust, decreased participation, and access disparities. In contrast, embracing cultural sensitivity can increase the campaign's efficacy and impact, making harm reduction services more accessible and beneficial to diverse populations (Ritter & Cameron, 2006). Effective messaging

should focus on individual attitudes and behaviors shaped by cultural norms and beliefs and shift social norms, systems, and policies to create an environment that fosters access to harm reduction and recovery services inclusive of culturally sensitive approaches across marginalized communities (Brooks et al., 2019).

2.9. An Overview of Social-Ecological Model

The Social–Ecological Model (SEM) is a framework utilized in psychology and public health to understand the complex interplay of factors that influence human behavior and health outcomes at multiple societal levels. Urie Bronfenbrenner first introduced his Ecological Systems Theory in the 1970s. He developed this theory over several years, with his initial ideas appearing in his 1974 book, "The Ecology of Human Development: Experiments by Nature and Design." In this book, Bronfenbrenner proposed that human development should be studied in the context of the multiple environments in which an individual interacts (Short et al., 2018). Kenneth McLeroy and colleagues later adapted the model, emphasizing the importance of considering the individual within the context of their social and physical environments.

The diagram below illustrates the five nested Social -Ecological Model levels.

- Intra-personal (Individual): At the center of the model, the focus is on personal knowledge, attitudes, beliefs, and behaviors. This indicates the personal factors that play a role in shaping health outcomes.
- Interpersonal: At this level, the immediate social environment that includes family, friends, and peers influences health behavior. This crucial close relationship of social norms and support influences a person’s behavior and health choices.

- Organizational: Schools, workplaces, healthcare settings, and community groups form this level. Cultural beliefs, expectations, practices, policies, and resources impact health choices and behaviors at this level.
- Community: This includes neighborhood, local institutions, community organizations, and civic structures. Thus, community norms, social capital, the built environment, and access to essential human resources, including food, healthcare, care, treatment, social norms, and built environments, influence health behaviors and outcomes in a community.
- Policy: The outermost level depicts how social inequality, economic policies, and political systems shape the social, economic, and environmental conditions that influence health at individual and community levels.

Fig 1: **The Social – Ecological Model**

Social-Ecological Model (SEM) of Health Promotion, proposed by McLeroy (McLeroy et al., 1988), describes casual relationships and the multiple factors influencing substance abuse and harm reduction services—using a coordinated approach across all intra–personal, inter–personal, community, and organizational level and public policy levels has the greatest chance for impact (Majee et al., 2021). The risk environment framework recognizes that harm associated with drug use is impacted not solely by individual choice but by influences at social, economic, policy, and physical environmental levels that shape health behaviors and access to services. It maps multi-level risk and protective factors requiring integrated action across domains like neighborhoods, networks, institutions, and infrastructure (Rhodes, 2002). The health empowerment lifestyle profile depicts intersecting spheres of individual, family, organizational, and community influences on lifestyle choices and confidence to improve personal/collective well-being. It has been applied to tailor empowering interventions promoting self-efficacy and social norms aligned with positive behaviors in contexts like addiction recovery (Wallerstein & Bernstein, 1994). These models illustrate how integrated frameworks that move beyond isolated individualistic approaches can inform harm reduction policies, programs, and communication attuned to cultural factors across health determinants at society's varied levels to drive health equity (Liabo, 2013).

Table 2: The Social–Ecological Model of Health Promotion

Social – Ecological Level	Harm Reduction Cultural Inclusive Messaging Strategies
Intra – Personal	Focus on individual attitudes, beliefs, values, knowledge, and behaviors.
	Tailor messaging and outreach to specific ethnic/cultural groups
	Address stigma and build self-efficacy.
Inter – Personal	Engage family units and community networks.
	Partner with religious groups, schools, and community organizations.

	Train providers in cultural competence communication.
	Ensure access to linguistically and culturally appropriate treatment.
	Engage family units and community networks.
	Partner with religious groups, schools, and community organizations.
Organizational and Community	**Community and Institutions**
	Collaborate with community-based organizations, faith-based groups, and local leaders to ensure that harm reduction efforts are rooted in the specific cultural context and needs of the BIPOC community.
	Conduct community workshops, seminars, and awareness campaigns to educate community members about the risks of substance abuse and available harm reduction and recovery services and resources.
	Collaborate with community-based organizations, faith-based groups, and local leaders to ensure that harm reduction efforts are rooted in the specific cultural context and needs of the BIPOC community.
	Conduct community workshops, seminars, and awareness campaigns to educate community members about the risks of substance abuse and available harm reduction and recovery services and resources.
Public Policy	Advocate for culturally informed policies around prevention, treatment, and recovery.
	Diversify and educate the behavioral health workforce.
	Allocate resources for culturally targeted programming and research.
	Advocate for culturally informed policies around prevention, treatment, and recovery.

CHARACTERISTICS AND THEORIES

3.1. Purpose of Study

Harm reduction services, such as needle exchanges and supervised injection sites, are evidence-based public health interventions that can effectively reduce the risks associated with substance use. However, utilization of these services remains low among many marginalized populations in

the United States. The core of harm reduction is ensuring that services accessed and utilized result in improved health outcomes decreased risk of harm associated with unsafe behaviors, and enhanced well-being among diverse populations. The delivery of harm reduction messages in a culturally sensitive manner is intended to demonstrate respect for individuals' cultural backgrounds, increase trust between service providers and recipients, and build trust, which is essential for encouraging individuals to seek assistance and engage with harm reduction services as they feel understood and valued within their cultural context. A lack of culturally sensitive messaging and outreach may present a significant barrier. Understanding the determinants that hinder or facilitate their uptake is paramount.

This study explores the role of culturally tailored messaging in enhancing the accessibility, effectiveness, and health outcomes of diverse populations utilizing harm reduction services. The study will elucidate messaging frameworks, including partnering with trusted advocates, affirming cultural values, and addressing systemic inequities. Findings will guide the development of culturally centered campaigns to increase access, utilization, and health equity within harm reduction systems. This research aims to fill gaps in understanding cultural barriers to harm reduction services and lift diverse voices and perspectives to inform the creation of inclusive health communication strategies. By investigating how to make harm reduction services more culturally safe and relevant, this study has the potential to inform policy, education, and outreach efforts, ultimately expand utilization and reduce health disparities and promoting the well-being of individuals and communities by fostering a more inclusive and responsive approach to harm reduction services in the United States.

3.2. Positionality Statement

My diverse experiences in public health intervention, peer recovery support services, and learning community psychology principles shape my perspective as a researcher; my positionality is deeply informed by a commitment to promoting health equity, empowerment, and community well-being. As a supervisor of peer recovery specialists, I developed a close understanding of the challenges marginalized communities face while honoring their profound resilience and the courageously lived experiences typically excluded from policy conversations and academic debates. My public health training reveals how substance use prevention and promotion of health options as harm reduction strategies are likely to fail when not grounded in cultural contexts. These opportunities seeded my commitment to elevating subjugated voices most impacted by issues often discussed only in obscure jargon and statistics detached from real people and communities. Now pursuing a PhD in community psychology, I believe research must uplift suppressed voices, not further exploit them.

In pursuing public health graduate training, I was reminded that research divorced from community wisdom often recapitulates hierarchies of credibility and control. Instead, those of us with academic privileges must humbly seek partnership - not extraction - guided by the self-identified needs and nuanced cultural contexts of people we claim to serve but frequently fail. Therefore, this project aims not to speak for marginalized groups, but to provide platforms for their empowered voices to guide collaborative development of harm reduction outreach messaging that resonates honestly. Through transparent dialogue and exploring barriers and facilitators, I hope to contribute knowledge back to the streets rather than unjustly taking knowledge away. While only an initial step on a longer decolonizing journey, I believe co-learning based on lived realities can

inform the positive transformation of health systems often misaligned with those seen as apart from society instead of integral members of shared humanity.

Therefore, I approach this work seeking to dismantle hierarchies that position academic knowledge as superior to the wisdom of lived experience. My role is that of a listener, advocate, and ally, not an authority dictating solutions. I provide tools and platforms for collaborative knowledge creation on equal terms. While my privileges limit my grasp of others' realities, civic duties accompany privilege. I will use my voice to validate those society ignores, not override them. This project aims to convey authentic narratives that traditional health promotion obscures. If, through the open sharing of stories and ideas, we identify more inclusive, socially just pathways for communities to heal themselves, community psychologists with a focus on public health intervention have returned to their proper place - as an instrument for transformative grassroots action.

3.3. Research Questions

The current dissertation research aims to understand better how cultural norms and sensitivity affect people's involvement with and utilization of harm reduction interventions by investigating how cultural factors intersect with harm reduction services. To increase engagement among marginalized populations, such as the African American community, which

has the highest number of overdose deaths according to data, the motivational interview strategy identified effective strategies for incorporating cultural sensitivity into messaging and interventions. This research aims to help develop harm reduction approaches responsive to and respecting the diverse cultural traditions and values cherished by the populations they serve.

The study answers four primary questions:

1. How do cultural norms and expectations influence the utilization of harm reduction services?
2. How can cultural sensitivity in messaging be incorporated into harm reduction interventions to increase engagement among marginalized populations?
3. How does cultural sensitivity in messaging affect individuals' perceptions or reported willingness to engage with harm reduction services?
4. What are effective strategies to create messages about harm reduction services that fit the culture and values of the marginalized community?

METHOD

This qualitative study explores the barriers and facilitators to using harm reduction services, focusing on inclusive, culturally sensitive messaging as a determinant for increased uptake of these services in the United States.

4.1. Design of the Study

The researcher employed grounded theory, an inductive qualitative research method, to explore how cultural context, perspective, and sensitivity influence actions related to harm

reduction messaging. Grounded theory was created by sociologists Barney G. Glaser and Anselm L. Strauss in the late 1960s. The central concept of grounded theory involves analyzing a textual database to identify and categorize variables known as categories, ideas, and associated relationships (Lumivero, 2020). An inductive grounded theory design enables the development of new conceptual frameworks and theories from qualitative data through constant comparison without relying on pre-existing theoretical perspectives (Timmermans & Tavory, 2012).

The theory allowed the researcher to explore how individuals, in relation to and influenced by their culture, perceive, accept, utilize, and respond to events or experiences of harm reduction. It enabled the emergence of themes and patterns from the participants' experiences and perspectives regarding cultural sensitivity and harm reduction services utilization. Additionally, it guided understanding of the significance of cultural interactions, social actions, and perceptions regarding harm reduction phenomena. This dissertation study used grounded theory methodology to develop theoretical concepts related to culturally respectful harm reduction messaging and its impacts. The study conducted an exploratory analysis of this phenomenon without applying preconceived theoretical perspectives.

This qualitative research study explores the barriers and facilitators to harm reduction services in the United States, focusing on inclusive and culturally sensitive messaging. Through in-depth interviews and thematic content analysis, the study understands the perspectives and experiences of study participants and gains rich, descriptive insights into perspectives regarding harm reduction messaging and service utilization. The exploratory qualitative methodology provided an opportunity for a deeper understanding of people's perceptions, experiences, and the

meanings they attribute to phenomena or events (Creswell, 2018). The flexibility of qualitative data collection permitted new issues to emerge organically from participants through participant stories that surveys could miss. The context-rich qualitative findings illuminate the "how" and "why" behind barriers and facilitators of access to harm reduction service utilization, not just surface-level trends.

4.2. Participants

Eighteen (18) participants were selected using purposive sampling, with 90% being African Americans. Inclusion criteria required participants to be adults over 21 years old, to have used harm reduction services in the past two years or considered using them but did not, and to be identified as a peer support service provider or mentor. Participants included individuals who have utilized or are familiar with harm reduction services within the past two years, harm reduction service providers, peer recovery support specialists with personal experience in substance use disorder and specialized training, healthcare or treatment team members offering support to individuals facing similar challenges, and families of individuals with substance use disorders who have received harm reduction services in Chicago.

Participants were recruited using snowball sampling, where current participants referred other potential participants for the research. The researcher first identified and recruited participants who met the research criteria and resided predominantly in the westside and southside areas of Chicago. The peer recovery specialists from the community served as guides during the selection process. Eighteen (18) participants who met all inclusion criteria were contacted and recruited to participate in the study. Fourteen (14) interviews were successfully

scheduled, but only ten (10) were completed. Four (4) interviews were left incomplete, with two participants who identified as having living experience being unable to continue and the other two declining to have their audio interviews recorded. In one case where the participant is a person who identified as one with a living experience, the researcher decided to terminate the interview due to the participant's hesitancy about completing the interview over the phone or secure video platform due to technological access difficulties along with a strong interest in an in-person discussion.

All participants were residents of Chicago. When the researcher attempted to recruit participants from other counties in Illinois, those individuals who were identified and approached did not consent to recording their interviews. Six participants were provided a twenty-dollar ($20) cash incentive for participating in the research, and the other four participants generously declined the financial incentive. They expressed hope that participating would contribute even in a small way to addressing the tragically high rates of fatal overdoses and other serious consequences disproportionately impacting friends, loved ones, and neighbors from their own cultural groups and networks. Their choice to refuse compensation reflects a deep, heartfelt commitment to illuminating the realities their own families and residents in predominantly Black neighborhoods face amid struggles linked to problematic drug use.

4.3. Procedure

4.3.1. Data Collection

The research utilized the application of motivational interviewing. This strategy, supported by empirical facts, helps individuals resolve uncertainty and hesitations about their feelings and

insecurities. It empowers them to identify the necessary desire to initiate behavioral changes that prevent personal growth. The primary objectives of Motivational Interviewing (MI) are to express empathy and elicit clients' reasons for and commitment to changing substance use and other harmful behaviors (Miller & Rollnick, 2013). The motivational interview approach explores how cultural norms and expectations influence the utilization of harm reduction services and how culturally sensitive messaging can promote acceptance and engagement, providing robust and valuable insights and designing effective and inclusive harm reduction programs.

Semi-structured interviews were conducted with selected participants; most were via Zoom/video call, and 20% were in-person conversations, primarily dependent on participant preference. The interview guide included open-ended questions to elicit key themes and perspectives on barriers and facilitators to using harm reduction services, opinions on current harm reduction messaging, suggestions for more inclusive/culturally sensitive messaging, personal and systemic experiences with harm reduction, the role of inclusive and culturally sensitive messaging in shaping service utilization, and other factors influencing service utilization. The interviews were audio and video–recorded, with participants' consent, and transcribed verbatim for subsequent analysis. The researcher's memo-taking during the interviews aided in reliably remembering and recalling key ideas, reviewing data, making references, identifying initial themes, and guiding further data collection. Data collection continued until data saturation was achieved, allowing new information and themes to emerge from the interviews.

