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**Effect of Drug Use Stigma to Accessing Harm Reduction Services by
People Who Inject Drugs in Nairobi County**



Effect of Drug Use Stigma to Accessing Harm Reduction Services by People Who Inject Drugs in Nairobi County

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Abstract

Purpose: This study aims to explore the influence of drug use stigma on Harm Reduction Services (HRS) accessibility for People Who Inject Drugs (PWIDs) in Nairobi County. It seeks to understand the various barriers encountered by PWIDs, particularly those related to stigma, that prevent them from accessing essential services like syringe service programs.

Methodology: Adopting the Health Belief Model (HBM), this study utilized a cross-sectional research survey design. The target population was 1100 PWIDs in Starehe sub-county, as highlighted by the Kenya HIV/AIDS Indicator Survey of 2019. A sample size of 285 participants was determined using the Fischer sample determination formula, and participants were selected through the snowball technique.

Findings: A significant majority of respondents, 77.8% (n = 221), reported experiencing stigma due to their drug use, with most experiencing it monthly (34.9%) or weekly (28.2%), indicating a regular pattern. Mobile services were the most utilized HRS delivery model (30.3%, n=86), followed by peer outreach (28.2%, n=80). A considerable proportion (40.1%, n=114) reported moderate challenges in HRS accessibility. Stigma was identified as a pervasive barrier for PWIDs across all stages of drug use, originating from both social (family, friends, and community) and institutional (healthcare providers, law enforcement) domains.

Unique Contribution to Theory, Policy and Practice: This study shows that stigma significantly hinders PWIDs' access to harm reduction services within the Health Belief Model. It calls for decriminalization, anti-discrimination laws, and expansion of OST and SCS. Practically, it urges participatory advocacy and inclusive outreach to reduce stigma and improve service accessibility for marginalized populations.

Keywords: *Harm Reduction Services, PWID, Drug Use Stigma*



1.0 Introduction

World Drug Report in 2019, close to 271 million globally use drugs at least once in the preceding year. Of these, 11.3 million people injected drugs (United Nations Office on Drugs and Crime [UNODC], 2019) while 2022 World Drug Report that highlighted trends on drug consumption in 2020 indicated that approximately 284 million individuals aged 15-64 consumed drugs worldwide, which was a rise of 26% compared to the previous 10 years (UNODC, 2022). There is a trend of increased drug usage among younger individuals, with current usage levels in many countries higher than that of previous generations. Most of those receiving treatment for drug use disorders are under the age of 35 years are found in Latin America and Arica. (Mauro et al., 2022).

Harm reduction represents a public health strategy designed to mitigate the adverse health and societal impacts associated with substance abuse, encompassing measures to prevent the spread of blood-borne diseases like HIV and hepatitis C, and overdose (World Health Organization [WHO], 2019). In the realm of individuals engaging in injection drug use, HRS encompass initiatives for example the Needle and syringe programs (NSPs) and Opioid Substitution Therapy (OST) and overdose prevention programs. To improve access to HRS and the health and well-being of PWID, it is important to address access barriers and implement evidence-based harm reduction programs and policies (Rhodes & Scott, 2019). Open Society Foundations (OSF, 2018) pointed fewer than half of states found in the Eastern and SSA offers needle and syringe programs, and access to OST is limited. In Kenya, NSP are not widely available and opioid substitution therapy is not yet fully integrated into the national healthcare system.

There are many barriers limiting access to HRS for those patients or by PWID have been documented in several publications. Johnson et al. (2017) stated that the main barriers when attempting to access harm reduction services included lack of transportation to Syringe Services Programs (SSPs), limited program hours, and stigma towards PWIDs while Meacham et al. (2019) indicated that access to opioid overdose prevention services, including naloxone distribution was affected by stigma, lack of education and awareness about overdose prevention, and limited availability of these services in certain areas. Core harm reduction services are widely available across most countries as they have supportive references in their national policy documents related to harm reduction and has implemented Needle and syringe programs (NSPs) (Demaret et al., 2015). Shirley-Beavan et al. (2020) identified stigma, discrimination, Detainment and intimidation by law enforcement officers, criminalization, and lack of gender-sensitive services as specific barriers affecting access to harm reduction services among women in Spain.

