



MAKERERE UNIVERSITY



GOVERNMENT OF UGANDA

Setting Up an Epidemiological Alcohol and Drug Abuse Surveillance System

A presentation by
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At the dissemination/validation meeting
at 3pm, 13th Oct 2020, Via Zoom

This study was made possible with funding from the Government of the Republic of Uganda through Makerere University Research and Innovations Fund.

Team members

Investigators

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- * Dr. Flavia Matovu
- * Assoc Prof. Ponsiano Ocama
- * Dr. Catherine Abbo
- * Dr. David Basangwa
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Other team members

- * Ronald Twesigomwe- Coordinator
- * Biribawa Claire- Field supervisor
- * Cissie Namanda –Field Supervisor

Presentation outline

- * Introduction and Background
- * Statement of the problem
- * Study objectives
- * Methodology
- * Results

Introduction

- * Substance abuse which is inclusive of alcohol abuse is one of the leading risk factors for detrimental population health worldwide
- * Alcohol and Drug Abuse (ADA) are among the major contributors to the burden of disease in over 200 health conditions.
- * Linked to many NCDs like cardiovascular diseases, to road traffic injuries, violence and suicide, to diseases associated with risky sexual behaviours, and poor mental health.
- * ADA are responsible for 7.2% of all premature (among persons 69 years of age and younger) mortality in 2016 worldwide

Introduction cont'd

- * In Uganda ADA are among the major contributors to the burden of disease due to NCDs, RTIs, diseases associated with risky sexual behaviors and poor mental health.
- * Half of the admissions at the National Mental Referral Hospital are young people with alcohol and substance use disorders
- * Alcohol use is among the top 10 risk factors that contribute to the country's burden of disease.
- * A drugs and alcohol surveillance system has the potential to inform policy development, guide local training and resource allocation decisions and mobilize researchers and attract new research initiatives.

Problem statement

- * Currently no known operational fully-fledged epidemiological surveillance system for alcohol, drugs and addictions
- * A small drug epidemiology network that carries out minimal surveillance in about 5 addictions/mental health treatment Centres in KMA but collects data once in a year.
- * There is general lack of information on substance use for program and policy implementation

