IN THE HIGH COURT OF SOUTH AFRICA
GAUTENG DIVISION, PRETORIA

CASE NO: 58668/2011

In the matter between:

JULIAN CHRISTOPHER STOBBS	**FIRST PLAINTIFF**
KATHLEEN (MYRTLE) CLARKE	**SECOND PLAINTIFF**
CLIFFORD ALAN NEAL THORP	**THIRD PLAINTIFF**
and	
NATIONAL DIRECTOR OF PUBLIC PROSECUTIONS	**FIRST DEFENDANT**
MINISTER OF JUSTICE AND CONSTITUTIONAL DEVELOPMENT	**SECOND DEFENDANT**
MINISTER OF HEALTH	**THIRD DEFENDANT**
MINISTER OF SOCIAL DEVELOPMENT	**FOURTH DEFENDANT**
MINISTER OF INTERNATIONAL RELATIONS AND COOPERATION	**FIFTH DEFENDANT**
MINISTER OF TRADE AND INDUSTRY	**SIXTH DEFENDANT**
MINISTER OF POLICE	**SEVENTH DEFENDANT**
DOCTORS FOR LIFE INTERNATIONAL INCORPORATED	**EIGHTH DEFENDANT**

PLAINTIFFS' NOTICE IN TERMS OF RULE 36(9)(b)
in respect of Quintin van Kerken

TAKE NOTICE THAT the Plaintiffs intend to call **QUINTIN VAN KERKEN** (*"the expert"*) to give evidence as an expert in this matter.

TAKE FURTHER NOTICE that the Expert's *curriculum vitae*, is annexed hereto and marked **"A"**. A summary of the expert's relevant qualifications and experience is, *inter alia*, as follows: -

1. The expert is currently the Chief Executive officer of the Anti-Drug Alliance South Africa, and has held this position for 10 (ten) years.

2. The expert has played a major role in Substance Abuse Policy formation, and implementation of same at a corporate level, for approximately 9 (nine) years, in which time his clients have included Associated Motor Holdings Group, Hyundai SA, Renault SA, Kia SA and Toshiba South Africa.

3. The expert has personally conducted research into drug trends, usage patterns and other drug-related issues, specifically in respect of South Africa, for approximately 10 (ten) years, which research has garnered a number of publications (as are detailed hereunder).

4. The expert assisted the United Nations Office on Drugs and Crime ("*UNODC*") in respect of HIV prevalence in people who inject drugs ("*PWID*"), the report from which is detailed hereunder.

5. As a Director of Treatment at the Clear Option Treatment Program, which position he has held for 6 (six) years, the expert has helped to develop the non-Minnesota model treatment program.

6. The expert struggled through active drug addiction for 10 (ten) years of his life, and has since spent nearly 10 years in sobriety, fighting the effects of drugs and addiction in South Africa.

7. The expert has a certificate in addiction recovery coaching.

8. The expert has had over 300 press interviews in the last 10 (ten) years regarding a number of drug-related issues, including addiction, drug policies, drug laws and

various substance abuse related matters, in which he is acknowledged as an expert on the matter. The aforesaid has included being interviewed as an expert by Carte Blanche, Special Assignment and numerous radio, television and print media houses.

TAKE NOTICE FURTHER that a summary of the expert's opinions, and his reasons, therefore, are set out hereunder.

1. In order to express the opinions and provide the reasons set out hereunder, the expert:

    1.1. has, in addition to his abundance of practically gained knowledge, researched relevant topics and extensively read historical sources, in order to conduct research into and/or participate in and/or author the following papers (which have been annexed hereto as annexures **"B"** to **"F"** and which are incorporated herein by reference and attachment):

        1.1.1. "*At what cost? The futility of the war on drugs in South Africa*", authored by the expert and released to the press during November 2013 (item number 1 in the Plaintiff's Discovery Affidavit, dated 6 April 2016);

        1.1.2. "*At what cost 2.0 – All Rands and No Sense*", authored by the expert (item number 2 in the Plaintiff's Discovery Affidavit, dated 6 April 2016);

        1.1.3. "*The 2014 National Survey on Drugs and Addiction*", published by the Anti-Drug Alliance South Africa (which will be discovered by the Plaintiffs);

        1.1.4. "*Final Report – Rapid Assessment of HIV prevalence and HIV-related risks among people who inject drugs in five South African cities*", authored by Andrew Scheibe, Ben Brown and Monika dos Santos (which will be discovered by the Plaintiffs); and

        1.1.5. "*The Anti-Drug Alliance Annual Survey and Report*" of 2012, published by the Anti-Drug Alliance South Africa (which will be discovered by the Plaintiffs).

1.2. has had regard to, *inter alia*:

1.2.1. the observations and conclusions made by him during the course of the aforesaid studies, papers and experience in-the-field;

1.2.2. the observations and conclusions made by him in reading studies and papers (as have been, or will be, discovered in this litigation and referred to by the expert/s in evidence), but which are, *inter alia*, those listed in annexure "**G**" hereto;

1.2.3. the pleadings delivered in the above matter, including any and all requests for further particulars and responses thereto (as at date hereof); and

1.2.4. the First to Seventh Defendants' Notices in terms of Rule 36(9)(a) and (b) in respect of David Bayever and Professor Shabir Banoo, that were delivered on or about **25 January 2016** and **28 January 2016** respectively.

2. A summary of the expert's opinions (incorporating limited reasons therefore, but which are expanded upon in the annexures) follows: -

Political considerations and the "*war on drugs*"

2.1. The war on drugs (including cannabis) is the real enemy and people fighting addiction are its victim, as opposed to drugs (and cannabis) being the enemy.

2.2. Drug busts are a popular topic in the media and affect public opinion of police and government, such that there is political motivation to pursue drug busts and make promises to the public in this regard. In particular, media coverage of drug busts lauds the number of arrests and Rands' worth of confiscated drugs.

2.3. Public approval of government was reaching unprecedented heights subsequent to the initial implementation of the government's Drug Watch

Initiative in Gauteng ("*the DWI*"), which approval sharply declined soon thereafter, when the futility thereof became apparent.

2.4. In recent times, and as part of the DWI, thousands of arrests have been effected and millions of Rands' worth of drugs have been confiscated, at an innumerable cost to the national *fiscus*.

2.5. Under the DWI, between the period of June 2013 and September 2013:

2.5.1. cannabis accounted for approximately 99% (ninety-nine percent) of all drugs confiscated in Gauteng (in terms of weight); and

2.5.2. the overwhelming majority of arrests occurred in the poorer areas, communities or clusters of South Africa.

2.6. At less politically relevant times, police activity in respect of drugs busts declines and dealers resume fighting for power and control over particular areas, to the dismay of the communities in which dealers are prevalent.

2.7. On average, one dealer is arrested for every 36 users arrested, which is indicative of the true effect of prohibition on society. It is nonsensical for users to be targeted, rather than dealers.

The cost of the "*war on drugs*"

2.8. Departments set aside a budget for substance abuse related matters and it is estimated that the Western Cape (and in all likelihood, similarly, Gauteng) spend in excess of R85 (eighty-five million Rand) million a year in this regard.

2.9. Statistically, with a 9% (nine percent) conviction rate in respect of drug-related arrests and the costs of keeping a prisoner in prison being R9,876.35 (nine thousand, eight hundred and seventy-six Rand and thirteen cents) per month (in 2013 terms), it costs the taxpayer R490,657,068.00 (four hundred and ninety million, six hundred and fifty-seven thousand, sixty-eight rand) per year, assuming that the average convict is sentenced to 2 (two) years in prison. The aforesaid cost is in respect of Gauteng only. An increase in conviction rates would, accordingly, see an increase in the liability to tax payers, which must

be viewed adjacent to the value of drugs seized (which is ordinarily a significantly small percentage of the aforesaid amount paid by taxpayers).

2.10. In the 2014/2015 year, the immediate costs of arresting dealers totalled R11,972,946.00 (eleven million, nine hundred and seventy-two thousand, nine hundred and forty-six Rand) and for all other drug users, totalled R158,334,354.00 (one hundred and fifty-eight million, three hundred and thirty-four thousand, three hundred and fifty-four Rand).

2.11. The immediate costs to arrest, keep in cells, investigate and let go 242,881 (two hundred and forty-two thousand, eight hundred and eighty-one) people arrested for possession and dealing, and to convict 24,021 (twenty-four thousand and twenty-one) of the people that were arrested for dealing or possession, amounts to approximately to R429,187,064.00 (four hundred and twenty-nine million, one hundred and eighty-seven thousand, sixty four Rand).

2.12. The total cost of the "*war against dagga*" specifically, in 2014/2015 was approximately R3.5 billion (three and a hald billion Rand), whilst total annual sales of dagga only amounted to approximately R1.1 billion (one-point-one billion Rand).

2.13. Enforcement-led policy offers stunningly poor value for money, being hugely expensive and creating further costs to society. The money spent imprisoning individuals convicted for drug-related offences could be spent building 5,255 (five thousand, two hundred and fifty-five) Reconstruction and Development Programme ("*RDP*") homes, which could house 15,000 (fifteen thousand) people. Only the VAT on cannabis sales (of R1.1 billion) could be used for university fees to educate 4,100 (four thousand, one hundred) social workers, as another pertinent example.

2.14. The government and media advance that prohibition reduces availability. However, where high demand exists alongside prohibition, a criminal profit opportunity is inevitably created: as criminal drug production is interrupted, the price of drugs rises and the market for drugs becomes more attractive for producers and sellers to enter it.

2.15. Simply put, arresting dealers and confiscating drugs merely funnels business elsewhere.

The failure of South Africa's drug policy

2.16. Drug policies ought to be judged on outcomes, not on inputs or process indicators. Superficial tweaks to policy, at best, marginally reduces the harms created by the policy in the first place and are more likely to cost government and taxpayers money for no benefits.

2.17. Drug addicts are no different to alcohol or gambling addicts, except for the fact that their choice of substance is, at present, illegal. It must be borne in mind that the addiction, rather than the substance, is the problem.

2.18. Prohibition has failed and has achieved the opposite of its goals, historically in South Africa, where it abdicates control of potentially dangerous substances to violent organised criminal networks and unregulated dealers.

2.19. Prohibition is organised crime's biggest source of income, which continues to grow despite enforcement efforts and billions of Rands spent on the "*war on drugs*" over a number of decades.

2.20. Legally regulating and controlling illegal drugs would collapse illegal markets and result in drug smugglers and dealers being left out of business.

2.21. South Africa's present drug policy supports:

2.21.1. mass criminalisation of young and vulnerable citizens; and

2.21.2. using criminal justice enforcement to deal with complex social and public health problems.

2.22. More countries are legalising and regulating the drug industry, in particular cannabis, and are, thereby, taking back control, from organised crime, and making money from the industry, for example, through taxes.

2.23. While legalising all drugs immediately may be anarchic in South Africa, legalising, or decriminalising, and regulating cannabis would make fiscal sense.

2.24. South Africa's prohibition of cannabis in 1870 was inherently racist, applying only to one population group and, before being rolled out to other population groups in 1928, when it was found to "*make mine workers lazy*".

2.25. The continued prohibition of cannabis perpetuates a blatantly racist and out-dated law, which had nothing to do with science, and more to do with control.

2.26. Cannabis is not a gateway drug. Conversely, factors which do play a role in, or act as, "*gateways*" to hard drug use include:

2.26.1. poverty and poor social environments;

2.26.2. association with people who use hard drugs;

2.26.3. certain mental illnesses, such as antisocial personality and bipolar disorder, which predispose some people to use drugs; and

2.26.4. criminalization and prohibition.

2.27. The legalization of cannabis will not significantly impact the number of people using it and will mean that its use and sale can be controlled. So too can its medical benefits be studied, developed and applied. In addition, its sale can be taxed and the legal frameworks in place to control it would result in job creation.

2.28. In the expert's experience, persons with drug abuse problems, or problems with cannabis, have seldom, if ever, been meaningfully assisted through the implementation of South Africa's prohibitive drug policies, or through being arrested and detained.

2.29. In the expert's opinion, and experience, rehabilitation and education is far more effective in ameliorating the harms associated with drug and cannabis use or abuse than criminalisation is.

Conclusions

2.30. Given, *inter alia*, all of the above, the expert will say that:

2.30.1. Moralistic and prohibitionist viewpoints no longer make sense and are no longer working, nor have they ever worked.

2.30.2. The prohibition of cannabis stigmatizes and criminalizes a massive section of South Africa's population, simply for believing differently to those who support its prohibition.

2.30.3. The manner in which the use and possession of drugs (and cannabis) is controlled is a matter of opinion and, accordingly, the policy implemented in pursuance of same ought to be rational, proportional and non-arbitrary.

2.30.4. Crime and the eradication thereof is fuelled by political undertones.

2.30.5. Drug seizures have no impact on the overall supply of drugs, which are cheaper and more available than ever.

2.30.6. Stricter laws will not stop drug use in South Africa.

2.30.7. The legalization of cannabis is the only rational and logical step forward.

Dated and signed at Melrose Arch on the 30th day of September 2016.

SCHINDLERS ATTORNEYS
Attorneys for the Plaintiffs
2nd Floor, 3 Melrose Boulevard
Melrose Arch
Tel: (011) 448 9600
Fax: (011) 448 9620

Ref: Mr Crespi/PK/G10194

C/O FRIEDLAND HART SOLOMON & NICOLSON ATTORNEYS

Suite 301, Block 4

Monument Office Park

Pretoria

Docex 11, Pretoria

Tel: (012) 424 0200

Fax: (012) 424 0207

Ref: T Van Straaten/318191

TO: THE REGISTRAR OF THE ABOVE HONOURABLE COURT

PRETORIA

AND TO: **THE STATE ATTORNEY**

Attorneys for First to Seventh Defendants

SALU Building

316 Thabo Sehume Street

Pretoria

E-mail: mmasenamela@justice.gov.za

Ref: 7510/2011/Z4

Received on this ____ day of _____ **2016**

_____

FOR: ATTORNEYS FOR FIRST TO SEVENTH DEFENDANTS

AND TO: **SANDI ARCHARY & COMPANY**

Attorneys for the Eighth Defendant

4th Floor, Carlton Centre

150 Commissioner Street,

Johannesburg, 2000

Per Email: sandiarchary@telkomsa.net

C/O The Law Clinic

University of Pretoria

1107 South Street

Hatfield, Pretoria

Ref: Soretha Venter

Received on this ____ day of _____ **2016**

_____

FOR: ATTORNEYS FOR EIGHTH DEFENDANT

"A"

Quintin van Kerken

DRUG & ADDICTION EXPERT

+ CONTACT

Address 40 Boland Road
Sonnedal
HONEYDEW
2179

Telephone 011 083 7607 | 081 577 7715

Email quintin@antidrugalliance.com

Nationality South African

Date of birth 19 July 1976

Gender Male

+ EXPERIENCE

FOUNDER & CEO AT ANTI DRUG ALLIANCE SA

(10 YEARS)

Oversee day to day operations of the organisation, including:

Operation of urinalysis drug testing unit;

Direct communication with corporate clients in regards to drug testing and substance policy management;

Expert witness at disciplinary hearings regarding substance misuse;

Opreation of the Clear Option Program (an addiction recovery program), liaising with various regional directors (Johannesburg, Durban, Cape Town) as well as overseeing performance management;

Overseeing in-house research into drug and addiction trends and ensuring that the results are published into the public domain;

Liaising with media and appearing on televison, radio or being interviewed for newspapers regarding drug and addiction related matters on an ad-hoc basis;

Ensuring that the organisation is up to date and alligned with international best practice with regards to drug policy;

Educating the public regarding drugs and addiction on a number of platforms such as school talks, information evenings and via social media;

Setting up and implementing of substance abuse policies in various businesses, schools etc.

+ EDUCATION (INDUSTRY SPECIFIC)

BASIC DRUG RECOGNITION SKILLS **2008 – INSTITUTE OF ADDICTION RECOVERY COACHING AND THERAPY**

BASIC, INTERMEDIARY AND ADVANCED ADDICTION RECOVERY COACHING **2008 TO 2011 - INSTITUTE OF ADDICTION RECOVERY COACHING AND THERAPY**

DRUG TESTING **URINALYSIS DRUG TESTING - 2010 – SIEMENS HEALTHCARE**

+ LANGUAGES

Mother tongue	**English**
Other languages	**Afrikaans**
	(as a second language, fluent).

+ OTHER SKILLS

Motivational Speaking	**Spoken at many schools, universities, events etc.**
Research	**Have worked on research project with UNODC, currently in process of finalising research project for Gauteng Provincial Government, and constantly researching drug and addiction trends in South Africa.**
Activism	**Author / co-author of numerous documents on drugs and addiction**
Film	**Collaborated / featured in drug documentaries. Currently producing a documentary on the harms & benefits of cannabis & psychedelics in South Africa.**

+ PROFESSIONAL HIGHLIGHTS

Have appeared as an expert on investigative journalism shows such as Carte Blanche and Special Assignment.

Outspoken about the need for better drug laws.

+ OTHER SKILLS AND HOBBIES

Photography
Design
Video editing

"B"

At what cost?

The futility of the war on drugs in South Africa

Quintin van Kerken, Anti Drug Alliance SA

At what cost?

The futility of the war on drugs in South Africa

Introduction

In February 2011, an article by Dr. JP van Niekerk in the South African Medical Journal spoke of the legalisation of drugs.

Dr. Van Niekerk wrote:

"The war on drugs has failed! Humans have always taken psychoactive substances and prohibition has never kept them from doing so. The international evidence suggests that drug policy has very limited impact on the overall level of drug use. Making people criminals for taking psychoactive substances is in itself criminal, for one is dealing with, at worst, a vice but not a crime." (February 2011, Vol. 101, No. 2 SAMJ, Page 2)

The article hit a nerve. Up until that stage, legalisation had only been spoken of by fringe groups, and their argument always took the religious (Rastafarianism) approach, or was an uneducated and biased approach to legalisation.

This was one of the first articles of its kind by a well-respected, well-known and well educated South African gentleman, who spoke from a completely scientific point of view.

However, my position as Chief Executive Officer of the Anti Drug Alliance of South Africa made it difficult to accept the article. After all, we (the Anti Drug Alliance) took a firm stand against drugs and addiction, and the name of the organisation clearly spelt out our purpose.

Yet it was the science behind the thought process that made sense. Years of fighting drugs seemed to have been (almost) pointless and futile. Suddenly, morals and deeply entrenched beliefs were no longer relevant. The war on drugs is the real enemy, and people fighting addiction are its victim.

I would like the reader to understand something. I do not use drugs, nor do I currently wish to. I was in active addiction for ten years of my life, and have spent nearly an equal amount of time in sobriety since then, fighting the effects of drugs and addiction in our country. Taking the legalisation stand was not just something that was just decided one day. It took months of intensive research, and many long hours arguing with myself, colleagues, friends and family.

After many long hours of debate, we decided that the organisation would take the official stance of legalisation.

This report sets out to show the cost of the war on drugs in South Africa.

We have ensured that the figures are correct, and most often taken the lowest (financial) figures to illustrate the point. What we have done is calculate the LOWEST possible amount the war on drugs costs our most populous and wealthiest province – Gauteng. We would have liked to investigate further, however, budget and time restraints did not allow for it.

We had endeavoured to use facts and figures that are readily available to the public.

To date, we have not received response from the government departments we contacted for facts and figures. SAPS, GCIS, Justice and Correctional Services, to name a few, simply never returned calls or emails.

All information we used is in the public domain, available via the internet on the various departments' websites, as well as via reports from major publications.

We would like to thank Danny Kushlick and his team at Transform Drug Policy Foundation in the UK for their invaluable input into this document.

What happens when the Police leave

Pic courtesy www.timeslive.co.za

Much has been said and done regarding drugs the last few months. It is a very emotional saga. A colleague recently noted that it was strange how the government "suddenly" got involved (with a sector that they had really pushed aside for some time) just before an election year.

Crime and the eradication thereof, is a major selling point for politicians. If they can show what an amazing job they have been doing cracking down on criminals, they garner votes.

With this said, it is clear that the media love drug busts. These busts make for wonderful headlines and public opinion of police and government soar when they see these headlines.

Mothers have written letters to the President, the press has been in a frenzy to cover the latest biggest bust. Radio, newspapers and television have focused on the scourge our country finds itself in.

Public-private partnerships with the Police have made for great headlines, lauding thousands of arrests and millions of Rands worth of confiscated drugs.

Communities such as Eldorado Park were thrust into the headlines and cameras were there to show the President making promises, and shortly after, to watch the Police arresting those that had fallen foul of the law with regards to drugs.

And then, the police left.

It is very much a case of back to business for dealers in many areas. What has happened is a power vacuum that was created when a lot of the dealers were arrested. New people take their place - with far less power than the bigger bosses in jail.

Before the police actively went into these areas big crime bosses kept the areas relatively peaceful (sic). The only crime allowed in those areas was the crime allowed by the bosses. What we see now in these areas are ongoing street battles which are literally fights over power and control of turf.

Now that the Police and media have made arrests and publicized it, they have moved out of those areas, and the reality of drugs and addiction has set back on the communities.

According to a media release (1) around the end of September 2013, roughly 23000 people have been arrested in the Drug Watch initiative with over R13 million worth of drugs having been confiscated.

A press release by Crime Line on the 29th of August also gave further information. (2)

The following tables show the recent breakdown of arrests per cluster:

Orlando	**1808**
Sebokeng	**1725**
Ga-Rankuwa	**1405**
Benoni	**1270**
Germiston	**969**
Moroka	**1278**
Temba	**1111**
Katlehong	**1088**
Tembisa	**1083**
Jo'burg Central	**1049**
Pretoria Central	**1031**
Honeydew	**944**
Brakpan	**784**
Sunnyside	**725**
Mamelodi	**706**
Springs	**447**
Hillbrow	**561**
Vereeniging	**584**
Carletonville	**512**
Krugersdorp	**455**
Alexandra	**299**
Bronkhorstspruit	**110**

The press release clearly claims 20068. A discrepancy of 124 arrests is clear. We put this down to a clerical error.

The following drugs have so far been confiscated in Gauteng since June 21 (up to 29 August as this is when these figures were published. *Please note all tables were copy/pasted directly from the website.*

Dagga	
Dagga Weight (Gram)	**1702758.918 (1.7 tons)**
Dagga Plants	**2296**
Other Drugs	
L S D (Units)	**113**
Crack (Grams)	**449.2**
Heroine (Tablets)	**1966**
Rocks (Grams)	**2794.01**
Crystal Meth(Tik-Tik) (Grams)	**1413.987**
T I K Pipes (Lollypops)	**79**
Whoonga (Grams)	**2**
*Khat (Grams)	**1468.471**
Thai White (Grams)	**27.405**
Rivotril (Tablets)	**366**
Nyaope (Grams)	**12997.847**
Hashish	**1**
Mandrax (1 Tablet)	**7919**
Mandrax (1/2 Tablet)	**346**
Mandrax (1/4 Tablet)	**113**
Ecstasy (Tablets)	**639**
Cocaine Powder (Grams)	**5022.119**
*Methcathinone (C A T) (Grams)	**888.558**

Khat vs CAT. We were unable to get clear answers from the Police as many are unaware that Khat is a plant and Cat is the street name for Methcathinone. The two are often confused.

Due to current legislation, we find it rather interesting that the Police are able to immediately identify these drugs and publish quantities etc. when it takes several months, if not longer, for forensic testing.

The following tables were taken from the Crime Line website (3)

Clarification

1. It must be made clear at the beginning that the intent behind initiatives such as Drug Watch must be applauded, and that this report does not wish to diminish or devalue these efforts into making our country a safer and better place to live. We fully agree that drugs are dangerous and must be controlled. How they are controlled is a matter of opinion, and we wish to bring our opinion to the public forum as well.

2. The aim of this report is not to berate or degrade the Police. We salute the men and women in blue for their tireless efforts in keeping us safe. Their job is to enforce the law, and as such they are only doing what the law tells them to do. We wish to highlight the futility of their actions with regards to current legislated drug enforcement.

3. This report sets out to highlight the unforeseen problems that have arisen due to operations such as "Drug Watch", and will set out to quantify the real cost of the war against drugs in our country, and more specifically Gauteng.

Statistically Speaking

Annually, the Anti Drug Alliance conducts a survey on drugs and addiction (See www.antidrugalliance.com to download this report).

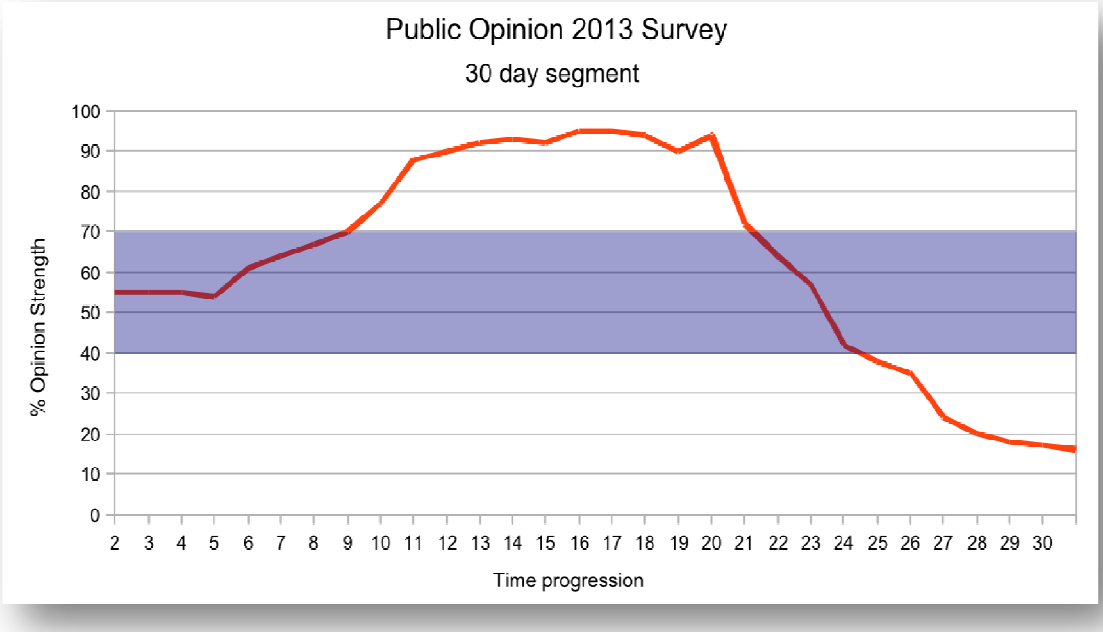
It was during a routine meeting looking over preliminary figures for the 2013 survey that certain anomalies were found. At first, it was thought that perhaps the data was being interpreted incorrectly. Then, we thought that perhaps wording in questioning may be ambiguous and caused confusion. Then we checked to see if perhaps it was an IT error. Days later it was very clear that the numbers were correct.