Kenya initiated the needle and syringe program through civil society organizations in 2012 as a targeted intervention for people who inject drugs. The program, which served as a significant addition to HIV prevention and treatment initiatives, also focused on PWIDs. Over time, Kenya successfully reached over 21,000 PWIDs by providing them with over 9,500 needles and syringes were collected and treated with opioid agonist therapy across 8 healthcare facilities. (Harm

Reduction International [HRI], 2021). The report by HRI stated that the available centers were not able to furnish 50% of the full array of WHO-recommended items services, which include opioid agonist therapy and needle and syringe programs, among others. Funding or political support, stigma, and discrimination are some of the factors, which have been documented as possible challenges limiting HRS accessibility in Kenya. Against this background, this study sought to explore barriers to accessing HRS by PWID in Nairobi County. The HRS accessibility for individuals who engage in drug injection has been a critical issue globally, with various barriers impeding the utilization of these services by this population. HRS such as Needle and syringe programs service programs have been demonstrated to effectively reduce the transmission of HIV and hepatitis C (Dolan & Millar, 2020). Despite their effectiveness, PWID often face multiple obstacles in accessing these services, ranging from stigma and discrimination to lack of availability and accessibility of the services in certain regions. The barriers can be both structural, such as restrictive laws and policies, and individual, such as poverty and lack of transportation (Rhodes & Scott, 2019).

Kenya has for a long time used punitive drug policy measures that aim to eradicate drug trade and use. However, there is a growing wave of evidence showing that this approach culminates in higher rates of HIV transmission among people who inject drugs, as well as other harms (Mburu et al., 2019). Moreover, an assessment done by National AIDS and STIs Control Programme (NASCO) in 2019 that sought to map and estimate the size of key populations estimated that there were 5,024 people who inject drugs in 73 hotspots in Nairobi County. HIV/AIDs prevalence among PWIDs in Nairobi was found to be 18.7% as opposed to the general population where it was 8.8%. In effect, this suggests that this key population has limited harm reduction service accessibility, such as needles and syringes, coupled with other underlying structural barriers that discourage HRS accessibility. In spite of the higher prevalence of HIV and hepatitis C among PWID, including unplanned pregnancies among women in Kenya, there is still limited evidence on specific individual, social, and environmental factors increasing this vulnerability, these factors also impact their capacity to participate in health-promoting services, including harm reduction. Against this backdrop, this study seeks to bridge the gap as identified pertinent knowledge gaps by examining barriers to accessing HRS by PWIDs in Nairobi County, Kenya.

2.0 Materials

The study utilized cross-sectional survey research design. The study was carried out in Starehe Sub County. with a particular focus on drop-in centers where PWID can avail themselves of HRS, including the Needle & Syringe Programmes (NSP) and Opioid Substitution Therapy (OST) and overdose prevention programs. The target population for this study constitutes of the PWIDs estimated 1,100 in Starehe Sub County (Kenya HIV/AIDs Indicator Survey 2019). The study used Fischer et al. (1996) to compute sample size of 284. The study used snowball sampling to select the respondents of the study. The method involves identifying one or more members of the hidden population and asking them to refer other members to the study. Primary data collection was done

using structured questionnaire administered by the researcher. Questionnaires were checked for consistencies and completeness which were then coded and entered in SPSS v28 for analysis. Validity check on the responses and assessing the overall internal consistency was later done. All independent variables will initially be analyzed in bivariate model, and those that were significantly associated with HRS Access were included in multivariate logistic regression model in order to control the confounders, p value <0.05 were considered significant. Before visiting the location to gather data, the researcher got permission from the NACOSTI and the Kenya Methodist University Scientific Ethics Review Committee (SERC). Respondents were told about the goal and significance of this study in order to get their informed permission. Respondents have to freely provide their consent or decline to take part in the study in order for consent to be obtained.