4.3.2. Recruitment

The researcher contacted prospective participants via email and phone calls to discuss the study's purpose, obtain informed consent, and schedule interviews at a time and location convenient for the participant. The study commenced with the informed consent procedure, during which the interviewer reiterated the purpose and process. Participants then reviewed and signed the consent form to participate in the interview and were granted permission to record and note-taking.

Participants were interviewed using a motivational semi-structured interview protocol after obtaining their consent. Interviews were conducted in person and virtually to accommodate the participants' availability and preferences. In-depth interviews lasting 15 - 60 minutes were conducted via secure audio/videoconference. The open-ended semi-structured probes on messaging inclusivity yielded rich qualitative data essential for grounded theory analysis. The data revealed insights on harm reduction services, such as barriers, facilitators, opinions on current messaging, suggestions for more inclusive and culturally sensitive messaging, personal and systemic experiences, the influence of culturally sensitive messaging on service utilization, and other factors impacting service utilization. With the participant's consent, interview recordings were professionally transcribed for further analysis through Otter.ai. This transcription tool converts spoken audio into written text in real time or after the recording is completed, and workflows are checked for accuracy. The resulting textual data were uploaded to Delve for coding and analysis. The researcher made field notes during the interviews for further use.

4.4. Data Analysis

The data analysis was conducted using DelveTool, an online software that helps researchers analyze and interpret qualitative data, which includes data coding, categorization, and visualization (Zaveri, 2023). Delve was used to code systematically, identify themes and patterns, categorize themes, and develop a theory related to the research topic. The open-ended interviews enabled the researcher to probe into diverse and complex experiences while gathering data. The study examines, analyzes, and categorizes data to identify themes and interpret the information by incorporating personal reflections, engaging with individuals with drug use experience, referring to existing research, and utilizing a person-centered and flexible approach.

The researcher employed inductive coding without predetermined categories or theoretical frameworks to analyze data from participants' lived experiences and stories. This approach helped in understanding how racial dynamics, cultural identity, expectations, and historical trauma influence the perception of messages and the utilization of harm reduction services. The researcher starts by approaching the task with a receptive mindset and then thoroughly analyzes the data, identifying patterns, themes, and concepts from the interview transcripts. The researcher creates codes according to the content and importance of the data, enabling the development of new categories as the analysis advances. Analyzing patterns, themes, and relationships led to the development of a mid-range Cultural Attunement Theory. This theory emphasizes the importance of understanding historical factors that contribute to mistrust and protective cultural elements that foster the creation of inclusive messages. By leveraging cultural assets and trusted systems, the theory aims to encourage the utilization of harm-reduction strategies that reflect lived realities.

4.4.1. Creating Research Project on DelveTool

- A new project, a name, and a project file location were created, and a qualitative-type interview transcript text document was created for the research project. In DelveTool, "Documents," the folders containing transcript text documents were selected. A file within the project file had all imported interview recordings.

4.4.2. Coding Theme, Categorization, and Theorizing

Data Coding involves assigning codes, labels, or tags to excerpt text sections. This study employed inductive coding. The revised interview transcriptions were uploaded into DelveTool for coding. The clean version was created by reviewing the initial transcription from otter.ai while listening to the audio recording multiple times to eliminate unnecessary or inappropriate words from the conversation. Otter.ai is voice-to-text transcription software that uses artificial intelligence to transcribe conversations and take notes during meetings. Transcriptions and audio files created on otter.ai are sharable (McCue, 2023). The seven-step inductive coding process utilized in the current study is described below.

- Step 1: Generating codes:

Open coding is the initial stage of coding qualitative data in order to categorize it. It is an inductive process that allows a researcher to conduct the first level of identifying key themes, patterns, and concepts to emerge directly from the raw data through close examination (i.e.,., interview transcripts) (Saldana, 2021)

Open coding was utilized to generate initial codes based on the first cleaned interview transcript using the vivo coding method. The participants' own words reflecting their perceptions

were used to create the first two codes: "cultural expectation" and "emotional repression," which provided causal content for the research.

- Step 2: Transcript Review and Creating More Codes.

A mix of in vivo and descriptive coding was adopted. The researcher utilized the in vivo coding process by using the research participants' exact words and phrases as codes to capture their lived experiences and perspectives. In vivo codes are verbatim representations of participants' language and cultural connotations, preserving the authenticity and richness of their expressions (Saldana, 2021). Additionally, descriptive coding summarizes passages of qualitative data using short phrases or single words that describe the essence of the information being conveyed (Creswell & Poth, 2018).

The researcher got acquainted with the transcripts, included additional excerpts, and generated new codes. The researcher primarily utilized in vivo and descriptive coding methods to summarize the data. Repetitive patterns were identified.

- Step 3: Coding Directions:

Additional excerpts were incorporated into current codes, and new codes were established. The researcher primarily utilized in vivo and descriptive coding methods to summarize the data. Repetitive patterns were recognized. An initial one hundred codes were developed, and a second round of coding allowed for the merging of similar patterns. Seventy-eight codes were created and used to develop hierarchy coding; primary codes had at least three sub-codes linked to each hierarchical code.

- Step 4: Merge Code with Excerpt:

All the coded excerpts were gathered, arranged, and rearranged according to codes. Excerpts were extracted and categorized from all ten transcripts utilized in the research. Conceptually related open codes were grouped under higher-level axial codes to represent themes and subthemes. Delve analytic tools were used to compare coding frequencies across interview subgroups, revealing variations among cultural affiliations, age cohorts, substance use histories, and harm reduction familiarities in assessing differences in factors influencing messaging receptivity and perspectives.

Selective coding combines important axial codes into theoretical categories that represent connections in the data concerning cultural sensitivity in messaging and the utilization of harm reduction services (Miles et al., 2020). The researcher manually created an evolving codebook to clarify code definitions and descriptions.

- Step 5: Categorize codes into themes and subthemes.

Axial coding was performed to establish relationships between codes and investigate connections among developing themes and patterns. All codes were categorized into themes to show broader categories, recognize relationships, and analyze causal content; at least five codes fit into one theme. The naming of themes was informed by how it captures the essence of the research topic; more so, the researcher utilized some vocabulary directly articulated by participants when it was deemed relevant for the theme naming, e.g., historical trauma, cultural pride, and historical lens, amongst many others. Determining theme fitting was guided by a deep consideration of grouping codes and themes to provide answers to the research questions. This process aimed to understand the reasons behind certain occurrences, such as why individuals sharing needles/syringes are at risk of contracting life-threatening infections like Hepatitis A, B, and C.

Additionally, it sought to investigate the consequences of various phenomena, such as how historical trauma influences health perceptions and behaviors. A conceptual framework was created to illustrate the connections between cultural respect in harm reduction messaging, community-centered message development, addressing structural inequities, and enhancing engagement with culturally appropriate services for marginalized populations. See Tables 3, 4, and 5 for more details.

Table 3: Showing Themes, Subthemes and Codes

Themes	Subtheme	Emerging Codes
Knowledge and Use of Harm Reduction Services	Addiction Initiation Fentanyl – Laced Drugs Narcan Acceptability	Panic and Confusion in Overdose Crisis Unsafe Practices Associated Harm Gap in Knowledge Usage Training on Use Safe Consumption Sites Distrust and Utilization Negative Enablers
Perception of Recovery Readiness	Community Readiness Receptiveness	Underserved Conditions Detachment from Overdose Crisis
Recovery Support System	Family – Led Community Effort Perception Trust in Support	
Acknowledging Historical Barriers and Trauma	Historical Lens Racial Dynamic	Criminal Justice Systemic Racism Identity and Cultural Pride
Facilitators	Community Inclusivity Community Leadership Faith-Based Approach Diverse levels of Messaging	Age and gender Use of valid data Examples
Cultural facilitators	Cultural Relevance Racial Representation Message Framing	Target and Language

Barriers to Utilization	Racial Perception Service Payment Myth Remoteness Stigma Inadequate Resources	Classicism Racial Exclusion Inaccessibility Blaming the victim Absence of support
Cultural Barriers	Background Emotional Development	Norms and Values Religious beliefs Taboos Cultural Expectations Emotional Repression
Message Channels	Engag**e** Black Women Boots on the Ground Where they are Associations and Groups Entertainment Electronic Media Print Media	Peer Recovery Specialist One–on–one Faith-Based Block Clubs Rap Music Age-appropriate Music Social media Digital Divide
Message Promotion	Community Education Family Outreach Ongoing Campaigns	Use of Incentive Hotspots Safe Sex and Safe Supply Prevention Approaches Coping Mechanism

- Step 6: Assess, Modify, and Rearrange Themes and subthemes.

Themes and subthemes were evaluated to confirm that they were supported by adequate evidence. Themes lacking sufficient data were eliminated or merged with related themes, reorganized, renamed, or used as subthemes. This study's results and discussion sections utilize established codes and themes. Nine overarching themes were identified from the ten completed interviews for this study. These themes include knowledge and use of harm reduction services, perception of recovery readiness, recovery support system, acknowledging historical barriers and

trauma, facilitators, barriers to utilization, cultural barriers, message channels, and message promotion. The identified themes were the foundation for the discussion, conclusion, and recommendations.

- Step 7: Theorizing

As the analytic theme categories reached capacity, the integration of memos yielded a mid-range result. A mid-range result refers to identifying patterns, themes, or concepts that emerge from the data and fall between the raw data and the high-level theoretical or conceptual interpretations. When analyzing theme categories that have reached capacity and integrating memos, a mid-range result would be a synthesis of the findings that provides a more refined understanding of the phenomenon under study (Harrison & Shirom, 1999).

In this study, the mid–range result emerged from the researcher's thorough exploration of the data and insights from memos integrated with theme categories. Additionally, synthesizing the theme categories and memo insights into a coherent narrative provided direction to describe the patterns and relationships observed in the data that explained the study findings in light of the research questions.

The study's data analysis process, culminating in developing the cultural attunement theory, demonstrates a rigorous and systematic approach to coding, theme and subtheme identification, and theory building. The theory emerged from translating codes into themes and subthemes, thoroughly analyzing and interpreting the data, and identifying the central concepts and relationships that explained the phenomenon of respectful messaging for increasing harm reduction service uptake among marginalized communities. Coded data were carefully examined, patterns and relationships were identified, and similar codes were grouped to form overarching themes. By organizing the

data into themes and subthemes, the researcher could gain a deeper understanding of the critical concepts and ideas that emerged from the data.

The Cultural Attunement Theory emphasizes the importance of comprehending historical factors that contribute to mistrust, along with protective elements within a culture that promote the collaborative development of messages using cultural strengths, assets, and reliable systems to encourage the use of harm reduction strategies by mirroring real-life experiences.

4.4.3. Codebook (Refer to Codebook Appendix B)

A codebook was manually generated. The Codebook view summarizes study categories, themes, subthemes, their respective description, the number of transcription files it was generated from, and the number of times it was referenced.

- The researcher added and modified the category/code descriptions to comprehensively explain the theme and annotate specific codes to provide additional context and insights.
- In the codebook, references were generated to help link each transcript file's original data sources.
- The custom and populated codebook was stored as a document for future use. In the Codebook view, select "Export" or "Print" from the "Output" tab of the ribbon menu to save or print the Codebook document.

Table 4: Historical Barriers and Trauma

Themes	Subthemes	Descriptions	Examples	Files	Ref
Historical Barriers and Trauma	Historical Lens	Consider, evaluate, and contextualize messages within the larger backdrop of systemic racism, oppression, and intergenerational trauma experienced by African Americans.	"I think you can also use the historical lens to think about how historically all the ways the black man has been disadvantaged or suffered or harmed and to situate this as yet another thing that is hitting a black man as a way to encourage empathy." Interview_HRM09_KE	4	21
	Racial Dynamics	Racial dynamics and tensions impact perceptions, outreach, and utilization of harm reduction services within black communities.	"I think we also cannot ignore; racial dynamics of this just kind of scream out at me in ways that maybe it doesn't for other issues." Interview_HRM07_MK		
	Racial Identity and Pride	Crafting harm reduction messages that align with and positively reflect African American racial, cultural, and social identities.	"Because of our ancestors, we are strong, and they're with us…that's tied to an idea of racial pride, of racial identity". Interview_HRM09_KE "And even if it has to be borderline offensive, in our country. As an African American, there's a lot of pride." Interview_HRM07_MK		

Table 5: Cultural Barriers to Utilization

Themes	Subthemes	Descriptions	Examples	Files	Ref
Cultural Barriers to Utilization	Norms and Values	Obstacles or impediments to harm reduction service uptake that are attributed to cultural values, beliefs, norms, or experiences.	"I seriously think it's just the culture, you can be a kid that was brought up the right way and everything, but you could get influenced by being around the wrong person". "It starts with the youth, the way they were raised and instilled within the family." Interview_HRM03PL	10	43
	Emotional Development	Psychological and behavioral processes by which individuals comprehend and communicate their emotions throughout their lifespan.	"So, to combat the fear, anger sets in place, then you find yourself in trouble because they're acting out. So we grew up with that; you display emotions, of fear and anger." Interview_HRM01CD		
	Cultural Expectations	Societal norms, beliefs, values, and behaviors that are commonly upheld and anticipated within a particular cultural or social context	So there's a huge stigma there which prevents people from disclosing and sharing that they're having certain types of troubles, certain types of issues. You don't even bring it up; you wouldn't even speak it aloud. Interview_HRM09_KE		
	Emotional Repression	The psychological process through which individuals consciously or unconsciously suppress, inhibit, or deny the expression of their emotions, thoughts, or feelings.	"In the house or as a young man, you don't talk about it. You toughen up and all of that stuff. And when you go through trauma, where do you put that trauma as a kid when you're told that you can't talk about it." Interview_HRM01CD		