Operation Drug Watch was showing success in taking drug related offenders off the streets. Public approval of government and police was sky high – figures we had never seen before.

We quickly jumped in and started to conduct on the ground interviews with people in communities such as Eldorado Park. These interviews confirmed the figures.

Days later, these figures began to plummet. Lower and lower. In fact to some of the lowest points we have seen.

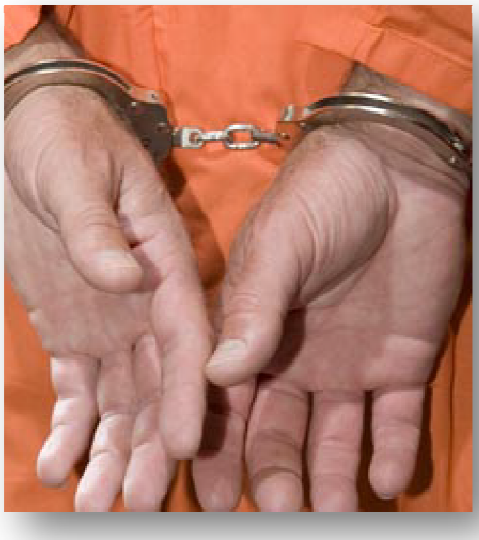
On a timeline graph it became blatantly obvious what was happening. As the drug related arrests were made, opinion ratings soared. As they returned, or were replaced, opinion showed a massive decline.



- *The blue bar represents the average range of opinion strength that our survey generally finds.*
- *The red line represents the fluctuations we saw over a 30 day period.*

We received innumerable emails and irate calls from members of the community, asking why the dealers were back on the streets. Corruption was the word most often used, and it took many hours of explaining to show that it was not corruption at all.

Offenders are back because, legally, they simply cannot be held.



Understanding the system

How is it that someone that has been arrested for drug related crimes is back on the street within days, if not hours, after arrest?

Let us look at the system. (*This is a simplified version of the chain of events, for ease of understanding*.)

1. Upon arrest, the person is taken to the Police Station to be processed.
2. Arrest reports are filled out, and the person is fingerprinted.
3. The drugs they were caught with are catalogued, weighed etc.
4. (Generally) the substance is named as an "Unknown Substance" because of the way our system works.
5. Samples of the "Unknown Substance" are sent for forensic testing to the SAPS Forensic Labs.
6. Depending on the day and time of day, the accused is most often held in custody until their court appearance (most often the following morning).
7. Before court, at the police station, the docket is then assigned to an investigating officer. It will be his responsibility to ensure the case is properly investigated, and to make sure that all evidence such as the forensic test results, are put into the docket.
8. The docket is then taken to court for the initial hearing.
9. At this hearing, it is quickly established if the person qualifies for bail or not. Due to our very powerful constitution, only a few provisos need to be met and bail is most often granted. (This type of offence is currently seen as a Schedule 1 offence.)
10. The case is postponed for "further investigation" and to wait for forensic reports.
11. The accused pays bail and goes home, until his next court appearance. Should the person not be able to afford bail, they are remanded until their next appearance.

The Anti Drug Alliance has tracked 12 random drug related cases* for several months. We chose cases simply by going to court, listening to who was arrested for possession, and returning on the dates laid down for those cases, and tracking the proceedings and outcomes.

We chose 3 courts in three different magisterial districts.

Out of the 12 cases we tracked, 3 accused had previous convictions for drug-related offences. These were the only cases where penalties were handed down.

The other 9 cases were all first offences. Of these 9:

- 5 were struck off the roll after an average of four months of postponements, as the forensic reports were either lost or not ready yet;
- 1 plead guilty on their first appearance and was given an admission of guilt fine and sent away with a “stern warning”;
- 2 accused were untraceable, and had absconded;
- 1 accused requested help in the form of rehabilitation and was sent to rehabilitation, with the file being held over until the treatment was completed. On completion the case was struck off the roll.

(*This was prior to the Drug Watch campaign being launched in Gauteng.)

Subsequently, over 23000 (twenty three thousand) arrests have been made (as of 26 September 2013).

In the following section let us look at the cost of these arrests.

Police and Government spend with direct regard to the war on drugs

We were unable to get a response from most departments on this question.

According to the National Drug Master Plan, departments set aside a budget for substance abuse related matters. Many letters, phone calls and emails never gave us concrete information, but did give us an indication.

We estimated that if the Western Cape spends in excess of R85 million a year, we can extrapolate that Gauteng's budget would be similar, if not larger.

Cost of detention

It costs R329.21 per day to keep a prisoner in prison (R9876.35 per month). (4)

Recent reports show that we currently have about a 9% conviction rate. (5)

The SA Law Commission Report gives us further indication. (6) (7)

Upon contacting the NPA, the Anti Drug Alliance was told that "It is difficult to quantify conviction vs. arrest rates, as it is a complex matter," by a high ranking NPA official who refused to be named in this report.

For the purposes of this report, and in order to begin to quantify the cost of the war against drugs, we felt that the statistics given in a report in the Mail & Guardian (8) would be used, as they give us an average compared to a Law Commission report as well.

Taking this into account, it would mean that of the 23000 arrests, we would see 6900 going to court; and hence 2070 convictions – a conviction rate of just 9%.

The criminal offences act stipulates various sentences for drug related crimes, from 2 years for simple possession up to the maximum of 25 years for serious cases.

Let us hypothesise that the average person of the 2070 we spoke about above was given 2 years.

That would cost the taxpayer **R490 657 068** (or **R245 328 534** per year).

AND THESE ARE JUST THE FIGURES FOR *GAUTENG*.

Cost of Man Hours

We extrapolated costs by working out how many hours were spent on each case, by how many people. We worked out hourly rates by working out the average hourly rate of each person in each position that deals with the case earns. (9) (10) (11) (12) (13)

Let us begin by looking at who would be directly involved in the arrest of someone for simple possession, and the process thereafter.

1. The arresting officer;
2. The Investigating Officer;
3. The officer taking fingerprints;
4. Officer in charge of the holding cells;
5. The Prosecutor;
6. The Translator;
7. The Bailiff;
8. The Magistrate;
9. Lawyer / Legal Aid;

Should we ONLY take the above people into account, figures begin to climb dramatically. *(We were unable to get the exact number of police personnel directly involved in the various "Drug Watch" operations.)*

For illustrative purposes, and to ensure a reasonable figure, we will only include man hours for the arresting officer, investigating officer, the holding cell officer, the prosecutor and the magistrate. (i)

An arrest, including booking the suspect in takes approximately 2 hours.

The amount of time investigating a case is subjective; however let us say that the investigating officer spends 12 hours tracking and tracing forensic results, interviewing the suspect and possible witnesses to the case, and appearing in court.

The amount of time the actual court proceeding take is also subjective, however, let us say that an initial appearance takes 15 minutes, subsequent appearances (due to postponements) also 15 minutes each (with a total of 3 postponements waiting for forensics and further information, and the trial (should there be one) 4 hours in total.

Cost of arrest, processing and conviction

Cost of arresting 23000 suspects – R2 048 380

Cost of detaining 23000 suspects overnight in police cells in man hours – R8 193 520

Cost of investigating 23000 suspects – R15 414 600

Cost of court proceedings for 23000 suspects – R 9 417 580

Cost of trial of 2070 (using conviction rate of 9%) suspects – R3 390 329

Total R38 464 469 (at this stage it is important to take into consideration that only R13 000 000 worth of drugs was seized.)

Should we include the amount to incarcerate 2070 offenders (9% conviction rate of 23000 arrests) for 1 year - R245 328 534.

We reach a grand total of R283 793 003.

Should we begin to increase the conviction rate these are the figures -

18% - R567 586 006 per annum

36% - R1 135 172 012 per annum

50% - R1 576 627 794 per annum

Please refer to ii – v in Reference section for breakdown of costs

ONCE AGAIN, THESE ARE JUST THE FIGURES FOR *GAUTENG*.

R283793003

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OR

Based on only 3 people per household.

What are the answers?

It is clear the prohibitionist way of thinking South Africa currently holds, is simply not working. If it were, there would be no drugs on our streets, all the dealers would be in jail, and there would be no recreational users of drugs, and no addicts.

Enforcement-led policy offers stunningly poor value for money – it is hugely expensive and creates further costs to society.

The government and media love telling us that "prohibition reduces availability". We constantly hear this argument from politicians and those backing the so-called war against drugs in South Africa. The goal of reducing the availability of drugs remains a key goal in our national drug strategy, and indeed of the entire UN international drug control apparatus, costing billions in government spending each year.

The simplistic rationale for this strategy is that if drug supply can be stopped then no one will take drugs and the drug problem will disappear.

We live in a society of supply and demand. Dealers are simply supplying a demand. Trying to eradicate them from the equation makes no sense. If we had to put it into simple terms, should there be two supermarkets in the same road, and one is closed down, the public will now flock to the one that is open. Close that one and the people will look for another that is open elsewhere.

Simply put, where high demand exists alongside prohibition, a criminal profit opportunity is inevitably created. Attempts to interrupt criminal drug production and supply are doomed as the effect (if successful – which they very rarely are) will be rising prices; this then makes the market more attractive for new producers and sellers to enter – which they always do. No matter how many dealers we arrest or smuggling networks we 'smash', the void is always filled by the queue of willing replacements, hungry for the extraordinary profits prohibition offers them.

Arresting dealers and confiscating drugs simply funnels business elsewhere. It does not stop the supply of drugs; it simply slows the flow down. We have to realise that addiction is a health problem, and that not all drug users are drug addicts. There are porn addicts, gambling addicts, prescription medication addicts, even food and alcohol addicts. The aforementioned addictions can be just as (if not more) detrimental to a family and addict.

We have heard recently that the Gauteng legislature wants to change possession of drugs from a Schedule 1 to a Schedule 6 offence.

Policy must be judged on outcomes, not inputs or process indicators.

Will this change in scheduling make any difference to the bigger picture on supply, availability, or problematic use? The problems with prohibition are fundamental and cannot be solved with superficial tweaks to policy which, at best, will marginally reduce the harms created by the policy in the first place, and more likely will cost government and taxpayers more money for no benefits.

We cannot measure the Police's success on completely meaningless indicators such as 'volume of drug seizures is up', 'number of dealers jailed has increased', 'we have 'smashed' record numbers of drug gangs' etc.

These are measures that reflect the level of expenditure on enforcement and the size of the illegal market. They rarely, if ever, translate into the policy outputs that prohibition is striving for – i.e. reduced drug production, supply, availability or use (let alone reduced harm). They sound great in the media; catching dealers, intercepting drug shipments etc – but it gives the misleading impression of success when in reality the opposite is true.

These are not meaningful indicators of the bigger picture. We look at the quantities of drugs seized that have been touted by the Police and spoken of in this report. These seizures have no impact on overall supply, and if we are honest with ourselves, drugs are cheaper and more available than ever. Higher DEMAND means more dealers, which equates to lower prices.

The Police simply cannot prove that every single person they arrested during these operations were dealers. Taking this one step further, that would mean that they are now criminalising someone with a health issue, and that suddenly becomes a human rights issue.

The problem is that we are fighting a lost war against drugs and not combating the actual problems – society has changed rapidly and the substance is no longer the problem, addiction is.

It is untrue to say that everyone that consumes drugs is an addict. If that were the case then we could easily say that any person who consumes alcohol is an alcoholic, and that anyone that goes to a casino is a gambling addict.

Another fact that we do not know is that how many people actually consume drugs versus how many are addicts. Using the alcohol industry as an example, we could extrapolate that only a small percentage of people that drink become alcoholics. The same rings true for the gaming (gambling) industry and even people that watch porn.

Does that mean that people do not lose everything due to gambling addiction? Not in the least. The industry is very well regulated. Does regulation mean that a few underage people still do not manage to sneak into casinos and gamble? Not in the least.

There will always be the exception to the rule. There will always be underage drinkers, even if the sign says no person under the age of 18. There will always be cigarette smokers, even if the warning tells us that smoking may cause cancer.

What we are saying is that the only realistic way to look at drugs these days is by changing firstly our mindset, and then legislation. Drug addicts are no different to alcohol or gambling addicts, except for the fact that their choice of substance is (currently) illegal.

The moralistic and prohibitionist viewpoints simply no longer make sense, and are no longer working. If they were, drug busts would never make headlines, as drugs would simply not be available or allowed.

Recently, high ranking police officials in the United Kingdom have agreed that the so called war on drugs is a failure in that country. (14)

Prohibition has thus far failed us, has it not?

Politicians and police are using the words "tough on crime" a lot these days. Prohibition has historically achieved the exact opposite of its stated goals.

- Drug prohibition is not tough on crime – it is manna from heaven for organised criminals, just as it was for the Mafia during alcohol prohibition.
- Prohibition is 'a gangster's charter' - abdicating control of a multi billion Rand market in dangerous substances to violent organised criminal networks and unregulated dealers.
- It is organised crime's single biggest source of income, and continues to grow despite the huge enforcement efforts and hundreds of billions spent on the drug war over a number of decades.
- Legally regulating and controlling currently illegal drugs would collapse the illegal markets and get the drug smugglers and dealers out of this business. If we want to really get tough on the drug dealing gangsters let's take away their biggest source of revenue and try to collapse the illegal drug business for good.

Current drug policy sends out an extremely confused message; one that supports:

- Mass criminalisation of the young and vulnerable;
- Policies that maximise drug harms such as drug deaths, overdoses and blood borne disease transmission;
- ignoring the decades of evidence that shows the policy is a counterproductive failure;
- using the blunt tool of criminal justice enforcement to deal with complex social and public health problems;
- Commercial promotion of dangerous legal drugs.

Arguing that drugs are morally reprehensible simply because of their effects on someone is a moot point, if we look at the alcohol and tobacco industries. Factually, the amount deaths attributed to drugs are a proverbial drop in the ocean when we take the amount of deaths that are attributed to the alcohol, pharmaceutical and tobacco industries. It is a fact that even caffeine is more physically addictive than marijuana (dagga), yet it's legal and socially acceptable to drink coffee or smoke tobacco or have a glass of wine.

Using criminal law to send out messages about public health or private morality is a bizarre strategy that has been, by any measure, a complete disaster. We do not imprison people for having unsafe sex, or other consenting adult risk taking behaviours such as dangerous sports, or for that matter, legal drug use. Homosexuality was legalised when the unacceptable injustice of imposing private morality with criminal law was exposed.

We simply cannot afford the war on drugs.

Looking at the figures in this report, we can extrapolate that the war is costing South Africa billions of Rand each year.

Internationally, more and more countries are legalising and regulating the (drug) industry. By doing so, they are taking the control back from organised crime, and making tax money from the industry. (15) (16) (17) (18) (19).

It would be silly to expect South Africa to simply legalise everything tomorrow. It would be anarchy.

An extremely valid argument is that drugs are dangerous and must be controlled.

We fully agree that this is right. However, the drug war concept of 'controlled drugs' is an absurdity, because prohibition has abdicated all control of drugs to gangsters. Control of drugs under prohibition is demonstrably impossible. In reality it leads to a complete lack of control and creates criminal anarchy.

Real control means taking the markets back from criminal networks and bringing them within the government sphere, where drug production, supply and use can be regulated, as strictly as is deemed appropriate for each drug in any given locale.

It is precisely because drugs are dangerous that they need to be regulated and controlled. Drugs are too dangerous to be left in the hands of criminals. The more dangerous a drug is, the more important that it is properly controlled by the government. Drugs are made even more dangerous when produced and supplied through illegal channels.

What we are saying is that let us look at the reality we find ourselves in, and realise that making laws harsher is simply not the answer. Let us be realistic and see that it would simply make no sense to legalise a drug like crystal meth, yet looking at regulating the cannabis (dagga) industry would make fiscal sense.

By applying fair trade practices, correctly regulating the industry, and applying the correct taxes, cannabis, for example, could become a major contributor to the economy.

Just as it is our choice not to buy cigarettes or alcohol, it is our choice not to buy something like cannabis.

Will regulation mean that there will be no addicts or corruption in the industry? The simple answer is no, but it will mean that there is a chain of distribution, just like cigarettes for example, and a framework to work within which is legal and ensures that those that need help can get it without fear of criminalisation, and that we can use that tax money to buy textbooks and stock hospitals with medicines, for example.

We have to use words like harm reduction.

Currently, the unregulated industry means that we cannot reduce harm due to a variety of factors. We cannot promise that the drug is pure, we cannot ensure that is has been grown according to regulated and acceptable standards, and we cannot even scientifically study what the effects actually are because it is illegal to do so.

The reality is that we simply cannot ignore that regulating (or legalising or decriminalising) the drug industry is an avenue that we simply have to explore.

How to move forward

South Africa has a massive cultural, religious and racial diversity, each with its own belief system and ways. It would be unreasonable to expect no resistance to this concept. Honestly, it does not *sound* right. And yet, more and more people, and even major religious institutions are seeing that perhaps legalisation is the key to solving the problem of a pointless drug war.

The Church of England Social Responsibility Board, in a written submission to the United Kingdom Home Affairs Select Committee, wrote,

"We support the ... inquiry's recommendations that "the possession of cannabis should not be an imprisonable offence." We also wish to support some of the cogent argument of Peter Lilley MP...where he says that inebriation is regarded as a sin because it can lead to more serious wrongdoing. Alcohol inebriation has long been associated with violence in some cases, and it is possible that cannabis abuse could sometimes have harmful effects. ***However that is a matter for personal responsibility, guided by moral imperatives. Abuse, which is a sin, is not necessarily a crime****."*

It is blatantly clear that legalisation and regulation is the only real way forward.

How can we justify spending billions on fighting something we will never win? Even with all the busts, all the arrests, all the negative media coverage, it still carries on.

The Anti Drug Alliance has seen year-on-year increases in drug use. This year is no different. Even with all the anti-drug operations, marijuana use is up, as well as drugs such as crystal meth and Cat.

We need to:

- ✓ Begin dialogue.
- ✓ Begin looking at fiscal benefits and harm reduction.
- ✓ Realise that the religious and moral concepts we hold dear will be tested.
- ✓ Realise that simply because the law says we cannot do something, it does not mean that we will not do it.

In Conclusion

South Africa was the first country to make marijuana illegal in 1870. Right from the beginning the law was inherently racist, applying only to only one population group, and then was rolled out to other population groups when in 1928, it was found "to make mine workers lazy". (20)

Our government claims to have the most progressive constitution in the world, and yet still perpetuates the blatant racism of an old, archaic and outdated law, which had nothing to do with science, but more to do with control. Because of this prohibitionist outlook, we now stigmatize and criminalize a massive section of our population for simply believing differently.

We stand at the precipice of a massive decision in this country. As South Africans, we see the damage of drugs highlighted and sensationalized in the media, and cannot help but to demand something be done.

However, we see drugs *highlighted and sensationalized*. It is time we reset our misdirected moral and prohibitionist compasses and see that we simply cannot go on like this anymore. Financially we cannot afford the billions it is costing.

Change needs to happen, because what we are doing is simply not working. Across the world, this process (of change) is underway on many levels:

- Personal use of drugs is widely (de facto) decriminalized in much of Western Europe, Russia, and regions of Canada, Australia and South America.
- Supervised injecting rooms (and drug smoking rooms) have been established in Vancouver, Sydney, and across Europe.
- Heroin and other drugs, including stimulants, are available through medical prescription, to long term problem users in a number of countries including the UK, Canada, Australia, Switzerland and Germany.
- Cannabis cultivation is decriminalized in some countries/regions and licensed sales are allowed in Holland.
- There is a global trend away from harsh, costly and ineffective enforcement, towards a greater emphasis on treatment, harm reduction and approaching problem drug use primarily as a public health issue.

These changes are chipping away at the monolith of prohibition in many different places. At one end, we can expect an expansion of medical maintenance prescribing of opiates, and some stimulants (possibly including cocaine); at the other end, moves towards the decriminalization and eventual legalization and regulation of cannabis and other comparatively low risk drugs (simultaneously we are witnessing tightening of regulation of alcohol and tobacco).

Different countries are moving at different paces and information from those experiences will feed into the body of knowledge about what works best for different drugs in different environments. It is time we realized that no amount of arrests, no amount of baseless prohibitionist arguments, and no amount of stricter laws will stop drug use in South Africa. Legalization is the only rational and logical step forward.

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i. For the purpose of this report we will say that the arresting officer and holding cell officer are both a sergeant with a mid range pay grade of R138 963 per year, the investigating officer a warrant officer earning R174 264 per year, and that both the magistrate and prosecutor are mid-range on their respective pay grades i.e. R671 219 per year and R180 594 per year.

ii. A sergeant earns R44.53 per hour (annual salary / 12 months / 21.67 working days / 12 hour shift)

iii. A warrant officer earns R55.85 per hour.

iv. A prosecutor earns R86.81 per hour (annual salary / 12 months / 21.67 working days / 8 hour shift)

v. A magistrate earns R322.65 per hour

We would like to thank the Transform Drug Policy Foundation UK for their support and the use of so many tools they provided us with.

"C"

At what cost 2.0

All Rands and No Sense

A frank look at the dangers of dagga use, by Quintin van Kerken of the Anti Drug Alliance of South Africa.

Introduction

By Quintin van Kerken
Chief Executive Officer
Anti Drug Alliance South Africa

Around two years ago, I sat down with the team and began to put all the data together for what turned out to be called “At What Cost?”, a report about what the “war against drugs” (or more specifically dagga) is costing South Africa.

What the report showed was that hundreds of millions of rands are (in my opinion, and that of many South Africans as well) wasted annually fighting a war not against dagga, but against people.

The floodgates of communications were smashed open when the report was published. Our organisation received an unbelievable amount of communications. Many telephone calls were made to us “just to say thank you”, whilst others called or wrote in just to argue. There were the few extremists that took things overboard and offered death threats, and yet on the other side of the coin, we received a few very entertaining emails from some rather interesting people as well, offering their “5 cents” of opinion.

We believe the greatest thing that came from the report was dialogue. It felt if the report was a catalyst of sorts, a small match that ignited a runaway fire of people talking.

I recall many instances of overhearing conversations in coffee shops where people were openly debating the legality of cannabis; I spent many long hours on the telephone explaining the report over and over to journalists and role players, and many late evenings responding to emails from South Africans questioning my sanity or reasoning.

Just on two years down the line, the landscape has changed somewhat. We have a number of legalisation / decriminalisation movements happening.

The Medical Innovation Bill seeks to see cannabis regulated for use by people with diseases that choose not to use conventional medications. As I write this document, Jeremy Acton will soon be challenging the constitutionality of the laws governing cannabis in the Western cape High Court, shortly followed by the Dagga Couple's case in a few month's time. These are two cases that are gaining massive media coverage and momentum, including the attention of a public that is beginning to question whether cannabis is the evil plant many make it out to be, or a plant that is really just and age old “medicine” that may hold the cure to many diseases.

It really boils down to two schools of thought. Firstly the prohibitionists who seek to keep the plant banned, and secondly the anti-prohibitionists, who seek to see the plant legalised / decriminalised (either for medicinal or recreational use or both).

We live in a sickly dualistic country. On one hand we saw pictures of parliamentarians standing up and applauding the late Mario Ambrosini for taking the stand and proposing the Medical Innovation Bill, and yet we constantly see pictures of several policemen triumphantly standing around a man that has been caught with a bag of cannabis.

“At What Cost 2.0 – All Rands And No Sense”, follows up on the original “At What Cost?” Report, and besides asking some pertinent questions, this report makes some important points.

The Anti Drug Alliance likes to look at harm reduction. As will be explained in this report, we believe that more harm comes from keeping the plant illegal than does from legalising it.

We do not wish to attack or defend any specific group, person or entities. Instead, we wish to take an unbiased look at prohibition in South Africa, and see whether the current laws are effective or need to be re-looked and whether spending billions of taxpayer money arresting and jailing dagga users is worth it all or not.

Statistically Speaking

We'd like you, the reader, to keep the following number in mind:

266902

According to latest crime statistics in South Africa (http://www.crimestatssa.com/national.php) that is the number of arrests that were made for "drug related crimes" in the reporting year 2014 – 2015.

It is unfortunate that the actual breakdown of these figures is somewhat harder to get. By somewhat harder, we mean practically impossible. Hence, we will use what we have at our disposal, that is the Government Central Information System (GCIS) and figures from credible sources which we have been able to obtain. We'll list these sources at the end of this document.

One particular page on the GCIS gave us much food for thought, as it supplied some very interesting figures which have allowed us to extrapolate very useful information.

We advise you to read the page (http://www.gcis.gov.za/newsroom/media-releases/media-briefing-operation-fiela-inter-ministerial-committee-migration). The page is speaking about arrests made by Operation Fiela in July 2015. The arrest figures that stood out to us were:

- Number of arrests for possession 585
- Number of arrests for dealing 16

These arrests were made over two days 30 and 31 July 2015. The aforementioned numbers speak volumes with regards to how Police operate. The ratio of dealer to user arrests is 1:36

ON AVERAGE, ONE DEALER IS ARRESTED FOR EVERY 36 USERS ARRESTED.

Based on the above numbers, it is very clear who the law targets. It is clearly not dealers, but users. This simply makes no sense on any level.