Objectives

- **General objective**

To set up an epidemiological ADA surveillance system in KMA

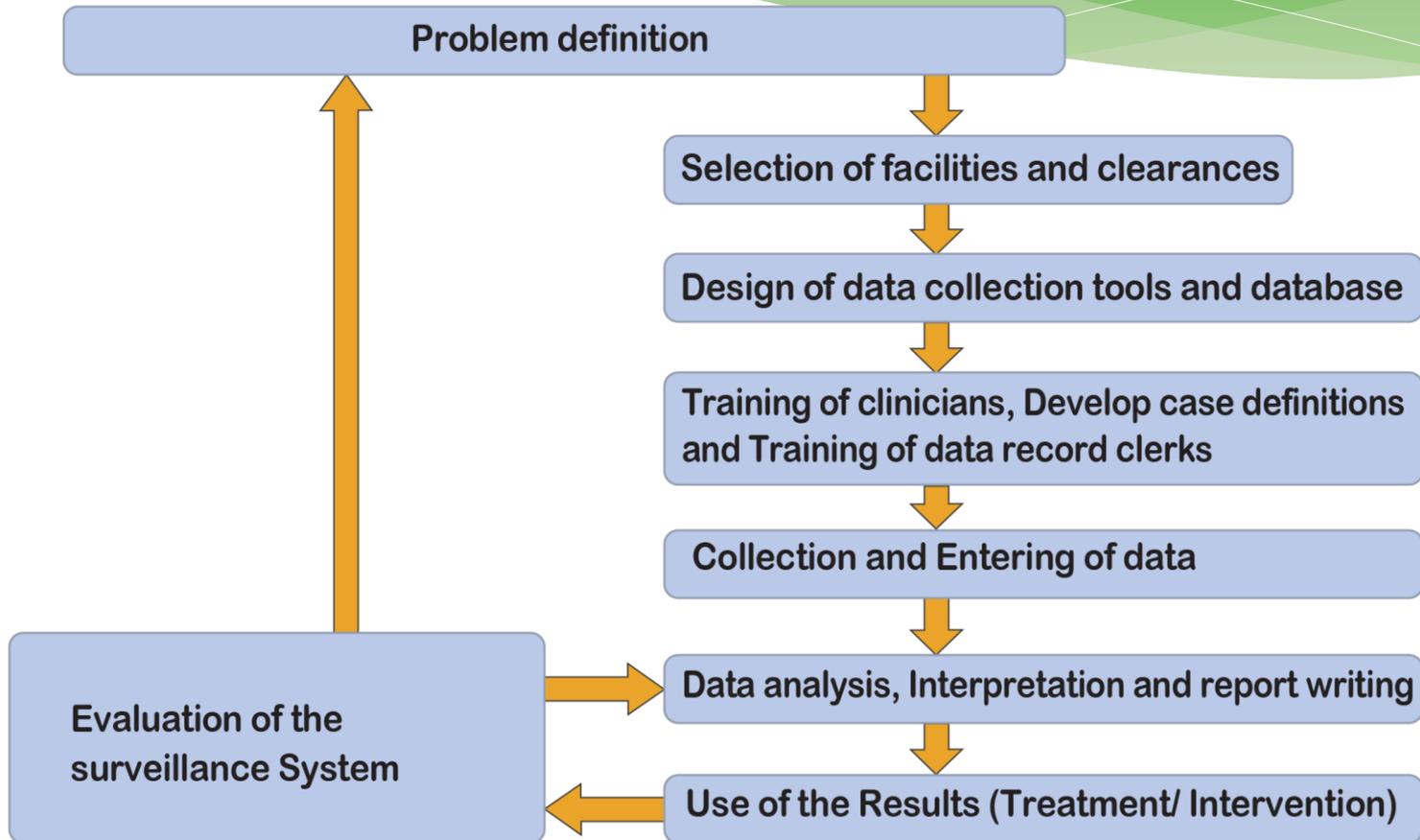
- **Specific objectives**

- * To establish the most suitable tools for the surveillance system through engagement with key stakeholders
- * To develop a database for integration of AD abuse data from source files into the surveillance system
- * To train staff of the treatment facilities and those affiliated to the alcohol and drugs research centre (ADARC) on the use and maintaining the surveillance system
- * To determine the patterns and trends of ADA in KMA

Methods

- **Study site:** 10 selected facilities within KMA- they had to have a computer, a records person and filing system, and at least 4 clients a month.
- **Study population:** All clients of addiction treatment Centres in KMA
- **Sample size:** All clients of the 10 facilities in KMA
- **Data collection** (Train of clinicians and data record clerks, Data base design & Tools)

Schema for setting up an Epidemiological Alcohol and Drug Abuse Surveillance System



Steps...

- A robust data base in MS Access software designed
- A one day's training workshop for 10 data clerks (Abstract data from files onto the tool, Enter data, Export to different software, sharing data).
- Installation of the MS Access Data base and onsite training for 4 extra data clerks from Butabika
- Analysis of data to come up with monthly reports (End of Feb report covering Nov2019 to Feb 2020)
- Sample reports for ten facilities & A final report

Steps in coming up with the surveillance system

- Selection of 10 facilities offering treatment and Rehabilitation to ADA victims (Purposive)
- MAKSPH-IRB & NCST approval as well as Administrative clearances
- Investigators workshop to identify adjustments in the data collection tool.
- Stakeholder workshop (10 heads of selected facilities and 10 facility clinicians). Facility heads briefed on the importance of the system
- Clinicians trained on diagnosis of alcohol and drug abuse victims.
- Additions and deductions made to further standardize and customize the data collection tool

Methodology con't...

- **Variables:**

- * Background characteristics of clients e.g. Age, Education level etc.
- * Source of referral of clients
- * Primary and secondary substances
- * Source of drugs and frequency of use
- * Mode of use of different substances
- * HIV/AIDS and HCV testing
- * Impact of drugs on clients and family
- * source of payment for treatment bills among others

Methodology con't...

- **Ethical considerations**

- Proposal review and approval from MAKSPH-IRB
- Approval from NCST
- Administrative clearance from the heads of the participating facilities

RESULTS

Achievement by objective

Objective	
To establish the most suitable tools for the surveillance system through engagement with key stakeholders	YES
To develop a database for integration of AD abuse data from source files into the surveillance system	YES
To train staff of the treatment facilities and those affiliated to the alcohol and drugs research centre (ADARC) on the use and maintaining the surveillance system	YES
To determine the patterns and trends of ADA in KMA	YES



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SURVEILLANCE SYSTEM FOR SUBSTANCE USE DISORDER IN KAMPALA METROPOLITAN AREA

Tool for abstraction of client records by records officers

1. Treatment Centre Details

- a) Name of Treatment Centre: _____
- b) Name of contact person: _____
- c) Contact tel: _____
- d) Email: _____
- e) Date of abstraction: _____
- f) Location of the centre-
 - Village: _____
 - Sub county: _____
 - District: _____
- g) Type of Centre: (Circle the right code)
 - 1. Private outpatient
 - 2. Private in-patient
 - 3. General hospital
 - 4. Psychiatric hospital
 - 5. Prison unit
 - 6. Therapeutic community
 - 7. Private- inpatient and outpatient
 - 8. Others specify: _____

A. Treatment Demand Indicators

- 2. Date of first visit for initial treatment: (Day/Month/Year) _____
- 3. Date of return visit for returning clients: (Day/Month/Year) _____

SURVEILLANCE SYSTEM FOR SUBSTANCE USE DISORDER IN KAMPALA METROPOLITAN AREA Tool for abstraction of client records by records officers

Start Page Middle Page End Page

PatientID

Search Patient ID

Q1. Treatment Centre Details

Q1-A. TreatmentCtr

Q1-B. Name of contact person

Q1-C. Contact tel

Q1-D. Email

Q1-E. Date of abstraction

Q1-F. Location of the centre

I-Village

II-Sub county

III-District

Q1-G. Type of Centre: (Circle the right code)

Please scify the other centre

SECTION A. Treatment Demand Indicators

Q2. Date of first visit for initial treatment: (Day/Month/Year)

