Assessment of Retrospective and Current Substance Use in Women who Inject Drugs in Low-Income Urban Settings in Kenya

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### Abstract

Women who inject drugs (WWIDs) continue to experience challenges that accumulate their risk to HIV transmission and other co-morbidities. However, data that conceptually link diverse substance use dimensions in WWIDs are lacking particularly in developing countries. We assessed retrospective and current substance use among 306 WWIDs in low-income urban settings in Kenya using mixed methods. Descriptive analyses were performed quantitative data while qualitative narratives revealed insights from quantitative findings. The mean age of the study participants was 17 (range 11, 30) years. Out of the 306 WWIDs 57% commenced with substance use by combining both licit and illicit drugs. Intimate sexual partners including spouses and casual sex partners introduced seventy-four percent of WWIDs to substance use. Majority of the WWIDs (39.9%) commenced with 2- way substance combination with bhang and cigarette having the highest usage. However, 4-way substance combinations containing heroin, cigarette, bhang, valium, Rohypnol had the highest frequency (12.8%) at the time of the survey. Varied routes of heroin administration were mentioned including injection, smoking and sniffing as separate routes and as 2-way or 3-way mode combinations of these. To inform policies targeting the health and rights of girls and women in low income settings, this study recommends urgent upstream policies targeting the girl adolescent life in form of a multifunctional package composed of identifying girls at risk, substance use interventions, sexual health education, improved educational attainment, and progressive social policies that target low social economic status in the adolescent phase. Harm reduction programs in Kenya should target people who use heroin through both injection and non-injection modes of administration.

## **Keywords**

WWID's; Substance use; Human immunodeficienc\ virus

## Introduction

Illicit substance use poses significDnt global public health challenges linked to multiple negative health outcomes [1]. His is particularly so in the transmission of human immunodeficienc\ virus (HIV) and other blood-borne viruses [2]. Equally important is the elevated risk of morbidity and mortality related to substance use overdose [3]. Research on substance use patterns in women who inject drugs (WWIDS) serves to better understand determinants and pathways to substance dependency such as age of onset of use [4], motivation for primary substance use [5], characteristics of social networks that introduce and maintain licit and illicit substance use [6], prospective polysubstance use trends [7] and polyroute of substance administration [8]. Moreover, these issues feature additional complex interactions with socio-economic disadvantages highlighting the role of social contexts [9,10]. His underscores the urgent need to strengthen linkages between substance use prevention policies, HIV prevention programmes and addressing social determinants of poverty in specific settings.

## Methods

# Study design and setting

His study adopted a cross-sectional study design with a mixed methods approach that was explanatory sequential. Study participants were Women Who Injected drugs (WWIDs) recruited from two sites supported by Support for Addiction Prevention and Treatment in Africa (SAPTA) in Nairobi respectively. A total of 306 participants were enrolled from SAPTA Drop in Centers (DIC)s in Pangani and Githurai between January 2017 to July 2017. He two study sites in Nairobi County are urban-situated and near each other. He study sites are also close to locations of substance sales and injecting hotspots, which facilitates access of active PWIDs to program sites for services, such as Needle and Syringe Program, linkage to Opioid substitution therapy (OST) and other substance dependence treatment, HIV Testing Services (HTS), Antiretroviral therapy, Prevention and treatment of sexually transmitted infections, Condom distribution, Targeted information, education and communication materials, Vaccination, diagnosis treatment of viral hepatitis, Prevention, diagnosis and treatment of tuberculosis.

## **Results**

Of the 360 respondents recruited into the study, 306 respondents or 85% participated in the study. Table 1 gives a breakdown of the demographic profiles of WWIDs respondents to the study in Nairobi County. He mean and median age was approximately 30 years (5.7 years) and 27 years respectively. A greater proportion of the respondents were aged between 28 and 32 years (Table 1). He youngest and the oldest age among the respondents were 18 and 42 years respectively.

# Associations between quantitative variables

Age of onset was not associated with the following variables: drugs used at age of onset (Fishers exact p=0.208), persons who introduced the drugs (Fisher exact p=0.240)

and current poly substance use (Fisher exact p=0.799). Substance used at age of onset was also not associated with the persons who introduced (fisher exact =0.947) and current poly substance use ( $\chi$ 2 4.3; degrees of freedom =2; p=0.115).

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