3.0 Results and Discussions

The study targeted a total of 284 People Who Inject Drugs (PWIDs) in Starehe Sub-County in Nairobi and the study achieved a response of 284 that translated to 100% response and this was due to the snowballing sampling technique that the study used

Drug Use Stigma on Access to HRS by PWID

Table 1: Drug Use Stigma on Access to HRS by PWID

		Frequency	Percent
Experienced stigma due to drug use	Yes	221	77.8
	No	63	22.2
Source of stigma	Family	26	9.2
	Friends	38	13.4
	Healthcare providers	32	11.3
	Community members	39	13.7
	Law enforcement	28	9.9
	Most of Above	60	21.1
	NA	61	21.5
Frequency of stigma experience	Daily	22	7.7
	Weekly	80	28.2
	Monthly	99	34.9
	Rarely	24	8.5
	NA	59	20.8
Extent stigma influence access to HRS	Not at all	1	.4
	To a small extent	28	9.9
	To a moderate extent	72	25.4
	To a large extent	128	45.1
	To a very large extent	55	19.4

Majority of the respondents, 77.8% (n = 221), reported having experienced stigma due to their drug use, while only 22.2% (n = 63) indicated they had not encountered any such stigma and this indicates that stigma is a widespread and systemic issue affecting the lives and health decisions of PWID, potentially contributing to marginalization and disengagement from essential health services. Stigma was reported as emanating from various quarters, community members (13.7%), friends (13.4%), and healthcare providers (11.3%) were among the most frequently cited individual sources of stigma. Family members (9.2%) and law enforcement agents (9.9%) also featured significantly. Notably, 21.1% (n = 60) of respondents identified “most of the above” as sources of stigma, suggesting that many PWID experience stigma from multiple social and institutional actors simultaneously. These findings demonstrate that stigma against PWID is not isolated but pervasive across personal, communal, and structural domains, complicating access to care and community reintegration. The study agrees with various authors such as the Wogen and Restrepo, (2020) who opined that drug use stigma leads to discrimination, marginalization, and exclusion, creating numerous barriers for people who use drugs as well as concurred with Macias Konstantopoulos et al., (2021) that drug use stigma can be the stigma associated with drug use can significantly impact the ability of Individuals who inject drugs encounter obstacles when attempting to access.

Majority of respondents experienced stigma monthly (34.9%) or weekly (28.2%), indicating a regular and ongoing pattern of stigmatizing encounters, consistent with the earlier finding that 22.2% of participants did not experience stigma at all and these suggested that for many PWID, stigma is not an occasional issue but a chronic social stressor, which may result in cumulative psychological harm and reduced healthcare engagement. Most (89.9%) acknowledged that stigma hampers their access to harm reduction services to some degree, with 64.5% (n = 183) stating this impact is large or very large and agrees with Camille, (2014) who opined that stigma and discrimination are widely recognized as significant barriers to seeking healthcare, engaging in care, and adhering to treatment across various health conditions worldwide.

Table 2: Influence of Drug Use Stigma on Access to HRS by PWID

		Duration of Drug Use				Chi Square	P value
		< 1 year	1-5 years	6-10 years	> 10 years		
Experienced stigma due to drug use	Yes	63	84	73	1	3.944	.268
	No	17	21	23	2		
Source of stigma	Family	7	12	7	0	16.159	.081
	Friends	11	17	10	0		
	Healthcare providers	13	11	8	0		
	Community members	8	14	17	0		
	Law enforcement	10	7	10	1		
	Most of Above	14	24	22	0		
	NA	17	20	22	2		
	Daily	7	10	5	0	7.119	.050
	Weekly	25	29	24	2		
Frequency of stigma experience	Monthly	27	35	37	0		
	Rarely	5	11	8	0		
	NA	16	20	22	1		
	Not at all	1	0	0	0	16.521	.169
	To a small extent	3	13	11	1		
	To a moderate extent	16	25	31	0		
	To a large extent	45	44	37	2		
	To a very large extent	15	23	17	0		