Table 6: Cultural Facilitators

Themes	Subthemes	Descriptions	Examples
Cultural facilitators	Cultural Relevance	Messaging should resonate with the cultural values, norms, and day-to-day realities that shape community needs and behaviors.	"So when you think about something being culturally relevant, I think about, is it reaching the population that is supposed to be reaching?" "Well, it seems like if it was more culturally relevant, it would be more effective." Interview_HRM07MK
	Target and Language	Strategic language and priority segments to influence with tailored harm reduction messaging.	"So I think this message needs to be embedded within the black community and needs to be spread; it needs to be hit just as hard as the campaign when it is the one against HIV and AIDS." Interview_HRM07MK "It should be translated in a language that people in that community and that culture understand and resonate with; that is stronger." "I believe that it is vital that it comes from that community and that language," Interview HRMO2ER
	Racial Representation	Meaningful involvement of people sharing the cultural background of target communities in crafting and sharing harm reduction messaging	"I think as long as the actors and the people who are in this situation of providing and receiving these messages are blacks, that will signify a cultural significance." Interview_HRM09_KE "I'm just saying if it's a community of Caucasians, I will put a Caucasian person in that area, whom they will listen to; if it's a Hispanic community, I'm gonna put a Hispanic in a position to be able to educate them on harm reduction." Interview_HRM01CD
	Message Framing	Deliberate, strategic choice and delivery of language, content, and context to convey information, influence perceptions and shape attitudes or behaviors.	"It's the way you approach it. If I approach them with, "Oh, please," That's bad. That's not going to work; you're gonna talk to a human being, and you're gonna be nice to the human being." Interview_HRM04_VG

RESULTS

5.1. Findings

A formal dictionary definition of the term "culturally sensitive messaging" was not found, as noted by an exploration of various dictionaries as recommended by Walker and Avant (2011) in their research process for concept analysis. Hence, for the purpose of this study, a culturally sensitive message is defined as culturally sensitive messaging is defined as the deliberate tailoring and dissemination of verbal and nonverbal communication that respects and reflects the values, beliefs, experiences, norms, and preferences of a specific cultural group or population to prevent misunderstandings or offense. Early on, the discipline of psychology acknowledged the influence of culture on human behavior (Wundt, 1921), but psychological scientists have struggled to measure this concept adequately. Culture is inherently difficult to define due to its multifaceted nature (e.g., dimensions of collectivism and individualism within a group); therefore, researchers often have used demographic variables (ethnicity, race, language, national origin, socioeconomic status, etc.) as proxies for culture, leading to an overreliance on group comparisons. (Sonika Ung, 2015). According to the American Psychological Association (2020), “culture” is the values, beliefs, language, rituals, traditions, and other behaviors that are passed from one generation to another within any social group (American Psychological Association, 2020). Culture is also defined as patterns of learned and shared behavior that are cumulative and transmitted across generations. (Worthy et al., 2020). The definition of messaging regarding harm reduction for this study is purposeful communication designed to convey information to a target population to educate, inform, motivate, or persuade. Crafting impactful messaging requires an in-depth strategy and an understanding of the target audience. Messaging about harm reduction is extremely

important, considering that harm reduction is controversial because they are perceived to contradict abstinence-only and law enforcement-focused drug policies. The messages about harm reduction are critical in garnering public support for adopting harm reduction interventions. (White et al., 2023). In this light, the deliberate inclusion of culture into crafting and disseminating harm-reduction messages aims to reduce the negative health, social, and economic effects of drug use while not mandating complete abstinence. Particularly, recognizing and respecting diversity within and across cultures is likely to reduce biases and misunderstandings that discourage a group, community, or individuals from accessing harm-reduction services, which include needle/syringe exchange programs, safe injection sites, drug checking services, and opioid agonist therapy such as methadone and buprenorphine treatment.

The diagram below describes the relationship across themes, subthemes, and constructs. The four constructs in the color shapes in Fig 2 below (cultural respect in harm reduction messaging, the influence of cultural norms, culturally appropriate messaging, and cultural sensitivity in intervention) reiterate the research findings and represent common themes, patterns, processes, or relationships that are identified across participants' experiences or perspectives. Results demonstrate that authentically acknowledging historical barriers and trauma communities have endured due to systematic marginalization and oppression is a crucial construct of cultural respect essential for building trust, resonance, and engagement when developing harm reduction messaging; the construct of cultural norms profoundly shapes perceptions and utilization of harm reduction services, underscoring the critical need for cultural representation and engagement of community members in developing messaging strategies that align with and leverage established beliefs, values, and communication patterns.

Findings indicate that culturally appropriate messaging is achieved through the key construct of cultural inclusivity in message framing, which involves centering the target community's voices, experiences, and preferences to create content that resonates with their unique identities, values, and communication styles. Cultural sensitivity in intervention is a critical construct for addressing barriers to access and utilization of harm reduction services, as it involves tailoring outreach strategies to the specific cultural contexts, needs, and strengths of marginalized communities to promote equitable engagement and outcomes.

In Figure 3, the diagram shows the centrality of intersectionality and diversity emerged as a unifying thread across the key constructs of cultural respect in messaging, the influence of cultural norms, culturally appropriate messaging, and cultural sensitivity in intervention. Results consistently highlighted the importance of recognizing and embracing the multifaceted, intersecting identities within marginalized communities, as individuals' experiences and perceptions of harm reduction services are shaped by the interplay of their racial, ethnic, gender, socioeconomic, and other cultural backgrounds. Findings emphasized that a one-size-fits-all approach to messaging and intervention fails to capture the nuances and diversity within and across communities, potentially perpetuating barriers to access and engagement. Instead, the research underscored the need for harm reduction efforts to adopt an intersectional lens, acknowledging the unique strengths, challenges, and cultural contexts that shape individuals' receptivity to and utilization of services. By centering intersectionality and diversity in developing and implementing culturally sensitive messaging and interventions, harm reduction initiatives can more effectively resonate with and serve the diverse needs of marginalized populations.

Fig 2: Relationship Between Constructs and Themes

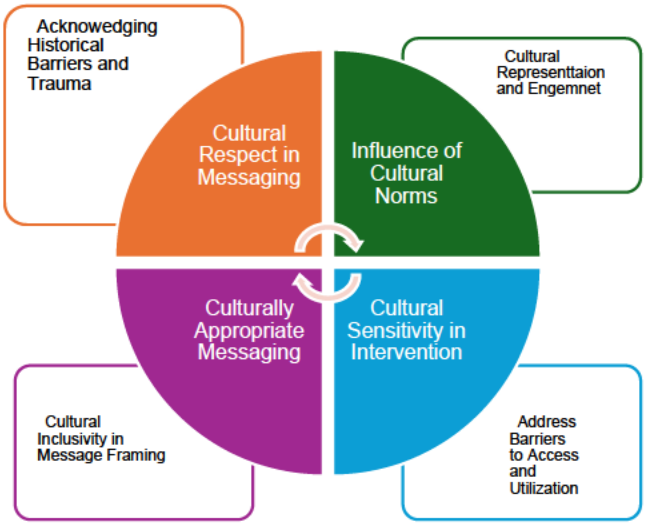


Fig 3: Intersectionality of Result

5.2. Role of Culture Respect in Messaging Reception and Engagement.

The summarized research findings were shared with participants to incorporate their perspectives through member-checking procedures to enhance credibility. Participants who expressed interest during interviews were sent concise summaries of the prominent results from the data analysis. They were informed these were preliminary and invited to provide open reactions, questions, or comments during a 15-minute follow-up interview remotely discussion.

Results from this study highlight that fostering a sense of genuine cultural respect is essential for crafting harm reduction messages that positively influence receptiveness and willingness to access available services among marginalized groups.

5.2.1. Trust Concerns

Profound mistrust of public health systems prevails among minority communities, given historical cases of perceived judgment, cultural ignorance, and, at times, deception. As mentioned

by a participant, "*Some people believe that these people truly do not care, some people believe that these man-made medicines are just not good" Interview_HRM05TY.* However, messages clearly developed through cultural immersion, co-design, humility, and desire to uplift communities can restore trust and convey deep respect.

Factors signaling cultural respect in messaging included collaborative partnerships with community insiders, resonant use of cultural archetypes, acknowledging challenges while praising strengths, meeting people "where they are," lingo aligning with cultural speech patterns, and visual assets reflecting the diversity of lived experiences. Displays of respect tangibly demonstrated that participants mattered. "*If you're trying to reach my community, you want it to come from that community; you want to hear from somebody that you trust and can relate to" HRM07MK*.

In contrast, contrived efforts were easily detectable and perceived as manipulative, further damaging credibility; this was a strong response from one participant who said, "*If you notice and look at the way that black men have been used unknowingly to test medical treatments by people giving them syphilis and the way they are targeted by the police" HRM09_KE*. Yet, the cultivation of authentic respect consistently increased openness to engage, even among those expressing initial wariness regarding support services due to the stigma. In essence, cultural respect lays a foundation of trust upon which marginalized communities can envision engaging with harm reduction on their own terms to manage complex challenges.

5.3. Historical Barriers and Trauma

Messaging choices carry great power to dismantle or reinforce barriers related to historical marginalization. This highlights the need to continually privilege target communities' perspectives

in crafting relevant framing, "*That is the cultural and historical context, and the messaging has to inspire empathy*" *HRM09_KE*. The perceived deliberate effort not to recognize or acknowledge historical barriers and trauma when developing harm reduction services has been internalized as disrespect to individuals and communities, particularly by the black community, who have reported that systemic injustices and past traumas impact them "*a lot of individuals were going to jail behind when it was just a gram of marijuana or cocaine, especially when it affects African Americans, instead of trying to find out the root of the problem, criminal justice just locks them up*." *HRM08AL*.

Acknowledge the historical context of systemic racism, discrimination, and trauma that have led to disparities in access to healthcare and harm reduction services. W*hat I believe is a distorted pride around being able to handle intense, horrible, dangerous trauma and not let it affect us in the way that we believe it might affect other people, HRM09_KE.* Foster cultural sensitivity and awareness among service providers to comprehend the influence of historical obstacles on individuals' experiences and behaviors. This important factor shows regard for the experiences and strength of individuals and communities impacted by systemic injustices. This acknowledgment is crucial for establishing trust, encouraging healing, and facilitating significant involvement in harm reduction initiatives.

5.4. Cultural Pride and Identity Affirmation

Fostering cultural pride and identity affirmation to increase harm reduction receptiveness towards and within marginalized groups and communities is more likely to be receptive to harm reduction services if the messaging content authentically affirms cultural pride and identities. When

people encounter campaigns, programs, or communication materials portraying their cultural communities in an uplifting, empowered light, it fosters goodwill and a sense of self-worth while demonstrating respect. The vital role of family and community pride and resilience in participant cultures increased attraction and willingness to bring supportive services into their collective experience, so long as it is appropriately framed. A participant with lived experience mentioned, "*This issue seems to be so situated within my race. If you can use that tool, that compulsion to be very proud of your race and identity is also a way to catch people's attention about something that's impacting your race. Using this opioid as a tool is an emotional trigger that hits the pride and identity.*" *HRM09_KE.*

In essence, cultural pride draws in, while cultural shame excludes populations from services attempting to reach them. When participants felt embraced in their entirety, the societal stigma surrounding substance use and harm reduction faded in importance during engagement decisions. Messaging can reinforce or disrupt barriers at the critical contact points where marginalized groups consider support options. These frontline touchpoints set trajectories moving forward. "*You got to tell them they love them and help try to show them a better way, don't shame, you gotta be positive. Give it your best shot with them so they know that you get their back; they have your support*". *HRM03PL*

5.5. Influence of Cultural Norms and Expectations on Harm Reduction Service Utilization

The complex sociocultural undercurrents profoundly shape whether marginalized communities will access existing harm reduction supports. Myriad norms and expectations tied to

cultural identities, systems of belief, gender roles, family dynamics, spirituality, age hierarchies, and assimilation processes formed robust barriers to utilization and potential facilitators.

5.5.1. **Cultural Attitudes Towards Substance Use**

Across the participants, the influential role of cultural attitudes toward substance use, healing practices, and accountability revealed a delicate balance between communal caregiving and social control instincts around behavioral norms. The participants exhibited a range of perspectives regarding substance use, which were shaped by cultural norms. *"I think it does take a community. I think what helps folks to avoid these kinds of things; I don't wanna be over-simplistic here is having a community that reinforces all the values and all of the things that we know help people thrive. Patience, support, encouragement, but it's also opportunity. It's also hearing yes, every now and then, to an idea, yes, to an opportunity, yes, to support in some type of way*". *HRM01_CD.*

Contrary to the prevailing perception among certain cultural groups, substance use was either deeply immoral or considered taboo or an ordinary aspect of social interactions, which, if done in moderation, would cause no harm to the user or their community. *It is seen as taboo to have intense mental and emotional issues because we see ourselves as being incredibly strong in that way, as opposed to how we see other communities, Interview_HRM09_KE.*

Historical oppression and medical mistreatment bred a cultural ethos of resilience and self-reliance that could inspire recovery narratives or sustain stigma-induced separation. "*I think you can also use the historical lens to think about how historically all the way the black man has been disadvantaged or suffered or harmed, the black men have been used unknowingly to test medical treatments by people giving them syphilis.*" *HRM09_KE*. Likewise, tensions between honoring

guidance from respected cultural elders and defending the dignity of those shouldering addiction against scolding judgment emerged in many interviews. The assimilation of younger generations into mainstream biomedical models offered promise, even though it potentially weakened communal traditions. Ultimately, each culture and microculture negotiated its own orientations. However, the gravity of respect, responsibility, trust, secrecy, autonomy, and social positioning inhered strongly across harm reduction utilization decisions – beyond simple individualistic choice paradigms.

5.5.2. **Constrain Emotional Growth and Readiness to Access Support**

Participants' responses suggest that prevailing sociocultural attitudes and norms around emotional expression and coping can profoundly shape emotional health trajectories over individuals' lifespans. Within marginalized communities facing intergenerational cycles of trauma and loss, dominant narratives often convey that painful feelings must be suppressed to demonstrate resilience and maturity. "*In the house, as a young man, you don't talk about it. You toughen up, and all of that stuff. Moreover, when you go through trauma, where do you put that trauma as a kid when you're told that you cannot talk about it?" HRM01CD.* Seeking or accepting support is framed as a weakness at odds with cultural values of pride, self-reliance, and secrecy around personal struggles. "*Real men do not break*" was a common refrain. "*And it's a shame that a lot of times, people are too embarrassed to talk about that subject; they are too ashamed even to tell, try to seek help*" *HRM08AL*.

Internalizing these dictates to save face and avoid shame can short-circuit emotional development, leaving individuals psychologically stranded without skills to express despair, loss,

anxiety, or hopelessness constructively, "*There's an intense stigma against mental health and mental support, counseling, and therapy. It is something that, as a culture, we believe that's not what we do, or it's what we need or that we do because we've experienced so much trauma" HRM09_KE.* This regression gets encoded as self-stigma and lack of efficacy regarding harm reduction service engagement.