Training

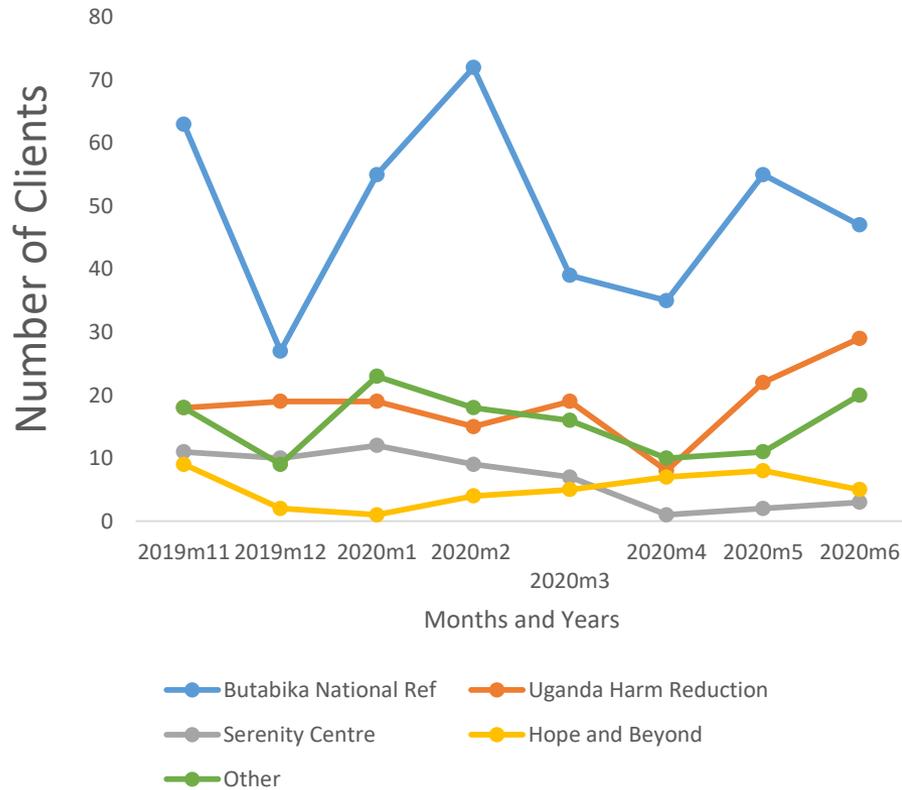


Background x-tics of clients

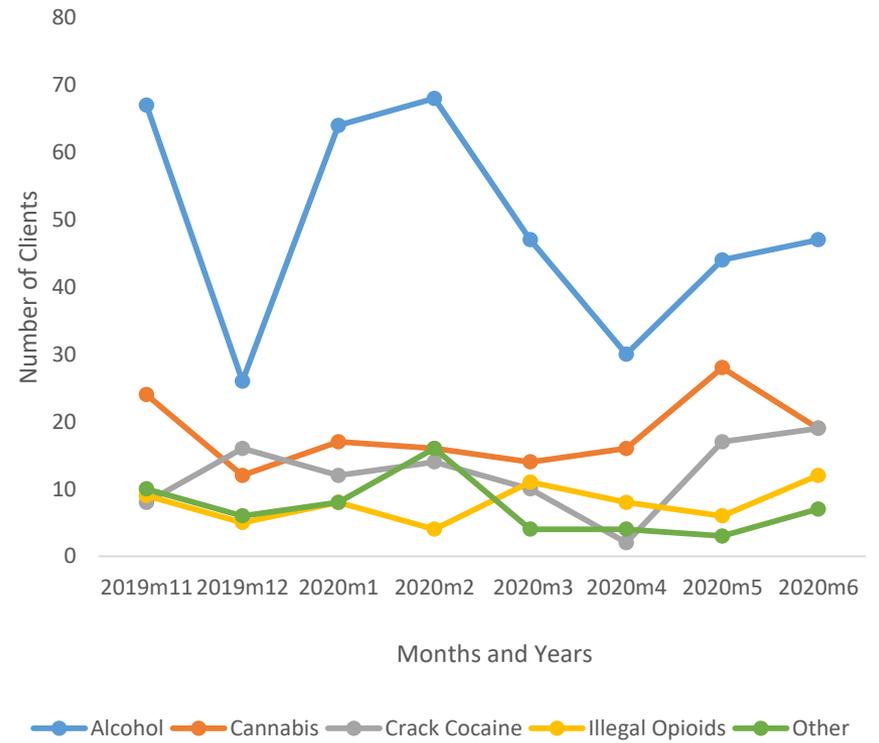
Characteristics	Males n(%)	Females n(%)	All n(%)
Age			
15-24	148(23.0)	29(24.4)	177(23.2)
25-34	291(45.2)	53(44.5)	344(45.1)
35+	205(31.8)	37(31.1)	242(31.7)
Education			
None	39(6.5)	1(0.9)	40(5.6)
Primary	66(11.0)	11(9.7)	77(10.8)
Secondary	321(53.7)	71(62.3)	392(55.1)
Tertiary	172(28.8)	31(27.2)	203(28.5)
Marital status			
Single	261(58.9)	38(48.1)	299(57.3)
Married/Living together	109(24.6)	24(30.4)	133(25.5)
Other	73(16.5)	17(21.5)	90(17.2)
Religion			
Catholic	220(35.2)	36(30.8)	256(34.5)
Protestant	276(44.2)	56(47.9)	332(44.7)
Muslim	84(13.4)	17(14.5)	101(13.6)
SDA	13(2.1)	2(1.7)	15(2.0)
Other	32(5.1)	6(5.1)	38(5.1)
Employment			
Regular	88(19.6)	10(12.5)	98(18.5)
Pupil/Student	55(12.3)	8(10.0)	63(11.9)
Unemployed	124(27.6)	27(33.8)	151(28.5)
Housewife	0(0.0)	7(8.8)	7(1.3)
Casual labour	71(15.8)	10(12.5)	81(15.3)
Self Employed	86(19.2)	16(20.0)	102(19.3)
Other	25(5.6)	2(2.5)	27(5.1)
Area of residence			
Urban	545(86.1)	108(90.8)	653(86.8)
Rural	88(14.0)	11(9.2)	99(13.2)
All	644(100.0)	119(100.0)	754(100.0)