The figures give us more insight:

CONFISCATIONS

Drugs:	Cannabis / Dagga (grams)	60540
	Cannabis / Dagga Plants	94
	Cocaine powder (grams)	0.016
	Crack Cocaine / Rocks (grams)	32.02
	Crystal Meth TIK TIK(grams)	118.54
	Ecstasy (1 tablet)	76
	Ecstasy (½ tablet)	2
	Heroine Thai White (grams)	734
	Khat (grams)	35909
	Mandrax (1 tablet)	148
	Mandrax (½ tablet)	11
	Mandrax powder (grams)	1.5
	Nyaope (grams)	34
	Whoonga (grams)	3

Let's put that into easier to understand numbers:

Dagga:	60.54kg	(61%)
All other drugs:	37.07kg	(39%)

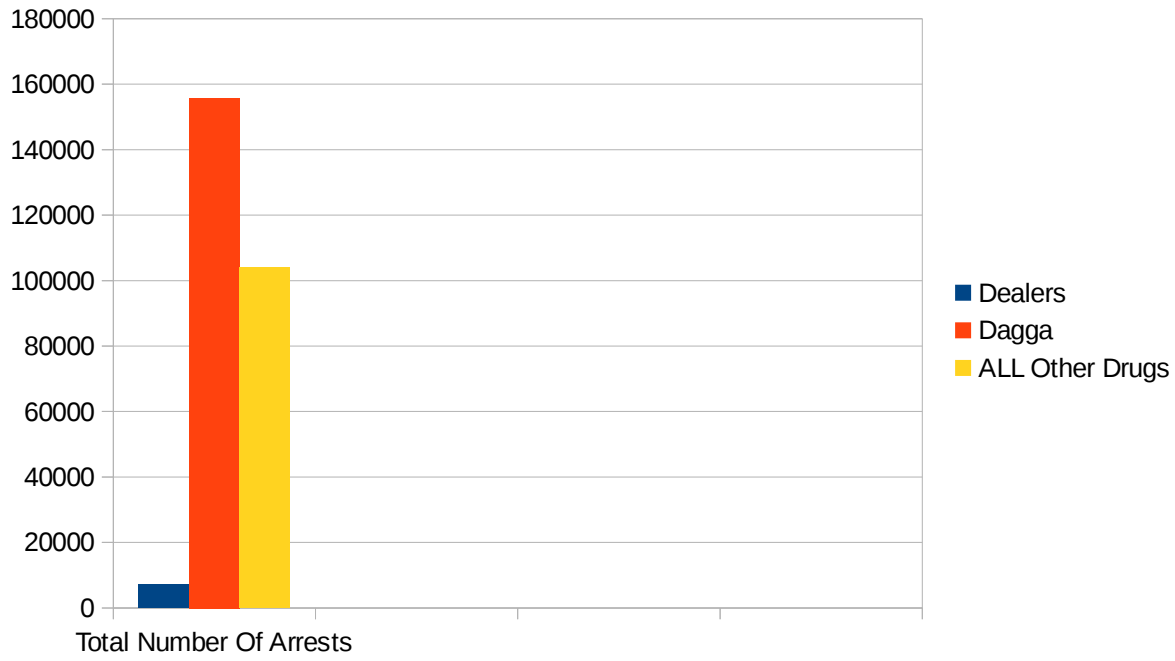
For ease of use for this report, we would like to use a general percentage split of 60/40. Dealing of drugs contributes roughly 2.7% of the total number of arrests.

Looking at operation Fiela's numbers and taking our numbers into consideration, we can see that we can possibly extrapolate that roughly 60% of all drug users arrested for possession are for dagga. (Arrest figures are confirmed at http://www.tnt.org.za/index.php/2012-06-29-07-13-09/item/120-should-sa-decriminalise-or-legalise-dagga)

Do you remember the figure 266902? Let us put what we have extrapolated from the figures above into easy to understand numbers.

- 7206 dealers arrested
- 155818 dagga users
- 103878 other drug users

This below graph illustrates the aforementioned figures.



Calculating the costs

We will use the same calculation methods that we used for "At What Cost?" and have decided, for the ease of use of this report, to use the exact same financial cost calculations. We will post all of the pages we used to work out figures at the end of this report, which are also noted in "At What Cost?". However that may be, we suggest you download "At What Cost" here - https://app.box.com/s/ro3rea65fvutqdn26b2k to see how we worked out the numbers.

This means that the financial amounts we will be quoting *will possibly be much lower than actual figures*, as they are amounts from old reports and sources that have been published, and are freely available on the internet.

What we know:

- It costs R329.21 a day to keep a prisoner behind bars – R9876.35 per month
- Current conviction rates in South Africa are about 9%
- It costs about R89 to arrest someone
- It costs R356 to keep someone overnight in the cells
- It costs about R671 to investigate someone arrested for possession
- It costs the state about R398 for court proceedings for a person arrested for possession
- It costs the state about R1638 to convict someone of possession
- You can get up to 2 years in prison for possession
- You can get up to 25 years in prison for serious drug crimes like dealing

Now that we have these figures, we can actually work out what the Drug War in South Africa (possibly) cost us in the 2014 / 2015 year that the figures were reported for.

Arrests for Dealers

We noted that we have seen an arrest rate of about 1 to 36 when it comes to dealers. That means of the 266902 arrests, (statistically speaking) 7206 dealers were arrested.

Immediate Costs	**R11 972 946**
Cost of arresting 7206 dealers	R641 334
Cost of keeping 7206 dealers in the cells overnight (once)	R2 565 336
Cost of investigating 7206 dealers	R4 835 226
Cost of court proceedings for 7206 dealers	R2 867 988
Cost of conviction (9%) (649)	R1 063 062
Long Term Costs	***R769 170 138***
Cost of keeping 649 dealers in prison for an average of 10 years	

Arrests for All Other Drug Users

Immediate Costs	**R158 334 354**
Cost of arresting 103878 for possession	R9 245 142

Cost of keeping 103878 users in the cells overnight (once)	R36 980 568
Cost of investigating 103878 users	R69 702 138
Cost of court proceedings for 103878 users	R41 343 444
Cost of conviction (9%) (9349)	R1 063 062
Long Term Costs	***R2 216 015 908***

Cost of keeping 9349 users in prison for an average of 2 years

Arrests for Dagga Users

Immediate Costs	**R258 879 764**
Cost of arresting 155818 for possession	R13 867 802
Cost of keeping 155818 users in the cells overnight (once)	R55 471 208
Cost of investigating 155818 users	R104 553 878
Cost of court proceedings for 155818 users	R62 015 564
Cost of conviction (9%) (14024)	R22 971 312
Long Term Costs	***R3 324 142 378***

Cost of keeping 14024 users in prison for an average of 2 years

Adding up the immediate costs (that is what is costs the taxpayer), to arrest, keep in the cells, investigate and LET GO 242881 people that were arrested for possession or dealing, and CONVICT 24021 people that were arrested for dealing or possession comes to **R429 187 064**.

Putting 24021 people in prison for being convicted for "Drug Related Crimes" arrested in the last year will cost the taxpayer **R6 309 328 424.**

That puts the immediate and long term costs of the "drug war" in 2014 / 2015 at a staggering **R6 738 515 488.**

Calculating a cost of war against people

Well, if we have to look at the above figures, the “war” against dagga ALONE for 2014 / 2015 will cost the taxpayer R3 583 022 142.

That is just over 53% of the total “drug war” cost of 2014 / 2015.

How much dagga is confiscated annually versus how much is produced annually?

This was a difficult question to answer. When it comes to confiscations, we simply could not work out how much. Several exercises and many headaches later, we simply gave up. We know the figure goes into tons, but that's about it. When it comes to production, we have more data to work with, and are able to get an idea on how much South Africa (excluding Lesotho, Swaziland and Botswana) produces annually.

According to http://www.unodc.org/pdf/southafrica/sa_drug.pdf, which was published in 1999, South Africa was producing +-52.6 tons of cannabis annually. If we *conservatively* say that production has increased 1% a year, and put a straightforward 15% increase onto the original amount (another 7.89 tons) that comes to 60.49 tons of dagga that is produced annually in South Africa.

In a recent exercise, the Anti Drug Alliance priced dagga sold by street dealers in different parts of South Africa.

- Johannesburg averaged out at R27 a gram (most expensive R200 for 5 grams, cheapest R70 for 5 grams).
- Rustenburg averaged out at R10 per gram (most expensive R70 for 5 grams, cheapest R30 for 5 grams)
- Durban, Cape Town and Bloemfontein averaged out at R22 a gram (most expensive R200 for 5 grams, cheapest R20 for 5 grams.

This gives us a national average of R19 per gram for sale on the streets.

From this we can extrapolate that the possible street value of dagga sales in South Africa is **R1 149 310 000.**

Let's stop right here.

The total cost of the “war against dagga” in 2014 / 2015 was R3.5 billion, whilst total annual sales only topped R1.1 billion?

A logical question here is why are we spending R3.5 billion a year to “fight” something that clearly can never be beaten? Are we not literally flushing money down the toilet?

(Please note that these were prices quoted by street dealers, and are being used to work out possible turnover only. We believe actual turnovers may be substantially more).

Perspective

R3 583 022 142 = 63500 RDP houses

VAT on dagga sales of R1 149 310 000
= R160 903 400
= University fees to educate +-4100 social workers

Questioning dagga's dangers to South African society.

In order to question how dangerous dagga is, let us look at the harm other popular drugs in South Africa cause. The widest used drug in South Africa is alcohol.

Older statistics on (legal) alcohol by Arrive Alive https://arrivealive.co.za/Alcohol-And-Road-Traffic-Crashes put the number of deaths in South Africa attributed to alcohol around the 12000 mark annually. Breaking that down, that is about 1000 deaths per month, and around 30 people PER DAY that die from alcohol related deaths.

Whilst researching this report we tried to find reliable and realistic figures that could directly attribute deaths to dagga in South Africa.

We could not find any.

This does not necessarily mean that there were not any, it simply means that in our research no deaths directly attributed to dagga were found. We do concede that there are possibly deaths that can be attributed to dagga. There will always be exceptions.

If we took out moral / religious beliefs and objections for a moment, and looked *only* at the science behind it, any scientist would say that if we look at the harm a substance causes, the fact is that alcohol should be banned, and dagga should be legalised.

At this stage, let us talk about the exceptions we spoke about. Yes, dagga can be abused. But with that being said, so can gambling, sex, porn, alcohol, social media, cellphones, chocolate, food, sugar and caffeine. (Dagga is the only illegal one in this paragraph).

Researching deaths attributed to sugar (http://bit.ly/1NdWWtH) versus deaths attributed to cannabis (http://bit.ly/1N9lZK1) you will note that it is extremely difficult to conclusively prove any cases of death because of cannabis, whilst millions of people die every single year because of sugar abuse.

The biggest opponents of legalisation all seem to quote the same arguments -

- cannabis is a gateway drug
- cannabis is highly addictive
- cannabis causes schizophrenia
- legalising cannabis will increase use

Well, this is simply NOT the case.

(We would like to credit an article in the US Magazine Newsweek for the following in italics).

When analysing what acts as a "gateway" to hard drug use, there are a number of factors at play. None involve cannabis.

- *Poverty and poor social environment is a gateway to drugs, according to much research.*
- *Association with people who use hard drugs is a better predictor of harder drug use.*
- *Certain mental illnesses, such as antisocial personality and bipolar disorder, are found to predispose some people to use drugs.*

- *Other research notes that criminalization and prohibition are real gateways to harder drugs.*
  With so much research challenging the gateway theory, it's important to examine—and dispel—the research that proponents of the myth latch onto.
  But what about all that evidence?

  Most of the research linking marijuana to harder drug use comes from the correlation between the two. However, as any junior scientist can tell you, correlation does not mean causation.
  Correlation is a first step. A correlation can be positive or negative; it can be weak or strong. And it never means a cause unless a rational reason for causality is found.

  The brain disease model, which describes changes in the brain during the progression from drug use to addiction, currently gets a lot of attention as a potential causal link of the gateway theory. For example, in a 2014 article, neuroscientist Dr Jodi Gilman reported that even a little marijuana use was associated with "exposure-dependent alterations of the neural matrix of core reward systems" in the brains of young marijuana users. The reasoning goes that this would predispose them to use other drugs.

  But other researchers were quick to point out the flaws of the Gilman study, such as a lack of careful controls for alcohol and other drug use by those whose brains were studied. Nonetheless, Dr Gilman's research continues to be cited in the news media, while its critics are ignored.

  In another study ***supporting the gateway theory, the authors admit to limitations in their study****: that they excluded younger cocaine users from the analysis, as well as older cocaine users who had never used marijuana. This means that those cases that might provide evidence of no gateway effect were left out of the analysis.*

  One the other hand, there's a wealth of research showing the flaws in the gateway theory. Unfortunately, the common thread among these studies is that much of them come from outside the U.S. or from grassroots organizations within the U.S. that are promoting marijuana legalization.

  As for the whole schizophrenia scare:

  Dr. Lester Grinspoon, Professor Emeritus of Psychiatry at Harvard, has done serious research in the field. He has shown that cannabis use has no effect on the number of cases of schizophrenia.

  Lynn E. DeLisi, MD, Professor of Psychiatry at Harvard Medical School, et al., stated in their article titled "A Controlled Family Study of Cannabis Users with and without Psychosis," published online by Schizophrenia Research on Dec. 2, 2013:

  "The results of the current study suggest that having an increased familial morbid risk for schizophrenia may be the underlying basis for schizophrenia in cannabis users and not cannabis use by itself...

  This study aimed to determine whether people who use cannabis during adolescence have a greater risk for developing schizophrenia because they have an increased familial risk for the illness, and

thus have a genetic predisposition for developing it regardless of cannabis use. If this is the case, we would expect to find a significantly higher morbid risk for schizophrenia in the relatives of people who develop schizophrenia compared to the relatives of non-schizophrenia controls, regardless of whether they do or do not use cannabis.

The results of the current study, both when analyzed using morbid risk and family frequency calculations, suggest that having an increased familial risk for schizophrenia is the underlying basis for schizophrenia in these samples and not the cannabis use. While cannabis may have an effect on the age of onset of schizophrenia **it is unlikely to be the cause of illness**."

Martin Frisher, PhD, Senior Lecturer in Health Services Research at Keele University, et al., stated the following in their Sep. 2009 article titled "Assessing the Impact of Cannabis Use on Trends in Diagnosed Schizophrenia in the United Kingdom from 1996 to 2005," published in Schizophrenia Research:

"Based on literature suggesting a) an elevated risk of developing schizophrenia/psychosis among cannabis users, b) a substantial rise in cannabis use in the UK from the mid-1970s onwards and c) an assumed elevated risk of 20 years, this model would predict a corresponding increase in schizophrenia/psychosis during our study period [1996-2005]...

The results of this study indicate that the incidence and prevalence of diagnoses of schizophrenia and psychoses in general practice did not increase between 1996 and 2005...

Decriminalisation will not make more (or less) people use it.

A 2004 study compared Amsterdam, where marijuana was decriminalized, to San Francisco, where cannabis was, at the time, still criminalized. The authors found that criminalization of marijuana didn't reduce use, while decriminalization didn't increase use. An article published in the American Academy of Pediatrics, the authors found no evidence that young people had increased marijuana use in states that had legalized medical or recreational marijuana.

Well, is dagga addictive or not?

Thankfully there has been research into that.

Drug	Mean	Pleasure	Psychological dependence	Physical dependence
Heroin	3.00	3.0	3.0	3.0
Cocaine	2.39	3.0	2.8	1.3
Tobacco	2.21	2.3	2.6	1.8
Barbiturates	2.01	2.0	2.2	1.8
Alcohol	1.93	2.3	1.9	1.6
Benzodiazepines	1.83	1.7	2.1	1.8
Amphetamine	1.67	2.0	1.9	1.1
Cannabis	1.51	1.9	1.7	0.8
Ecstasy	1.13	1.5	1.2	0.7

According to this table, researched by leading UK scientists, it's clear that dagga is second to the

bottom of the list, and that our favourites – alcohol and cigarettes – which are both very legal, ARE MUCH HARDER TO QUIT THAN DAGGA. In fact, alcohol has a higher physical dependence than cocaine!

Cigarettes are highly addictive – no one argues this point – and yet, very legal and is a highly taxed product. Cigarette smokers damage their health, and smoking is linked to lung cancer. Manufacturers are required by law to put a warning on each pack. “Smoking is addictive”, “Smoking causes cancer”, and many other warnings, go along with a telephone number on the pack to help you quit, if you want.

Gambling is addictive. Many thousands of people have destroyed their lives because of it. Yet, the “gaming” industry is one of the major contributors to SA's GDP. The industry employs many thousands of people that support their families thanks to the billions of taxed rands that flow into the industry. Let's not forget that casinos are required by law to put up a sign that gambling is addictive. “Winners know when to quit” is their way of saying that their industry destroys lives.

Porn is very addictive. Yet, it is still legal and businesses selling naughty DVD's have to pay tax. Many people's lives have been decimated because of porn, yet, the “adult entertainment industry” is thriving and employs many people.

Alcohol is possibly the most highly addictive and dangerous drug out there, causing more death and destruction than all other drugs combined, and yet, big companies such as SAB Miller pay billions in tax every year and hire thousands of people who support their families which equates to thousands of more people that benefit from the industry.

Prescription medication addiction is on the rise, and yet, big pharmaceutical companies hire thousands of staff, and pay millions in tax. They just hide the fact that the sleeping pill you take is addictive amongst a whole host of other “contra-indications” on the insert in the pack.

The fact is that anything in life is open to abuse or addiction. Cellphones, Twitter, Facebook, gambling, smoking, porn, Lotto, pills the doctor prescribes, sex, masturbation, fighting, alcohol, chocolates, sugar, and even caffeine are all open to addiction.

The fact is cannabis can be misused or abused. The fact is that people could become dependent on it. But that fact rings true for just about any substance or action. Any scientist will tell you that.

However, on any given day, the chances of someone who uses dagga breaking into your home to steal your television to support his habit is close to zero. If we had to use crystal meth or heroin as an example, well, those figures would be exponentially higher.

In fact, recent research (http://www.metronews.ca/news/vancouver/2015/09/30/uvic-ubc-study-says-marijuana-could-be-exit-drug.html) shows that more addicts use dagga to *come off of hard drugs, prescription medication addiction and alcohol addiction*, leading us to believe that dagga is AN EXIT DRUG, and **not a gateway drug.**

Let's summarise

- “The war against dagga” costs SA R3.5 billion a year, every year. And that figure is just climbing. The money being spent simply does not justify the results.
- South Africans spend about R1.1 billion on buying dagga (extremely low estimate) annually.
- Dagga is less dangerous than alcohol, and tobacco (scientifically proven).
- Dagga is not a “gateway drug”.
- Dagga is an exit drug, not a gateway drug.
- Legalising it won't really impact the numbers of people using it dramatically.
- As far as we know, no deaths have been recorded directly attributed to dagga in South Africa.
- Dagga doesn't cause schizophrenia.
- Sugar kills more people in our country than dagga does.
- If we legalise it, we can CONTROL it.
- If we legalise it, we can study its medical benefits.
- If it's legal, we can TAX it.
- If it is legalised, there would have to be legal frameworks in place to control it, and that means job creation.

What we know is that there are many industries and substances out there that are more dangerous than dagga. In the beginning of this document, we spoke about harm reduction.

Well, it is the opinion of the Anti Drug Alliance that keeping dagga illegal is counter productive. We believe regulating the industry is a much better idea. Government can earn tax money, and users can be assured of quality. Cannabis growers internationally even conform to ISO standards and are certified!

In South Africa, if you have a criminal record, it is very problematic, and does not bode well for you. You can't be a director of a company; your employment prospects are very bad because of your record; you are marginalised; you are seen as a second rate citizen.

What would happen if alcohol were illegal?

You would go to jail for two years for having a bottle of brandy hidden in the boot of your car. Eight cops would stand proudly around you having a photo taken while you stand cuffed in front of a case of beer. You'd spend up to 25 years behind bars for brewing beer in your garage. You'd be laughed at by society and told that booze will make you dumb. You would have to buy your wine from a dodgy guy on a street corner (at a massively inflated price), and you wouldn't be sure if he laced it with something or not. You would drive home in fear after buying it praying you don't get caught.

Dagga users are people like you and me.

They are students who are tomorrow's leaders, doctors who save lives, lawyers who put bad people in jail, surgeons who do life saving transplants, entertainers who make us laugh and cry, mechanics who make sure our car doesn't fall apart, nurses who help us heal, refuse collectors who keep our neighbourhoods clean, the friendly face behind the till at our neighbourhood grocery store, the courier who delivers your parcels, the friendly old lady walking her dog that you pass every day, or the journalist writing a story about this report. A dagga user could be your neighbour, your best

friend, your brother, your mother, your father, your cousin, or grandparent. A dagga user is no different to a person who stops at the bottle store after work to buy a few beers to unwind after a long week at work. In fact, you probably know several dagga users that are normal people, going about their lives just like you and me, not hurting anyone or breaking any laws (well, except for the fact that they buy and use an illegal plant).

Some people use dagga (in various forms) to help them through cancer treatment, or to actually treat their cancer. Some use it because without that joint every few days, their Multiple Sclerosis would flare up. Some use it because without cannabis oil on a daily basis, their fibromyalgia would be so debilitating that they could not even play a few minutes of soccer with their child on the lawn. Others light up after a tough day at work. Others yet use it for their religion. Some use it to have a few laughs with their friends. Some use it to meditate, while others use it to relax. Some use it to focus or calm down, while others use it to celebrate their team winning the finals.

The fact is that our country has spent so much time focusing on punishing people who have been arrested because of a law that came into existence for racial reasons that we have lost sight of the fact that the plant could actually benefit us.

Hemp products (from paper to clothing to diesel (yes even your 4x4 can run on diesel made from dagga)), medicinal products that have been proven beneficial in treating a wide variety of diseases such as cancer, epilepsy (in minor children even), dementia, MS and a whole host of other diseases are all ways we can capitalize on the cannabis. If people want to use it recreationally, well, it is less harmful and much less addictive than alcohol (proven scientifically).

It simply does not make sense to keep cannabis illegal anymore. Science has proven it less harmful and safer than alcohol or sugar, and more beneficial than many medicines the doctors prescribe.

Financially, if put into the right frameworks, legal dagga can put big money (and foreign currency) into government's coffers. Not only from local sales but from exporting to countries where it is now legal for recreational or medical use.

Dagga is less harmful to society that alcohol or sugar. It is more versatile and beneficial than almost any other plant, and can be used to produce medicine, paper, clothing, diesel, and a wide variety of other products, even bricks.

It would be financially more beneficial to legalise it, control it and tax it. Keeping it illegal means quality can never be assured, pricing can be set by a drug dealer who also sells heroin and crystal meth, and we will never be able to study its medical benefits.

IN THE ENTIRE HISTORY OF MANKIND, SIMPLY BANNING SOMETHING HAS NEVER STOPPED IT. IT HAS ONLY FORCED THE SALE OR DISTRIBUTION OF IT UNDERGROUND, AND GIVEN CRIMINALS AND GANGSTERS THE POWER TO CONTROL IT.

Finally

The single biggest threat to dagga users in South Africa is not death, not overdose, not addiction or dependency or the chance of contracting a mental illness.

The single biggest threat to dagga users is the risk of being arrested and going to prison for ingesting a plant to either relax, enjoy themselves or medicate themselves for whichever reason they choose. A plant which was made illegal not because of scientific research or its properties, or even because it may destroy lives.

The only reason dagga is illegal in South Africa is because of racism, and a law which was passed for racial reasons.

It is very clear that the “war against dagga” is not a war against a “drug”. How can one declare war on a noun?

A war has been declared on people. People who choose not to use legal, highly addictive and destructive drugs such as alcohol or prescribed medication, but an illegal plant, which grows wild, and which has (scientifically speaking) more benefits and very little negative value.

The question begs to be asked, why is it still illegal?

It's not moral or religious objections, because science makes quick work of those.

If we just look at the taxed alcohol industry, the destruction it has caused, and continues to cause, it becomes clear that one of the only possible reasons that government is keeping dagga illegal is that they simply have not figured out a way to tax it.

There is no reason whatsoever, beside illicit financial gain, that it is still illegal.

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For the purpose of this report we will say that the arresting officer and holding cell officer are both a sergeant with a mid range pay grade of R138 963 per year, the investigating officer a warrant officer earning R174 264 per year, and that both the magistrate and prosecutor are mid-range on their respective pay grades i.e. R671 219 per year and R180 594 per year. Hence:

1. A sergeant earns R44.53 per hour (annual salary / 12 months / 21.67 working days / 12 hour
2. shift) *
3. A warrant officer earns R55.85 per hour*
4. A prosecutor earns R86.81 per hour (annual salary / 12 months / 21.67 working days / 8 hour
5. shift) *
6. A magistrate earns R322.65 per hour*
7. Court Interpreter – R115 212 – R135 714 per annum (SL 05) *

*These amounts may be substantially less than current salaries and pay grades.

Disclaimer

Many of the financial figures used in the calculations in this report are based on older and possibly outdated figures. Calculations use the lowest possible figures from these sources.

Therefore, whilst the calculations are mathematically correct, the actual cost implications to our country are most possibly (and have a higher probability of being) much higher that of the figures quoted in this report.

"D"

The 2014 National Survey on Drugs and Addiction

www.antidrugalliance.com

Foreword

Extremely humble beginnings. These are the words I use often when people ask how the Anti Drug Alliance began. The next question they ask is, “How humble?” and I answer, “We had no money, but we had a dream...”

As we come into our eighth year of existence, so much has changed both in our organisation, and in South Africa as a whole. We would never have dreamed we would be a major voice in the legalisation field, and never have possibly imagined how the organisation would have grown into the major force that it is today.

Massive companies have approached us to assist them in ensuring that they have a drug free and safe workplace, we have forged partnerships and friendships with many NGO's, and we have succeeded in becoming known as the experts on drugs and addiction in South Africa. We are the “go to guys” when the press need statistics, or opinion on anything drug related. There have been numerous academic research projects in the past few years which have confirmed our figures over and over.

As I write this so many thoughts flood my mind, and one would be the passing of the epitome of a gentleman, Mario Ambrosini. His fight against cancer was tragically lost, but not before he made his mark in the history books – the proposed Medical Innovation Bill, which would see cannabis legalised for medicinal use in South Africa. We completely support this bill, which many say is strange coming from the Anti Drug Alliance, as they believe our name simply does not gel with legalisation. This could not be further from the truth.

Let me explain.

The Anti Drug Alliance has always promised to tell the public the truth about drugs and addiction. We could not in good conscience tell the public that cannabis had no value in the medical field and was a danger to society. There are many protractors that will say that dagga is dangerous and simply cannot be legalised, and will base their opinions in moral, cultural, as well as uninformed propagandist and religious beliefs. We preferred to look at the science behind it. There are literally hundreds of thousands of pages of data from mainstream researchers that support the fact that cannabis is a better treatment than traditional pharmaceuticals for a host of illnesses and diseases ranging from epilepsy to cancer and even dementia. We simply had to tell the truth.