Transforming readiness to access support first requires cultural shifts from narrow expectations of emotional toughness towards norms fostering vulnerability, interchange, and reunifying the broken self with the cultural whole, "*So there's a huge stigma there which prevents people from disclosing and sharing that they're having certain types of troubles, certain types of issues. You don't even bring it up; you wouldn't even speak it aloud*" HRM07_MK. Messaging anchored in cultural strengths can nurture this through transitional narratives that "*give people permission to feel again*," as one participant said. The cycle of regression can give way to growth and collective healing.

5.5.3. Equitable Access to Care

Sociocultural influences related to social class (classism), financial misconceptions (Insurance coverage and hidden cost), and geographic isolation (remoteness) can exert complex pressures on the utilization of existing harm reduction services.

Socioeconomic disparities lead to unequal access to resources, transportation limitations, and stigma related to substance use problems. "*Black folks don't have what they consider to be expendable income to put a family member in a treatment center to get off opioids. They don't;*

they're like, I don't, I am, barely still surviving myself. And then I think most middle-class, upper-middle-class black folks, they're like, I'm just trying to maintain what I got" HRM09_KE.

Removing financial obstacles and increasing inclusivity are two examples of how addressing these barriers can make harm-reduction services more accessible. Individuals may be discouraged from seeking help if they have misconceptions about paying for services, such as hidden costs and insurance coverage. *"Most of the people in an African American community don't have insurance. So therefore, they don't go to the hospital and doctors as much because they can't afford it; I think it's a money and insurance thing" HRM05TY.* Dispelling these myths requires open, honest, and clear messages regarding payment options and eligibility criteria. Other obstacles include geographical isolation and inadequate transportation options. "*Proximity and having harm reduction recovery centers in neighborhoods in communities closer to the people who use drugs and need to use these services will help them out." HRMO2ER.* Helpful new ways of providing services include telehealth and mobile harm reduction units. Outreach initiatives can be strengthened through cooperative relationships with neighborhood groups, medical professionals, and public entities.

To overcome these barriers, we need policies and programs that are culturally sensitive. It is essential to implement strategies that focus on fairness, availability, and cultural awareness to guarantee that everyone can access the necessary support, help, and resources to overcome their substance use problems effectively.

5.5.4. Spirituality, Faith and Traditions

Spirituality and faith traditions played a significant role in shaping individuals' coping mechanisms and attitudes towards substance use and harm reduction services. Participants emphasized the importance of integrating spirituality and faith-based approaches into harm reduction interventions because the black community has religion integrated into her culture. *"I think our faith is important. Religion is extremely important, and even in my addiction, I tried to get my faith in there; even though I wanted to go to church sometime, the church has been the cornerstone of getting us through various plagues that have affected our community". HRM07MK.* Across the group, participants reiterated that people within their communities believed in healing for their illness and that prayer would bring a solution. "*They believe in healing themselves. I think many people believe in that, that they believe that as long as they have faith that they don't need the medicine".* HRM05TY

5.5.5. Speaking the Language of Cultural Humility

Results across diverse groups underscore that marginalized populations are more likely to openly receive and respond to harm reduction outreach when messages align with cultural identities and demonstrate authentic humility rather than assumptions. *You don't see any of us giving out messages.* "*I think it's coming from the white community or how the public department of Public Health sees their messaging." HRM07MK.* Effective engagement hinges on respecting nuanced cultural attitudes, experiences, and norms to inform the substantive involvement of target populations in crafting relevant messaging. Dominant framings of harm reduction rooted in Western biomedical models often breed disconnection rather than resonance when uniformly applied across communities; it cannot be a one-size-fits-all approach*, "So I think this message*

needs to be embedded within the black community and needs to be spread; it needs to be hit just as hard as the campaign when it is the one against HIV and AIDS" HRM09_KE.

However, participants consistently expressed greater openness to services acknowledging historical trauma, grounded in values of collective care, delivered through trusted conduits like spiritual leaders, and resonance with traditional practices. Meeting people "where they are" means understanding where they've been. "*They hang out at the pool halls, getting their hair cut, they hang around on street corners, places where they get their drugs and stuff like that, places where they get their paraphernalia at places where they, maybe after a doctor's office if they're going to see an individual for needle exchange, or what if they're going to see individuals to get wound care"? HRM010EO*

One leader summarized: "*Our elders say it takes a thousand voices to tell the same story. Yours is just one seeking place by our fire. We cannot change the past but may harmonize each future song through steadfast compassion*." "*So those avenues are we listen to them as we will listen to a preacher on Sunday infomercials with people who look like us, meaning African Americans*" *HRMO2ER*

In essence, diversity demands plurality in messaging. A rigid institutional voice must give way to inclusive cultural polyphony. When communities gain confidence, their chorus is heard, and willingness to participate crescendos across groups long marginalized from systems now pledging to earn trust through humility. Sincerity sung in familiar tongues makes all the difference.

5.6. Message Framing through Cultural Lens

Results reveal that thoughtfully framing harm reduction messaging to align with communities' values, beliefs, and self-perceptions enables connection vital for engagement. Across groups, slogans spotlighting pride, dignity, and the protective role of culture resonated strongly, while approaches perceived as paternalistic or punitive bred distrust and skepticism. Program designs hoping to foster harm reduction readiness must first relay an understanding of insider cultural perspectives with humility. Then, framing services through native terms and imagery plants seeds for communities to adapt interventions congruent with lived realities organically. "*This empowers messaging as an instrument for grassroots change. In my community, we're big on the rap culture, the R and B culture, and poetry culture; it has been effective in that way". HRMO2ER. "I just did a campaign not too long ago, where he wanted me to talk slang as an avatar, so you want to put in some culturally relevant words and languages and phrases that we relate to, like, homey" HRM07MK*

- Positive and Strengths-Based Messaging: Construct messages utilizing a strengths-based approach that emphasizes the community's resilience, strengths, and assets. Highlight favorable results and resolutions instead of concentrating solely on adverse effects or hazards linked to substance use. *"They have Christian Rap out there that catches the ear. You're gonna have stuff like that. It does not have to be gangster rap. It can be a good rap. I have heard rap groups out there that rap about positive things, and that would help if we had more groups like that rapping about positive things. Instead of all this negative stuff". HRM05TY*

- Tailored Messaging for Subgroups: Acknowledge the diversity within the community and customize message strategies for different subgroups based on age, gender, ethnicity, socioeconomic status, and other pertinent factors. Consider the distinct requirements, worries, and preferences of various demographic segments in the community when developing messages. "*I remember when I was doing cocaine back in the day, I mean years ago, but we used to go to this West Side club, but now, I am over 50yrs old, and I listened to a lot of R&B, house music, more of slower, slightly slower music than with the rap." HRM07MK.*
- Inclusive and Culturally Responsive Language: Substance use and harm reduction terminology should not be stigmatizing or marginalizing; instead, it should be inclusive and reflective of the community's diversity. Think about the different languages spoken in the community and ensure people can understand and participate by providing messages in multiple languages.
- Community Engagement and Co-Creation: Block clubs, community forums, and participatory design methods can bring community members into the process of creating messages. Ensure your messages are culturally relevant, engaging, and effective by getting input from community leaders, stakeholders, and people using your services. "*So it is probably something we can deal with with the right resources and get some good administrators in there, and some other programs, such as the medical, we could probably handle it."* "*I think they should be from our senators all the way to our local government, from the federal government to the local government. I think that could help. If we get our political leaders to be that voice sometimes, even have a box somewhere when they have*

community meetings, put your information in the box, it could be an anonymous phone number or something". HRM08AL

5.6.1. Identifying Resonant Message Channels and Trusted Messengers

Results reveal that strategically selecting communication channels trusted and preferred within marginalized communities is critical for optimizing harm reduction messaging reach and uptake. Participants emphasized that outreach disseminated through indigenous information streams flowing directly from known and esteemed entities is far more likely to garner engagement than unfamiliar channels. "*We pass news through our drums, not billboards*," one participant noted.

Participants' trusted channels included spiritual networks, neighborhood hubs like beauty salons, Indigenous radio programs, ethnic media outlets, influential social media figures, and word-of-mouth amplification through family matriarchal lines. Proactively involving black women in shaping and promoting messages and programs was a suggestion to reach older black men struggling with substance use disorder. The engagement of community members who are peer recovery support coaches and specialists is echoed amongst participants because they can use personal narratives to inspire hope and promote harm reduction services. Furthermore, consistent visibility, tabling at community events, door-to-door canvassing, street outreach, grassroots peer leadership, and volunteer training allow these community members with lived experience to lead efforts.

Meeting people where they already convene and learn with guardians, they know it enables message penetration. Furthermore, pairing emergent channels like viral TikTok, Instagram, and

other social media testimonials captioned in native slang with traditional avenues creates convergence.

Participants recognized a divide in social media usage as a barrier to reaching people who use drugs. Often, without consistent phone or internet access, traditional digital outreach misses this group. Instead, direct in-person engagement through "boots on the ground" and printed materials like pamphlets and fliers work better to connect. At the same time, we can leverage social media and technology to educate families and support networks. No single channel holds inherent persuasive power alone. Influence stems from perceived credibility and resonating with existing cultural streams. By understanding these varied channels, we can strategically craft messaging that converges convictions and simultaneously turns the tide toward acceptance across multiple audiences. It is through multipronged outreach, meeting distinct groups where they are, that we can drive impact.

5.7. Cultural Representation and Diversity

Results overwhelmingly indicate that integrating authentic cultural representation within harm reduction messaging across various media is key for fostering engagement among groups historically facing stereotypes or exclusion from health initiatives. When participants recognized depictions or voices conveying the inherent diversity of strengths and challenges within their communities, an enhanced sense of belonging and credibility emerged regarding services. “You took time to show us as we are,” a woman stated. Mindful incorporation of intersectional cultural images, stories, and community partnerships signaled to participants that their unique needs mattered. In contrast, tokenized approaches or failures to move beyond monolithic depictions

reinforced barriers to engagement due to communities' past marginalization. Representation also proved an evolving process as identities shift across generations and settings. Still, the research suggests that for messaging to resonate, communities require reflection of their authentic realities throughout the process. One youth advocate concluded, "Respect the beauty in our truth, and we will walk with you."

5.8. Intersectionality and Diversity

Stepping back to view this mosaic of findings exploring how cultural contexts shape harm reduction messaging and engagement, an overarching theme permeating the results is the multidimensional diversity within and across communities. While high-level cultural categories provided an anchoring frame for this research, illuminated lived realities reveal far more intricate identities, perspectives, needs, values, histories, and orientations towards health issues like substance use risks and services. Observation and analysis found that even participants of the same racial background, socioeconomic difference, and demographics like age and gender categories masked profound intersectional nuances in how messaging resonance and barriers took shape across individuals of overlapping marginalized backgrounds. For example, low-income African American men in substance use recovery voiced different cultural priorities, communication preferences, and concerns around accessing harm reduction interventions compared to the African American woman who is a caregiver of a family member with substance use disorder.

Understanding culture as a fluid multidimensional spectrum rather than a static trait provides a model to adapt messaging and service approaches to reverberate across subgroups perpetually. Insisting on stable cultural universals or relying purely on easily measured

demographic factors likely misses opportunities to foster the use of innovations like safe consumption sites, drug checking, or peer recovery coaching by excluding subgroups that do not fit assumptions. Honoring intersectionality complexifies outreach yet holds transformational potential when historically marginalized voices guide solutions tailored to their dynamic realities. This breaking down of cultural monopolies opens new paths to support all who still suffer beyond the reach of respect and care.

5.9. The Cultural Attunement Theory for Harm Reduction Intervention

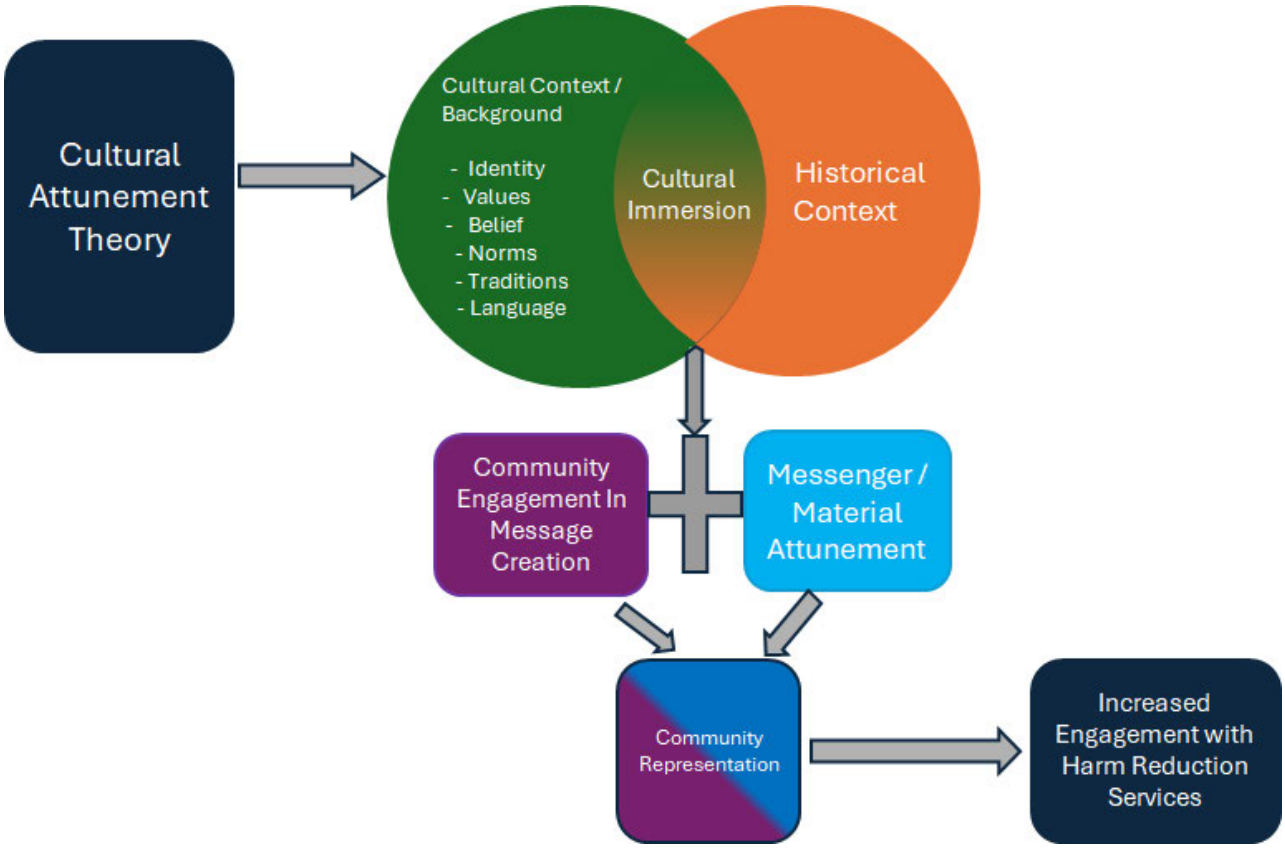
The Cultural Attunement Theory for Harm Reduction Interventions was created by combining original research data with established literature. The Cultural Attunement Theory emerged progressively during in-depth data analysis, tracing back to the initial open coding of rich interview transcripts. As cultural barriers and facilitators were documented, their multifaceted relationships to engagement took more precise shape. Constant comparison of codes to contextual factors made directional linkages apparent between degrees of attunement, with dimensions like messaging alignment and service access and utilization evident. As codes coalesced conceptually into the core pillars of attunement processes, cultural responsiveness, and enhanced receptivity, existing models were revisited contextually. Cultural sensitivity schema on tailoring health messaging provided an orientation but demanded a more complex adaptation regarding harm reduction given the severe social stigma (Kreuter et al., 2003). This resonates with Muñoz's cultural competence continuum, evident in how authenticity cultivates engagement (Muñoz, 2021).

