

# Injection Drug Use and HIV/AIDS Transmission in Somalia

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## Abstract

Somalia has been engulfed in civil strife, and drug dealers had a better chance of smuggling different kinds of drugs. According to a report from the Banadir Regional Administration, drug-related incidents reached their peak between 2020 – 2023, and injection drug users have also increased in Somalia; as a result, HIV/AIDS and other infectious diseases have spread to the country and caused serious alarming public health problems.

In 2023, the police launched several operations against drug trafficking and its users. Various business centers were shut down and some others revoked business licenses during the operations.

**Purpose:** This study aimed to investigate the chances of transmission of HIV/AIDS among persons use injectable drugs in Somalia. The study also sought to investigate knowledge and awareness of HIV/AIDS among persons injecting drug.

**Methodology:** The study was conducted in Mogadishu and targeted people who use syringes to inject drugs. Two methods of data collection were used: first, a personal questionnaire, and second, the collection of blood samples for HIV/AIDS testing.

**Findings:** The result indicates that 81% of respondents are unaware that HIV/AIDS exist in the country. The study also confirms that persons injecting drugs have very poor awareness of HIV/AIDS. 270 people were screened for HIV; 21 were HIV positive.

**Research limitations/implications.** The study may not be applicable to other nations since it exclusively focused on persons injecting drugs in Somalia.

**Originality/value:** Limited studies have been conducted to investigate drug injection and HIV/AIDS transmission in Somalia.

**Keywords:** HIV/AIDS, injecting drug use, Somalia

## Introduction

In Somalia, the number of drug addicts with HIV/AIDS has increased over the past five years (MoH, 2023). According to a report from the Banadir Regional Administration, drug-related incidents reached their peak between 2020 - 2023 and became a major public health problem. As a result, the police launched several operations against drug trafficking and its users. Various business centers of drug dealers were shut down, and some others revoked business licenses during the operations.

According to the most recent Spectrum (UNAIDS) report on 2022/2021 data, 7,7461 persons are predicted to be living with HIV. As a stand-in for the general population, pregnant women had a 0.1% prevalence, according to the 2019 Antenatal Surveillance.

Women are the most susceptible to the virus (vulnerable to transactional relationships) was 3.4% in the 2017 Integrated Biological and Behavioral Surveillance (IBBS) data, 0.5% for uniform staff, 0.7% for port workers, and 0.6% for transport workers. Other groups thought to be susceptible to HIV infection, such as injectable drug user and internally displaced people (vulnerable women).

## Literature

Nikki *et al.* (2019) found that youth who are street-based are at a significantly higher risk of their behavior of borrowing and lending syringes among others who use injection drugs. Charles *et al.*, (2009) state that, in South Africa, 20% of injection drug users (IDUs) who agreed to HIV screening tested positive. Yelena *et al.* (2016) argue that drug-related vulnerabilities are associated with the risk of HIV infection. Islam and Conigrave (2007) stated that in the capital city of Bangladesh, the HIV prevalence among injecting drug users reached the level of a concentrated epidemic (4.9%). Drug abuse and addiction have been linked to HIV/AIDS. Sharif, (2020) highlights that 61% of people living with HIV have a drug addiction.

**Methodology** This study was conducted in Mogadishu and targeted persons injecting drugs. To determine the minimum sample size, the study used the “Morgan Table”. Based on the table, it was recommended at 380. After targeting 380 respondents, we received 270 (71%). The survey questionnaire was created using the ODK tool, and the blood collection was conducted in the central lab.

Researchers assessed 270 injection drug users, and all respondents were men. The study used a self-administered survey questionnaire and blood sample to determine HIV/AIDS status among drug injection users.

This research method was derived from phenomenological assumptions, which means the phenomenon was explored by asking an individual respondent who has experienced the phenomenon to describe his or her experiences (Sale, 2007).

Before analyzing the data, we have done the data screening and preliminary analysis to confirm the data were free from possible statistical errors. We have eliminated those respondents' responses if they were missing more than 20%.