Average age: Male=31.9; Female =31.9; All =31.9/

Number of clients by months



Primary drugs by months



Patterns of commonly abused primary substances/drugs

Characteristic	Commonly Abused Primary Drug					Total
	Alcohol	Cannabis	Crack Cocaine	Illegal opioids	Other	
Age group						
15-24	50(12.7)	62(42.5)	32(32.7)	11(17.5)	21(36.2)	176(23.2)
25-34	157(40.0)	73(50.0)	49(50.0)	36(57.1)	26(44.8)	341(45.0)
35+	186(47.3)	11(7.5)	17(17.4)	16(25.4)	11(19.0)	241(31.8)
Sex						
Male	350(89.1)	143(97.9)	58(59.2)	44(69.4)	45(77.6)	640(84.4)
Female	43(10.9)	3(2.1)	40(40.8)	19(30.2)	13(22.4)	118(15.6)
Residence						
Urban	314(81.3)	124(87.3)	98(100.0)	62(98.4)	51(87.9)	649(86.9)
Rural	72(18.7)	18(12.7)	0(0.0)	1(1.6)	7(12.1)	98(13.1)
Religion						
Catholic	146(38.5)	40(28.4)	27(27.6)	25(39.7)	16(28.6)	254(34.5)
Anglican/Protestant	178(47.0)	53(54.1)	53(54.1)	26(41.3)	20(35.7)	330(44.8)
Muslim	31(8.2)	28(19.9)	16(16.3)	11(17.5)	15(26.8)	101(13.7)
SDA	9(2.4)	3(2.1)	1(1.0)	1(1.6)	1(1.8)	15(2.0)
Other	15(4.0)	17(12.1)	1(1.0)	0(0.0)	4(7.1)	37(5.0)
Education						
None	24(6.7)	8(6.2)	1(1.0)	4(6.4)	3(5.2)	40(5.7)
Primary	32(8.9)	16(12.4)	13(13.3)	8(12.7)	8(13.8)	77(10.9)
Secondary	158(43.9)	80(62.0)	83(84.7)	44(69.8)	26(44.8)	391(55.2)
Tertiary	146(40.7)	25(19.4)	1(1.0)	7(11.1)	21(36.2)	200(28.3)
All	393(51.9)	146(19.3)	98(12.9)	63(8.3)	58(7.7)	758(100.0)

Primary drug source by months

Source	Months Year								Total (%)
	2019 m11	2019 m12	2020 m1	2020 m2	2020 m3	2020 m4	2020 m5	2020 m6	
Friends	35(31.0)	18(29.5)	37(35.6)	45(39.5)	31(38.3)	25(43.9)	41(44.6)	36(36.7)	268(37.2)
Street dealers	69(61.1)	37(60.7)	50(48.1)	55(48.3)	38(46.9)	22(38.6)	48(52.2)	54(55.1)	373(51.8)
Prescription/pharmacy	2(1.8)	3(4.9)	2(1.9)	6(5.3)	2(2.5)	2(3.5)	1(1.1)	2(2.0)	20(2.8)
Other	7(6.2)	3(4.9)	15(14.4)	8(7.0)	10(12.4)	8(14.0)	2(2.2)	6(6.1)	59(8.2)
Total	113(100.0)	61(100.0)	104(100.0)	114(100.0)	81(100.0)	57(100.0)	92(100.0)	98(100.0)	720(100.0)

Selected secondary drugs of abuse

Drug	n (%)
Alcohol	
No	167(75.9)
Yes	53(24.1)
Cannabis	
No	183(83.2)
Yes	37(16.8)
Crack cocaine	
No	210(95.0)
Yes	10(5.0)
Tobacco	
No	142(64.5)
Yes	78(35.5)