The term "attunement" emerged organically from participants likening impactful messaging to "hitting the right notes." Targeted probe questions refined the understanding of sequential flow

influencing outcomes. Perspectives warned against assuming stagnant linear trajectories within dynamic cultural contexts. Thus, the Cultural Attunement Theory crystallized through iterative cycling between data gathering and coding evolutions analyzed against literature until reaching coherence balancing conceptual depth with grounded accuracy representative of diverse insights direct from participants recruited from the black communities who are most impacted by associated harm of illicit drug use (Godkhindi & O'Shea, 2022). Member-checking supported further refinement to maximize recognizability and actionability (van Boekel et al., 2013).

The Cultural Attunement Theory proposes that effectively engaging vulnerable cultural groups in harm reduction efforts requires a process of in-depth "attunement"—listening to and understanding the cultural context to inform the proper framing of messaging. The theory suggests that cultural attunement predicated on humility, member-checking, and participatory involvement of the community will allow seminal recovery/support messages to resonate deeply versus breeding distrust or disillusionment through historical authority structures. Pillars of attunement-based messaging include authentic use of cultural elements, terminology, and archetypes combined with trusted communication vehicles intuitively appropriate on local levels. Central is the concept of "cultural resonance," echoing at surface and deeper value levels across groups.

Fig 4: **The Cultural Attunement Theory**



This facilitates paradigm shifts toward collective support solutions. Attunement implies iterative approach adjustment as groups evolve across generational lines and historical moments, potentially realigning access considerations. Thus, the theory emphasizes responsiveness and co-creation versus fixed assumptions or transient caricatures of experience.

The core premise is that cultural attunement in harm reduction messaging, achieved through authentic community engagement, cultural immersion, and tailoring communications to resonate linguistically and values-wise, leads to increased engagement from target populations. Key elements depicted include the foundational cultural context, attuned messaging shaped through cultural partnership, and downstream increases in harm reduction service participation within communities. Arrows indicate the directional relationships between attunement processes, adapted messaging, and engagement outcomes.

DISCUSSION

6.1. Connecting Results and Existing Literature

The findings from the research on cultural respect definitions are consistent with the literature on the psychology of cultural respect in engaging with indignity on Indigenous issues, which shows that marginalized groups perceive respect by considering understanding historical challenges and the level of representation in decision-making and implementation (Ranzijn, 2021). Cultural identity factors are connected to intersections with oppression. The painful legacy of historical deprivation and trauma still echoes across societal barriers embedded more deeply than many care to acknowledge. Any credible examination aiming to remedy exclusion must first listen to those long unheard, respectfully uplift their accounts of struggle, and ensure analyses illuminate interconnected injustices still casting shadows today. (Collins, 2021).

The unchecked stigma surrounding substance use disorders often leads to unfair blame and assumptions of moral failure about those who have an addiction. Families also face stigma-fueled perceptions of negligence for their loved one's situation. Such stigma creates significant barriers to accessing harm reduction services meant to help. Participants across cultural groups described these stigma-related barriers, confirming past research identifying stigma as a primary obstacle to service utilization (McPherson et al., 2022). However, the findings also showcase harm reduction approaches that foster compassion over judgment while respecting families' protective capacities. These inclusive messaging strategies offer pathways to reduce stigma's marginalizing impacts. However, undoing long-held social stigma requires continual effort and understanding.

The literature on integrating indigenous medicine into the health system suggests integrating traditional practices with indigenous healing rather than replacing them (Lowe, 2019).

Family and community roles support the collectivist values observed in various cultural groups (Matsumoto & Hwang, 2022). The language and communication style results support the established models of adapting health messages to different cultures (Resnicow et al., 2000) (McClure, 2004).

Messages delivered by credible voices from within cultural groups had higher resonance and influence, which closely parallel evidence of the unique value of same-identity peer education and outreach approaches. Especially for communities facing marginalization, peer leader models can leverage deeper cultural understanding, communication fluency, and barriers related to historical mistrust. Trusted messengers mirror the approach outlined for identity-concordant peer leader models (Wang et al., 2022). This research reinforces the vital process of identifying, training, and empowering culturally reflective peer interventionists to promote health behavior changes effectively.

The conceptual model of cultural healing centers, as well as cultural healing and restoration of identity, is clearly critical for harm reduction messaging and outreach strategies among groups contending with multigenerational marginalization. This links historical context to the idea of cultural healing from intergenerational trauma (Ford & Airhihenbuwa, 2022). The results on representation reflect the (Hill, 2021) concept of identities and the communication channels connected to (Kreuter et al., 2022) cultural schema theory regarding deep metaphors. Family/community advising is consistent with the extended family role descriptions outlined by (Abel & Levine, 2022). These qualitative findings confirm and build on existing literature on cultural and harm reduction messaging areas.

6.2. Recommendation

The Cultural Attunement Theory emerging from this research provides an overarching framework and principles for ensuring harm reduction messaging engages diverse cultural groups effectively. Adopting this theory can give a head start and facilitate program design that ensures genuine participatory representation and actively focuses on the most affected population through collaborative co-creation partnerships for messaging rather than imposing top-down approaches. This research emphasizes the significant value and advantages of prioritizing community voices and leadership. It is important to incorporate asset-based assessment in creating harm-reduction messages to highlight cultural strengths, challenges, role models, and success stories. This approach helps to reduce assumptions and promotes inclusive representation of diversity. Utilizing local information channels and community leaders to spread messages to increase communication channels' reach and credibility.

To adapt and frame language effectively, one must pay close attention to cultural speech patterns, archetypes, values, and daily frames of reference to ensure that the message accurately reflects real-life experiences. Anchoring broad cultural groups and acknowledging the diverse intersections of backgrounds, gender, age, and class can help address subgroups. Applying iterative adjustment processes in designing interventions can increase the uptake of harm reduction services in communities most affected by drug-related consequences. It is essential to openly admit historical marginalization that has contributed to a lack of trust in systems as a moral obligation to build trust, move toward reconciliation, and tackle historical marginalization.

6.3. Limitations

The researcher acknowledges the limitations of this work, which might help frame the appropriate interpretation and application of findings. Further research can build on this emergent work through expanded sample sizes and demographics, increasing participants' familiarity with harm reduction, multi-regional investigations, and pre/post measurements quantifying messaging outcomes on service uptake. The current study provides a thorough basis and theoretical structure for enhancing cultural sensitivity in harm reduction communication.

The limited sample size (<20 participants) limits the generalizability of findings beyond the study scope despite achieving data saturation. Other cultural groups have not been explored yet. Self-selection bias may occur in participants more inclined to discuss sensitive topics with a researcher, potentially favoring those more receptive to harm-reduction strategies.

Capturing more critical perspectives could reveal additional barriers and facilitators. Social desirability bias can influence participant responses even when efforts are made to encourage honest sharing. Controversial subjects frequently have social prohibitions that restrict open discussion. Differences in understanding harm reduction may hinder the development of optimal communication strategies. Participants with limited exposure may need more foresight beyond the current situation. Geographic specificity limits transferability and fails to account for variations in services and cultural characteristics between different locations. Quantitatively measuring observed outcomes is not feasible in this exploratory qualitative study, limiting the ability to make causal inferences about the effectiveness. Researcher traits, analysis, and cultural humility assessments could unintentionally strengthen specific biases that affect collaboration and interpretation.

6.4. Implication of Future Research

The cultural attunement framework requires expanded validation through quantitative evaluation of actual messaging strategies co-developed with communities on key harm reduction participation outcomes. Research is needed to establish measurable impact. More groups must be examined. Every cultural context contains unique barriers, communication norms, and pathways to increase engagement around substance use services requiring immersive understanding. Studies should emphasize inclusive representation. The surveys focused on specific communication practices have the potential to provide an assessment of real-world message dissemination and upgrading based on evolving cultural preferences across generations or migratory shifts.

As cultural humility involves lifelong commitment, researchers have ethical obligations for sustained community participation extending beyond fixed project timeframes. Exploring interactive feedback channels may facilitate this approach. Health communication technology research and innovations in messaging modalities should purposefully embed cultural attunement requirements into design criteria, ensuring accessibility and responsiveness. Greater participation of scholars from within minority cultures is imperative to counter the disciplinary dominance of Western cultural paradigms marginalizing non-academic but highly rigorous indigenous knowledge systems and theories of wellbeing.

In summary, future research demands ongoing pluralistic, empowering inquiry supporting communities themselves to guide appropriate harm reduction communication while elevating multiply-marginalized voices within scholarly discourse and decision-making that impacts them.

6.5. Implication for Future Policy and Practice

This work has reiterated that suffering cannot be described in statistics. Instead, through stories, lived and living experiences are evidence and must be trusted. Service delivery and policy guidance must obligate that funding decisions, evaluation standards, and tiered messaging efforts structurally require intimate cultural participation, co-creation, and leadership to demonstrate impact on those historically underserved.

6.5.1. Implication for Policy

The study highlights the importance of promoting equitable access and engagement with harm reduction services among marginalized cultural communities. It suggests that achieving health equity requires a deeper understanding of cultural context and community leadership in outreach strategies. Cultural attunement, achieved through immersive partnerships and contextualized communication, is crucial for overcoming historical barriers; therein lies the path to justice and healing. Policymakers should institutionalize community participatory frameworks, reallocate resources to grassroots organizations, and incentivize hiring cultural mediators. Policies grounded in cultural humility can transform the systemic landscape of harm reduction efforts. Suggested pathways as an initial start are listed below.

- The development of cultural competency standards and guidelines for government and organizational messaging around substance use and harm reduction.
- Funding for translation, literacy adjustment, and multi-platform dissemination of materials.
- Grants for nonprofits led by impacted communities to pilot participatory research communication initiatives.

- Support for training programs that qualify more peers and outreach workers from diverse communities.

6.5.2. Implication for Practice

The findings from this research have direct implications for practitioners seeking to enhance the reach and impact of harm reduction services within diverse cultural communities. The results underscore that effectively engaging marginalized populations requires moving beyond solely translating materials to embrace a holistic approach grounded in cultural attunement. This involves practitioners dedicating time and resources to cultivate a deep understanding of the unique histories, values, strengths, and challenges shaping community perspectives on substance use and support services. It means humbly partnering with community members as experts to co-design outreach strategies that resonate with their lived realities.

Practitioners must be willing to challenge their own assumptions and adapt messaging to incorporate culturally meaningful framing, visuals, and communication channels. The research suggests that investing in hiring and training peer leaders, cultural brokers, and outreach workers with insider knowledge and credibility is critical for building trust and engagement. Ultimately, integrating cultural attunement as a core competency and ethical standard across all aspects of practice - from needs and strength assessments to intervention design to evaluation - is crucial for ensuring harm reduction services are accessible, acceptable, and impactful for communities that have long been underserved. Suggested pathways as an initial start are listed below.

- Employ community advisory boards and cultural consultants in designing intervention messaging and content.

- Set targets for pretesting communications with a representative sample of intended cultural audiences.
- Build capacity of providers, frontline workers, and recovery coaches on culturally aligned communication norms.
- Integrate members of cultural groups into outreach teams to capitalize on enhanced credibility and access.
- Invest in cultural immersion experiences for leadership to counter assumptions and internalized narratives that breed stigma.
- Apply cultural attunement as a quality improvement criterion for evaluating real-world implementation.

CONCLUSION

This undertaking sought to address disparities in engagement with harm reduction interventions for marginalized cultural groups through sensitive, inclusive messaging approaches. Poor outcomes persist, seeded in legacies of medical exploitation and narratives breeding internalized shame or resignation. Top-down solutions repeatedly disappoint by dismissing contexts where strength and wisdom to overcome adversity reside in communities themselves. Thus, this inquiry employed grounded theory methodology to privilege voices directly impacted. The goal was to conceptualize messaging as an instrument for empowerment guided by cultural partners. Three research questions explored multidimensional factors influencing harm reduction communication receptivity across groups:

- Defining respect to build trust and convey value.
- Understanding norms that inhibit or encourage support options.
- Ensuring representation and tailoring to enhance relevance.

Interviews with those navigating recovery, policy advisors, and families revealed histories of people demanding remedies before reconciling promising futures. They highlighted complex barriers woven into the societal fabric. Stigma and assumptions dominated past efforts, constraining worldviews on transformation centered in communal bonds. However, glimmers emerged where services conveyed true cultural humility. Analyses crystallized interconnections between historical oppression, dismissive paradigms, and access disparities. Core categories coalesced into mid-range Cultural Attunement Theory, delineating how immersed understanding of lived realities can reshape top-down assumptions and foster inclusive communication approaches.