Table 2 presents the relationship between the duration of drug use and various stigma constructs alongside its sources, frequency, and influence on access to harm reduction services (HRS). Majority of PWID across all categories of drug use duration have experienced stigma due to drug use ($\chi^2 = 3.944$, $p = 0.268$) and suggests no statistically significant association between the duration of drug use and whether one experiences stigma. The study agrees with Biancarelli et al., (2019) who opined that physical and mental health of PWID has been established to be adversely affected

by drug use stigma and this form of stigma is greater than other forms of social stigma that arise from mental illness, obesity, and smoking as pointed by Barry et al. , (2014) who identified various sources of drug related stigma as noted by PWID who identified multiple sources of stigma, including family, friends, healthcare providers, community members, and law enforcement. The most commonly cited source across the majority of drug use durations was "most of the above," indicating that stigma is often multifaceted and experienced from multiple fronts. Notably, family and community members were frequently cited, with healthcare providers and law enforcement also contributing ($\chi^2 = 16.159$, $p=0.081$), suggesting a potential trend that may warrant further investigation.

Among PWID who had used drugs for 6–10 years, 37 reported experiencing stigma on a monthly basis, compared to 24 weekly and 5 daily. Those with less than one year or 1–5 years of drug use reported higher daily and weekly frequencies than those with longer drug use histories ($\chi^2 = 7.119$, $p= 0.050$), indicating a significant relationship. This agrees with Muncan et al., (2020) who suggests that frequency of stigma experiences may vary meaningfully across different stages of drug use, potentially reflecting changing social dynamics, self-isolation, or reduced engagement with stigmatizing institutions over time. Majority of respondents reported that stigma impacted them to a moderate or large extent ($\chi^2 = 16.521$, $p = 0.169$), and suggests a meaningful impact nonetheless, especially among more recent users. This findings agrees with Watson et al., (2021) and Marshall et al., (2015) who noted that the stigma associated with drug use in the U.S. is often reinforced by media portrayals and public policies that emphasize criminalization over treatment contributes to the reluctance of communities to support harm reduction facilities, often resulting in local opposition and legal obstacles (Watson et al., 2021).

4.0 Conclusions

Majority of the respondents reported having experienced stigma due to their drug use. Stigma was reported as emanating from various quarters, community members friends and healthcare providers were among the most frequently cited individual sources of stigma. Family members and law enforcement agents. Majority of respondents experienced stigma monthly or weekly (28.2%), indicating a regular and ongoing pattern of stigmatizing encounters.

Majority of PWID acknowledged that stigma hampers their access to harm reduction services to some degree, most attesting impact is large or very large. Among PWID who had used drugs for 6–10 years, 37 reported experiencing stigma on a monthly basis, compared to 24 weekly and 5 daily. Those with less than one year or 1–5 years of drug use reported higher daily and weekly frequencies than those with longer drug use histories.

While the statistical associations between drug use duration and most stigma-related variables were not significant, the trends observed highlight important practical and policy-relevant insights. Stigma is a pervasive barrier affecting PWID across all stages of drug use, and it emanates from multiple sources, including both social (family, friends, community) and institutional (healthcare

providers, law enforcement) domains. More frequent experiences of stigma are significantly associated with shorter durations of drug use, possibly due to heightened visibility or lack of coping mechanisms early in one's drug use trajectory. PWID accessed HRS through a variety of delivery models and this reflected a fragmented but diversified ecosystem of service provision. Mobile services emerged as the most commonly utilized delivery model, followed by peer outreach and hospital or clinic-based services.

5.0 Recommendations

Given the disconnect between awareness and participation, stakeholders should adopt participatory advocacy models that actively include PWID in the design, execution, and evaluation of campaigns. This could involve training PWID as peer advocates and creating safe spaces for their contribution.

These findings underscore the importance of stigma-reduction interventions, especially targeting early-stage PWID, and call for a holistic approach involving families, communities, healthcare workers, and law enforcement. Enhancing access to harm reduction services requires addressing these stigma sources systematically to improve health outcomes and reduce the social exclusion of PWID.

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