Consent forms were signed by the participants, and the ethics approval letter was received from the Ministry of Health (MoH).

### **Sampling**

380 injectable drug users were targeted; all were male respondents using systematic random sampling; however, after data collection was completed, 270 responses were analyzed. The study missed 29% of the target respondents due to study illegibility, respondents rejected or were reluctant to take

part in the study. However, 270 have taken part, which counts as a 71% response rate.

### **Data Collection**

Data collection commenced in February and completed in April 2023. Areas were selected for the study on the basis of their hotspot levels for injection drug users. Three enumerators were assigned to mobilize respondents.

**Hotspots:** The first step of the data collection was identifying or mapping hotspots, where drug users meet together, and estimating the number of clients on the spot. Enumerators were familiar with the geographic area of the study, and they found most hotspots in Mogadishu.

In the second phase, randomly selected target respondents from the hotspots were collected for data collection. Respondents were prepared to bring vehicles at the National Laboratory for an interview and blood test. After the test, each respondent was given \$ 5 for transportation back to the hotspot.

The process of the blood test and questionnaire was as follows: there were group of four, namely the screener, interviewer, lab technician, and supervisor. The screener ensures whether the respondent is a real drug injector; it was validated by

checking signs of injected blood vessels, and asked to sign a consent form. The interviewer was using Open Data Kit (ODK) application, and respondents were asked questions related to their knowledge of HIV/AIDS.

**Blood test:** After the interview, respondents proceeded with a voluntary blood test and used rapid HIV test equipment. Each case has taken 20 minutes to wait for the result.

**Counseling** We had counseling experts, and those who became HIV positive were given further counseling and information about where they could get anti-retrovirus drugs, and the location of ART centers in Mogadishu.

Data collection was completed in two to three months, although sometimes we use to work after working hours and public holidays.

## Data Analysis

This research primarily sought to identify injection drug use and HIV transmission. Descriptive statistics have been mainly used for data analysis to observe the frequency distribution, means, and percentages of the target indicators. Results have been presented in the form of charts and tables in the subsequent part of the report.

## Findings

The findings have shown that most injection drug users are under 25 years old, they have no or little knowledge about HIV, they share needles regularly, and they are not aware of the existence of HIV/AIDS in the country. The study also found that the level of HIV/AIDS transmission among drug users is higher.

## Hotspots:

Hotspots are the meeting points for injection drug users. The study found the existence of more than ten different meeting points for injection drug users. These hot-spots are included in both public and private places; the public places are Lido Beach, Elgab, Say-Piono, and Urubo Beach; however, there are also private business hot-spots. Due to research ethics, we are unable to mention the names of the business centers.

## Demographic Profile

The age group of the respondents was close; there was not much deviation. According to figure 1 majority of the respondents, 95 (35%) lies between 18 and 23 years old, while about one-third 84 (31%) are

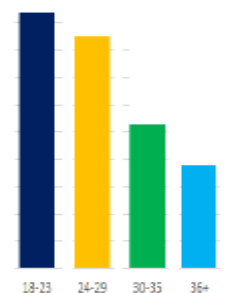


Fig. 1 Respondents' age

aged between 24 - 29. About quarter of the respondents, 62 (23%) are aged between 30-35 years old. while those above 36 years old are only 30 (11%) of the respondents.

**Education:** Education can have an influence on personal behavior; thus, during data collection, respondents were asked their educational level. According to Figure 2, the study found that the majority of the injection drug users six-in-ten 162 (60%) did not get formal education, while 76 (28%) stated that

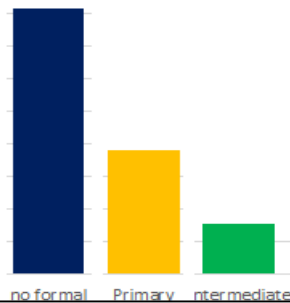


Fig. 2 education level

they had received primary education and only 32 (12%) had attended intermediate school. Although the study does not measure the correlation between education and drug addiction, but this finding can hypothesize that a lack of education has a high chance of drug addiction.