Results carry ethical burdens for systems eager to demonstrate overdue commitment through representation, not window-dressing. However, members passionately declared that messages grounded in the strength of identity could seed redemption and healing after generations of wounds. Thus, conclusions channel caution and hope as marginalized shoulders expect justified justice through long-overdue trust in their resilience and hard-earned wisdom. The theories articulated here merely launch toward reconciliation's far horizon.

References

Abynag., & Jn, W. (2017, January 11). *Communities in Action: Pathways to Health Equity*. PubMed. https://pubmed.ncbi.nlm.nih.gov/28418632/

Administration (SAMHSA), S. A. and M. H. S. (2022, September 23). *Biden-Harris Administration Awards More Than $1.6 Billion in Funds for Communities Addressing Addiction and Overdose Crises*. HHS.gov. https://www.hhs.gov/about/news/2022/09/23/biden-harris-administration-awards-more-than1-6-billion-funds-communities-addressing-addiction-overdose-crises.html

American Psychological Association. (2020). *APA Dictionary of Psychology*. Dictionary.apa.org. https://dictionary.apa.org/culture

Arbelo Cruz, F. (2021, October 1). *Racial Inequities in Treatments of Addictive Disorders*. Medicine.yale.edu. https://medicine.yale.edu/news-article/racial-inequities-in-treatments-of-addictive-disorders/

Askim-Lovseth, M. K., & Aldana, A. (2010). Looking Beyond "Affordable" Health Care: Cultural Understanding and Sensitivity—Necessities in Addressing the Health Care Disparities of the U.S. Hispanic Population. *Health Marketing Quarterly*, *27*(4), 354–387. https://doi.org/10.1080/07359683.2010.519990

Banks, D. E., Scroggins, S., Paschke, M. E., Shacham, E., Nance, M., Cavazos-Rehg, P., & Winograd, R. P. (2023). Examining Increasing Racial Inequities in Opioid Overdose Deaths: A Spatiotemporal Analysis of Black and White Decedents in St. Louis, Missouri, 2011-2021. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, *100*(3), 436–446. https://doi.org/10.1007/s11524-023-00736-9

Baumgartner, J., & Radley, D. (2023, March 13). *Overdose Deaths Declined but Remained Near Record Levels During the First Nine Months of 2022 as States Cope with Synthetic Opioids*. Www.commonwealthfund.org. https://www.commonwealthfund.org/blog/2023/overdose-deaths-declined-remained-near-record-levels-during-first-nine-months-2022-states

Beyer, D. (2022, September 28). *JEC Analysis Finds Opioid Epidemic Cost U.S. Nearly $1.5 Trillion in 2020*. U.S. Representative Don Beyer. https://beyer.house.gov/news/documentsingle.aspx?DocumentID=5684

Boutin-Foster, C., Foster, J. C., & Konopasek, L. (2008). Viewpoint: Physician, Know Thyself: The Professional Culture of Medicine as a Framework for Teaching Cultural Competence. *Academic Medicine*, *83*(1), 106–111. https://doi.org/10.1097/acm.0b013e31815c6753

Boyd, S. (2021). *History of Drug Policy in Canada*. Canadian Drug Policy Coalition. https://drugpolicy.ca/about/history/

Brooks, L. A., Manias, E., & Bloomer, M. J. (2019). Culturally sensitive communication in healthcare: A concept analysis. *Collegian*, *26*(3), 383–391. https://doi.org/10.1016/j.colegn.2018.09.007

Burke, S., & Burke, S. (2022, May 19). *Boosting the Power of Harm Reduction with Culturally Responsive Housing, Recovery Supports, and Treatment*. TAC. https://www.tacinc.org/blog/boosting-the-power-of-harm-reduction-with-culturally-responsive-housing-recovery-supports-and-treatment/

Burlew, K., McCuistian, C., & Szapocznik, J. (2021). Racial/ethnic equity in substance use treatment research: the way forward. *Addiction Science & Clinical Practice*, *16*(1). https://doi.org/10.1186/s13722-021-00256-4

CDC. (2021, June 17). *Understanding the epidemic | CDC's response to the opioid overdose epidemic | CDC*. Www.cdc.gov; CDC. https://www.cdc.gov/opioids/basics/epidemic.html

CDC. (2022). *Products - Vital Statistics Rapid Release - Provisional Drug Overdose Data*. CDC. https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm

Chan, A., & Saewyc, E. M. (2022). 16. The Links Between Discrimination, Violence and Health Outcomes for Gender Minority BIPOC Youth in Canada. *Journal of Adolescent Health, 70*(4), S9. https://doi.org/10.1016/j.jadohealth.2022.01.020

Chatterjee, A., Glasgow, L., Bullard, M., Sabir, M., Hamilton, G., Chassler, D., Stevens-Watkins, D. J., Goddard-Eckrich, D., Rodgers, E., Chaya, J., Rodriguez, S., Gutnick, D. N., Oga, E. A., Salsberry, P., & Martinez, L. S. (2022). Placing Racial Equity at the Center of Substance Use Research: Lessons From the HEALing Communities Study. *American Journal of Public Health, 112*(2), 204–208. https://doi.org/10.2105/ajph.2021.306572

Chicago, W. C. (2023, July 25). *Cook County breaks opioid overdose record with 2,000 deaths logged last year*. WBEZ Chicago; Chicago. https://www.wbez.org/stories/cook-county-breaks-opioid-overdose-record-with-2000-deaths/1594446e-7838-4c63-9ecf-21cc2ac7f13f

Clark, N. (2019). Building a Culturally Responsive Independent Consulting Practice. *New Directions for Evaluation, 2019*(164), 81–88. https://doi.org/10.1002/ev.20382

Creed, M. C. (2017). Toward a targeted treatment for addiction. *Science, 357*(6350), 464–465. https://doi.org/10.1126/science.aao1197

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Sage.

Davis, C. S., & Judd Lieberman, A. (2020). Access to Care for Individuals with Opioid Use

Disorder. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3675885

Delve. (2022). *Essential guide to coding qualitative data*. Delve. https://delvetool.com/guide

Des Jarlais, D. C. (2017). Harm reduction in the USA: the research perspective and an archive to David Purchase. *Harm Reduction Journal*, *14*(1). https://doi.org/10.1186/s12954-017-0178-6

Domino, M. E., Sylvia, S., & Green, S. (2021). Nudging primary care providers to expand the opioid use disorder workforce. *Health Services Research*. https://doi.org/10.1111/1475-6773.13894

Doyle, W. S., & Huskinson, S. L. (2023). Environmental Uncertainty and Substance Use Disorders: A Behavior Analytic Perspective. *Policy Insights from the Behavioral and Brain Sciences*, *10*(1), 96–103. https://doi.org/10.1177/23727322231152451

Dupont, R. L. (1996). Harm Reduction and Decriminalization in the United States: A Personal Perspective. *Substance Use & Misuse*, *31*(14), 1929–1945. https://doi.org/10.3109/10826089609066439

Farahmand, P., Arshed, A., & Bradley, M. V. (2020). Systemic Racism and Substance Use Disorders. *Psychiatric Annals*, *50*(11), 494–498. https://doi.org/10.3928/00485713-20201008-01

Forchuk, C., Serrato, J., & Scott, L. (2023). Identifying barriers and facilitators for implementing harm reduction strategies for methamphetamine use in hospital settings. *Frontiers in Health Services*, *3*. https://doi.org/10.3389/frhs.2023.1113891

Friedman, J., & Akre, S. (2021). COVID-19 and the Drug Overdose Crisis: Uncovering the Deadliest Months in the United States, January–July 2020. *American Journal of Public*

Health, *111*(7), 1284–1291. https://doi.org/10.2105/ajph.2021.306256

Friedman, S. R., Southwell, M., Bueno, R., Paone, D., Byrne, J., & Crofts, N. (2001). Harm reduction — a historical view from the left. *International Journal of Drug Policy*, *12*(1), 3–14. https://doi.org/10.1016/s0955-3959(01)00063-9

Gavulic, K. A., & Dusetzina, S. B. (2021). Prescription Drug Priorities under the Biden Administration. *Journal of Health Politics, Policy and Law*. https://doi.org/10.1215/03616878-8970810

Geddes, L. (2022). *An investigation of health-related harms associated with illicit opioid injection*. Unsworks.unsw.edu.au. https://unsworks.unsw.edu.au/entities/publication/dbddbc76-8754-4055-9fc1-fbb816a16fea

Gussow, A. (2006). "Where Is the Love?": Racial Violence, Racial Healing, and Blues Communities. *Southern Cultures*, *12*(4), 33–54. https://doi.org/10.1353/scu.2006.0047

Harrison, M. I., & Shirom, A. (1999). *Organizational diagnosis and assessment : bridging theory and practice*. Sage Publications.

Harvard, S. S., Hill, W. D., & Buxton, J. A. (2008). Harm Reduction Product Distribution in British Columbia. *Canadian Journal of Public Health*, *99*(6), 446–450. https://doi.org/10.1007/bf03403773

Harvey, L., Sliwinski, S. K., Flike, K., Boudreau, J., Gifford, A. L., Branch-Elliman, W., & Hyde, J. (2022). 2093. Utilizing Implementation Science to Identify Barriers and Facilitators to Implementing Harm Reduction Services in the Veterans Health Administration (VHA). *Open Forum Infectious Diseases*, *9*(Supplement_2). https://doi.org/10.1093/ofid/ofac492.1715

Hobden, K. L., & Cunningham, J. A. (2006). Barriers to the dissemination of four harm reduction strategies: a survey of addiction treatment providers in Ontario. *Harm Reduction Journal*, *3*(1), 35. https://doi.org/10.1186/1477-7517-3-35

Hoffman, K. A., Ford, J. H., Choi, D., Gustafson, D. H., & McCarty, D. (2008). Replication and sustainability of improved access and retention within the Network for the Improvement of Addiction Treatment. *Drug and Alcohol Dependence*, *98*(1-2), pp. 63–69. https://doi.org/10.1016/j.drugalcdep.2008.04.016

https://chicago.suntimes.com/authors/david-struett, & https://chicago.suntimes.com/authors/emmanuel-camarillo. (2023, July 26). *Cook County breaks opioid overdose record with 2,000 deaths logged in 2022*. Chicago Sun-Times. https://chicago.suntimes.com/news/2023/7/25/23806921/opioid-overdose-deaths-rising-2022-fentanyl-cook-county-medical-examiner-drug-addiction

Hughes, M., Suhail-Sindhu, S., Namirembe, S., Jordan, A., Medlock, M., Tookes, H. E., Turner, J., & Gonzalez-Zuniga, P. (2022). The Crucial Role of Black, Latinx, and Indigenous Leadership in Harm Reduction and Addiction Treatment. *American Journal of Public Health*, *112*(S2), S136–S139. https://doi.org/10.2105/ajph.2022.306807

Hulsey, J. N. (2022). Toward Improved Addiction Treatment Quality and Access for Black Patients. *American Journal of Public Health*, *112*(S1), S21–S23. https://doi.org/10.2105/ajph.2021.306664

Humphreys, K., Shover, C. L., Andrews, C. M., Bohnert, A. S. B., Brandeau, M. L., Caulkins, J. P., Chen, J. H., Cuéllar, M.-F., Hurd, Y. L., Juurlink, D. N., Koh, H. K., Krebs, E. E., Lembke, A., Mackey, S. C., Larrimore Ouellette, L., Suffoletto, B., & Timko, C. (2022). Responding

to the opioid crisis in North America and beyond: recommendations of the Stanford–Lancet Commission. *The Lancet*, *399*(10324), pp. 555–604. https://doi.org/10.1016/s0140-6736(21)02252-2

Inciardi, J. A., & Harrison, L. D. (1999). Harm Reduction: National and International Perspectives. In *Google Books*. SAGE Publications. https://www.google.com/books/edition/Harm_Reduction/ZRLN7V49VpgC?hl=en&gbpv=1&dq=The+Global+History+of+Harm+Reduction+&pg=PA1&printsec=frontcover

Kagotho, N., Maleku, A., Baaklini, V., Karandikar, S., & Mengo, C. (2020). Substance Use, Service Provision, Access & Utilization among Foreign-Born Communities in the United States: A Mixed Methods Study. *Substance Use & Misuse*, *55*(12), 2043–2054. https://doi.org/10.1080/10826084.2020.1790006

Kariisa, M. (2023). Illicitly Manufactured Fentanyl–Involved Overdose Deaths with Detected Xylazine — United States, January 2019–June 2022. *MMWR. Morbidity and Mortality Weekly Report*, *72*(26). https://doi.org/10.15585/mmwr.mm7226a4

Keane, C., Egan, J. E., & Hawk, M. (2018). Effects of naloxone distribution to likely bystanders: Results of an agent-based model. *International Journal of Drug Policy*, *55*, 61–69. https://doi.org/10.1016/j.drugpo.2018.02.008

Kretzmann, J. P., & McKnight, J. L. (1996). *Building Communities From The Inside Out*. Turtleback.

Kreuter, M. W., Lukwago, S. N., Bucholtz, D. C., Clark, E. M., & Sanders-Thompson, V. (2003). Achieving Cultural Appropriateness in Health Promotion Programs: Targeted and Tailored Approaches. *Health Education & Behavior*, *30*(2), 133–146.

https://doi.org/10.1177/1090198102251021

Liabo, K. (2013). Health activism: foundations and strategies. *Critical Public Health, 24*(1), 104–105. https://doi.org/10.1080/09581596.2013.850231

lumivero. (2020, April 1). *An Overview of Grounded Theory Qualitative Research*. Lumivero. https://lumivero.com/resources/blog/an-overview-of-grounded-theory-qualitative-research/#:~:text=What%20is%20Grounded%20Theory%20Approach

Majee, W., Conteh, N., Jacobs, J., Jooste, K., & Wegner, L. (2021). Rural voices: A social-ecological perspective on factors influencing youth substance use in rural South africa. *Health & Social Care in the Community*. https://doi.org/10.1111/hsc.13292

McCormack, L., Sheridan, S., Lewis, M., Boudewyns, V., Melvin, K. L., Kistler, C., Lux, L. J., Cullen, K., & Lohr, K. N. (2013). *Communication and Dissemination Strategies to Facilitate the Use of Health-Related Evidence*. https://doi.org/10.23970/ahrqepcerta213

McCue, T. J. (2023, March 3). *Otter.ai Is A Gem For Transcribing Your Recorded Thoughts Into Writing*. Forbes. https://www.forbes.com/sites/tjmccue/2023/01/29/otterai-is-a-gem-for-transcribing-your-recorded-thoughts-into-writing/

McGinty, E. E., White, S. A., Sherman, S. G., Lee, R., & Kennedy-Hendricks, A. (2023). Framing harm reduction as part of an integrated approach to reduce drug overdose: A randomized message testing experiment in a nationally representative sample of U.S. adults, 2022. *International Journal of Drug Policy*, p. *118*, 104101. https://doi.org/10.1016/j.drugpo.2023.104101

Miles, M. B., Huberman, A. M., & Saldaña, J. (2020). *Qualitative data analysis: a methods sourcebook.* Sage.