Frequency of use of primary drugs

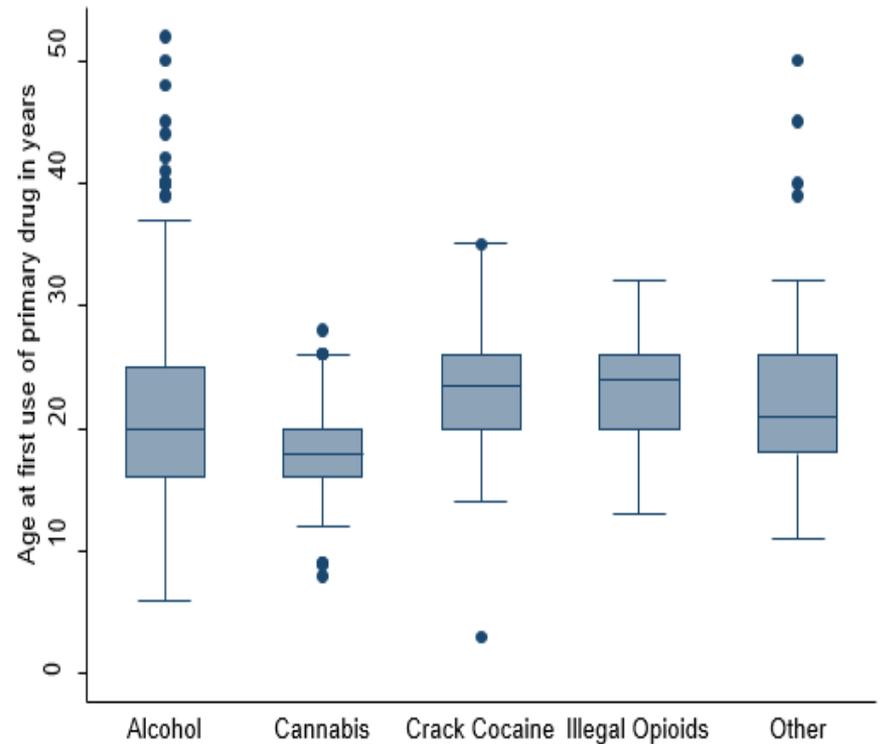
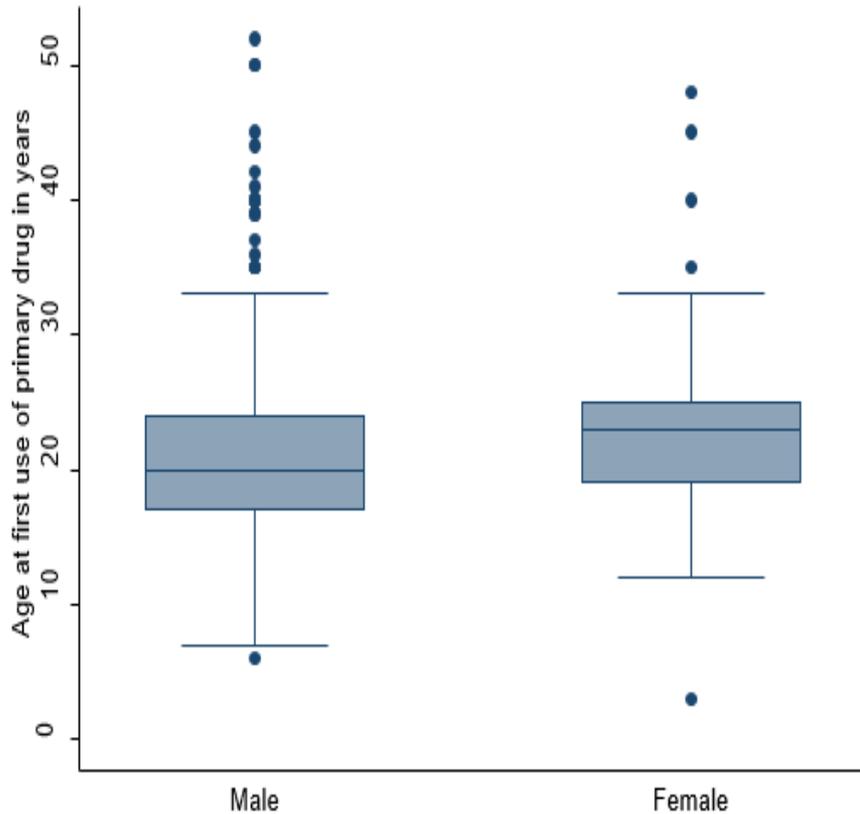
Primary drug	Frequency of use		
	Daily	Other	Total
Alcohol	244(92.4)	20(7.6)	264(100.0)
Cannabis	72(86.8)	11(13.3)	83(100.0)
Crack Cocaine	60(98.4)	1(1.6)	61(100.0)
Illegal opioids	40(88.9)	5(11.1)	45(100.0)
Other	38(86.4)	6(13.6)	44(100.0)
Total	454(91.4)	43(8.7)	497(100.0)

Frequency of selected secondary drugs

Drug	Frequency of use		
	Daily	Other	Total
Alcohol	44(91.7)	4(8.3)	48(100.0)
Cannabis	23(82.1)	5(17.9)	28(100.0)
Crack Cocaine	9(90.0)	1(10.0)	10(100.0)
Tobacco	70(94.6)	4(5.4)	74(100.0)

Age at first use of drugs by sex

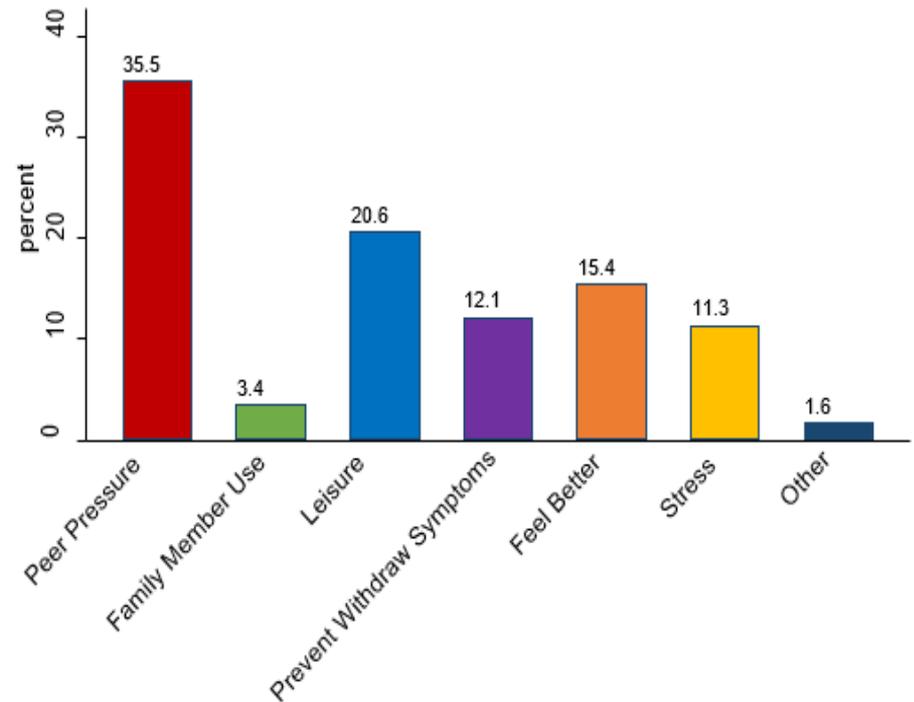
Age at first use of particular primary drugs