**Drug Addiction Types:** It is hypothesized that drug addiction is related to HIV/AIDS. Thus, this section aims to investigate common drug addiction among youth, and respondents were asked if they were addicted to one of these: alcohol, Majuran, tramadol injection, or cocaine. Study results found Majuran and Tramadol injection and pills are the main addictions due to being easier to

purchase and consume, while drugs like heroin, cocaine, and methamphetamine are difficult to get. However, one of the respondents said, “My body is addicted to drugs; regardless to drug type, we should get something.” another said, “I prefer injectable drugs because its effect is very quick and have a nice feeling”.

### Respondents’ Knowledge on HIV

People who use injectable drugs and share needles are at risk of transmitting HIV/AIDS. This is because viruses can spread through blood or other body fluids. This section aims to investigate respondents’ knowledge of HIV. Respondents were asked, have you ever heard of HIV/AIDS? Tables 1, 2, and 3 explain the findings.

Table 1.1 Respondents’ awareness on HIV/AIDS

Have you ever heard of HIV/AIDS?	Yes	No	Don’t know
Count	232	25	13
Percentage	86%	9%	5%

Findings showed that 232 (86%) of the respondents have heard about HIV, while 25 (9%) said, we did not hear HIV/AIDS and only 13 (5%) said, don’t know. Respondents were asked a follow up question, do you know the existence of people live with HIV in Somalia?

Table 1.2 Respondents' awareness on HIV/AIDS existence

Do you know the existence of HIV positive cases in Somalia?	Yes	No	Don't know
Count	44	220	9
Percentage	16%	81%	3%

Findings indicate that the majority 220 (81%) of IDUs are not aware of the existence of HIV in the country.

Table 3 presents respondents' knowledge on HIV/AIDS transmission.

Table 2. Respondents' knowledge on HIV/AIDS transmission.

Can people get HIV from sharing unsterilized needles?	Yes	No	Don't know
Count	153	77	40
Percentage	57%	29%	14%
Can people get HIV by sharing food with a person with HIV/AIDS?	Yes	No	Don't know
Count	35	224	11
Percentage	13%	83%	4%
Have you heard about special antiretroviral drugs that can help people infected with HIV/AIDS?	Yes	No	Don't know
Count	22	205	43
Percentage	8%	76%	16%

The study confirms that 117 (43%) of the respondents are not aware that HIV can be transmitted through sharing unsterilized needles with a person living with HIV. A follow-up question was asked about whether people can get HIV by sharing food with a someone with HIV. The majority of 224

(83%) said no, while 35 (13%) and 11(4%) responded yes or don't know, respectively. Since injection drug users are susceptible to HIV/AIDS, we asked, have you heard about antiretroviral drugs that can help people infected with HIV/AIDS? Unlike the other two questions, the majority of the respondents 205 (76%) confirmed that they never heard that. While 43 (16%) replied, don't know, and only 22 (8%) said yes. We can conclude that if drug users become HIV positive, they will miss the chance to seek antiretroviral drugs that can help people infected with HIV/AIDS.

### Years of Taking Drugs

In the hotspots, it's common to see persons injecting drugs, thus, respondents were asked, how long have you been taking drugs? A slightly higher half 140 (52%) of the drug users stated that they were using drugs for an average of 3-4 years.

While about one-third 86 (32%) stated they were using 1-2 years, only 43 (16%) stated they were using 5-6 years.



Study respondents

were also asked, how old were you when you first injected drugs? An options list was given



to the respondents. One-third 89 (33%) stated the age of 20 -25, followed by 105 (39%) stated that they were between 26 -30 years old when they first injected drugs. For those who started injecting at the age of 31-35 were 54 (20%), only 22(8%) confirmed their first injection was when

they were 36 years old as stated figure.