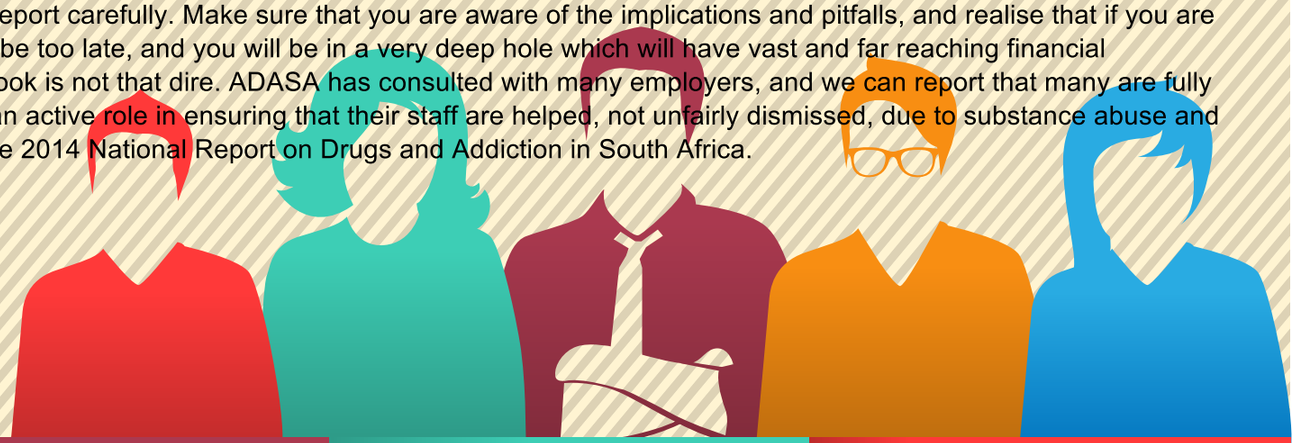
The past two years have seen many corporate companies approach ADASA to assist them in ensuring that their workplaces are drug free and that their staff who wish to overcome addiction are given the very best chance at doing so.

With this in mind, we decided to look into how addiction has directly affected business in South Africa. The theme for this year's survey is thus very business orientated. We will show that drugs and addiction in the workplace is rife, and will show that research done recently by Bronwyn Meyers which showed that between 6% and 20% of the workforce are involved in substance abuse is completely accurate, and may even be conservative estimates.

A word of warning to employers out there – your staff's weekend fun with substance abuse can, and eventually will, spill over into their work life as addiction steps in, and this will end up costing you more than you can imagine.

It is thus an imperative that employers read this report carefully. Make sure that you are aware of the implications and pitfalls, and realise that if you are not proactive in this, taking a reactive stance will be too late, and you will be in a very deep hole which will have vast and far reaching financial implications on your business. However, the outlook is not that dire. ADASA has consulted with many employers, and we can report that many are fully aware of the problem they have, and are taking an active role in ensuring that their staff are helped, not unfairly dismissed, due to substance abuse and addiction. So, without further ado, we give you the 2014 National Report on Drugs and Addiction in South Africa.

Quintin van Kerken
Chief Executive Officer
Anti Drug Alliance South Africa



Introduction

Although many think that the survey results come only from an online survey, this is not the case. During the course of the survey, we interview staff of rehabilitation centres, social workers, law enforcement professionals, public prosecutors & magistrates (who are only able to offer personal opinions, which are not the official stance of the department of justice), families of addicts, addicts, human resource managers, a host of people involved in drug testing and treatment as well as individuals involved in support groups and advocacy. A number of on the street interviews are also conducted to verify figures coming through from the online survey (more about this later).

Taking all these figures into consideration, we then set about compiling the report.

The total sample size came to 7218, with 4081 responses being used from the online survey, and the balance of 3137 coming from private interviews and on the street interviews used to verify the online figures that we felt unsure about.

We use figures from our own past surveys as well as current research by other parties to ensure accuracy. With our online survey, we sometimes come across figures which may differ somewhat from current and past figures. We then take to the street and ask everyday citizens to give us their opinions to verify results. We have yet to have a scenario where on the street interviews are completely different to the online figures. We used a small sample size of 150 to verify results where necessary.

There are also specific checks and balances put into place with the online survey to ensure that only questionnaires completed within our borders are used, hence a large number of questionnaires were discarded and negated because they were completed in other countries.

Privacy is a major concern, and the results of offline interviews are scanned and encrypted and uploaded to a secure and encrypted cloud server. The original documents are then destroyed. The reason for this is information about illegal activities such as drug use are given, and we wish to protect the identity and privacy of the respondents to our survey. We will not hand over any of this information to any government or law enforcement agency, and state here and now that any attempt to gain this information from us will be met with one simple answer – no. The online results are treated much in the same manner.

A further security measure is that the identities of any people involved with the collection of data for this survey are not published and will remain confidential.

58.2%

Of South Africans say the drinking age should be raised to 21

In the workplace

A little over 78% of respondents fell into the South African workforce. This large percentage helped us understand the way substance abuse affects business in SA.

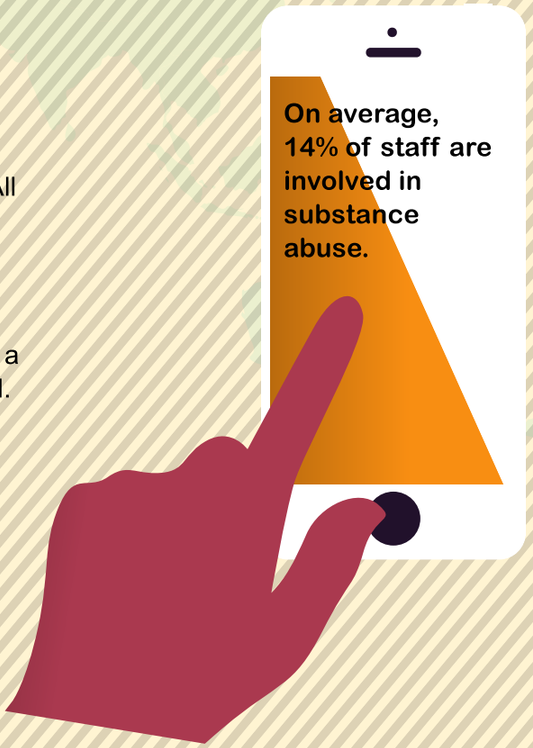
Besides the results from the main survey, we were able to get a number of case studies from our corporate partners that show the vast amounts of money that an addict can cost a company. These figures were absolutely eye opening, and for those of you reading this document that are employers, it is of great importance that you read this section.

The first case study speaks of Bryan (not his real name) who was employed at a well known IT company in a sales executive position. Bryan's employer gave us the following details and kindly requested that we do not publish their details.

Bryan became addicted to the drug Cat, and graduated to Crystal Meth. In a space of 14 months, Bryan:

Was"Hijacked" in company vehicles TWICE. These were staged hijackings to pay off drug debts.
"Lost" or was "robbed" of THREE company cell phones, TWO tablet computers and TWO laptops. All of these items were given to dealers to get drugs.
Stole FIVE desktop computers from his company on a Sunday evening. He was in cahoots with a member of the security team who was also using drugs, and the member of security turned the cameras off during the break in.
Used his company issued petrol card to fill up his dealer's car in lieu of payment an average of once a week. On investigation, it was found that this act alone cost the company R24286,08 over the period.

Taking into account the costs of theft and shrinkage, insurance excesses, as well as loss of productivity and sick days, as well as the cost of hiring a private firm to investigate the case, Bryan cost his company R681588 in 14 months.



9.3%

Say they lied and called in sick on a Monday, when they had actually binged on alcohol or drugs on the weekend.

In the workplace

During consultation with a company involved in the motor industry, we were told that figures such as the previously mentioned were not unheard of, and we were asked to choose one file out of a stack of over 30 that the human resources department of the company had garnered in the period of a year.

The file contained the following information:

Richard (not his real name) was a car salesman. Richard admitted addiction to Cat and Crack Cocaine.

Over the course of 8 months, Richard:

Crashed two company vehicles. He admitted later that he was evading arrest both times.
Stole 19 spare tyres, 2 Sat Navs, and 5 co-worker's cellphones.
Was late a total of 31 times.
Had 12 customer complaints, and stole 3 customer's cellphones.
Was "sick" 11 Mondays. He admitted that each of these occasions were as a direct result of weekend drug binges.
Was found asleep at work 4 times. Two of these time were at his desk and he was discovered by clients.
Dropped in sales from an average of 16 units a month to 0.

Taking all of the above into consideration, Richard's addiction directly cost the company R741254,86.
The same company reported that direct losses due to substance abuse amongst staff totalled over R22 million per annum, that they were aware of.

Other industries also reported massive losses due to substance abuse. One manufacturing concern noted that mistakes made by machinists under the influence cost them R2.5 million in one year. A private hospital told us that one nurse addicted to pethadine and other prescription medication cost them over R170000 in one year in stolen medications. A human resources manager for a large restaurant group noted that theft and fraud by one waiter who was a drug addict totalled over R1 million in a six month period. Roughly R900000 of this was attributed to the fact that the waiter was involved with drug dealers who enlisted the help of the addict to scan customer's credit cards and then used this information to clone them. A company bookkeeper managed to defraud the company of over R2 million in a 3 year period to pay for her gambling addiction. An electronics company reported to us that 3 company technicians cost the company well in excess of R4 million in a two year period, due to direct theft of company assets. An extra R285000 was paid to forensic investigators to help uncover and bring the staff to book.

Substance abuse amongst the workforce is the highest it has been ever. Whilst consulting with many companies, ADASA found that no one industry is drug free. Drug testing at many of these companies has shown figures of up to 30% of staff with illicit / illegal drugs in their systems. And drug positive rates are climbing.

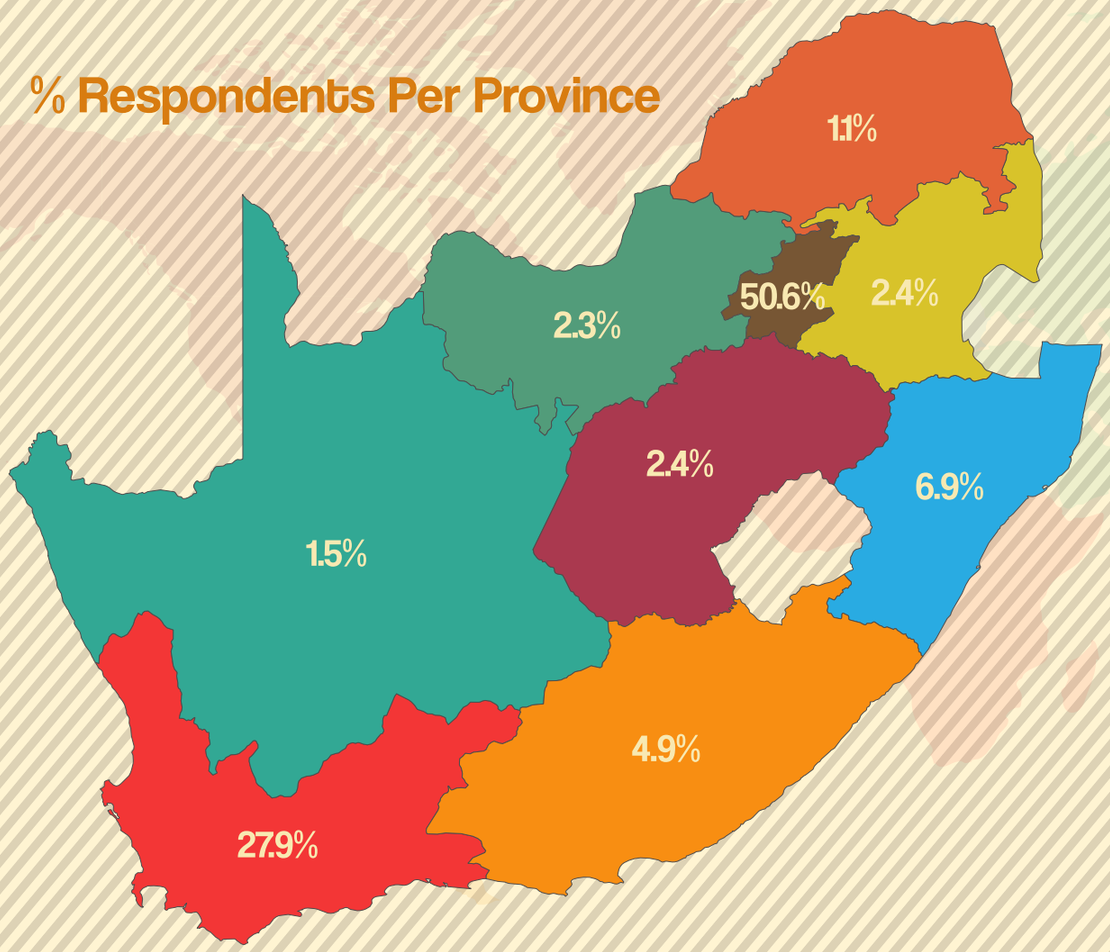
Many companies have resorted to doing pre-screening drug tests on new candidates, and several human resource managers have noted that roughly 15% of all candidates (across several industries and at different job levels applied for) test positive for illicit / illegal drugs. One HR manager noted that one candidate was quite offended that she was not considered for the job due to the positive drug test, and openly stated in an email that her drug use was actually not the concern of the company, and the she assured the company that it did not happen during working hours. Ironically, this person was hired by another company that ADASA consults to, that does not do pre-screening drug tests. She was dismissed (less than two weeks into the job) after she was pulled over after police saw her stopping and purchasing drugs from a drug dealer (in a brightly branded company vehicle). 7 grams of Cat were found in her possession – at 11am in the morning. It was established during the investigation that she had also stolen two iPads from the company the second day of work. She is currently serving a jail term as she was serving a suspended sentence for possession at the time of being caught.

The case studies are too numerous to mention, and each one seems to be the same story over and over, with the same result – massive financial cost to company. The following statistics only seem to verify what the case studies tell us – South African companies have a massive problem, and it is getting worse. The sad fact is that addiction does not only affect the addict and the employer.

Most often it is the family of the addict that suffers. The addict is many times the breadwinner, and the family suffer financially because of the addict's expenditure on substance abuse. The situation is exacerbated should the addict lose their job. ADASA identified a direct correlation between substance abuse and family violence, and our project, *United Against Abuse, has noted that 95% of family violence cases they deal with are directly linked with substance abuse.*

Quick Stats

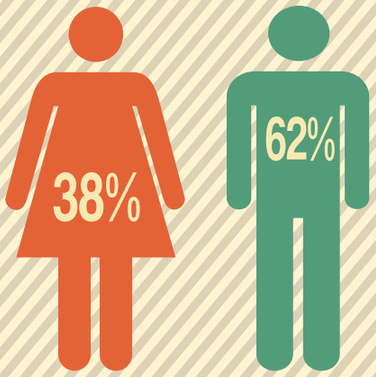
% Respondents Per Province



Age Groups

18 - 23	24.6%
24 - 29	25.3%
30 - 35	16.8%
36 - 40	8.3%
41 - 50	12.2%
51 - 60	10.7%
61+	2.2%

Gender Response



Quick Stats

Education Levels

	Percentage
I did not complete school	1.6%
Grade 10 / Std 8	5.0%
Matric	30.3%
Diploma / National Diploma	32.6%
Bachelors Degree	25.0%
Masters Degree	4.9%
Doctoral Degree	0.5%

Marital Status

	Percentage
Single	30.0%
In a relationship NOT living with partner	15.6%
In a relationship living with partner	20.6%
Married	27.1%
Divorced	5.5%
Widowed	1.2%

Earnings

	Percentage
Less than R1000	10.7%
R1001 R5000	17.1%
R5001 R10000	18.0%
R10001 R20000	24.2%
R20001 R30000	11.2%
R30001 R50000	11.4%
R50000 +	7.4%

Sexual Orientation

	Percentage
Straight	93.6%
LGBT	6.4%

Employment Status

	Percentage
Student	15.7%
Unemployed	3.5%
Employed Part Time	5.0%
Employed Full Time	45.3%
Self Employed	20.7%
Professional	7.6%
Pensioner / Retired	2.2%

7218

The amount of South Africans that took part in the 2014 National Survey on Drugs and Addiction

Lifestyle

63.5%

Of respondents admitted to lighting up a joint or using hard drugs in the past six months. This includes taking pills or meds that they either did not have a prescription for, or taking medication to get high.

Cigarette Smokers

45.1% of respondents said they smoked cigarettes

Alcohol

67.1% of people told us they consumed alcohol on a regular basis.

1.1%of respondents admitted they may be alcoholics.

16.1%

Of respondents told us that they had repeat prescriptions for pain or insomnia

Gambling

Gambing, including Lotto, was something that only 22.6% of respondents admitted to doing occasionally.

46.7%

Of respondents said they watched or downloaded porn recently. 44% of this percentage also stated that they were married.

Over The Counter Medication Abuse

14.3%

Over the counter medication abuse was admitted by 14.3% of respondents. Headache tablets or powders were the major culprit, with many saying they took the pills or powders to avoid or headache, or that they got a headache if they did not take the pills or powders.

Lifestyle

Rehabilitation

9.6%

Of respondents said that they had attended rehabilitation for drug or alcohol dependency, or for depression, or both, in the last year.

Driving Under the Influence

16.4%

Of respondents admitted that they had been taken into custody after being caught driving under the influence of alcohol or drugs.

Hard Drugs

12.6% Admitted using hard drugs such as Cat, Crystal Meth, Cocaine, GHB or Ecstasy at least twice a month

1.9% Admitted using hard drugs such as Cat, Crystal Meth, Cocaine, GHB or Ecstasy at least twice a week

0.4% Admitted using hard drugs heavily, but did not consider themselves addicts

0.8% Admitted that they were addicts of hard drugs

Alcohol versus Cannabis Use

Open Debate

69.9% Of respondents said that they consumed alcohol either socially or regularly. 1.1% of total respondents did admit that they may have an alcohol dependency.

46.4% Of respondents admitted that they were regular users of cannabis, that is to say, they used it an average of 3 times a week. On deeper investigation of these numbers, we found that the 18 - 25 and 45 + age groups seemed to make up the bulk of the regular users. During the verification stage, we specifically asked the 26 - 44 age group who admitted use why they did not smoke regularly. Time and opportunity were the biggest contributing factors. This age group are generally the group that are married, have children and very full work lives. A bulk of the 26 - 44 respondents (91%) also noted that substance abuse policies at work, coupled with regular random drug testing, as well as the fact that they had children at home was the main factor why they chose not to smoke regularly.

18% Of respondents admitted irregular use, saying that they had used cannabis at least three separate times in the past year.

R2500

The average monthly expendature on hard drugs by people admitting to regular use of hard drugs.

R500

The average monthly expendature on alcohol by people admitting to regular use of alcohol.

R250

The average monthly expendature on cannabis by people admitting to regular use of cannabis.

During the survey we noted that general attitudes toward alcohol and cannabis have changed. More people are admitting to use of cannabis, and the general perception is that the plant is less harmful overall than alcohol.

Worldwide statistics seem to mirror that perception and prove it as well. During our research, we could find no deaths directly attributed to cannabis in the past year, whilst thousands of deaths are attributed directly to alcohol.

South Africans are educating themselves. We noted that although many did not remember the late Mario Abrosini's name, most were very well aware that a bill was being proposed in parliament for the legalisation of cannabis for medicinal use.

Whilst verifying some of the cannabis statistics, we came across many people, of all races and ages, who admitted use of the plant. What we found is that more are using the plant for self medication of a variety of afflictions, from migraines and anxiety to depression, pain management, and for serious diseases such as cancer, multiple sclerosis, and a variety of life threatening illnesses.

At this stage, we need to note that cannabis use and possession is still illegal in South Africa according to Act 140 of 1992.

We do not advocate the use of the plant for recreational use, and use of the plant does impair certain brain functions. Whilst many say that they are able to work after consuming cannabis, there is much research to show that use impairs certain brain functions, which may negatively affect the user's judgement or productivity, and this may be detrimental depending on the industry. Driving or operating heavy machinery could be very dangerous.

At work

In the past year, that is to say specifically from September 2013 to September 2014, respondents admitted to the following:

	Percentage
Called in ill when actually suffering from a hangover?	9.3%
Called in ill after consuming too many drugs?	4.1%
Called in ill after consuming too many prescription medications?	1.0%
Left work early due to any of the above?	6.3%
Gone to a pharmacy to purchase something for your hangover?	6.3%
Seen a doctor because of hangover / high drug usage?	1.5%
Been hospitalized for any drug/ alcohol related problems?	1.8%
Been called in by management because of poor work performance?	1.9%
Changed jobs voluntarily and to avoid trouble because of your alcohol / drug / medication usage?	0.8%
Been dismissed because of alcohol / drug / prescription medication usage?	1.0%
Been arrested / taken into custody for possession of a controlled substance?	5.0%
Been arrested / taken into custody for driving under the influence?	1.2%
Driven under the influence of alcohol or drugs?	24.6%
Viewed porn at work?	5.3%
Left work to view porn?	0.7%
Gambled online during working hours?	0.7%
Left work to gamble?	0.4%
Left work to use drugs?	2.7%
Left work to consume alcohol?	2.2%

The figures on this page represent a very real scenario for employers.

Nearly 1 in 4 openly admitted to getting behind the steering wheel whilst drunk or high.

5% of respondents that are employed were arrested for possessing a controlled substance (drugs).

Let us look at the scenario where staff are driving company vehicles under the influence. This on its own represents a minefield of potential problems, and should be of grave concern for employers.

One human resource manager we shared this data with emailed back the the following response:

"What scares me is the cost of liability alone to the company. I have to admit that these figures are pretty much spot on with what we experience. I am too scared to start trying to work out what it actually has cost us. The figure will run into millions..."

In Closing

In the coming while, as these figures are mulled over by the public and press, we ask you look at the reality of addiction in South Africa.

The report gives us the opinions of thousands, but at the end of the day, each person affected with addiction is a father, mother, brother, sister or child of someone. Addiction is a lonely and terrible road, and often we forget that these numbers we speak about have names, and mean the world to someone.

The face of addiction in South Africa has changed.

Long gone are the days that people think of a heroin addict on the street when the word “addiction” is mentioned. They now think of family members, friends and colleagues, that look just like you and me, but that have made some bad choices and ended up in addiction.

Yes, we can argue about figures, but the bottom line is that we cannot argue that addiction is a massive problem in South Africa, and is growing almost exponentially each day. It affects every sector of our society, and does not discriminate between age, gender, culture, religious beliefs or moral standpoints. The fact is that addiction can happen to anyone at any time, and we have to accept that people get addicted to both legal and illegal things.

In the war against addiction, we have found the biggest weapon to be education. People need to be educated about what addiction does, and what can be done about addiction. At home, tell your children the truth, at schools give them the real facts, and at work give them the help if they want it.

More people stay in addiction because of fear than anything else – fear of judgement, fear of losing their jobs, fear of the unknown. If we take the time to educate these people, and let them know that addiction is not the end of the world, that it is a treatable condition and that many have come through it and now live wonderful, fulfilled lives.

Often, people ask the Anti Drug Alliance what the best way is to teach someone to not take drugs is. We say this:

When faced with the opportunity to do drugs, ask yourself three questions.

1. Will this add value to my life?
2. Is it worth it?
3. What are the possible consequences of my actions?

By answering the three questions honestly, you will have the answer.

We aimed much of the results of this report at employers, because addiction is now getting to the point where it is severely harming the country. It would take minds far greater than ours to calculate how badly the economy is affected, however it would be fair to assume that billions of Rands are lost annually because of addiction in the workplace.

We hope this report encourages open dialogue, and change for the better.

Should you, a loved one or someone you know have a problem with addiction, please feel free to visit www.antidrugalliance.com or Google “help for addiction”.

We thank you for taking the time to read this report.

The Anti Drug Alliance of South Africa.

ADA SA

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FINAL REPORT

FEBRUARY 2015

Rapid assessment of HIV prevalence and
HIV-related risks among people who inject drugs
in five South African cities

FINAL REPORT

Rapid assessment of HIV prevalence and HIV-related risks among people who inject drugs in five South African cities

Andrew Scheibe, Ben Brown, Monika dos Santos

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ACRONYMS AND ABBREVIATIONS

ACT	Addiction Consultancy and Training including trauma
ADA	Anti-Drug Alliance South Africa
AG	Advisory Group
AIDS	Acquired Immune Deficiency Syndrome
ATS	Amphetamine-Type Stimulant
aOR	Adjusted Odds Ratio
ART	Antiretroviral Therapy
ARV	Antiretroviral
CBO	Community-Based Organisation
CSO	Civil Society Organisation
CI	Confidence Interval
CDA	Central Drug Authority
DALY	Disability-Adjusted Life Years
DCS	Department of Correctional Services
DOH	Department of Health
DOJ	Department of Justice
DSD	Department of Social Development
DTHF	Desmond Tutu HIV Foundation
FGD	Focus Group Discussion
GIZ	Gesellschaft für Internationale Zusammenarbeit
HCT	HIV Counselling and Testing
HTC	HIV Testing and Counselling
HCW	Health Care Worker
HIV	Human Immunodeficiency Virus
HLM	High-Level Meeting
HREC	Human Research Ethics Committee
IEC	Information, Education and Communication
IDI	In-Depth Interview
I-RARE	International Rapid Assessment and Response study
KII	Key Informant Interview
KP	Key Population
LGBTI	Lesbian Gay Bisexual Transgender and Intersex
MSM	Men who have Sex with Men
MOU	Memorandum of Understanding
NDOH	National Department of Health
NGO	Non-Governmental Organisation
NSP	Needle and Syringe Programme
OI	Opportunistic Infections
OR	Odds Ratio
OST	Opioid Substitution Therapy
PDOH	Provincial Department of Health
PEP	Post-Exposure Prophylaxis
PID	Participant Identification number

ACRONYMS AND ABBREVIATIONS/cont.