Reasons for starting substance use

Reasons for continued substance use

Reason	Sex of client		All
	Male	Female	
Peer Pressure	494(81.7)	82(71.3)	576(80.0)
Family environment	55(9.1)	9(7.8)	64(8.9)
Prescription Drug	4(0.7)	4(3.5)	8(1.1)
Stress	48(7.9)	19(16.5)	67(9.3)
Other	4(0.7)	1(0.9)	5(0.7)
Total	605(100.0)	115	720(100.0)



Causes of stress to clients who mentioned it as reason for starting drugs/alcohol

Cause	n (%)
School Work	68(8.9)
Friends/Relationships	224(29.4)
Family	264(34.6)
Work	211(27.7)
Finances	289(37.9)
Other	49(6.4)

Injection of drugs by clients

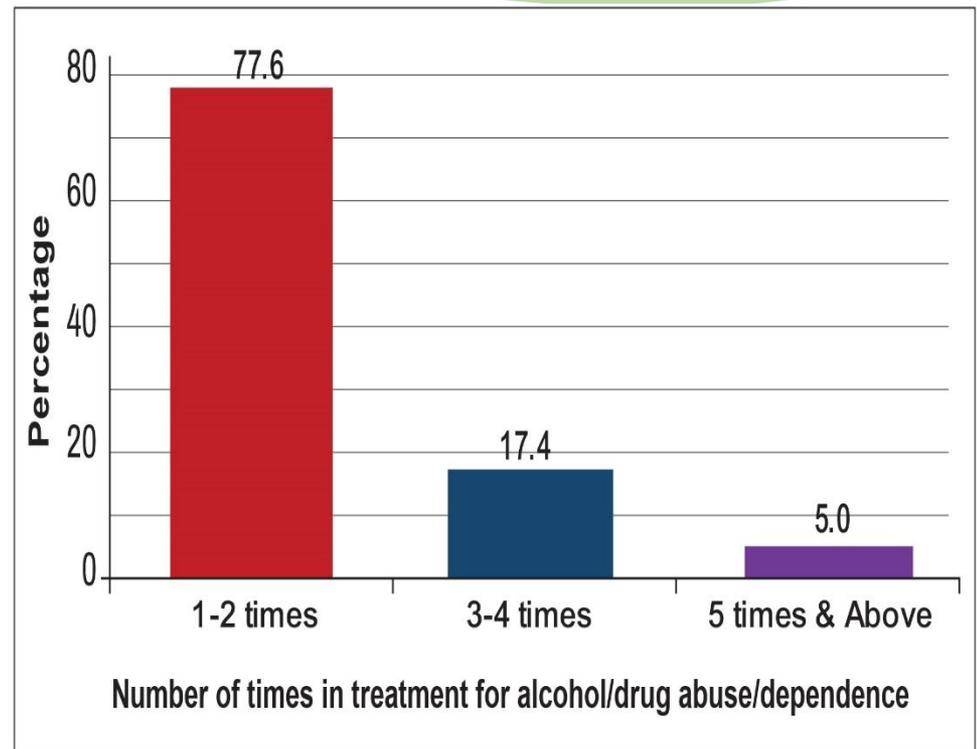
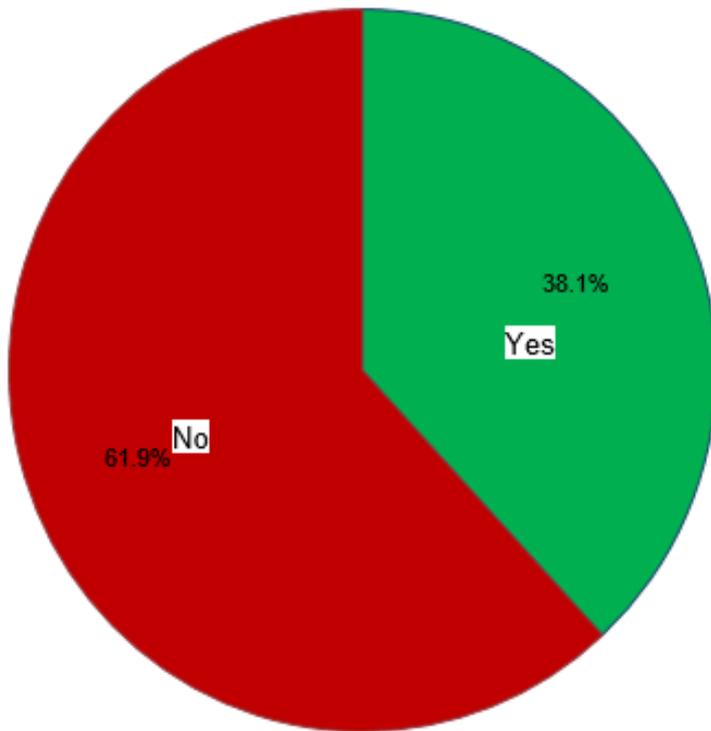
Sharing of equipment by clients