Moore, M. D., Ali, S., Burnich-Line, D., Gonzales, W., & Stanton, M. V. (2020). Stigma, Opioids, and Public Health Messaging: The Need to Disentangle Behavior From Identity. *American Journal of Public Health*, *110*(6), 807–810. https://doi.org/10.2105/AJPH.2020.305628

National Council for Mental Health. (2023, January 24). *Training Public Safety to Prevent Overdose in BIPOC Communities*. National Council for Mental Wellbeing. https://www.thenationalcouncil.org/program/training-public-safety-to-prevent-overdose-in-bipoc-communities/#:~:text=Individuals%2C%20communities%2C%20and%20health%20care

National Harm Reduction Coalition. (2019). *Principles of Harm Reduction*. Harmreduction.org. https://harmreduction.org/about-us/principles-of-harm-reduction/

Office of National Drug Control Policy Control Policy. (2021, May 6). Https://Www.whitehouse.gov/Ondcp/The-Administrations-Strategy/The-Biden-Harris-Administrations-First-Year-Drug-Policy-Priorities/#:~:Text=Enhancing%20evidence%2Dbased%20harm%20reduction,And%20expanding%20the%20addiction%20workforce.

Ratts, M. J., Singh, A. A., Nassar-McMillan, S., Butler, S. K., & McCullough, J. R. (2016). Multicultural and Social Justice Counseling Competencies: Guidelines for the Counseling Profession. *Journal of Multicultural Counseling and Development*, *44*(1), 28–48. https://doi.org/10.1002/jmcd.12035

Reif, S. (2012). Addiction pharmacotherapy: What do we know about access? *Journal of Substance Abuse Treatment*, *43*(3), e12–e13. https://doi.org/10.1016/j.jsat.2012.08.068

Rhodes, T. (2002). The “risk environment”: a framework for understanding and reducing drug-

related harm. *International Journal of Drug Policy*, *13*(2), 85–94. https://doi.org/10.1016/s0955-3959(02)00007-5

Ritter, A., & Cameron, J. (2006). A review of the efficacy and effectiveness of harm reduction strategies for alcohol, tobacco and illicit drugs. *Drug and Alcohol Review*, *25*(6), 611–624. https://doi.org/10.1080/09595230600944529

Safi, F., Rioux, W., Rider, N., Fornssler, B., Jones, S., & S Monty Ghosh. (2023). *Feasibility and acceptability of inserts promoting virtual overdose monitoring services (VOMS) in naloxone kits: a qualitative study*. *20*(1). https://doi.org/10.1186/s12954-023-00792-z

Saldana, J. (2021). *The Coding Manual for Qualitative Researchers*. SAGE.

Satcher, D. (2011). Pioneers in Health Equity: Lessons from the REACH Communities. *Progress in Community Health Partnerships: Research, Education, and Action*, *5*(3), 215–217. https://doi.org/10.1353/cpr.2011.0040

Short, C. E., DeSmet, A., Woods, C., Williams, S. L., Maher, C., Middelweerd, A., Müller, A. M., Wark, P. A., Vandelanotte, C., Poppe, L., Hingle, M. D., & Crutzen, R. (2018). Measuring Engagement in eHealth and mHealth Behavior Change Interventions: Viewpoint of Methodologies. *Journal of Medical Internet Research*, *20*(11), e292. https://doi.org/10.2196/jmir.9397

Sonika Ung. (2015). Integrating Culture Into Psychological Research. *APS Observer*, *28*(7). https://www.psychologicalscience.org/observer/integrating-culture-into-psychological-research

State of Illinois Opioid Action Plan. (n.d.). Dph.illinois.gov. https://dph.illinois.gov/topics-services/opioids/il-opioid-action-plan.html

Supporting and Sustaining Access to Harm Reduction Services for People Who Use Drugs. (2022, August 11). National Governors Association. https://www.nga.org/publications/supporting-and-sustaining-access-to-harm-reduction-services-for-people-who-use-drugs/

The White House. (2022, September 23). *FACT SHEET: Biden-Harris Administration Announces New Actions and Funding to Address the Overdose Epidemic and Support Recovery*. The White House. https://www.whitehouse.gov/briefing-room/statements-releases/2022/09/23/fact-sheet-biden-harris-administration-announces-new-actions-and-funding-to-address-the-overdose-epidemic-and-support-recovery/

Thomson, N. (2013). Harm reduction history, response, and current trends in Asia. *Journal of Food and Drug Analysis*, *21*(4), S113–S116. https://doi.org/10.1016/j.jfda.2013.09.047

Timmermans, S., & Tavory, I. (2012). Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociological Theory*, *30*(3), 167–186. https://doi.org/10.1177/0735275112457914

Tulane University. (2021, March 1). *How to improve cultural competence in health care*. Publichealth.tulane.edu. https://publichealth.tulane.edu/blog/cultural-competence-in-health-care/

Urbanoski, K., Kenaszchuk, C., Inglis, D., Rotondi, N. K., & Rush, B. (2018). A system-level study of initiation, engagement, and equity in outpatient substance use treatment. *Journal of Substance Abuse Treatment*, *90*, 19–28. https://doi.org/10.1016/j.jsat.2018.04.006

van Boekel, L. C., Brouwers, E. P. M., van Weeghel, J., & Garretsen, H. F. L. (2013). Stigma among health professionals towards patients with substance use disorders and its consequences for healthcare delivery: Systematic review. *Drug and Alcohol Dependence*,

131(1-2), 23–35. https://doi.org/10.1016/j.drugalcdep.2013.02.018

Värmå Falk, M., Strömdahl, S., Ekström, A. M., Kåberg, M., Karlsson, N., Dahlborn, H., & Hammarberg, A. (2020). A qualitative study of facilitators and barriers to participate in a needle exchange program for women who inject drugs. *Harm Reduction Journal*, *17*(1). https://doi.org/10.1186/s12954-020-00425-9

Wallerstein, N., & Bernstein, E. (1994). Introduction to Community Empowerment, Participatory Education, and Health. *Health Education Quarterly*, *21*(2), 141–148. https://doi.org/10.1177/109019819402100202

Wen, L. S., & Sadeghi, N. B. (2020). The opioid crisis and the 2020 US election: crossroads for a national epidemic. *The Lancet*, *396*(10259). https://doi.org/10.1016/s0140-6736(20)32113-9

White, S., Lee, R., Kennedy-Hendricks, A., Sherman, S. G., & McGinty, E. E. (2023). Perspectives of U.S. harm reduction advocates on persuasive message strategies. *Harm Reduction Journal*, *20*(1). https://doi.org/10.1186/s12954-023-00849-z

Worthy, L. D., Lavigne, T., & Romero, F. (2020). Defining Culture. *Open.maricopa.edu*. https://open.maricopa.edu/culturepsychology/chapter/defining-culture/

Zaveri, A. (2023, August 30). *Delve Qualitative Research: How To Analyze Data Using It*. Mind the Graph Blog. https://mindthegraph.com/blog/delve-qualitative-research/

APPENDIX A: INFORMED CONSENT

Determining Factors for Improved Uptake of Harm Reduction Services in the United States: A Study of Culturally Sensitive Messaging

You are being asked to participate in this interview for a study by Lauretta Ekanem Omale, a doctoral student at National Louis University. *The study is Determining Factors for Improved Uptake of Harm Reduction Services in the United States: A Study of Inclusive, Culturally Sensitive Messaging*. This study aims to understand better how cultural factors influence engagement with harm reduction services. This interview will focus on your perceptions of different messaging approaches and how they shape people's willingness to engage with harm reduction services. Your perspectives will help identify strategies for developing culturally sensitive messaging and best practices for culturally sensitive communication to promote the utilization of harm reduction services.

You were purposefully selected based on our interests and the study's feasibility of providing access to individuals who have or know people who have utilized harm reduction services within the past two years or have considered using but did not use the services eventually. If you want to be part of the study, I will ask you some questions, and the discussion will be recorded. The questions will be related to your knowledge and opinions of different messaging approaches and how they shape people's willingness to engage with harm reduction services. Your perspectives may help identify strategies for developing culturally sensitive messaging and best practices for culturally sensitive communication to promote the utilization of harm reduction services. We are also necessarily interested in your personal and non-personal experiences.

The interview will take between 15 and 45 minutes. Everything you tell me will be kept confidential and not shared with anyone outside the study team. If you agree to talk with me, you may skip any question you don't want to answer, and you can stop the interview at any time. As far as the researcher is aware, participation in the study presents no anticipated risks or benefits more significant than those encountered daily.

Participation is voluntary and may be discontinued at any time without penalty or bias.
The researcher will keep all identities confidential and will not be attached to data. Participants' identities will in no way be revealed as data will be reported anonymously and bear no identifiers that could connect data to individual participants. Only the researcher will have access to all data. To ensure confidentiality, the researcher will secure data in a password-protected file on a password-protected computer. All data will be destroyed five years after the completion of the study.

Community psychologists who work with groups and communities may also use the study's results to create outreach plans and campaign messages that make harm reduction services more accessible for people from a wide range of cultural backgrounds. You will not be given money or anything else to participate in this study. Still, it is an opportunity to help better understand the issues around drug use and harm reduction issues regarding community readiness, well-being,

and reintegration. You can ask questions about this study at any time during or after the interview.

Upon request, you may receive summary results from this study and copies of any publications that may occur. Please email the researcher, Omale Lauretta, at [redacted] to request results from this study. If you have questions or require additional information, contact the researcher at [redacted] if you have any concerns or questions before or during participation that the researcher still needs to address. In that case, you may contact Dr. Judah Viola at judah.viola@nl.edu, the academic advisor and chair overseeing this project. You may also contact the National Louis University Institutional Review Board Chair, Shaunti Knauth, at shaunti.knauth@nl.edu, Co-Chair Carla Sparks, at csparks3@nl.edu or Valerie Buckley, at vbuckley3@nl.edu.

Do you have any questions now?

May I proceed with the interview? ○ Yes (Go to section A) ○ No (DO NOT Complete interview.)

I have discussed this study with the participant and answered all the participant's questions in a language he or she understands. I believe the participant understood this explanation and voluntarily agreed to participate in this study.

Consent: I understand that by signing below, I agree to participate in the Determining Factors for Improved Uptake of Harm Reduction Services in the United States: A Study of Inclusive, Culturally Sensitive Messaging. My participation will require an interview lasting approximately 15–45 minutes.

Participant Signature/Date: ……

Name of Person Obtaining Consent/Date: ……

Appendix B. Interview Protocol

Determining Factors for Improved Uptake of Harm Reduction Services in the United States: A Study of Culturally Sensitive Messaging

The researchers will start the interview by introducing the study, reiterating the freedom to withdraw at any point, and thanking the participants for their time. Depending on their responses, the participants will be asked only a fraction of the questions in the interview protocol.

Eligibility Criteria Questions

a. Please identify your age in years.
b. Have you or anyone you know utilized harm reduction services within the past two years, or have you or anyone you know considered using but did not use the services eventually?
c. Identify as a peer recovery specialist, coach, or worker.

(If yes to all, continue with the interview; if no, stop.)

Section 1: Knowledge and Perception of Harm Reduction Services

Ice-breaker: When someone says "harm reduction services," what does that make you think about?

Tell me what you know about the types of services provided by harm reduction programs.

- Probe: What have you heard or seen about needle exchange programs, Narcan, condoms, fentanyl, or xylazine test kits, and safe consumption sites? (The researcher will show participants some harm reduction service images.)

Section 2: Barriers and Facilitators to Accessing Harm Reduction Services

Ice-breaker - Can you tell me about your cultural background, heritage, or any cultural identities that are important to you?

What are some beliefs (taboos) about getting help for health problems in your culture?
Probe: How is addiction or drug use perceived in your community? How do your community/friends/ family members relate to or interact with someone identified as using drugs?

How would your community like to receive messages about services that prevent overdoses and deaths from drug use? e.g., social media, radio ads, brochures, or something else? When should they give these messages?

- Probe: Who would be the best person or personality to talk about these services that will get the attention of the people in your community?
  - Example: your religious leaders, community leaders, etc.

Section 3: Respect for Culture and Messaging

Ice-breaker - Can you share any instances or experiences where cultural respect in health services made a difference for you or someone you know? For example, is there a time when a healthcare provider impressively showed respect for your culture? What are some specific ways health providers could show more respect for your culture?

Could you share any specific instances where you encountered harm reduction messages that seemed out of touch with your culture or were disrespectful?

- Probe: I will show you some videos and images from a new harm reduction campaign. As you view them, please share your thoughts on how well the messages connect with the values and experiences in your community. Specifically:
  - Do you think the content is culturally relevant and appropriate? Why or why not?
  - How would young people in your community respond to these messages?

- What about elders or older members of your community? Would they find this content acceptable?
- Suppose someone in your community experiences a drug overdose. How confident are you that others will know to seek medical help right away based on the information provided in this message?

Section 4: What are the effective strategies for developing culturally sensitive messages about harm reduction services that resonate with people of color?

How can we communicate the value of these services while considering what matters most to your community?

Probe: On a scale of 1 to 10, with 10 being very motivated, how likely are you or other community members or friends to use harm reduction services when the messaging respects your community's values?

- What is the best way to talk to people here about harm reduction in a respectful way?
- What could motivate you, friends, or family members to use any harm reduction services if needed? (For example, having Black staff, incorporating spiritual elements, or addressing racism in health care?)

- How could harm reduction campaigns connect with black culture's strong community spirit and activism?
  - Probe: Can you suggest ways to design campaigns that tap into the power of community and social justice advocacy in your community? I would love to hear your ideas for harnessing that energy in a culturally relevant way.

Section 5: Demographics

Please identify your race or ethnicity.
What is your gender identity?
What are your preferred pronouns?
Please identify your marital status.
What is your sexual orientation?
What is your highest level of education?
Please identify your socioeconomic status.