PrEP	Pre-Exposure Prophylaxis
RAR	Rapid Assessment and Response study
PWID	People Who Inject Drugs
PWUD	People Who Use Drugs
SACENDU	South African Community Epidemiology Network on Drug Use
SANAC	South African National AIDS Council
STI	Sexually Transmitted Infection
ToR	Terms of Reference
SWEAT	Sex Worker Education and Advocacy Taskforce
TB	Tuberculosis
TBHCA	TB HIV Care Association
TGF	Transgender Female
TGM	Transgender Male
SW	Sex Worker
UI	Uncertainty Interval
UNAIDS	Joint United Nations Programme on HIV and AIDS
UNGASS	United Nations General Assembly Special Session
UNODC	United Nations Office on Drugs and Crime
WHO	World Health Organisation
WSW	Women who have Sex with Women

GLOSSARY OF TERMS[1]

Advisory group	Group of individuals representing study funders, national stake-holders, technical agencies, United Nations agencies and drug users to advise on all stages of this study.
Biomedical	Relating to medicine and biology.
DALY (Disability-Adjusted Life Years)	This measure takes into account the burden of disease. A measure that accounts for the years of life lost and years of life living with disability on account of illness.
Evaluation	The systematic collection and analysis of information about programme activities, characteristics, and outcomes that determine the merit or worth of a specific programme.
Gender	'Gender' refers to differences in social roles and relations. Gender roles are learned through socialisation and vary widely within and between cultures. They are also affected by age, class, race, ethnicity, and religion, as well as by geographical, economic and political environments. Moreover, gender roles are specific to their historical context and can evolve over time, particularly through the empowerment of women.
Generalisability	The extent to which findings can be assumed to be true for the entire target population, not just the sample. To ensure generalisability, the sample procedure and the data need to meet certain methodological standards.
Illicit or illegal drug use	The use of substances that are obtained and administered in a way that is against the law. This may include scheduled drugs that would normally have to be obtained from a pharmacy with a prescription.
Key populations	UNAIDS defines 'key populations' as those most likely to be exposed to HIV or to transmit it. Their engagement is critical to a successful HIV response – they are key to the epidemic and key to the response. In all countries, key populations include people living with HIV. In most settings, men who have sex with men, transgender persons, people who inject drugs, sex workers and their clients, and seronegative partners in serodiscordant couples are at higher risk of exposure to HIV than other people.
Men who have sex with men	The term 'men who have sex with men' describes males who have sex with males, regardless of whether or not they have sex with women or have a personal or social gay or bisexual identity. This concept is useful because it also includes men who self-identify as heterosexual but have sex with other men.

1 Terms and definitions included in the glossary come from the UNAIDS Terminology Guidelines (October 2011), Geneva: UNAIDS and from the final draft of the Operational Guidelines for HIV, STI and TB programmes for Key Populations in South Africa (November 2012), Pretoria: South African Department of Health.

GLOSSARY OF TERMS/cont.

Needle and syringe programme	The term 'needle and syringe programme' is increasingly replacing the term 'needle exchange programme' because the exchange of needles has been associated with unintended negative consequences compared with distribution. Both terms refer to programmes aimed at increasing the availability of sterile injecting equipment.
Objective	A statement of desired programme results. A good objective meets the criteria of being specific, measurable, achievable, realistic and time-based (SMART).
Opportunistic infections	Opportunistic Infections (OIs) are illnesses that occur particularly in HIV-infected people, taking advantage of the weakness in the immune defences. The most common OIs in people with HIV are TB, pneumonia, candidiasis (thrush) and the herpes simplex virus.
Opioid substitution therapy	Opioid Substitution Therapy (OST) is a medical treatment for opiate dependency consisting in the administration of thoroughly evaluated, long-acting opioid agonists by accredited professionals, in the framework of recognised medical practice, to people with opioid dependence, for achieving defined treatment aims.
People who inject drugs	The term 'people who inject drugs' (PWID) is preferable to 'drug addicts' and refers to people who regularly inject drugs intravenously, intramuscularly, subcutaneously or by some other route. PWID is used interchangeably with IDU which stands for Injecting Drug User.
Pre-Exposure Prophylaxis	Pre-Exposure Prophylaxis (PrEP) is one of a range of new ARV-based prevention interventions aimed at decreasing HIV incidence. PreP is given to people who do not have HIV, in the form of a daily pill to reduce their risk of becoming infected. When used consistently, PrEP has been shown to be effective in men who have sex with men (MSM) and heterosexually-active men and women. A CDC study is also underway to evaluate whether PrEP is safe and effective in reducing the risk of HIV infection through injecting drug use, but those results are not yet available.
Psychosocial support	Psychosocial support refers to a range of interventions that addresses the ongoing emotional, social and spiritual needs of an individual
Risk	Risk is defined as the risk of exposure to HIV or the likelihood that a person may become infected with HIV. Certain behaviours create, increase, or perpetuate risk. Behaviours, not membership of a group, place individuals in situations in which they may be exposed to HIV. People with behaviours that may place them at higher risk of HIV exposure do not necessarily identify themselves with any particular group.
Sex work	The exchange of sex for money.

Sex worker	Sex workers include consenting female, male and transgender adults and young people over the age of 18 who receive money or goods in exchange for sexual services, either regularly or occasionally. The term 'sex worker' is preferred to 'prostitute' and denotes that the services sex workers provide are considered to be work. This is also preferable to the term 'commercial sex worker', as 'commercial' already implies work, and is therefore redundant.
Sexually Transmitted Infection	Sexually Transmitted Infections (STIs) are spread by the transfer of organisms from person to person during sexual contact. In addition to the traditional STIs (syphilis and gonorrhoea), the spectrum of STIs now includes: HIV, which causes AIDS; chlamydia trachomatis; human papillomavirus (HPV), which can cause cervical, penile, or anal cancer; genital herpes; chancroid; genital mycoplasmas; hepatitis B; trichomoniasis; enteric infections; and ectoparasitic diseases, i.e. diseases caused by organisms that live on the outside of the host's body. The complexity and scope of sexually transmitted infections have increased dramatically since the 1980s: more than 20 disease-causing organisms and syndromes are now recognised as belonging in this category.
Stigma and discrimination	'Stigma' is derived from the Greek, meaning a mark or a stain. Stigma can be described as a dynamic process of devaluation that significantly discredits an individual in the eyes of others. Within particular cultures or settings, certain attributes are seized upon and defined by others as discreditable or unworthy. When stigma is acted upon, the result is discrimination that may take the form of actions or omissions. Discrimination refers to any form of arbitrary distinction, exclusion or restriction affecting a person, usually but not only by virtue of an inherent personal characteristic or perceived belonging to a particular group. In the case of AIDS, a person's confirmed or suspected HIV-positive status may be a source of discrimination – irrespective of whether or not there is any justification for these measures.
Transgender	A transgender person has a gender identity that is different from his or her sex at birth. Transgender people may be male-to-female (female appearance) or female-to-male (male appearance). Trans-gender persons may also prefer not to conform to any binary conception of gender and to instead use gender neutral references.
Triangulation	The analysis and use of data from three or more sources obtained by different methods. Findings can be corroborated, and the weakness or bias of any of the methods or data sources can be compensated for by the strengths of another, thereby increasing the validity and reliability of the result.
Women who have sex with women (WSW)	The term 'women who have sex with women' is useful as it includes not only women who self-identify as lesbian or homosexual and have sex only with other women, but also bisexual women as well as women who self-identify as heterosexual but have sex with other women.

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EXECUTIVE SUMMARY

This report presents the methodology, findings, conclusions and recommendations from a 2013 rapid assessment of HIV prevalence and HIV risk among people who inject drugs (PWID) in five South African cities. This study reflects data on the largest number of PWID recruited in a South African study on PWID and HIV to date.

Globally, PWID are greatly affected by HIV. In 2013, there were between 11.2 million and 22.0 million PWID worldwide with an estimated global HIV prevalence of 11.5% (1). Although data on PWID in South Africa are sparse, HIV prevalence among the approximate 67,000 PWID in South Africa is estimated to be 19.4% (2).

Several factors influence HIV acquisition among PWID in South Africa. Initial qualitative studies have identified the use of non-sterile injecting equipment, high risk sexual practices (e.g. unprotected intercourse) and high levels of sex work among PWID in South Africa. These studies identified low levels of HIV-related knowledge among participants who injected drugs (3–5).

Inadequate policies and the absence of public health guidelines to prevent and treat HIV infection among PWID limits the standardisation of drug dependency treatment for PWID. Neither national opioid substitution therapy (OST) nor needle and syringe programme (NSP) guidelines exist, making the provision of drug dependency treatment service unregulated and non-standardised.

HIV prevention, support and treatment services for PWID are limited, exacerbating the HIV burden among PWID. In South Africa, civil society organisations (CSOs) provide the majority of available social and health services for PWID. Some of these CSOs receive government funding. However, the full World Health Organization (WHO), United National Office on Drugs and Crime (UNODC) and the Joint United Nations Programme on HIV and AIDS (UNAIDS) package of comprehensive services for PWID is not currently provided in South Africa. OST is only available through the private sector, and just one NSP targeting men who have sex with men (MSM) who inject drugs has been established in central Cape Town. Few non-OST drug dependency treatment services are provided free of charge, making cost a major barrier to accessing evidence-based drug dependency treatment services. Uptake of HIV counselling and testing (HCT) among PWID is unknown and data on PWID on antiretroviral treatment (ART) are unavailable (2,6,7).

Data on HIV service uptake and clinical outcomes of PWID are needed. No disaggregate data for PWID were included in South Africa's 2012 Global AIDS Progress Report. Progress made towards reducing HIV infections among PWID and their sexual and drug-using partners is not known (7).

Study objectives

1. To identify, describe and analyse the social and behavioural factors associated with injecting drug use (including transmission route) and HIV infection risk
2. To identify, describe and analyse the level of HIV risk awareness among PWID, and attitudes about HIV risk reduction
3. To estimate HIV prevalence among PWID sampled in five cities in three selected provinces
4. To identify, describe and analyse HIV prevention, treatment and care interventions targeted to PWID
5. To develop recommendations and an action plan for evidence-informed national policy and programme development for PWID

Methods

The study was conducted in five cities across Gauteng, KwaZulu-Natal and the Western Cape (South Africa).[2] In each province, up to three study sites were established in urban areas and managed by CSOs that received study-specific training and were experienced in working with drug users, MSM or sex workers (SWs). A literature review, focus group discussions (FGDs), in-depth interviews (IDIs) and a bio-behavioural survey were conducted as part of this study.

Oversight and ethical considerations

An advisory group (AG) comprising representatives from the South African government, the Central Drug Authority, development partners, the United Nations, technical agencies and a PWID in recovery was established to oversee study planning and implementation. Ethical approval was obtained from the University of Cape Town Faculty of Health Sciences Human Research Ethics Board in May 2013. All participants provided informed consent prior to their participation.

Data collection

A literature review included literature on PWID in South Africa and the region. Five IDIs and three FGDs with male and female PWID were held between April and July 2013. Two law enforcement officers and a NSP service provider supplied background information. FGDs and IDIs with PWID explored participants' knowledge of local injecting and drug using practices, sexual practices, as well as their experiences and perceptions of HIV- and drug-related prevention and treatment services.

The bio-behavioural survey, conducted between May and July 2013, recruited 150 eligible PWID from each province (452 participants were recruited in total, two of whom proved to be non-PWIDs and were excluded from the analysis). Participants were at least 18 years old and had previously injected an illegal drug in their lifetime. The survey captured demographic characteristics, drug using and injecting history, sexual practices and arrest history. An anonymous rapid HIV test (Calypte® AWARE TM HIV-1/2 OMT) was conducted using an oral mucosal transudate (an oral swab along the gum line). Participants were provided with information on where to access HCT. Participants received ZAR30 (US$3) in cash for transport and ZAR30 (US$3) in food vouchers for participation in the study.

Data analysis

Themes emerging from the literature review were analysed using a data review template. Data from IDIs and FGDs were audio recorded, transcribed and then analysed using directed content analysis. Quantitative data were analysed using Stata v11.0 (College Station, Texas). Frequency distributions and proportions were calculated and data were disaggregated by province and biological sex. Bivariate analysis was conducted between HIV test result and selected predictor variables.

A logistic regression model for HIV infection was developed. The model assessed associations between the likelihood of HIV infection and dependent variables (including injecting practices and sexual practices) and was adjusted for demographic characteristics (including age, sex and province).

Limitations

Application of the study findings to other PWID is limited due to the small sample size, use of opportunistic sampling, and limitation to selected urban areas. The division of PWID into smaller sub-groups further limited the accuracy of findings. Partnering with CSOs with existing links with the lesbian gay bisexual transgender intersex (LGBTI) and sex work (SW) communities may

2 The WHO/UNODC/UNAIDS comprehensive package of services includes: (1) needle and syringe programmes; (2) opioid substitution therapy and other drug dependence treatment; (3) HIV counselling and testing; (4) antiretroviral therapy; (5) prevention and treatment of sexually transmitted infections; (6) condom programmes for PWID and their sexual partners; (7) targeted information, education and communication for PWID and their sexual partners; (8) vaccination, diagnosis and treatment of viral hepatitis, and (9) prevention, diagnosis and treatment of tuberculosis.

have contributed to the overrepresentation of PWID who were MSM, women who have sex with women (WSW) and SWs. Social desirability bias may have also contributed to underreporting of needle sharing, needle reuse and unsafe sexual practices. Additionally, self-selection bias may have contributed to a healthier cohort, given that participants were in some ways linked to or known by social and health service organizations.

Findings and discussion

Demographic characteristics

In total, 450 PWID were included in the survey analysis: 359 men (80%), 84 women (19%), 4 transgender women[3] (1%) and 3 transgender men[4] (1%). The median age among male participants was 29 years (inter-quartile range (IQR) 25–35) and 28 years (IQR 24–34) for females. Overall, 40% (144/363) of male participants were white, 27% (97/363) were black, 28% (102/363) were coloured[5] and 5% (20/363) were of Asian descent. Almost two thirds of the female participants were white (58%, 51/87); 22% (19/87) were coloured; 13% (11/87) black and 8% (7/87) were of Asian descent.

In contrast to the general South African population, the sample shows a distinct over-representation of white participants. The 2011 Census found about 9% of the total South African population to be white (8). However, the study sample demographic characteristics are similar to the demographics of people who use drugs who have taken part in similar research and who access drug dependency treatment centres in South Africa (4, 9). Marginalisation, stigmatisation and barriers to accessing services experienced by female PWID could have contributed to the low numbers of female PWID recruited (10).

Socioeconomic characteristics

Over a third of the males (38%, 137/363) and over half of the females (45%, 39/87) had completed high school. The majority of male participants were unemployed (65%, 234/363). The median monthly income[6] of males was ZAR4,000/US$400 (IQR: ZAR2,000 – 6,000 / US$200 – 600). Just under half of the women were unemployed (44%, 38/87). The median monthly income of females was ZAR4,000/US$400 (IQR: ZAR2,000–8,000 / US$200–800). Just fewer than half of the male survey participants (45%, 162/363) and a fifth of the female participants (20%, 17/87) were homeless.

HIV prevalence

Overall HIV prevalence among participants was 14% (64/450). HIV prevalence was 17% (26/150) in KwaZulu-Natal, 16% (24/150) in Gauteng and 9% (14/150) in the Western Cape. HIV prevalence among males was 14% (49/363) and 17% (15/87) among females.

The HIV prevalence among female PWID who had ever worked as a sex worker was 23% (10/44). HIV prevalence among female sex workers across South Africa is estimated between 34 – 60% (6,11). HIV prevalence among males who had ever worked as a sex worker was 27% (15/56). The HIV prevalence among white male participants (10%, 15/144) was five times higher than among white males in the general population (less than 2% in 2008)(12). HIV prevalence among MSM PWID (including transgender female PWID) was 21% (20/94) and among WSW PWID (including transgender male PWID) was 22% (7/32). HIV prevalence estimates of MSM from several studies ranges from 10 to 15% (6). However, HIV prevalence estimated for MSM and SWs are not representative and estimates for WSW do not exist. The sample HIV prevalence is highlighted in relation to the HIV prevalence among other population groups in the figures on pages 4 and 5.[7]

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3 Transgender women were grouped with biological males for study analysis purposes.

4 Transgender men were grouped with biological females for study analysis purposes.

5 Coloured racial group is a heterogenous ethnic group who possess ancestry from various Khoisan, Bantu, European and Cape Malay populations.

6 Unemployed PWID used theft and support from family members to obtain money, which was considered as income.

7 Comparisons of HIV prevalence with other populations cannot be made as the study findings are not generalisable to the larger PWID population.

FIGURE 1

HIV prevalence among male PWID participants in relation to other population groups

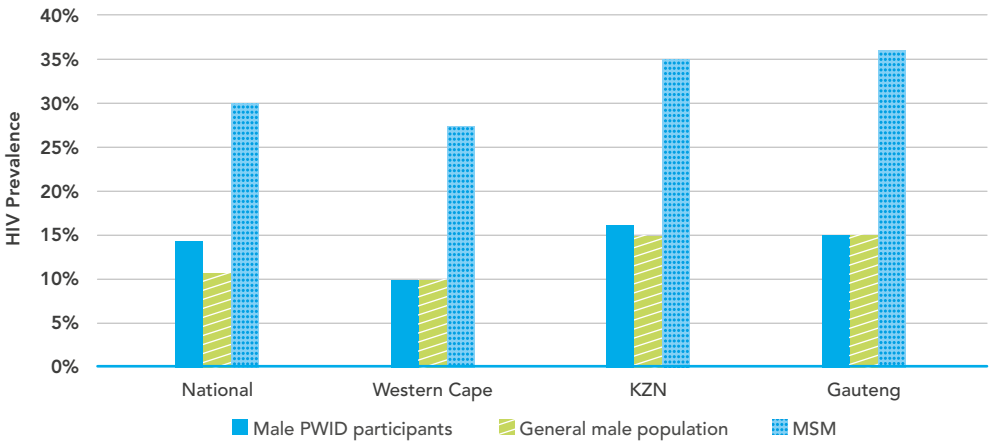
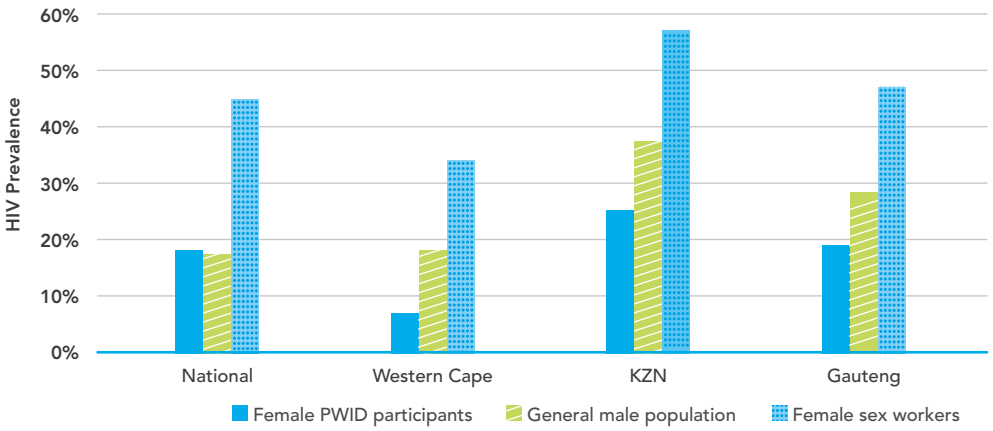


FIGURE 2

HIV prevalence of female PWID participants in relation to other population groups



Race was the only demographic variable that was significantly associated with HIV positivity in the multivariate analysis. White participants were less likely to test positive for HIV compared to other participants (aOR 0.3, 95% CI 0.1–0.6, p=0.001).

Injecting practices and risks

High-risk injecting practices were found in this sample of PWID. On average, participants had been injecting heroin for approximately five years. Most participants (59%, 261/450) had shared a needle and/or syringe with at least one other person during their injecting career. Nearly half of the participants (49%, 219/450) reported reusing a needle and/or syringe the last time they injected. Almost all participants (94%, 422/450) used ineffective cleaning methods to clean their needles and syringes. Most participants (79%, 355/450) had purchased needles and syringes from pharmacies, or obtained them from health facilities under false pretences (7%, 32/450). Several key informants mentioned that they had been denied needles and syringes from pharmacies. PWID who had less money had more difficulties in purchasing needles compared to people with more money. The former were also more likely to reuse their needles and syringes.

The likelihood of testing positive for HIV infection among female participants increased with the number of people that they had ever shared a needle and/or syringe with at one time (OR 1.3, 95% CI 1.1–1.6, p=0.008).

Sexual practices and risks

Both male and female participants reported having an average of two sexual partners in the last 12 months. A quarter (26%, 94/363) of male and over a third (37%, 32/87) of female participants had ever had sex with someone of the same biological sex.

FIGURE 3

HIV prevalence of female PWID in relation to females (aged 15 and above) in the general population[8]

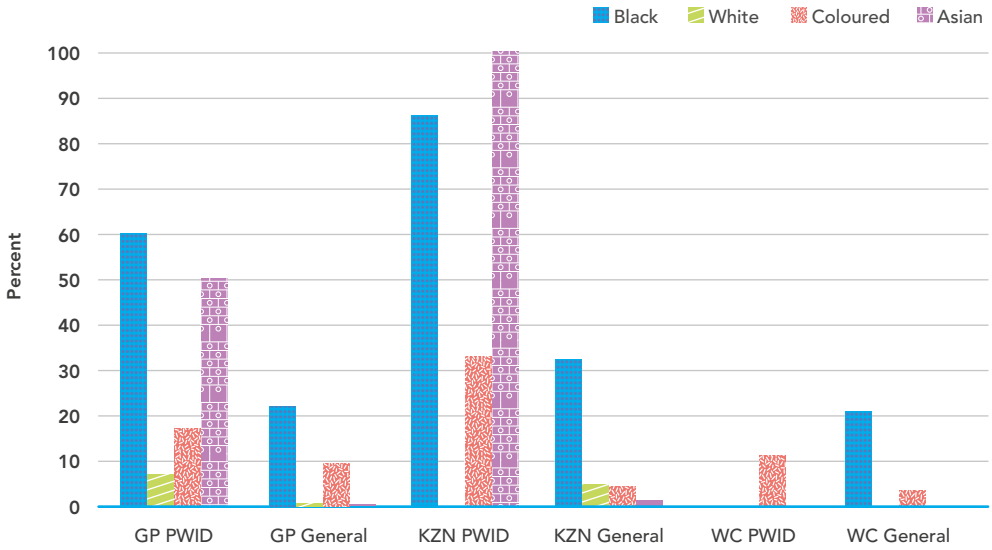
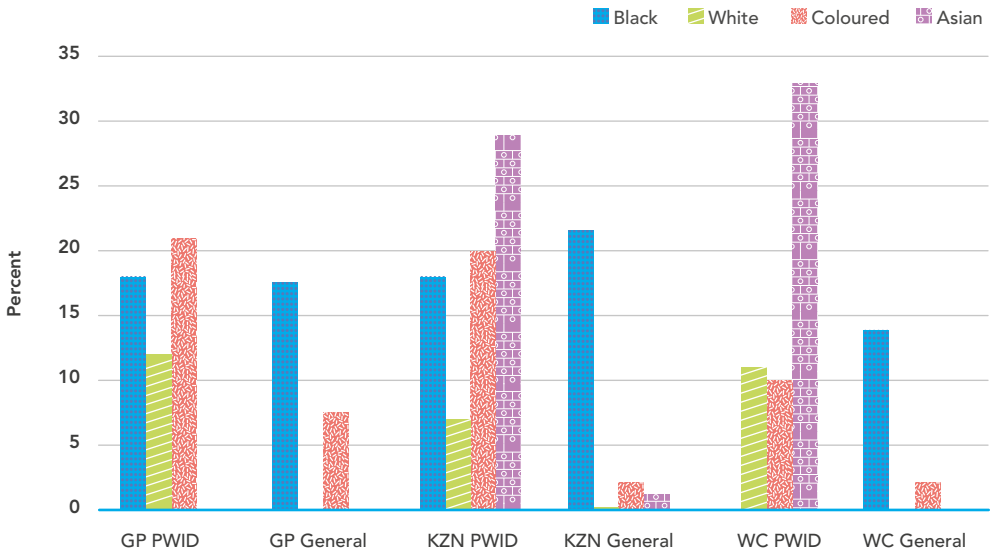


FIGURE 4

HIV prevalence among male PWID in relation to men (aged 15 years and above) in the general population[8]



Fifteen per cent (56/363) of male and 51% (45/88) of female participants had ever worked as a sex worker. Under half of the female (47%, 41/87) and male (48%, 173/363) participants reported condom use during their last sexual encounter.

The number of sexual partners in the last 12 months was low, considering many participants had reported commercial sex, but this factor was not time-bound and the participant may have engaged in sex work more than 12 months before. The majority of participants injected heroin, which reduces libido (13), and could also account for the low number of sexual partners. In this study people who had worked as sex workers were also more likely to have had sex with someone of the same sex, including clients.

8 HIV prevalence estimates for the general population were obtained from additional analysis done on data from the 2012 household survey completed by the Human Sciences Research Council. Due to limited sample size, it was not possible to estimate HIV prevalence among the general population for all population groups.

Participants who had ever worked as a sex worker were also more likely to test positive for HIV compared to those who had not worked as a sex worker (aOR 3.2, 95% CI 1.6–6.6, p=001).

A third (26/88) of female and a quarter (86/363) of male participants reported symptoms of a sexually transmitted infection (STI) in the previous 12 months. Reporting symptoms of a STI in the last 12 months was associated with an increased likelihood of testing positive for HIV (aOR 2.3, 95% CI 1.6–6.5, p=0.016).

Consequences of injecting drug use

Half (226/450) of the participants had previously experienced a drug overdose. Most of the key informants and FGD participants knew someone who had died as a result of drug overdose. Most participants (85%, 382/450) reported ever having weight loss and 39% (174/450) reported ever having an abscess. Almost all (93%, 420/450) of the participants had been in police lock-up and most (60%, 317/450) had been in prison.

HIV-related knowledge and risk perception

Almost all (99%, 445/450) of the participants had heard of HIV. More than half (58%, 259/450) had received HIV prevention information for drug users and 58% (262/450) perceived themselves to be at risk for HIV infection. Proportionately more women had received HIV prevention information compared to men (69%, 60/87 versus 53%, 191/362) and had proportionately better knowledge of HIV sexual transmission. Yet, fewer female participants perceived themselves to be at risk for HIV (48%, 42/87 females versus 61%, 220/362 males). Proportionately more females thought that they were at risk for HIV through unprotected sex with multiple partners (43%, 18/42) compared to males (33%, 73/220). Proportionately more males perceived themselves to be at risk for HIV through the use of non-sterile injecting equipment (65%, 143/220) compared to females (38%, 16/42).