Injection status	n(%)
Never	627(85.8)
Injected but not in the last 12 months	24(3.3)
Injected in the last12months_not last30days	9(1.2)
Current injecting	65(8.9)
Unknown/Decline to answer	6(0.8)
Total	731(100.0)

Share Equipment	n(%)
Never shared	14(14.3)
Shared but not in the last 12 months	23(23.5)
Shared in the last 12 months but not in the last 30days	29(29.6)
Currently sharing (in the last 30 days)	31(31.6)
Unknown/Decline to answer	1(1.0)
Total	98(100.0)

Previous treatment for substance dependence

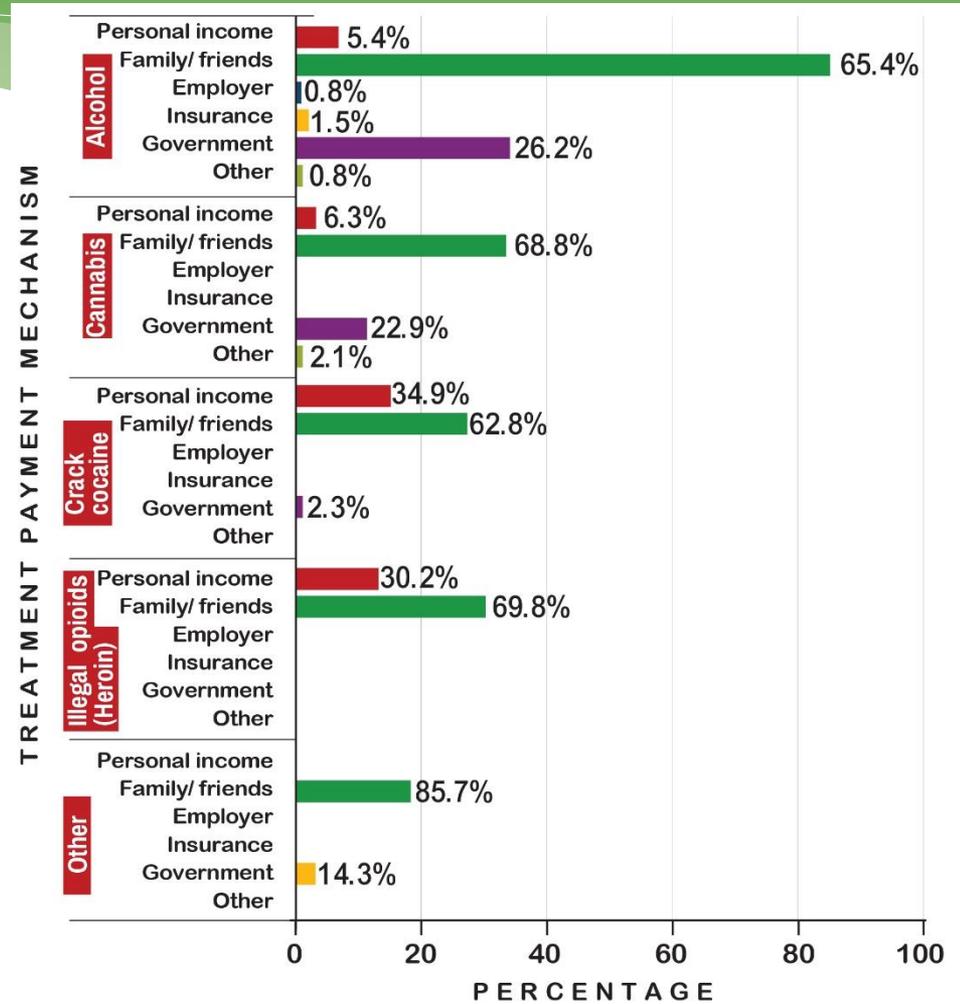
Number of times in treatment for substance dependence



Treatment kinds received by clients

Source of payment for treatment

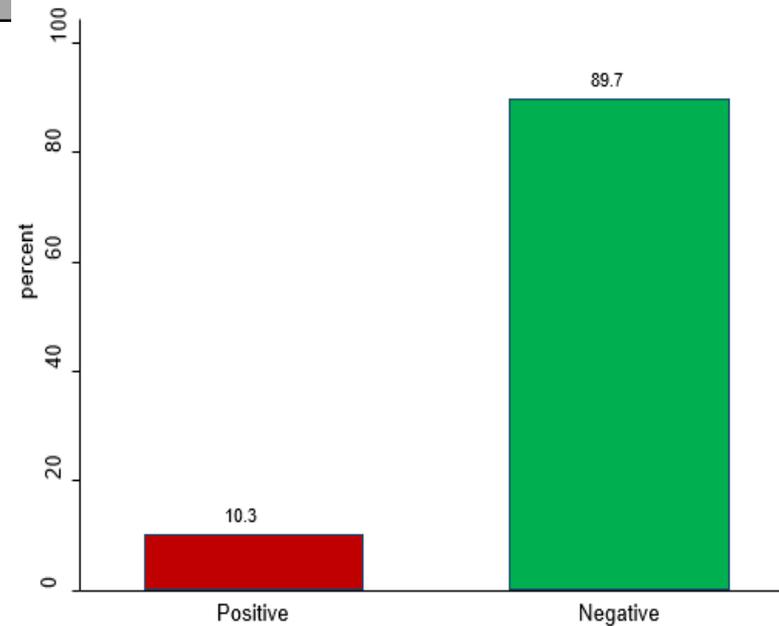
Treatment Kind	n (%)
Medical	162(57.2)
Psychosocial treatment	104(36.7)
Prayer	93(32.9)
Traditional Healers	87(30.7)
Other	9(3.2)