Thank you again for sharing your valuable perspectives. Your insights about cultural factors and messaging strategies will help promote greater acceptance and use of harm reduction services. I aim to ensure that harm reduction outreach and campaigns are respectful, empowering, and effective for diverse communities. I appreciate you sharing your valuable insights on how to shape messaging that connects with these important populations.

Please feel free to contact me if you have anything else to add. Be assured of the confidentiality of your responses.

Appendix C: Code Book

Table : Showing Code Categorization and Description

Category	Description	Files	References
Knowledge and Use of Harm Reduction Services	Understanding, awareness, familiarity, and perceptions of existing harm reduction services and programs.	10	42
Addiction Initiation	Reasons people may initially use or abuse substances, how addiction progresses, and the cyclical factors that perpetuate it.	4	11
Fentanyl – Laced Drugs	Illicit drugs adulterated or contaminated with fentanyl without the user's knowledge or consent.	3	9
Panic and Confusion in Overdose Crisis	Experiences feeling scared, baffled, overwhelmed, or in crisis about managing and responding during an overdose emergency or attempts to access support.	3	8
Unsafe Practices	Sharing susceptible syringes and drug preparation equipment (such as a cotton filter, cooker, and rinse water). There is no pre-use testing for xylazine or fentanyl in drugs.	2	6
Associated Harm	Violence, family deprivation, crime, neglect, passive or utero exposure to different substances, and abuse of children. Under the influence of traffic accidents, societal cost, jail terms, poverty, depreciating health, depression, and death.	5	9
Narcan	Narcan (naloxone) is an opioid antidote that can quickly reverse overdoses when administered by first responders, community members, and others prepared to act swiftly in emergencies. Its rapid administration can be life-saving, especially in cases of respiratory	8	11

Category	Description	Files	References
	depression where immediate intervention is crucial.		
Gap in Knowledge	Refers to a deficiency or lack of understanding regarding the medication Narcan (naloxone) and its use in the context of opioid overdose management.	3	7
Usage	refers to the application, utilization, and deployment of the medication Narcan (naloxone) in various contexts, primarily focused on reversing opioid overdoses.	4	8
Training on Use	Educational efforts and initiatives that aim to provide individuals with the information, instructions, and skills necessary to identify symptoms of an opioid overdose and administer Narcan (naloxone) safely in overdose emergencies.	2	5
Safe Consumption Sites	Safe consumption sites (SCS), also known as supervised injection facilities, are legally sanctioned locations where people can consume pre-obtained drugs under medical supervision.	2	3
Acceptability	Attitudes, perspectives, and readiness of stakeholders, communities, and individuals to support and endorse harm reduction initiatives that aim to reduce negative effects associated with substance use and related behaviors.	3	5
Distrust and Utilization	The intricate correlation between the doubt or lack of confidence expressed by communities and individuals towards harm reduction interventions and their subsequent involvement with these services is comprehensively captured.	5	10

Category	Description	Files	References
Negative Enablers	Refers to the belief that harm reduction services normalize or condone drug use by minimizing consequences. Encourages problematic or risky substance use.	3	4
Perception of Recovery Readiness	Individuals' subjective assessments, beliefs, and attitudes regarding their preparedness, willingness, and capacity to engage in the process of recovery from substance use disorders or other addictive behaviors.	10	44
Community	Collective attitudes, beliefs, and opinions held by a community about their preparedness and willingness to support, adopt, recommend, and use harm reduction services.	5	17
Underserved Conditions	The collective perception is that the community is unworthy of basic resources due to systemic and historical deprivation of basic needs, particularly healthcare.	1	2
Detachment from Overdose Crisis	Community displays disengagement, detachment, disconnection, disregard, disinterest, or indifference toward the pervasive and urgent issue of opioid overdose deaths and related substance use crises.	3	9
Receptiveness	Captures an individual's openness and willingness to accept, access, utilize, and adopt a harm reduction service (s).	5	11
Recovery Support System	Comprise of an array of assistance, resources, and approaches designed to encourage and sustain long-term recovery from substance use disorders and addictive behaviors.	10	45

Category	Description	Files	References
Family - Led	Assistance and resources that family members and caregivers provide as support to individuals with substance use disorder.	7	21
Community Effort	A consensus on inclusive, group-wide initiatives and actions that are best for the community will address the drug abuse problem.	4	17
Perception Trust in Support	Subjective understanding and reassurance about the support systems' reliability, authenticity, and efficacy in utilizing services.	3	7
Acknowledging Historical Barriers and Trauma	Historical trauma, discrimination, and structural barriers faced by the black community in health services and treatment	4	17
Historical Lens	Consider, evaluate, and contextualize messages within the larger backdrop of systemic racism, oppression, and intergenerational trauma experienced by African Americans.	3	4
Criminal Justice	Address issues and barriers – racial profiling has disproportionately criminalized substance use in communities of color.	1	2
Systemic Racism	Refers to systemic and institutional racism impacts black communities' access to and trust in harm reduction services.	1	2
Racial Dynamic	This code refers to how racial dynamics and tensions impact perceptions, outreach, and utilization of harm reduction services within black communities.	2	5
Identity and Cultural Pride	Refers to crafting harm reduction messages that align with and positively reflect African American racial, cultural, and social identities.	2	4

Category	Description	Files	References
Facilitators	Identifying and utilizing facilitators – enablers, driving force (s), mediators, healers, and spurs who can effectively promote harm reduction messaging within black communities	10	63
Community Inclusivity	Involvement of diverse community members, stakeholders, and opinions in formulating and disseminating messages that aim to promote and foster safety, health, and harm reduction in substance use and associated behaviors.	8	3
Community Leadership	Engage community gatekeepers and influencers to champion messaging and programs tailored for the community. Potential leaders include pastors, small business owners, organizers, coaches, elders, and young innovators.	2	7
Faith-Based Approach	Strategic leadership involvement of the religious organizations in the community to facilitate and promote harm reduction messages design and dissemination	3	3
Diverse levels of Messaging	Indicates the need for messaging and communication to occur through multiple channels	3	5
Age and gender	Relates to the impact or relevance of age and gender on perspectives, experiences, or behaviors related to the overdose. Messages should target age and gender across the category strata.	2	5
Use of valid data	The use of valis, appropriate, representative, up-to-date data on needs specific to populations rather than relying on broad statistics	1	1

Category	Description	Files	References
Cultural facilitators	Refers to a people's values and beliefs perceived as enabling or promoting utilization of harm reduction services.	8	5
Cultural Relevance	Messages and outreach are culturally sensitive and related to the lived experiences of the target audience. Messaging should resonate with the cultural values, norms, and day-to-day realities that shape community needs and behaviors.	2	3
Target and Language	Focus on strategic language use and identifying the population's priority segments to influence with tailored harm reduction messaging.	9	14
Racial Representation	Captures the perceived importance of meaningful involvement of people sharing the cultural background of target communities in crafting and sharing harm reduction messaging.	7	14
Message Framing	Deliberate and strategic choice and delivery of language, content, and context to convey information, influence perceptions, and shape attitudes or behaviors.	4	20
Examples	Participants suggested types of culturally resonating and respectful messages.	7	10
Barriers to Utilization	Obstacles, challenges, difficulties, obstructions, and impediments that hinder individual or communal access to and make use of services designed to mitigate the adverse effects linked to substance use.	10	83
Racial Perception	Influence of racial stereotypes, biases, and systemic discrimination on individuals' ability to access and make use of harm reduction	7	11

Category	Description	Files	References
	services designed to tackle substance use problems.		
Classicism	Systemic bias, prejudice, discrimination, and stereotypes are rooted in socioeconomic class or economic status.	2	3
Racial Exclusion	Deliberate or unintentional use of systematic processes, practices, and behaviors that prevent individuals or groups from participating, accessing, or benefiting from opportunities based on race or racial identity.	3	6
Service Payment Myth	Misconceptions, beliefs, or tales about the payment or costs associated with accessing services or resources.	2	4
Remoteness	Encounters and effects that arise from the long distance or isolation of available services from the communities they aim to support.	4	4
Inaccessibility	Challenges that hinder individuals' ability to access and benefit from available.	5	7
Stigma	Negative attitudes, beliefs, stereotypes, unfavorable opinions, convictions, generalizations, and bias and discrimination directed towards individuals with substance use disorder	10	12
Blaming the victim	Viewpoints that attribute fault, responsibility, or guilt for substance use problems to the individual's experiencing addiction. For example, a personal moral failing or character flaw	10	12
Absence of support	Occurrences or contexts in which individuals, groups, or communities are deprived of the required support, resources, or emotional	3	10

Category	Description	Files	References
	reinforcement vital to effectively deal with drug use difficulties and accomplish the desired recovery goals.		
Inadequate Resources	Instances where individuals, groups, or communities encounter constraints or deficiencies in obtaining vital resources necessary to fulfill their requirements, accomplish their objectives, or effectively tackle challenges.	3	5
Cultural Barriers	Obstacles or impediments to harm reduction service uptake that are attributed to cultural values, beliefs, norms, or experiences.	10	43
Background	Belief or perception that one's cultural experience influences the use of services.	3	6
Norms and Values	The set of beliefs, standards, principles, and expectations govern individuals' and groups' behavior within a society, culture, or community.	3	6
Religious beliefs	The beliefs, practices, rituals, and values associated with a community's organized religious or spiritual traditions.	2	3
Taboos	Societal, cultural, or religious prohibitions, restrictions, or norms that dictate certain behaviors, practices, or topics as socially unacceptable, forbidden, or off-limits within a particular community or context.	3	5
Emotional Development	The psychological and behavioral processes by which individuals gain, comprehend and communicate their emotions throughout their lifespan.	3	4

Category	Description	Files	References
Cultural Expectations	Societal norms, beliefs, values, and behaviors that are commonly upheld and anticipated within a particular cultural or social context	4	4
Emotional Repression	The psychological process through which individuals consciously or unconsciously suppress, inhibit, or deny the expression of their emotions, thoughts, or feelings.	2	6
Message Channels	Utilize communication channels and community settings that effectively reach target audiences within the community.	10	125
Engage Black Women	Proactively involving black women in shaping and promoting harm reduction messaging and programs for the community.	1	4
Boots on the Ground	Grassroots, community, and neighborhood–level work, effort, and participation rather than high-level planning.	6	13
Peer Recovery Specialist	Peer recovery advocates use personal narratives to inspire hope and promote harm reduction services. Messaging should be embedded directly within communities through on-the-ground outreach. Consistent visibility: tabling at community events, door-to-door canvassing, street outreach, etc. Grassroots peer leadership and volunteer training allow community members to lead efforts.	4	13
Where they are	Importance of meeting people struggling with substance use in their geographical location, stages of progression or development of addiction, physical or virtual spaces.	4	10

Category	Description	Files	References
	Discuss their needs nonjudgmentally, address service barriers, and suggest incremental steps tailored to individual readiness for change.		
One–on–one	Consistent rapport with a trusted contact person over time, either in person or virtually.	2	4
Associations and Groups	Interest-based social groups, professional associations, community organizations, support groups, etc. Affiliation with certain groups, such as shared interests/values, fulfilling social needs, gaining support, or pursuing a cause.	4	5
Faith-Based	These organizations are formed around shared religious or spiritual beliefs, practices, and values.	6	7
Block Clubs	Neighborhood-based associations or organizations are established by people of a specific geographic region, typically a city block or a cluster of adjacent blocks.	2	5
Entertainment	Activities, media, or content they engage with for enjoyment, amusement, or leisure. E.g., music, movies, games, sports, reading, hiking, poetry, arts/crafts, etc.	2	6
Rap Music	An African-American-originated music style consists of lyrics spoken or chanted over a musical backdrop, emphasizing rhythm, flow, and cadence. They convey messages, tell stories, and express personal experiences, social commentary, or political perspectives.	4	4
Age-appropriate Music	Suitable musical content and lyrics for different age groups, particularly younger and older listeners.	1	4

Category	Description	Files	References
Electronic Media	Technology-based modes of information, message dissemination, entertainment, and communication that facilitate transmission, reception, and distribution	10	10
Social media	Online platforms, websites, and apps, e.g., Facebook. TikTok, Twitter, and Instagram enable virtual communication and relationship building and connect people through shared content and interaction.	8	11
Digital Divide	Disparity in the utilization and accessibility of ICTs across various demographic, cultural, or racial populations. Particularly among those who use drugs and from poor communities.	1	1
Print Media	Books, pamphlets, newsletters, magazines, newspapers, and other printed materials are examples of traditional forms of mass communication.	5	9
Message Promotion	Campaign for messages, strategies, and interventions aimed at reducing the negative consequences of risky behavior, substance abuse, or public health issues.		
Community Education	Campaigns, events, community efforts, actions, activities, and initiatives are meant to give people in specific communities chances to learn information and access resources.		14
Family Outreach	efforts to engage, educate, and support family members of individuals dealing with substance use issues Provide information and resources to help families understand addiction, harm reduction approaches, and available services.	9	21

Category	Description	Files	References
	Empowering families with the knowledge to recognize overdose risks and administer naloxone if needed. Family involvement in recovery journeys and relapse prevention efforts.		
Prevention Approaches	Approaches, interventions, and strategies aim to reduce the prevalence, consequences, or negative impacts of various behavioral, social, environmental, or health concerns within a specific community or population.	4	4
Coping Mechanism	Adaptive reactions assist people in navigating challenging circumstances and preserving their psychological health. Stress, adversity, challenges, or emotional distress in an individual's life are managed through various psychological processes, behaviors, and strategies.	5	10
Use of Incentive	A method of encouraging particular behaviors, actions, or outcomes in groups or individuals through providing benefits and rewards. This is to promote compliance, change behavior, and accomplish predetermined objectives.	3	4
Ongoing Campaigns	A prolonged ongoing endeavor to foster particular messages, initiatives, or causes for a long time. Usually, these campaigns involve planned deliberation, execution, and assessment to attain enduring goals and objectives.	3	4
Hotspots	Locations, sites, or places that demonstrate increased activity, importance, or concentration of the purchase, use, or transaction of drugs and all types of opioids. The locations frequently	1	2

Category	Description	Files	References
	attract and gather attention on account of their pertinence, influence, or intensity in drug use.		
Safe Sex and Safe Supply	Access to condoms, drug testing, and sex education to reduce STD/HIV transmission risks. Providing clean needles/syringes and pipes to prevent infections, Fentanyl test strips, and drug potency information. Provisions and access to supervised consumption sites	2	3