Drug dependency treatment service access

Proportionately more females than males had ever received some assistance for their drug use (76%, 65/87 versus 57%, 206/362). Non-white participants were less likely to have received some form of help to stop using drugs compared to white participants (OR 0.26, 95% CI 0.17–0.39, p<0.001), and were less likely to have received some form of HIV-related information targeting drug users when compared to white participants (OR 0.44, 95% CI 0.30 – 0.65, p<0.001). More participants had accessed private drug dependency treatment services (30%, 135/450) than public drug dependency treatment services (17%, 77/450). Psychosocial support was the most common form (44%, 197/450) of drug dependency treatment received. More participants had used in-patient drug dependency treatment than out-patient treatment services (48%, 214/450, versus 10%, 46/450).

More than half of the survey participants (55%, 246/450) reported having had an HIV test in the last 12 months and knew their results.

Conclusion

This study highlights high-risk injecting and sexual practices associated with HIV prevalence among a sample of PWID from five South African cities. Sexual links between PWID in this study and the general population, mostly through sex work, were also identified. This study may over-represent MSM, WSW and SWs, but it does indicate that the risk of an exponential increase in HIV prevalence among PWID, as seen in other contexts, exists.

Key factors associated with HIV prevalence include:

- High-risk injecting practices (e.g., needle and syringe reuse and sharing, ineffective cleaning practices)
- High-risk sexual practices such as sex work and unprotected sex
- Relatively higher risks and HIV burden among female PWID compared to male PWID
- Lack of adequate, targeted services for PWID

Recommendations and next steps

B

Service provision

1. Establish and provide a package of comprehensive HIV prevention services for PWID
2. Increase access to sexual and reproductive health services for PWID
3. Include harm-reduction services within HIV programmes for sex workers, MSM and prisoners
4. Establish new services and increase PWID access to existing in/outpatient treatment facilities for PWID
5. Sensitise service providers on stigma and discrimination related to PWID, and on drug dependency and harm-reduction interventions available for PWID

Strategic information and future research

1. Establish a PWID surveillance system to identify, quantify and monitor PWID and HIV-related risks in South Africa
2. Identify and describe the typologies of people who use drugs in South Africa and document their real-life experiences to inform the development of interventions
3. Assess the scope of injecting drug use in detention contexts and prisons
4. Review factors influencing the transition to injecting drugs in order to inform interventions to prevent injecting drug use
5. Review and quantify the health, economic and social consequences of injecting drug use (including viral hepatitis and TB) in South Africa to inform government prioritisation
6. Conduct costing exercises on OST provision for people dependent on heroin
7. Assess the quality of services, including OST, provided by drug dependence treatment facilities
8. Assess and quantify the prevalence of mental health conditions among PWID to inform interventions that address commonly occurring comorbidities

Advocacy and community mobilisation

1. Develop a high-level advocacy agenda
2. Advocate for the establishment of services for PWID
3. Strengthen networking and build capacities of PWID and CSOs working with PWUD and PWID
4. Enable the community of PWID to articulate their priorities and to advocate for their rights
5. Enable participation of PWID in various drug- and HIV-related structures

Policy and legal environment

1. Review existing policy and legal frameworks at various levels (national, provincial, departmental) to address PWID issues
2. Include comprehensive HIV prevention package for PWID in further strategic planning exercises based on available evidence
3. Develop country-specific harm-reduction guidelines to enable the implementation of the National Drug Master Plan

PART A
BACKGROUND AND METHODS

A

A.1 Background

A.1.1 A global and regional perspective of injecting drug use and HIV

Although the practice is often hidden, people around the world, including Africa, inject drugs. In 2013, it was estimated that there are around 14.0 million (range: 11.2–22.0 million) people who inject drugs (PWID) worldwide,[9] and of people aged 15–64 years in Africa, about 0.17% are PWID (1).

Data on the prevalence of injecting drug practices remains limited in eastern and southern Africa, even though these regions are part of international heroin trafficking routes (1). Nevertheless, injecting drug use has been documented in Kenya, Tanzania, Madagascar, Mauritius, Mozambique, the Seychelles and South Africa (1,14).

Globally, the majority of drug dependent people are males (70% of opioid-dependent people) (15) and this is true for PWID in countries in the eastern and southern African regions, too (16). Sex workers and MSM who inject drugs have been described in research conducted in eastern and southern Africa, however, multiple barriers limit the current understanding of female PWID in Africa (16,17). These barriers include traditional gender roles and gender-based stigma (18).

HIV and burden of disease among people who inject drugs

PWID remain a population greatly affected by HIV globally. In 2013, the global HIV prevalence [10] among PWID was estimated to be 11.5% (1). In the same year, the HIV prevalence among PWID in Africa was estimated at around 11.8%, with an estimated 117 502 (range 36 506–1 837 524) PWID living with HIV in 2011 (1). A summary of estimates of the PWID population size, HIV prevalence and access to antiretroviral therapy (ART) from selected African and Indian Ocean countries is included in Table 1.

TABLE 1 PWID size estimates, HIV prevalence and access to ART in selected eastern and southern African countries (2)

Country	PWID size estimate*	Percentage of population (15–64)	HIV prevalence	Percentage of PWID living with HIV on ART**
Kenya	30 000	0.13%	36–43%	–
Mauritius	10 000	1.10%	47%	11%
South Africa	67 000	0.21%	19%	–
Tanzania	37 500 (range 25 000–50 000)	0.09%	42%	–

* Ranges not provided for several countries.
** Data on ART access for several countries not available.

9 Current UNODC PWID population estimates include data from more countries than previous estimates, and are based on data from 2011, or the latest available data (1).

10 Current UNODC HIV prevalence estimates among PWID are based on more robust data from bio-behavioural surveys. Global HIV prevelance among PWID in 2008 was estimated at 18.9% (1).

A.1.2 Risk factors for HIV among people who inject drugs

Multiple, intersecting risk factors have contributed to the rapid spread of HIV among PWID in many regions of the world (1). Injecting-related, sex-related, structural and social factors interact and contribute to HIV transmission risk[11] among PWID and their drug-using and sexual partners (13,19).

HIV transmission through injecting

HIV transmission through the use of contaminated injecting equipment is the major HIV transmission risk among PWID (15). The probability of HIV transmission through the use of a needle contaminated with HIV is about 1 in 150 per injection[12] (20).

Heroin remains the most widely injected illegal drug worldwide and in eastern and southern Africa. Other illegal drugs, including amphetamine-type stimulants (ATS) and cocaine, are less frequently injected (1).

HIV transmission through contaminated injecting equipment can be eliminated if drugs are not injected.

The use of a new needle and syringe can prevent HIV infection but if new needles and syringes are not accessible, effective needle cleaning with bleach[13] can reduce the likelihood of HIV infection through needle and syringe reuse (21).

Needle and syringe reuse and sharing is also influenced by biological, logistical, and personal factors (22). Where new or effectively cleaned needles and syringes are not available, the physiological and psychological symptoms of drug dependency usually outweigh concerns related to risks of using contaminated injecting equipment. As such, PWID experiencing withdrawal are likely to use whatever injecting equipment is available to them (23).

PWID without financial resources to purchase new needles, syringes and/or bleach are at increased risk for using contaminated needles and syringes (23).

Personal motivation to prevent HIV and other consequences of injecting also affect needle sharing, reuse and cleaning practices. PWID with depression and feelings of worthlessness and fatalism are less likely to prioritise safe injecting practices over other actions (24).

Poor knowledge of the risks of HIV infection through the use of contaminated needles and syringes and effective cleaning methods increases the likelihood of practices associated with increased risk for HIV infection, e.g., needle reuse and ineffective cleaning methods. Research conducted among PWID in Tanzania and other African countries has identified high-risk injecting practices among male and female PWID[14] (25).

Sexual transmission of HIV

Besides the risks from injecting, PWID are at risk for HIV infection through sexual transmission (13). The risk for sexual HIV transmission among PWID and their sexual partners is linked to the number of sexual partners and the frequency, type and nature of their sexual acts. Like the general population, increased risk of HIV infection is associated with increased frequency of high-risk sexual acts (e.g. unprotected receptive anal intercourse without lubrication). The HIV risk of PWID and their sexual partners is further influenced by the dynamics of their sexual network, the sexual network[15] of their sexual partners and the viral load of the individual that is infected by HIV (13).

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11 This report does not focus on perinatal HIV transmission among female PWID who are living with HIV.

12 A comparison of HIV transmission risk probabilities can be found at: http://www.phac-aspc.gc.ca/aids-sida/publication/hivtr-rtvih-eng.php.

13 Cleaning needles and syringes with bleach does not provide any protection against viral hepatitis. One recommended cleaning method includes: (i) flushing the needle and syringe with water 3 times; (ii) drawing up bleach into the needle and syringe and keeping it there for 60 seconds; (iii) flushing it again with water. For more information see: http://www.cdc.gov/idu/facts/disinfection.pdf.

14 In 2009 and 2010, Atkinson et al. conducted a cross-sectional survey among 298 PWID aged 17–25 years old in Dar es Salaam (Tanzania) using snowball sampling techniques. Thirty-two per cent (95/298) of the sample were women. A fifth of all participants had shared a needle and syringe in the previous 30 days, and fewer than 1% used bleach to clean their needles (25).

15 Sexual network dynamics are not limited to: sexual network size; nature and frequency of sexual acts within and between sexual networks and the viral load of people living with HIV involved in sexual acts.

In Tanzania, higher numbers of sexual partners were found among female PWID compared to male PWID (25). In this sample, more female than male PWID reported sex work, which could account for the different numbers in sexual partners. However, condom usage rates were higher among female PWID compared to male PWID (27% versus 15%). Yet HIV prevalence among female PWID was higher than among male PWID (55%, 50/91, versus 12% (24/198, respectively) (25). Disproportionately higher HIV prevalence among female PWID compared to male PWID was confirmed[16] in a later study conducted among PWID in Dar es Salaam (67% versus 30% respectively) (26).

Some PWID use sex work to obtain money to purchase drugs, or use sex to obtain drugs. Sex workers[17] who inject drugs are at an increased risk for the sexual transmission of HIV due to an increased number of sexual partners and sexual acts. Additionally, power differences have been shown to negatively affect condom negotiation between sex workers and their clients (28). SWs are also vulnerable to police harassment, violence, and rape (by law enforcers and clients), which further contributes to their risk for the sexual transmission of HIV (27).

Trust between SWs and their sexual partners has been shown to negatively influence condom use in sexual relationships between SWs and their partners (28). Limited condom access and limited knowledge of safer sex practices also increase the likelihood of unprotected sex (13).

Among MSM PWID who inject amphetamine-type stimulants (ATS)[18], high-risk sexual practices (e.g. unprotected receptive anal intercourse and unprotected group sex) have been reported (13, 29). HIV transmission can be rapid in the context of multiple sexual partners and high-risk sexual practices (14).

PWID younger than thirty years old have also been shown to be at greater risk for HIV than older PWID (26). It is possible that poor decision making, inexperience in injecting drugs and increased libido contribute to the higher levels of needle and syringe sharing, higher levels of sexual activity and higher rates of transactional sex among younger PWID compared to their older counterparts (26).

Structural and social factors

PWID are often marginalised from society. Stigmatisation, discrimination and punitive laws (e.g. the criminalisation of drug use) contribute to the exclusion of PWID from society (30). As a result, fear of arrest and contravening social and cultural norms fuels high-risk practices among PWID, including injecting drugs in unsafe or concealed environments (31). Limited light, space and cleaning materials, common in concealed environments, increases the risk of unsafe injecting practices. Therefore, marginalisation increases vulnerability and the likelihood of PWID being exposed to HIV. Furthermore, social exclusion and marginalisation limits access to comprehensive services for PWID (27).

The World Health Organization (WHO), United Nations Office on Drugs and Crime (UNODC) and the United Nations Joint Programme on HIV and AIDS (UNAIDS) recommend a comprehensive package of HIV prevention, treatment, care and support services for PWID (see Text Box 1). Although some progress has been made in increasing coverage of comprehensive services for PWID, a significant proportion of PWID do not have access to such services. Globally, in 2010, PWID received about two needles per month when taken as an average; eight per cent received opioid substitution therapy (OST), and only four per cent of those living with HIV were on antiretroviral therapy (ART) (32). HIV counselling and testing (HCT) and access to ART for the general population is widely accessible in countries in the eastern and southern African region. However, research done by Bowring et al. and others, has shown that despite knowledge of HIV risk, uptake of HIV testing among PWID, particularly male PWID, in Africa is low[19] (26).

16 Snowball and targeted sampling was used to recruit 267 PWID (13 female) in Dar es Salaam (26).

17 Sex workers include female, male and transgender people who sell sex.

18 Sub-cultures of MSM PWID who use online websites to find sexual and drug using partners exist in many regions of the world, including southern Africa (31).

19 The low levels of HIV testing suggest that a deeper understanding of the barriers preventing HIV counselling and testing (HCT) are needed to inform strategies to increase HCT uptake among PWID (32).

TEXT BOX 1

Comprehensive package of services for the prevention, treatment and care of HIV among PWID (21)

The WHO/UNAIDS/UNODC recommends a package of nine interventions for the prevention and treatment of HIV among PWID. This package is based on scientific evidence supporting the efficacy and effectiveness of these interventions.

1. Needle and syringe programmes (NSPs)

The provision of new needles and syringes to PWID has consistently been shown to reduce HIV transmission among PWID.

2. Opioid substitution therapy (OST) and other drug dependence treatments

The structured, medically supervised provision of methadone and buprenorphine to substitute injected heroin among PWID has been shown to reduce high risk injecting practices and improve health outcomes (notably increased access and adherence to ART and reduced mortality). Evidence-based drug dependence treatment is also recommended for ATS and cocaine dependence where use of these drugs is prevalent. Cognitive behavioural therapy and contingency management for ATS dependence are some of the evidence-based interventions that are recommended.

3. HIV testing and counselling (T&C)

HIV testing and counselling, also referred to as HIV counselling and testing (HCT), is an essential first step into the health system. PWID can become aware of their HIV status, and be linked to care or provided with ongoing prevention strategies as appropriate.

4. Antiretroviral therapy (ART)

ART improves the health outcomes of PWID living with HIV, and reduces the likelihood of HIV transmission to others when ART successfully reduces viral load in a person who is living with HIV.

5. Prevention and treatment of sexually transmitted infections (STIs)

The prevention and treatment of STIs among PWID, particularly among female PWID and PWID who are sex workers, are recommended to prevent sexual transmission of HIV and other STIs among PWID.

6. Condom programmes for PWID and their sexual partners

The provision of condoms and lubricant are recommended to prevent the sexual transmission of HIV among PWID and their sexual partners.

7. Targeted information, education and communication (IEC) for PWID and their sexual partners

IEC is recommended to support NSP, OST and other interventions.

8. Vaccination, diagnosis and treatment of viral hepatitis

PWID are at increased risk for acquiring viral hepatitis compared to the general population. Vaccination for hepatitis B is recommended, and detection and treatment for viral hepatitis is recommended where resources allow.

9. Prevention, diagnosis and treatment of tuberculosis (TB)

Weakened immunity, poor nutrition and poor living conditions increase the likelihood of TB infection among PWID. PWID living with HIV are particularly at risk for developing TB. TB prevention, screening, diagnosis and treatment is therefore an essential part of the combination package of services for PWID.

Many PWID who access health and drug dependency treatment services experience stigmatisation and discrimination from service providers (23). This often discourages future health system engagement, reducing the likelihood of PWID returning for regular HIV counselling and testing and adherence to care. In turn, this reduces compliance and follow-up for HIV care and ART, as well as accessing drug dependency treatment services (27). Female PWID are particularly affected by stigmatisation and discrimination. Female PWID generally experience higher levels of violence and disempowerment compared to male PWID. As a result, females who inject drugs often conceal their injecting more than men, which may compound their ability to enter and stay in services (10, 23, 32–34).

Access to comprehensive services for PWID is particularly low in low- and middle-income countries. In 2011 and 2012, only two[20] countries with concentrated HIV epidemics among PWID (Bangladesh and Malaysia) distributed the global recommended minimum of 200 needles and syringes per PWID per year (35). Failure to provide universal access to the WHO/UNAIDS/UNODC recommended comprehensive package of services for PWID is contributing to new HIV infections and poor health outcomes among PWID and their sexual partners (23).

In combination, drug using, and sexual and structural factors prevent the effective prevention and treatment of HIV and drug dependency among PWID. Ineffective treatment of PWID also affects their sexual partners and family, who may be infected with HIV, or bear the social consequences of drug dependency and injecting drug use (31).

A.1.3 Injecting drug use and HIV in South Africa

Summary of recent data on PWID in South Africa

Understanding of injecting drug use and its association with HIV in South Africa is informed by limited research, and on drug dependency treatment and HIV-related programming data. However, since 2004, several small studies have contributed data on injecting drug use in South Africa, and are summarized in chronological order in Appendix 1. Most of the data comes from major metropolitan areas in Gauteng, KwaZulu-Natal and the Western Cape. A few drug- and HIV-related studies have explored injecting drug practices among SWs, MSM and WSW.

South African PWID population size and HIV prevalence

Currently there is no formal, representative PWID population size estimate for South Africa.[21] However, recent modelling data estimate 67 000 PWID live in South Africa[22] (2). The HIV prevalence among PWID in South Africa is estimated at 19.4%[23] (2).

HIV transmission through injecting

High levels of needle and syringe reuse have been found among PWID in Gauteng, KwaZulu-Natal and the Western Cape. One study found that 89% (51/57) of injecting heroin users in Cape Town had used a needle and syringe after someone else in the 30 days before the study. Most participants of that study had used a needle and syringe after a close friend had used it (45%), or their regular sex partner (35%)(4). Another study (the I-RARE study) found that the majority[24] of PWID participating in that study reused and shared needles and syringes. The I-RARE researchers concluded that the frequency of needle and syringe reuse was associated with an individual's income: PWID with less money were more likely to reuse needles and syringes compared to PWID with more money. Some participants reported reusing needles and syringes for several weeks or until they broke (24). Participants interviewed as part of a study conducted by the Trimbos Institute identified daily needle and syringe sharing in Pretoria (36). Just under half (40%, 6/15) of the Cape Town MSM participating in the ANOVA Health Institute's online survey among MSM showed participants reused needles and syringes (37).

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20 Out of 32 low- and middle-income countries reporting needle and syringe exchange programmes in 2011 and 2012, only Bangladesh and Malaysia met the global minimum requirement (35).

21 In 2008, a systematic review on the global epidemiology of injecting drug use and HIV among PWID estimated there were approximately 265 975 PWID (0.87% of the adult population in 2004) in South Africa (14).

22 The authors of this review estimated the PWID population by extrapolating unpublished data from the South African National HIV Prevalence, Incidence, Behaviour and Communication Survey. HIV prevalence among the general population, MSM and sex workers in South Afica is presented in the findings sections of this report.

23 The source of the HIV prevalence data is not referenced in the review article published by Petersen et al (2).

24 This study employed qualitative methods and the researchers did not quantify all of their findings.

All studies identified ineffective needle and syringe cleaning methods among PWID in South Africa. None of the I-RARE participants reported using bleach to clean their needles and syringes, and the majority rinsed them with water (24).

Sexual risk factors

High-risk sexual practices have been identified among PWID in South Africa. Plüddemann et al. found that about two-thirds of heroin users participating in their study did not always use condoms with their regular and non-regular sexual partners (72% and 64% respectively)(4). PWID participating in the I-RARE[25] study reported a range of sexual partners, including emotional partners, casual partners, drug dealers, clients and strangers. Participants in this study reported that their assessment of a sexual partner's HIV status influenced their condom use practices. Drug and alcohol use before sex was also commonly reported among these participants. Additionally, only a few participants consistently used condoms and I-RARE researchers found that increased frequency of drug use was associated with an increased frequency of unprotected sex (24). Some of the PWID SWs had unprotected sex with clients who paid more for unprotected sex.

Multiple sexual partners and frequent group sex was found among MSM PWID in recent online surveys.[26] The odds of having had group sex in the last 6 months was almost six times higher among those who had ever injected a drug compared to those who had never injected a drug. Furthermore, frequency of group sex and number of sexual partners was found to increase with increasing frequency of injecting drug use (37).

Structural and social factors[27]

Policy

Since the early 2000s South Africa has adopted a series of resolutions to reduce HIV infections among PWID and to improve the treatment of PWID living with HIV. In 2011, the South African government developed resolutions to improve prevention and treatment of substance abuse, including aspects of harm reduction, at the 2nd South African Biennial Substance Abuse Summit[28] (38). In the same year, South Africa adopted the United Nations Member States' 'Political Declaration on HIV/AIDS: Intensifying our Efforts to Eliminate HIV/AIDS'[29] (39).

The National Strategic Plan on HIV, STI and TB (2012–2016), defines drug users[30] as a key population, and Objective 2.2. focuses on the delivery of a comprehensive package of sexual health and rights services for key populations (40). The National Drug Master Plan (2013–2017) was developed thereafter and includes commitments to collect strategic information on injecting drug use to inform future drug policy, including policy around harm reduction (41). The National Department of Health's (NDOH) Mini Drug Master Plan (2011/12–2013/14) (section 5.2.1.4) outlines planned short- and medium-to-long-term harm-reduction programmes and services, which include elements of the WHO/UNAIDS/UNODC comprehensive service package for PWID[31] (42). The National Department of Health's Draft Operational Guidelines for HIV, STI and TB Programmes for Key Populations in South Africa (2012) recommends a package of services for key populations and includes the WHO/UNAIDS/UNODC package of services for PWID in contexts where the need and sufficient resources exist[32] (43).

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25 The I-RARE study employed qualitative research methods, and quantification of perceptions and experiences are not provided in the technical report.

26 Two online surveys conducted by the ANOVA Health Institute recruited a total of 74 MSM PWID. A summary of findings is included in Appendix 1 (37).

27 An analysis of efforts to address drug supply and demand in South Africa more broadly is beyond the scope of this study.

28 Resolutions relate to alcohol and drug related policy, structures and programmes. Resolution 29 calls for the development of an acceptable definition of and protocols for Harm Reduction in the South African context. Resolutions can be viewed at: http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=17094&tid=30258.

29 Commitments to prevent new HIV infections among PWID are included in this declaration.

30 PWID-specific objectives were included in the NSP 2007–2011. However, none of these targets were reached (6).

31 The short-term services includes the prescription of medication for substitution therapy according to evidence-based guidelines. Medium- to long-term harm-reduction services include the introduction of evidence-based programmes to prevent transition from non-injecting to injecting drug use practices and the introduction of evidence-based harm-reduction programmes for PWID in areas where PWID populations exist. Furthermore, efforts to: (i) build human resource capacity; (ii) increase implementation of the National Strategic Plan on HIV, STIs and TB as it related to drug users; (iii) increase prevention, screening and brief interventions around drug use, and (iv) review existing drug policy are included as part of this plan (42).

32 Minimum recommended services include: peer-based outreach and education, sexual and reproductive health screening; condom and lubricant provision; screening for alcohol and drug use; HCT and linkage to care and ART, STI and TB screening and treatment, hepatitis B and C and psychosocial support. In contexts where additional funding is available NSP, OST, overdose prevention, hepatitis B screening and vaccination and capacity building activities are recommended (43).

The South African Essential Drug List recommends that opioid detoxification is provided in specialist rehabilitation centres (44). Methadone, buprenorphine and buprenorphine-naloxone combination medications are registered in South Africa for heroin detoxification and for maintenance therapy (45).

Strategic information

Reliable estimates of the PWID population size and HIV prevalence and incidence among PWID in South Africa do not exist.[33] Initial research has identified the existence of PWID and their injecting and sexual practices but lack of reliable data on the size, location and characteristics of PWID in South Africa limits the ability to allocate appropriate resources, implement appropriate programmes and monitor the effectiveness of efforts. No data on the effectiveness on existing PWID programmes has been published. Although South Africa submits biannual Global AIDS Response Progress Reports, some indicators of which are related to PWID, no data were provided for 2010 and 2011 in the submitted 2012 progress report.

Programming

Access to needles and syringes

Only one Civil Society Organisation (CSO) is operating a needle and syringe programme (NSP), and coverage is limited to MSM PWID in Cape Town. Other needles and syringes must be purchased from a pharmacy or obtained from other sources (e.g. health facilities, drug dealers, peer users). Although there are no laws preventing the purchase of needles and syringes, pharmacy and healthcare staff attitudes towards PWID and the cost of needles are major barriers to access. Over half (56% 32/57) of the injecting heroin users in Cape Town who took part in the study conducted by Plüddemann (2008) had been denied needles in the 30 days preceding the survey – 85% were denied needles and syringes by staff at pharmacies and health facilities (24).

Access to opioid substitution therapy and drug dependency treatment

In 2008, WHO estimated that about 60% of drug dependency treatment services for PWID in South Africa were provided by the private sector, mostly in specialised treatment centres.[34] Fewer than 10% of people with drug use disorders[35] were reported to receive medical detoxification and fewer than 10% of people with opioid use disorders were reported to receive opioid substitution therapy (OST) (46). South African treatment guidelines for OST do not exist and the quality and standard of care for opioid dependence varies (44). Between 10 and 50% of people with any form of drug use disorder were estimated in 2008 to access non-evidence-based abstinence-orientated drug dependency treatment services[36] (55).

The South African National Council on Alcoholism and Drug Dependence (SANCA)[37] is the largest network of CSOs that provide drug dependency treatment services. Public drug treatment facilities exist in the Western Cape, Gauteng,[38] Mpumalanga and KwaZulu-Natal (56). In some provinces, including the Western Cape, government funding is provided to CSOs who provide abstinence-only drug dependency treatment services[39] (57). Detoxification is also provided in some public hospitals and public psychiatric centres[40] (58).

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33 Existing data on HIV estimates and risk factors are from qualitative and non-representative quantitative studies.