HIV/AIDS Testing-detail

HIV/AIDS Testing Result

Treatment Centre	Yes in past 12 months	Yes but not in past 12 months	No	Unknown/declined	Total
Africa Retreat Centre	3 (8.8)	31 (91.2)	0 (0.0)	0 (0.0)	34 (100.0)
Butabaka National Mental Hospital.	236(60.1)	51(13.0)	68(17.3)	39(9.7)	393(100.0)
Fore Tranquil Homes	18(100.0)	0 (0.0)	0 (0.0)	0 (0.0)	18 (0.0)
Hope and Beyond	41(100.0)	0 (0.0)	0 (0.0)	0 (0.0)	41(100.0)
Life Back Foundation	17(81.0)	4(19.1)	0(0.0)	0(0.0)	21(100.0)
National Care Centre	15(79.0)	2(10.5)	2(10.5)	0 (0.0)	19(100.0)
Recovery Solutions	13(81.3)	2(12.5)	0 (0.0)	1(6.3)	16(100.0)
Safe Places	17(100.0)	0 (0.0)	0 (0.0)	0 (0.0)	17(100.0)
Serenity Centre	52(94.5)	3(5.5)	0 (0.0)	0 (0.0)	55(100.0)
Uganda Harm Reduction Network	132(88.6)	16(14.3)	1(0.7)	0 (0.0)	149(100.0)
Total	544(71.3)	109(14.3)	71(9.3)	39(5.1)	763(100.0)



HIV testing- % tested

Facility	N	%	Total
Africa Retreat Centre	34	100	34
Butabaka National Mental Hospital.	287	73.1	393
Fore Tranquil Homes	18	100.0	18
Hope and Beyond	41	100.0	41
Life Back Foundation	21	100.1	21
National Care Centre	17	89.5	19
Recovery Solutions	15	93.8	16
Safe Places	17	100.0	17
Serenity Centre	55	100.0	55
Uganda Harm Reduction Network	148	100.0	149
Total	653	85.6	763

Hepatitis C Virus (HCV) testing- Ever been tested

Facility	n	%	Total
Africa Retreat Centre	30	88.2	34
Fore Tranquil Homes	11	61.2	18
Hope and Beyond	25	61.0	41
Serenity Centre	29	60.0	55
National Care Centre	8	42.1	19
Recovery Solutions	5	31.3	16
Life Back Foundation	4	19.1	21
Safe Places	2	11.8	17
Uganda Harm Reduction Network	12	11.5	149
Butabika National Mental Hospital.	21	5.3	393
Total	100	20.4	763

Source of payment for primary drugs

Monthly expenditure of primary drug/alcohol

Source of payment for primary drug	n(%)
Self	654(85.7)
Family/Friends	290(38.0)
Other	17(2.2)

Expenditure (UGX)	n(%)
Less than 10,000	88(12.6)
10,000-100,000	499(71.5)
>100,000	111(15.5)
Total	698(100.0)

Impact of substance abuse on clients

Impact of substance abuse on the family

Impact on the client	n(%)
Dropped out of school	188(24.6)
Lost Job	220(28.8)
Developed Mental Health Complications	308(40.4)
Developed Physical Complications	210(27.5)
Developed Sexual Complications	65(8.5)
Ever been Arrested	229(30.0)
Other	60(7.9)

Impact on the Family	n(%)
Domestic Violence	267(35.0)
Spousal Separation/Divorce	112(14.7)
Children Dropped out of School	55(7.2)
Lack of Basic needs	308(40.4)
Parental Separation/Divorce	46(6.0)
Other	104(13.6)

Conclusions

- There is an increasing number of patients with clients in Rehabilitation facilities with alcohol and drug problems.
- Most of the clients in these facilities are young, single and educated thus likely to waste their most productive stages of life.
- HIV prevalence higher than national average
- Testing for hepatitis C among clients is low

Conclusions-cont'd

- Peers are the major influence in starting and continuing drug use
- Street vendors are the major source of drugs
- Majority of the clients use drugs daily.
- Family and friends are main funders of the drug abuse
- Relapse high -38%
- Sharing equipment among injecting drug users high -31%

Recommendations

- Scale up and automating the surveillance system
- Identify hotspots where the drugs are sold and design interventions to eliminate or reduce the sale of dangerous substances by police and other security institutions
- OTHERS
 - * Program initiatives to target street dealers then peers as sources of drugs
 - * More effort on young people- taking drugs earlier than alcohol
 - * More sensitization especially for young people and their peers

Recommendations cont'd

- * Increased testing for hepatitis C
- * Harm reduction among injecting drug users as 32% share equipment
- * Action on high relapse- 38% high
- * More research to establish factors associated with seeking rehabilitation services- like a matched case control study- why only men, educated, urban,
- * More research on factors associated with addiction