4. Drug users hardly to stay without injecting, therefore, respondents were

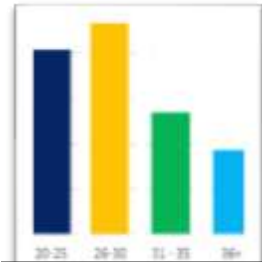


Fig. 4 Age of first injection

asked, how many times do you inject drugs in a day? It was given minimum and maximum options. About seven in ten 197 (73%) confirmed once a day use injection, while the remaining 73 (27%) stated twice a day.

Worthy note, during the interview, blood sample collection and waiting for the result, study enumerators observed that respondents were in hurry to go back to their hotspot and most of the time they were requesting to speed up the interview as they were feeling drug addiction.

## Injecting Unsterilized Needle

While any sort of drug has an impact on a drug user's chance of getting HIV/AIDS, some substances have a greater impact than others. The risk of transmitting HIV through sharing unsterilized needles, syringes, or other drug injection equipment is higher. Therefore, respondents were asked: Do you use a non-sterile syringe or needle at any time you inject? About eight-in-ten (79%) stated that they use a non-sterile needle, while 43 (16%) argued that they use a sterilized one; one said "We change the needle but share the drugs", and only 14 (5%) said, I don't know.

Those who answered no were asked a follow-up question: How did you get that syringe or needle? A list of options was given; however, 151 (71%) said my friend gave it to me after his use, 34 (16%) said I picked it up from our hot-spot which was left there by others, and 28 (13%) responded that I reused my own needle or syringe. Since this study examines whether those engaged in syringe borrowing and syringe lending among street-involved youth, another follow-up question was asked: were you in a group or alone when you injected the same needle last time? About seven in ten 186 (69%) stated they were injected in a group, while about one-third 84 (31%) said they were injected alone.

The study also aimed to know the frequency, with which they used a needle or syringe that had previously been used by someone else. The study found that 183 (68%) said it every time, while 62 (23%) said it sometimes, and only 24 (9%) said it never.

Can you obtain new, unused needles and syringes when you need them? 140 (52%) said never get, while about two in ten 57(21%) said sometimes, only about quarter (27%) confirmed getting unused one.

### **HIV Blood Test Result**

The study aimed to know the prevalence of HIV among injection drug users, hence, the study employed professional laboratory technicians. After the screen check and the interview, respondents were taken a finger stick blood sample for an HIV test. The rapid antibody test has been used. The process took in 20 minutes and the results were shared with the target respondents.

Our study found that of 270 blood test, 21 were HIV positive, and this is an alert message for HIV in the country. The prevalence of HIV was calculated by dividing the total number of HIV-positive participants with the total number of participants tested; this counts about 8% of Injunction Drug Users (IDUs) who agreed to HIV screening and tested are positive for HIV.

### **Discussion**

According to the study results 8% of injection drug users who agreed screening tests were HIV positive. Yelena *et al.* (2016) argue that drug-related vulnerabilities are associated with the risk of HIV infection. Charles *et al.*, (2009) state that, in South Africa, 20% of injection drug users (IDUs) who agreed to HIV screening tested positive.

HIV/AIDS awareness among IDU's is very low; the study found that 81% of the respondents do not know HIV's existence in the country. Nikki *et al.* (2019) found that youth who are street-based are at a significantly higher risk of their behavior of borrowing and lending syringes among others who use injection drugs.

### **Conclusion**

Injection drug use (IDU) contributed to nearly 10 percent of recorded HIV cases among men. Additionally, men who become infected with a virus can pass it on to their friends while sharing needles; they can also pass HIV on to their wives through intercourse.

There is low awareness about organizations or programs providing health services for injectable drug users. Prevention and treatment programs are urgently required in this population. The study concludes that



there's an association between HIV and injection drug use.

### **Future research recommendations**

Future research should investigate the relationship between female injection drug users associated with HIV risk.

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