34 A limited number of in- and out-patient drug dependency treatment services provided by civil society are sponsored. In-patient drug rehabilitation costs range from R10,000–R30,000 (US$1,000–US$3,000) for 28 days. Private drug dependency treatment centres providing the '12 step' programme are listed on http://drug-rehab.org.za/; http://www.tnt.org.za/index.php/2012-06-29-07-14-32; http://drug-rehab.org.za/.

35 Drug use disorders are classified as drug dependency, as outlined by the DSM IV.

36 Abstinence-oriented drug and alcohol depedency treatment has not been proven effective. Very little evidence supports the effectiveness of 12-step approaches (Cochrane review: onlinelibrary.wiley.com/doi/10.1002/14651858.CD005032.pub2/abstract).

37 SANCA includes 29 out-patient based facilities with branches in all nine provinces. Organisations include centres that provide out-patient and in-patient services. In some provinces specialist adolescent centres exist. http://sancanational.org/

38 In 2011, 3 public drug dependency rehabilitation centres existed in Gauteng (Randburg, Boksburg and Magaliesburg).

39 A list of the drug dependency treatment services providers in the Western Cape is provided at: http://www.westerncape.gov.za/directories/facilities/736.

40 Data on the number of public health facilities providing detoxification was not found. Medications and guidelines for opioid detoxification are included in Essential Drug List for public secondary hospitals in South Africa.

The cost of private drug dependency treatment has been identified as the major barrier to accessing drug dependency treatment in South Africa. Poverty, adverse living conditions, poor education levels and the challenging process of accessing public services have been identified as factors preventing drug users from accessing drug dependency treatment in South Africa (5, 24).

Access to HCT and HIV treatment, care and support

Many drug dependence treatment facilities offer on-site HCT and refer persons testing positive to HIV treatment and care services offered to the general public. None specialize in co-management of opioid dependency and HIV infection.

Participants from the I-RARE study reported fairly good access to HCT services. However, I-RARE participants who did not support this view identified perceived and experienced stigmatisation around HIV and drug use to be barriers to HCT (24). No data on the experiences of HIV treatment and care among PWID were identified. While UNAIDS, WHO and other normative bodies encourage countries to collect PWID disaggregate HIV information, published data on ART provision in South Africa is not disaggregated to assess the proportion of PWID on treatment (35).

Prevention and treatment of sexually transmitted infections

Free STI screening, diagnosis and management is widely available through the public health sector. Data on targeted STI services for PWID was not found.

Condom programmes for PWID and their sexual partners

Free condoms are widely distributed by government through public health facilities and CSOs, and condoms and lubricant are distributed to SWs and MSM by CSOs in major metropolitan areas. Condom programmes are included in national HIV campaigns; however, evidence of condom programmes specifically for PWID and their sexual partners in South Africa was not identified.

Targeted information, education and communication (IEC) for PWID and their sexual partners

No large-scale PWID-specific IEC campaigns exist, although IEC material around general drug use and its consequences have been implemented by the Central Drug Authority and the national and provincial Departments of Social Development. Other government departments, including the Department of Basic Education, have included drug use in their health and wellness campaigns and curricula. A harm reduction programme targetting MSM who use drugs is run by ANOVA Health Institute and part of this programme includes IEC materials.[41]

Vaccination, diagnosis and treatment of viral hepatitis

Hepatitis B vaccination has been included in the childhood immunisation schedule since 1995. While hepatitis screening is not widely available in South Africa, hepatitis B screening is available at selected HIV treatment centres that provide specialist care. Hepatitis C treatment in the public sector is limited to a few new patients annually, provided by tertiary academic hospitals. Private treatment for hepatitis C is available.[42]

Prevention, diagnosis and treatment of tuberculosis

Access to free diagnosis and treatment of TB is widely available in South Africa through the public health sector. Evidence of interventions to specifically prevent, diagnose and treat TB among PWID in particular does not exist, however.

Limited advocacy around the needs of PWID and the lack of dedicated resources for PWID-focused programming prevents access to comprehensive services among PWID, and leads to new HIV infections among PWID and their sexual partners in South Africa (6).

41 IEC material for MSM who use drugs includes materials around safer injecting practices and drug use and ART.

42 Published data on the number of patients with hepatitis infection that are treated through the public health system is not available. Data on number of people treated for hepatitis C privately was not obtained.

A.2 Study objectives

1. To identify, describe and analyse the social and behavioural factors associated with injecting drug use (including transmission route) and HIV infection risk.
2. To identify, describe and analyse the level of HIV risk awareness among PWID and attitudes to HIV risk reduction.
3. To estimate HIV prevalence among PWID sampled in five cities in three selected provinces of South Africa.
4. To identify, describe and analyse interventions required for HIV prevention, treatment and care for PWID.
5. To develop recommendations and an action plan for evidence-informed policy and programme development for PWID.

A.3 Methods

Financial constraints influenced the choice of research methodology and the location of the research procedures.[43] An overview of the methods used to plan, implement, analyse and ensure quality for this study is provided below.

A study advisory group was established in late 2012, and a lead consultant was selected in February 2013. A research protocol was approved in May 2013, and fieldwork was completed between May and July 2013. Data analysis and report writing were completed thereafter, and meetings to disseminate results occurred in November 2014.

A.3.1 Study advisory group

An advisory group (AG) was established to oversee study planning, implementation, analysis, reporting, results dissemination and advocacy efforts. Terms of Reference (ToR) were developed outlining the composition, roles and responsibility of the AG. The AG consisted of representatives from the National Department of Health (NDOH), the Central Drug Authority (CDA), the Department of Social Development (DSD), United Nations, development partners and technical agencies, and a PWID.

Members of the AG were responsible for engaging with officials in relevant government departments to obtain support for the study and to assist in obtaining relevant data for analysis. The AG provided a platform to develop strategies to overcome challenges, and reviewed and provided inputs into the study reports.

A.3.2 Protocol development and ethical review

A scientific research protocol was developed to achieve the study objectives. The Faculty of Health Science's Human Research Ethics Committee (HREC) of the University of Cape Town approved the protocol and tools on 2 May 2013 (HREC reference 138/2013[44]).

A.3.3 Literature review

Information relating to injecting drug use, people who inject drugs and HIV in South Africa was reviewed. Additionally, relevant data on PWID and HIV from other parts of Africa and the rest of the world were included. Multiple strategies were used to obtain information. Academic databases, Pubmed, Google Scholar and the reference lists of relevant publications were used to identify data, and data published within the last 15 years was considered for inclusion. In order to include as much data as possible, the literature review was not limited to peer-reviewed journals – unpublished data and data from programme reports were also included.[45] Researchers, service providers and other stakeholders provided additional information. Data was extracted, analysed and included in the Background and Results sections of this report.

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43 Based on the available budget, the research study could only be done in five cities in three South African provinces. The largest portion of the study budget was allocated to quantitative research methods, limiting the number of interviews and focus group discussions that could be completed as part of this study.

44 Ethical approval was also sought from the KwaZulu-Natal and Western Cape Provincial Department of Health (PDOH) Research Ethics Committees. Such ethical approval was not required for participant recruitment.

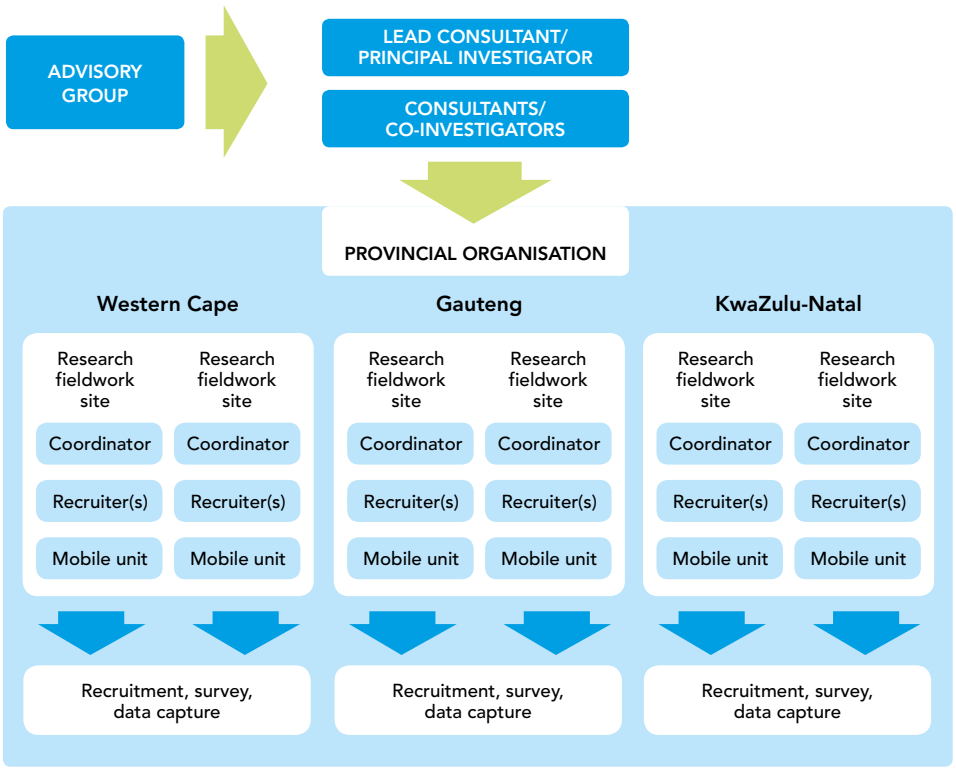
45 Data from studies with methodological weaknesses and from studies with small, conveniently sampled populations are included, as the application of stringent inclusion criteria would have significantly reduced data for review.

A.3.4 Organisational structure

The AG advised on all phases of the study. The lead consultant, supported by two other consultants, coordinated overall planning and implementation. Up to four sites were established in each of three provinces (Gauteng, KwaZulu-Natal and the Western Cape), and site coordinators, recruiters and support staff enabled implementation.

Each site had a study coordinator and, in most cases, recruiters. The site coordinator liaised with the lead consultant and coordinated activities at each site. In most cases, the study coordinator also implemented study procedures. Each study coordinator had experience in working with key populations (e.g. PWID, MSM or SWs) and in Pretoria the coordinator was a PWID in recovery from heroin dependency. To the extent possible, recruiters were drug users (current or in recovery), and were responsible for outreach and recruitment. The study coordinators from four of the sites also recruited participants and received additional technical and logistical assistance from support staff from their organisations. An overview of the study organisational structure is provided in Figure 5.

FIGURE 5
Overview of study team members



A.3.5 Site selection, preparation, training and initiation

Resource and logistical constraints limited the number of individual qualitative interviews and focus group discussions, and restricted study implementation to five cities in three provinces.

Site selection

A list of potential CSOs that could work as study recruitment sites was developed. Organisations with access to sub-groups of PWID were included on the list.

The lead consultant made contact with the organisations, provided them with an overview of the study, proposed activities, timeframes and targets, and enquired about their interest in becoming a study site.

Organisations that were interested in participating in the study signed a memorandum of understanding (MOU) with the lead consultant. The MOU outlined the study objectives, roles, responsibilities, timeframes, budgets, monitoring, confidentiality and dispute resolution process.

Several organisations that were initially approached did not become formal study recruitment sites. Concerns regarding ability to recruit PWID, conflicts with existing programmes, ethical approval requirements and concerns around the research methodology were the main reasons for organisations not becoming formal study recruitment sites. However, several organisations opted to refer potential participants and to accept service referrals. Two organisations did not respond to invitations to participate in the study.

The sites and organisations that participated in study activities are included in Table 2.

TABLE 2 Overview of study sites and supporting organisations

Area	Organisation/individual name	Description
Gauteng		
Pretoria	OUT LGBTI Well-being & Sediba Hope Medical Centre	A collaborative effort between OUT (a civil society organisation focused on providing health and drug counselling for MSM and LGBTI people) and Sediba Hope Medical Centre (an HIV-focused medical centre in central Pretoria).
Centurion	Annaliese Rix	Independent social worker, experienced in supporting PWID on opioid substitution therapy.
Johannesburg	SHARP Recovery Centre	A private drug rehabilitation centre in Athol Oaklands, serving the eastern parts of Johannesburg.
Johannesburg	Anti-Drug Alliance South Africa	A civil society organisation providing outreach and psychosocial support for drug users, serving the northern and western parts of greater Johannesburg.
KwaZulu-Natal		
Central Durban	TB HIV Care Association	A civil society organisation providing holistic outreach and mobile services to sex workers.
Hillcrest	Hillcrest Addiction Centre	A private drug treatment centre.
Hillcrest	Careline Crisis Centre	An NGO providing rehabilitation services, including a halfway house, to drug users in recovery.
Western Cape		
Cape Town	Sex Workers Education and Advocacy Taskforce (SWEAT) and TB HIV Care Association	A collaboration between two NGOs to provide mobile outreach services to sex workers and on-site safe spaces for sex workers, including drug-using sex workers.
Cape Town	Catherine Williams	A clinical nurse practitioner with experience in a private drug treatment centre.

Site staff

All study coordinators were experienced in working with key populations (e.g. PWID, MSM or SWs). Nine of the eleven recruiters were drug users (two recruiters from Cape Town were currently injecting heroin and the others were in recovery from drug use). Each site made use of people who used drugs as recruiters.

Site preparation

Two days of training for researchers and CSO staff were held in each province ahead of study implementation, facilitated by the consultants and representatives from UNODC. Training sessions were held in Pretoria (15–16 April 2013), Cape Town (18–19 April 2013) and Durban (23–24 April 2013). Local stakeholders and PWID also participated in the training.

Training sessions covered:

- PWID and HIV in South Africa
- Study objectives, activities and timeframe
- Research ethics
- Recruitment
- Study tools
- Quality control and assurance processes
- Safety
- HIV testing procedures and referral
- Participant visit dry runs
- Data entry processes
- Potential problems and brainstorming

Sites developed tailored recruitment strategies and referral lists for HIV counselling and testing services, as well as drug treatment services. A training agenda is included in Appendix 3.

Research tools were piloted by study staff with PWID and other drug users before recruitment began. Changes were made to the study tools as informed by the piloting activities.

A.3.6 Key informant interviews

In-depth interviews (IDI) were used to develop a deeper understanding of the nature, trends and HIV-related risk factors among PWID in the selected areas. The lead consultant conducted eight IDIs between May and July 2013. PWID from Gauteng, KwaZulu-Natal and the Western Cape took part in IDIs. Additionally, two representatives from law enforcement agencies (one from Cape Town and one from Durban) and an individual from Pretoria who had independently provided outreach services to PWID took part in IDIs. An overview of the IDI participants is provided in Table 3.

All participants of IDIs met the following criteria:

- 18 years old or older
- Able to understand study procedures
- Willing to participate
- Experienced in providing services or support to PWID, or self-identified as a PWID

Before interviews took place, interviewees provided their written consent for participation. The interviews followed an interview guide that enquired about: (I) the interviewee's background and experience; (II) opinions and experience of local injecting practices and trends; (III) sexual transmission risks of HIV among PWID; (IV) HIV-related risk perception; (V) HIV, drug treatment and related services, and (VI) closing questions (see Appendix 4). The interview guide was based on tools developed and successfully used to conduct a rapid assessment and response (RAR) study among drug users in Cambodia and Mongolia (59, 60).

Interviewees were reimbursed with R30's (US$ 3) worth of food coupons and R30 (US$ 3) cash for travel to compensate them for their time and costs incurred to take part in the interviews. All interviewees understood and spoke English fluently. Interviews lasted about one hour, and proceedings were voice-recorded, accompanied by written notes. No identifying details were placed on any documentation except for the participants' signatures on the informed consent forms. Recordings were destroyed once transcription was completed.

TABLE 3 Summary of key informant in-depth interviewees

Area	Interviewee	Description
Gauteng		
Pretoria	White male PWID	30-year-old PWID in recovery for 2 years. He had injected heroin and other drugs for over 10 years. He used drugs independently, in groups and with female sexual partners. He had lived in high density areas of central Pretoria and on the streets of Pretoria and Durban.
Pretoria	White male pharmacist	Independently provided new needles and syringes to PWID in Hillbrow, and conducted focus groups and interviews with PWID and community stakeholders.
KwaZulu-Natal		
Durban	Black male PWID	26-year-old PWID in active drug use, who injects heroin regularly. He last injected heroin 3 months prior to interview. He is currently living on the street and previously worked as a pimp. Several of the sex workers he used to manage injected drugs.
Durban	White male private investigator	Independent private investigator with over 10 years' experience working in the South African Police Service. Works on a variety of cases, some related to drug use in the Hillcrest area of Durban. Familiar with drug use and drug-related crime patterns in major South African cities.
Western Cape		
Cape Town	White male PWID	33-year-old MSM PWID, last injected ATS and heroin 2 weeks prior to interview. He had met male sexual partners on the internet, and injected drugs with them before having sex, including group sex.
Cape Town	White male PWID	31-year-old PWID in recovery for 2 years; injected heroin and other drugs for several years. He had injected drugs in Johannesburg and Cape Town.
Cape Town	White female PWID	36-year-old WSW PWID, who was in a rehabilitation centre. She last injected heroin 8 months prior to interview. She had injected heroin for 2 years, and injected with her female sexual partner. She was aware of drug use patterns within the LGBTI community in Cape Town.
Cape Town	Coloured male police officer	Community liaison officer with over 30 years' experience in the South African Police Service. Aware of drug use trends, nature of drug dependence, and law enforcement in the line of duty.

A.3.7 Key informant focus group discussions

Focus group discussions (FGDs) were used to explore and analyse injecting drug use and HIV-related risks among PWID. The lead consultant, supported by an assistant, led three FGDs between May and July 2013. FGDs were held with white male and female PWID from Centurion, black male PWID from Durban and non-white females in Durban. Attempts to arrange a FGD among MSM in Cape Town were unsuccessful. An overview of the FGDs is provided in Table 4.

Up to 6 PWID, all of whom were at least 18 years old and lived in the cities where the study was being conducted, took part in each FGD. Participants had previously injected an illegal drug and consented to participate. FGDs lasted up to two hours and were held in private spaces at either a study site or a community safe space.

Consent for participation and permission to record the discussions were obtained in private before study procedures commenced. The researchers used a standard script to inform participants about the discussion and risks. No identifying details were placed on any documentation except for the participants' signatures on the informed consent form.

Discussions followed a predetermined discussion guide that explored: (I) participants' opinions and experiences of local injecting practices and trends; (II) HIV-related risk behaviours, and (III) use and need for HIV and drug treatment, and related services (see Appendix 5). The FGD guide was based on tools developed and successfully used to conduct a rapid assessment and response study among drug users in Cambodia and Mongolia (59,60).

Discussions were voice-recorded, supported by written notes. A research assistant provided some English-Zulu translations in the focus groups held among men in Durban but otherwise, focus group discussions were conducted in English. Recordings were destroyed once transcription was completed.

FGD participants were reimbursed with R30's worth of food coupons and R30 cash to compensate them for their time and travel costs incurred to take part in the FGD. The researchers provided FGD participants with refreshments.

TABLE 4 Summary of focus group discussions

Area	Group	Description
Gauteng		
Centurion	White male and female PWID	Four PWID, aged between 20 and 40, all currently injecting heroin. Two had previously used opioid substitution therapy. None were in full-time employment, were supported by family members and lived at home. Participants knew each other, had injected together and shared needles and syringes with one another previously.
KwaZulu-Natal		
Durban	Black male PWID	Six PWID, aged 25–30. Four were living on the street. Participants had mostly smoked heroin in combination with cannabis, and had injected heroin when the possibility existed.
Durban	Black and Asian female PWID	Focus group included a 24-year-old Indian transgender female, a 25-year-old Indian female and a 28-year-old black female who had previously injected heroin. All females had worked as sex workers in Durban and surrounding areas.
Western Cape		
Cape Town	MSM PWID	Attempts to conduct a focus group discussion among MSM were unsuccessful.

A.3.8 Bio-behavioural survey

A bio-behavioural survey was conducted among 450 PWID[46] (150 participants from each province: Gauteng, KwaZulu-Natal and Western Cape). Anonymous, rapid, oral HIV testing accompanied the survey. The anonymous HIV testing did not include dedicated pre- and post-test HIV counselling and participants did not receive the result of the HIV test. However, participants were provided with an option for referral for HIV counselling and testing as part of standard operating procedure. In addition, researchers provided study participants with HIV prevention commodities, information and brief counselling around injecting drug use and sexual risk reduction as part of standard operating procedures. Participants were informed of these issues before consent was obtained and study procedures commenced.

Individuals were considered eligible for the bio-behavioural survey if they:

- Were 18 years old or over
- Lived in the area where the study was being conducted
- Self-reported to have ever injected any illegal drug
- Consented to participate

Recruitment

Opportunistic, targeted sampling methods were used for recruitment.[47]

In order to successfully recruit a diverse range of PWID, different recruitment methods[48] were used to better access PWID sub-groups. For example, sex worker, MSM and LGBTI PWID were recruited through outreach coordinated by organisations experienced in working with sex workers, MSM or LGBTI people. Study coordinators who were linked with drug dependency treatment and rehabilitation centres were used to recruit PWID in recovery. In order to recruit PWID of different demographic characteristics, recruiters of different ethnic groups and ages were used.

Study site networks and community links enabled access to PWID in active use, PWID who had accessed harm-reduction services and PWID in recovery from drug dependency. As discussed below, peer-based outreach, snowballing, street intercepts and referrals were used to recruit participants.[49]

Outreach

Recruiters recruited participants through their social networks and through street intercepts (see point (c), below). Recruiters were trained around research ethics, confidentiality, privacy, fieldwork safety, and the study's aims, objectives and methodology. They were paid a stipend of R500 (US$50) a month and were provided with R25 (US$2.50) cell phone airtime vouchers and R30 (US$3) cash for transport on a weekly basis. They also received R30 (US$3) food vouchers for each eligible participant they recruited in order to incentivise recruitment.

Recruiters approached potential participants and provided them with a description of the study (rationale, objectives, nature of procedures, risks and benefits). They then conducted eligibility screening and assessed potential participants' interest in participation. Thereafter, recruiters accompanied interested, eligible participants to the relevant research fieldwork site. Finally, the recruiters introduced the potential participant to research staff in order for study procedures to continue.

Snowballing

Participants were allowed to recruit up to three PWID each, and received R30 (US$3) food vouchers for every eligible person referred in order to incentivise recruitment. Before leaving a

46 The sample size was selected based on available budget and timeframes. As a convenient sample was used, sample size was not based on the ability to make statistical inferences from the findings.

47 Globally, PWID are viewed as a 'hard to reach' or 'hidden' population. Due to the lack of a sampling frame, privacy and security concerns and their relatively small number, traditional sampling methods are not appropriate for research targeting PWID. As such, opportunistic, targeted sampling methods are recommended as international best practice. The use of peer-based recruitment, incentivised participant referral (snowballing), street intercepts and key-informant referrals have successfully been used to recruit drug users, drug-using sub-populations and other 'hard to reach' populations (e.g. drug-using MSM and drug-using sex workers) in Cape Town, Pretoria, Johannesburg and Durban (Desmond Tutu HIV Foundation, 2011).

48 Budgetary limitations and AG recommendations influenced the choice of recruitment methods.

49 Due to budgetary and time constraints, pure respondent-driven sampling was not used for this study.

research site, interested participants were provided with a study information sheet and three snowballing coupons. Participants[50] were encouraged to recruit their peers (snowballing).

Street intercepts
In some instances, recruiter pairs recruited participants in areas where drug users were known to congregate or exist ('hotspots').[51] Recruiters worked in areas they were familiar with and where they had established contacts. While doing fieldwork, they wore a badge with the logo of the organisation for which they worked. Recruiters approached potential participants discreetly, speaking to potential participants on a one-to-one basis. They then proceeded with the standard recruitment and site referral procedures described in point (a), below.

Organisation and expert referrals
Field experts and organisations also referred potential participants to the study.

Proceedings

As part of the bio-behavioural survey, participants underwent: (a) an eligibility assessment; (b) an informed consent process; (c) an interviewer administered survey; (d) anonymous oral HIV testing; (e) referral for HIV testing, brief counselling and provision of HIV prevention commodities; (f) snowballing preparation, and (g) reimbursement. The bio-behavioural survey proceedings took about an hour to complete.

a. *Eligibility assessment*
   A recruiter or a researcher assessed participants' eligibility using an eligibility assessment form (see Appendix 6). Participants were also assessed on their ability to engage with study staff in a coherent manner before informed consent was taken.

b. *Informed consent*
   A researcher took eligible participants through the informed consent process (see Appendix 7). Informed consent forms were available in English, Xhosa, Zulu and Afrikaans. Once they had signed the informed consent form, participants received a participant identification number (PID).

c. *Interviewer administered survey*
   A researcher administered a survey questionnaire assessing the participants' experience and understanding of injecting and other drug use locally. The questionnaire covered: (A) demographic characteristics; (B) drug-taking history, (C) sexual behaviour; (D) HIV/AIDS; (E) drug treatment history; (F) drug market questions, and (G) arrest history (see Appendix 8). Questions were closed-ended and administered in English. Where translation was needed, study staff members conversant in local languages were available on site to assist.

d. *Anonymous oral HIV testing*
   A researcher took oral swabs for anonymous HIV testing, for which the Calypte® Aware™ HIV-1/2 OMT rapid HIV test was used. This rapid test is approved by the United States Food and Drug Administration, with a sensitivity of 100% (95% confidence interval: 98.47–100%) and a specificity of 99.84% (95% confidence interval: 99.42–99.96%) (47). HIV testing procedures were undertaken in line with the manufacturer's standard testing guidelines, and the PID number was recorded onto the oral sample. Once the HIV test result had been entered onto the HIV testing form, samples were destroyed.

e. *Referral for HIV counselling and testing, brief counselling and provision of HIV prevention commodities*
   Participants were offered HIV counselling and testing (HCT) as standard operating procedure. On-site HCT was available at those sites with trained staff and resources.[52]

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50 In respondent-driven sampling (RDS) methodology, 'socio-metric stars' are identified as 'seeds' that begin peer recruitment chains. As far as possible, initial participants had the characteristics of 'seeds', but RDS analysis methodology was not used.

51 Hotspots included public spaces in the city centre, near transport hubs and areas where many sex workers worked. Hotspot identification was not uniform and hotspots are not included in this report.

52 On-site HCT was offered at three study sites.

At sites without the necessary resources, participants were able to arrange for HCT and travel to attend HCT at another location. Participants were also provided with condoms, information on local HIV and drug dependency treatment services,[53] and brief injecting and sexual risk reduction counselling. Where possible, study staff facilitated access to other available drug dependency treatment services by providing referral letters, making appointments and arranging travel when participants expressed an interest in accessing treatment.

f. *Provision of snowballing coupons and information sheets*
Participants interested in snowballing were provided with study information and tools to enable recruitment.

g. *Reimbursement*
After completing study procedures, participants were provided with food vouchers valued at R30, and R30 cash to compensate participants for their time and transport costs incurred.

A.3.9 Data capture, management and analysis

Qualitative data

Data from audio recordings and written notes were entered into a word processor, with personal identifying information removed. Data were then analysed using a directed thematic content analysis approach. A data analysis framework was developed, which reflected the dimensions covered in the interview and discussion guides as well as the bio-behavioural survey, and used to guide qualitative data analysis. This allowed comparisons to be made between data obtained from different groups and individuals interviewed. To contextualise the findings and to present the diversity of data, detailed descriptions and direct quotes were provided. As a result, a wide range of opinions, experiences and views could be provided, where relevant.

Quantitative data

Complete surveys were entered into a password-protected Microsoft Excel Spreadsheet by one staff member at each site, and later analysed in Stata v11.0 (College Station, Texas).

Frequency distributions of numerical variables (including age, income, duration spent injecting, number of sexual partners, number of overdoses) and proportions of categorical variables (including types and methods of drugs used, needle and syringe reuse and cleaning methods, risk perception, use of drug dependency treatment services and arrest history) were calculated.[54] The data were then disaggregated by province and biological sex to enable the understanding of geographical and sex categories separately. For analysis purposes, transgender people were categorised according to their biological sex.[55]

Bivariate analysis was conducted between HIV test result and selected demographic (age, education, race, income and employment), drug taking, sexual risk and health knowledge variables. Bivariate analysis was also conducted between selected behaviour variables to explore potential associations between them.

Finally, a logistic regression model was developed to assess multivariate associations with HIV infection. The model was adjusted for demographic characteristics and province (details of the regression model are provided in Appendix 2).

A.3.10 Quality control and assurance

Standardised tools and procedures, supported by on-going staff training and consistent monitoring, were used to maximise data quality.

53 Lubrication, funded from seperate sources, was provided to participants at 3 study sites.

54 Results from the data exploration are presented in tables in section B of this report.

55 To minimise problems associated with analysis of data on the small number of transgender people it was necessary to include them in analysis by biological sex.

Training

All study staff received preparation and initiation training. During monthly site visits, additional training was provided on issues identified by the lead consultant or study team members.

Standardised tools and procedures

The same templates, documents and operating procedures were used across all sites. Standard operating procedures were developed for participant recruitment, field work, safety, visit flow, interviews and participant referral procedures.

In all instances, Calypte® Aware HIV-1/2™ standard testing procedures were used for HIV testing. The process for data quality control was also standardised.

Quality control and quality assurance

A quality assurance plan was developed and used, and included pre-defined roles and responsibilities, as set out below.

The lead consultant completed all interviews and focus group discussions. At each site, the same trained study staff member administered bio-behavioural surveys. One person entered data into the database, and a different team member checked data. Transcription errors were addressed, and any quality issues identified were discussed with the site coordinator and the lead consultant. Any data entry concerns were addressed using source documents.

Study staff communicated with the lead consultant at least once a week, and the lead consultant conducted regular site visits to monitor implementation. Survey completion checks were fulfilled by study coordinators on all surveys and HIV testing forms, and the lead consultant assessed the quality of at least 15% of all documentation (eligibility screen, consent forms, surveys and templates) at each site. Monitoring reports outlining errors and required actions were also developed after each monitoring visit.

A.3.11 Data validation and triangulation

Data outputs from the research activities, along with findings from the literature review, have been triangulated and are presented in the 'Findings and Discussion' sections of this report. A draft report was circulated to co-authors, study coordinators and the AG for comment, whereafter formal results discussion sessions were held with the AG in Pretoria on 23 August 2013 and 2 October 2013. Recommendations from the AG were integrated into the report and presented to provincial and national stakeholders during workshops facilitated in Cape Town (11 November 2014), Durban (13 November 2014) and Pretoria (19 and 20 November 2014).

The resulting recommendations and action plan are included in this report (see Section D). An example of the workshop agenda is also provided (see Appendix 9).

A.3.12 Study limitations

This is the largest mixed-methods study to be completed among PWID in South Africa to date. However, several limitations affect the degree to which the study findings may be generalised to PWID who did not take part in this study. Limitations are related to the study design, study tools, study procedures, participant responses and data analysis.

Study design

Financial and logistical constraints limited the number of interviews and focus group discussions that could take place. These constraints restricted study implementation to five cities in three provinces, and prevented the inclusion of population size estimation techniques and the use of respondent-driven sampling methodology. This may have resulted in a sampling bias, or the selection of a sub-group of PWID who may have different risk profiles, behaviours, risk perceptions, drug dependency treatment access, and HIV-related service access in relation to other PWID not recruited into the study. These differences might present higher or lower risks and HIV prevalence in the sample when compared to the total PWID population.

Several participants were known to, or linked with, CSOs participating in and supporting this study. Consequently, the recruited participants may have greater service access than other PWID, while more 'hidden' PWID may have different risk profiles from study participants.

Participants from the selected cities (all in major metropolitan areas) may have greater access to illegal drugs, or larger networks of people who use drugs, compared to other areas of South Africa. However, data on drug use, particularly injecting drug use, beyond these areas is lacking.

Time and available financial resources also limited the extent of the literature review. Dedicated resources for a systematic review of injecting drug use in the region could have provided additional insights for the analysis.

Study tools

Study sites differed in terms of their organisational structure, research experience, links with the PWID community and context. Therefore, a variety of methods were used to recruit participants, and standardised tools to map study hotspots were not developed. As a consequence, it was not possible to map areas where street intercepts occurred in a standardised manner.

The study tools were developed to keep study procedures to around one hour in duration, limiting the amount of information that could be gathered. The interview guide, focus group discussion guide and bio-behavioural survey did not explicitly enquire around PWID hotspots, nor about how PWID seek knowledge around injecting drug use, sexual practices or risk reduction behaviours. None of the tools explicitly explored how different elements of the comprehensive package of HIV and drug treatment related services for PWID were accessed.

The bio-behavioural survey did not explicitly request detailed information on frequency of injecting drug practices. Neither did the questionnaire enquire about the timing and nature of sexual practices – including same sex practices and sex work – in relation to drug use. Also absent from the survey was an assessment of the timing and the duration of sexual partnerships and behaviours. Specific time frames were not included in questions enquiring about condom use practices, and participants were not asked to disclose their HIV status. Reasons for arrest and detainment were not specifically enquired about, either.

The lack of detail on injecting and sexual practices limits the analysis and the conclusions that can be drawn from the findings. However, the information obtained addresses many current gaps and identifies areas where additional research is needed.

Study procedures

The study relied on self-reported drug use and no independent biomarker was used to corroborate injecting drug use. Participants were not required to demonstrate evidence of previous injecting to researchers; it may have been possible that not all of the study participants had injected a drug. This may have affected the reliability of data and the study conclusions.

In order to detect and exclude people who had not previously injected, eligibly assessment screening was used. In the majority of cases, a person who uses drugs screened participants, making use of a standard eligibility screening form.

The use of incentivised recruitment may have biased the study sample. The provision of an incentive for recruitment and reimbursement for time and travel may have encouraged a particular sub-set of PWID to participate. This sub-set of PWID may have under- or over-represented characteristics assessed in this study. The use of incentives may also have resulted in non-PWID participating in the study and reporting on injecting practices in order to obtain study incentives. To address this limitation, reimbursement was kept to a minimum and reflected the amounts recommended by the University of Cape Town ethics committee.

Recruitment of PWID, particularly those who are currently injecting, is particularly challenging. PWID need to weigh up the opportunity cost of participating in research, which may occur in areas removed from where PWID obtain money to purchase drugs. Therefore, the benefit of peer-based recruitment among PWID is generally perceived to outweigh the potential risks of biasing the sample through incentivised recruitment.

Due to financial and logistical constraints, on-site HCT was not available at all study sites. All participants were offered free scheduling and transport to HCT in cases where it was not available on site. However, the lack of on-site HCT may have limited the potential benefits of study participation.

In previous studies, many PWID declined HIV testing (37% of PWID in the study conducted by Parry et al. in 2007 declined HIV testing) (24). To best address the data gap on HIV prevalence among PWID in South Africa, this study included anonymous HIV testing among the largest sample size resources would allow, with opt-in HCT as discussed above.

Data

The estimates related to female[56] and Asian PWID are imprecise due to the small number of these participants recruited. Having few data points for particular variables and subgroups affected the ability of the study to identify associations that may exist. Researchers conducting similar studies in South Africa have experienced similar challenges in recruiting female PWID. In a study specifically looking at gender differences in HIV risk factors among black South African drug users, only 1 of 385 participants recruited in Gauteng reported injecting drug use (48). In the study conducted by Plüddemann et al. only 21% (50/239) of the total sample of people who used heroin were females and only 24% (57/239) of all participants had injected heroin in the last 30 days. Data on female PWID are not published in this study, but the challenge in recruiting females who use heroin is identified (4).

Social desirability bias may have contributed to underreporting of needle sharing and needle reuse, lowering the ability to detect an association between these behaviours and HIV infection. Participants may also have reported sexual practices in a way that they believed interviewers expected – either increasing or decreasing the reported sexual transmission risk for HIV.

About 10 per cent (n=37) of participants had not injected a drug in the last year, potentially affecting the validity of findings in relation to PWID who are currently injecting drugs. PWID who have not injected for 12 months may have different drug using and sexual practices, as well as risk perceptions from people who are actively injecting.

Non-standardised questioning occurred around survey questions about perceived drug treatment needs. Patterns from data entry for these questions suggested that these questions were posed and probed in different ways by different researchers. Since different questioning could result in different responses and ultimately conclusions from the data, the data from these questions has been excluded from the report.

Conclusions about causality

The completion of one-time, cross-sectional surveys prevents inferences about causality. Logistic regression modelling can only identify associations between identified risk factors and the outcome of interest; it does not allow for conclusions about causality. Furthermore, lack of data prevents reliable assessment of trends among PWID in South Africa.

Statistical inference

This study used opportunistic sampling of a small, non-statistically powered sample of participants. The findings of the study cannot reliably be applied to other PWID in the areas where this study took place or to other regions of South Africa.

56 Despite the use of additional recruitment incentives for female PWID in a study in Dar es Salaam, the target of 20% female PWID was not reached by researchers. The increased degree of isolation of female PWID from injecting networks, increased levels of stigma and discrimination towards female PWID could have contributed to the researchers' inability to recruit female PWID (6).

PART B
FINDINGS AND DISCUSSION

B

This section describes demographic and socioeconomic characteristics of survey participants, followed by summaries of reported drug use and sexual practices. Finally, findings from the bivariate and multivariate logistic regression analysis are presented and discussed. Tables that are included in this section and the appendices provide additional detail.

B.1 Participant demographic characteristics

In total, 452 PWID were recruited between May and July 2013. An overview of participant demographic characteristics, disaggregated by sex, is provided in Table 5.

Biological sex and gender

For this study, 361 men (80%), 84 women (19%), 4 transgender women (1%) and 3 transgender men (1%) were recruited. Two male participants had never injected an illegal drug[57] and were excluded from the analysis.

More biological males than biological females were enrolled in this study (81%, 363/450 and 19%, 87/450, respectively). Globally, the prevalence of illegal drug use among males is higher than among females; male heroin users account for about 70% of the total burden of disease related to heroin use (15). Reaching female PWID has proved to be challenging in several African countries, including Tanzania and South Africa. In Tanzania, researchers provided additional incentives to female participants (a mobile phone voucher) to increase their recruitment. Despite these additional incentives researchers were unable to recruit enough female PWID to make up 20% of their sample (26). In South Africa, only 1 of the 8 PWID I-RARE focus groups was conducted among female PWID (n=7), and only 7 of 19 in-depth interviews among street-based sex workers who used drugs in Durban were with females (24). Globally, female PWID have been found to be particularly affected by stigmatisation and discrimination and are more likely than male PWID to be excluded from society. Female PWID have also been shown to be less likely than male PWID to utilise available drug dependency treatment services (31). Failure to address stigmatisation and discrimination facing female PWID, and their unique health needs, make accessing female PWID more challenging. Furthermore, female PWID, particularly those who inject in isolation, may not be linked to PWID networks or organisations providing services to PWID (13). As a result, isolation of female PWID could have contributed to the low numbers recruited for this study, since it used peer-based and service-provider referrals to recruit participants.

Age

The median age of biologically male survey participants was 29 years (inter-quartile range (IQR) 25–35). The median age of biologically female survey participants was 28 years (IQR 24–34).

Male and female survey participants from all sites were of similar ages, and their ages were similar to the participants of other research studies conducted among PWID in South Africa (28, 41).

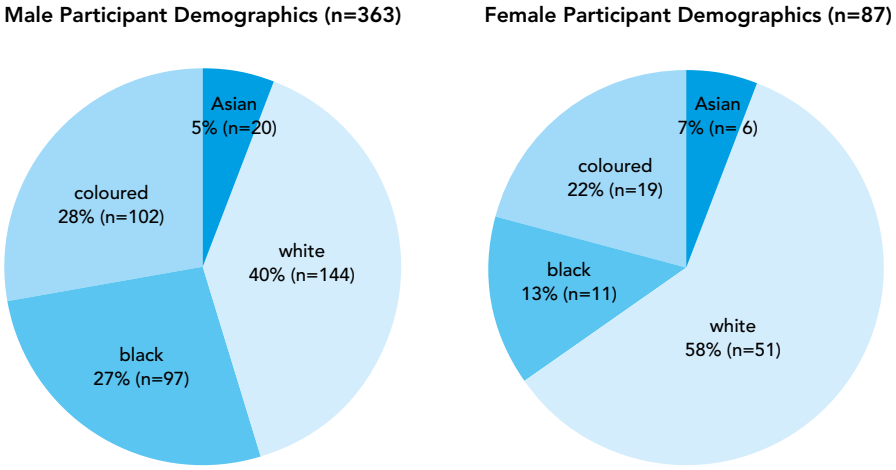
Race

Overall, 40% (144/363) of male survey participants were white; 28% (101/363) were coloured; 27% (97/363) were black and 5% (20/363) were of Asian descent.

57 One excluded participant had never injected a drug and another participant had illicitly injected only steroid medications.

Almost two-thirds (58%, 51/87) of female participants were white; 22% (19/87) were coloured; 13% (11/87) black and 7% (6/87) were of Asian descent. The limited number of black female PWID recruited could be partly due to the lack of a black female recruiter and the challenges of accessing female PWID that were described earlier (6). An overview of participants' racial characteristics is provided in Figure 6.

FIGURE 6
Pie graphs of participant race by biological sex



The racial composition of study participants was not proportional to the racial make-up of South Africa:[58] the estimated racial stratification of South Africa's population in 2013 is 80% black, 9% coloured, 9% white and 3% Asian (63). The proportional variations in the recruitment of coloured participants in the Western Cape and Asian participants in KwaZulu-Natal compared to the other provinces reflect the larger proportions of these groups in those provinces (63). However, comparing characteristics of PWID to the general population may not be a good comparison to assess sample representativeness, as socioeconomic and cultural factors that are closely linked to race in the South African context may be associated with heroin use and injecting drug use. For example, the median income of white people is higher than other racial groups (49), and as a result, white people are likely to have greater financial access to needles and syringes compared to other racial groups. Representative data on PWID do not exist but PWID recruited by Plüddemann et al. and Parry et al. had similar racial characteristics to the participants of this study (4, 24).[59]

Data collected from drug dependency treatment centres that are part of the SACENDU network suggest that the proportion of black heroin users is increasing, particularly in Gauteng, Limpopo and Mpumalanga[60] (9). However, the demographic and socioeconomic characteristics of PWUD who access drug treatment centres are likely to differ from PWUD who do not access drug treatment services (50).

PWID who access drug dependency treatment are more likely to have access to financial and other resources to enable access to services compared to PWID who do not access drug dependency treatment. Furthermore, PWID who access drug dependency treatment services are more likely to know how to access relevant services and related information (e.g. access to information on needle reuse and effective needle cleaning practices) compared to people who do not access such services (50). Financial barriers to purchasing new needles, syringes and bleach are more likely to

58 In South Africa, race is of importance from a social point of view. Analysis of race is not an analysis of different biological traits per se, but an analysis of broader racial-based social inequities. Apartheid policies contributed to systematic, unfair distribution of access to education, livelihood, income generating opportunities and healthcare. Race is a proxy for many social factors that influence health. An analysis of racial differences or associations allows for the identification of where racially based inequities exist and can assist to develop policies and programmes to address these issues (6).

59 Of the 239 heroin users recruited by Plüddemann et al., the majority were white (57%), and 6% were black (4). Similarly, 40% (22/55) of the non-SW, non-MSM PWID recruited by Parry et al. were white (24).

60 In Gauteng, during the July–December 2012 period, 67% of patients with heroin dependence were black (237/355). This reflects a 37% increase compared to the same period in 2008. During that same time period there was also a 24% increase in the number of black patients with heroin dependence admitted to SACENDU centres in Limpopo and Mpumalanga (136/179 in July–December 2012) (9).

affect people who cannot afford to pay for drug dependency treatment (24). Financial barriers to purchasing needles, syringes and bleach also increase the likelihood of needle reuse and inefficient cleaning practices among PWID, and the HIV transmission risks associated with those behaviours (24).

Marital status

The majority (73%, 266/363) of male survey participants were single and 10% (36/363) were living with their partner. Almost half (45%, 39/87) of the female survey participants were single and a third (33%, 29/87) lived with their partner. PWID who are in emotional relationships with other PWID are more likely to share needles and syringes compared to PWID who are living alone, particularly among female PWID (33). PWID in monogamous relationships are less likely to be exposed to HIV through sex than PWID who have different sexual partners. However, many people who are dependent on heroin do not have frequent sexual encounters, while others may use sex work to purchase and access drugs (10).

TABLE 5 Summary of survey participant demographic characteristics

Province	Gauteng		KwaZulu-Natal		Western Cape		Total*	
Biological sex	*Male n=123*	*Female n=27*	*Male n=116*	*Female n=34*	*Male n=124*	*Female n=26*	*Male n=363*	*Female n=87*
Age (years)								
Median (IQR)	29 (25–33)	28 (23–31)	27 (24–33)	30 (25–41)	31 (26–37)	28 (23–32)	29 (25–35)	28 (24–34)
Race								
Black	33% (40/123)	16% (4/ 27)	42% (49/116)	21% (7/34)	7% (8/124)	0	27% (97/363)	13% (11/87)
White	54% (66/123)	50% (13/27)	37% (43/116)	68% (23/34)	28% (35/124)	56% (15/26)	40% (144/363)	58% (51/87)
Coloured	11% (14/123)	23% (3/27)	9% (10/116)	9% (3/34)	63% (78/124)	37% (10/26)	28% (102/363)	22% (19/87)
Asian	2% (3/123)	12% (3/27)	12% (14/116)	3% (1/34)	2% (3/124)	7% (2/ 26)	5% (20/363)	7% (6/87)
Marital status								
Single	81% (99/123)	44% (12/27)	77% (89/116)	38% (13/34))	63% (78/124)	54% (14/26)	73% (266/363)	45% (39/87)
Married	4% (5/123)	7% (2/27)	5% (6/116)	12% (4/34)	7% (9/124)	8% (2/26)	6% (20/363)	9% (8/87)
Divorced	6% (7/123)	7% (2/27)	8% (9/116)	21% (7/34)	18% (22/124)	0	11% (38/363)	10% (9/87)
Living with partner	10% (12/123)	33% (9/27)	9% (10/116)	29% (10/34)	11% (14/124)	38% (10/26)	10% (36/363)	33% (29/87)
Widowed	0	7% (2/27)	2% (2/116)	0	1% (1/124)	0	1% (3/363)	2% (2/87)

* Not all totals add up due to rounding off and not all data shown.

B.2 Participant socioeconomic characteristics

Education and income

Over half of the male survey participants (51%, 193/363) had some level of high school education, and over a third had completed high school (38%, 137/363). The majority of them were unemployed (65%, 234/363), and their median monthly income was ZAR4,000/US$400 (IQR: ZAR2,000–6,000/US$200–600). Among those who were unemployed, about a quarter (28%, 66/234) reported to earn money through theft, and 19% (44/234) were supported by family members.

Over half the female survey participants (52%, 45/87) had some level of high school education and a fifth of them (21%, 18/87) had some level of tertiary education. Over half of them had some form of employment, 28% (24/87) reported to be in full-time employment and 39% (25/87) in part-time employment. The female survey participants had a median monthly income of ZAR4,000 (IQR: ZAR2,000–7,500/US$200–750).

Female participants were proportionally better educated, and proportionally more were employed[61] compared to their male counterparts. Median monthly income was similar between sexes. Over a quarter of male participants earned money through theft, placing them at risk for engagement with law enforcement and correctional service systems.

Housing

Almost half (45%, 163/ 363) of the males participating in the survey were homeless. Over half of the female survey participants (55%, 48/87) lived in a house or flat; a quarter (25%, 22/87) reported some other form of housing (including shelters and rehabilitation centres) and 20% (17/87) were homeless.

Recruitment of male PWID in Pretoria (one of the Gauteng sites) occurred almost exclusively through peer-based recruitment. These male PWID were living on the streets of Pretoria and were well networked with PWID from similar socioeconomic circumstances. Two of the three sites in KwaZulu-Natal were based in more wealthy communities. Recruitment in these two sites in KwaZulu-Natal was mostly of PWID with links to drug dependency treatment services. The third site in Durban recruited participants from the city centre and accessed PWID from poorer township areas through a recruiter who worked in those areas.

TABLE 6 Summary of survey participant socioeconomic characteristics

Province	Gauteng		KwaZulu-Natal		Western Cape		Total*	
Biological sex	*Male n=123*	*Female n=27*	*Male n=116*	*Female n=34*	*Male n=124*	*Female n=26*	*Male n=363*	*Female n=87*
Education								
Completed high school	45% (55/123)	48% (13/27)	33% (38/116)	41% (14/34)	36% (44/124)	46% (12/26)	38% (137/363)	45% (39/87)
Employment								
Some form of work	21% (26/123)	59% (16/27)	63% (73/116)	62% (21/34)	24% (30/124)	46% (12/26)	36% (129/363)	56% (49/87)
Not working	79% (97/123)	41% (11/27)	37% (43/116)	38% (13/34)	76% (94/124)	54% (14/26)	65% (234/363)	44% (38/87)
Monthly income, ZAR**								
Median (IQR)	4500 (3000–8000)	4000 (3000–8500)	2500 (1200–4000)	2500 (1200–4000)	4800 (3000–7500)	5125 (2400–9000)	4000 (2000–6000)	4000 (2000–8000)
Housing								
Homeless	57% (70/123)	26% (7/27)	27% (31/116)	5% (2/34)	50% (62/124)	31% (8/26)	45% (163/363)	20% (17/87)
Some sort of housing	43% (53/123)	74% (20/27)	73% (85/116)	94% (32/34)	50% (62/124)	50% (18/26)	55% (200/363)	80% (70/87)

* Not all totals add up due to rounding off and not all data shown.

** ZAR1 equals US$0.10.

Homelessness in South African metropolitan areas is associated with poor access to clean water and sanitation. Homeless people are also more vulnerable to violence and harassment compared to people who have formal housing (49).

61 Type of employment was not requested as part of the survey. Males and females who were currently working as sex workers may have self-reported as being employed.

Since homelessness is usually linked with poverty, it could be used as proxy for socioeconomic position. It would follow then that increased levels of poverty contribute to high-risk injecting practices and challenges to accessing drug dependency treatment services (28,64). Access to safe injecting spaces, cleaning materials for injecting equipment and money to purchase injecting equipment are all more limited among impoverished PWID compared to PWID with more money, and those living in stable environments. These differences translate into fewer safety precautions taken by impoverished PWID and influence the likelihood of arrest while injecting on the street (51). Lack of money to purchase injecting equipment and cleaning materials increases the likelihood of reusing injecting equipment and their contamination. Collectively, many of the factors associated with poverty and lack of free injecting equipment and cleaning materials increase the likelihood of HIV infection and transmission through unsafe injecting practices (52).

B.3 Participant drug use and injecting patterns

B.3.1 Initiation of drug use

Very few participants' (n=15) first experience of an illegal drug was through injecting. Most participants (84%, 377/450) in this study first smoked an illegal drug, mainly cannabis (63%, 285/450), in mid-adolescence. The median age when first taking an illegal drug was 15 years (IQR 13–17) and 16 (IQR 13–19) among male and female participants respectively. The majority of male and female survey participants smoked their first drug (86%, 311/363 and 76%, 66/87, respectively). In the case of male participants, 64% (232/363) first used cannabis and for female participants, the figure is 61% (53/87). Less than half of the male (42%, 152/363) and female (36%, 31/87) participants reported that they took their first drug due to peer pressure. An overview of first-drug-taking history is provided in Table 7.

B.3.2 Injecting drug use patterns

The bio-behavioural survey did not enquire about the time between initial drug use and transition to injection. However, some insight into the timing of transition to injecting was obtained from focus group discussions. One of the Centurion FGD participants first used heroin by injecting it, and the other three people in the focus group transitioned to injecting heroin within a year of heroin use.

> *"When you start [heroin] you smoke it, or you snort it. But just like that [clicks his fingers], then you start mainlining (injecting)."* White male PWID, Centurion FGD

The timing of transition to injecting has not been documented in South Africa, but rapid transitioning (median of 2 years) among PWID under the age of 20 years has been documented in Tanzania (8). Hence, interventions looking to prevent the transition to injecting drugs, and consequences thereof, would need to be provided within a year or two after the initiation of heroin use in order to be useful.

Transition from non-injecting to injecting drug use

An overview of the factors influencing survey participants' reasons for injecting drugs is provided in Table 8. The majority of male (49%, 178/363) and female (43%, 37/87) participants started injecting drugs to experience the effects of the drug (i.e. 'to get high'). A male participant of the Centurion FGD described this:

> *"The rush is more, you feel it more. You always want that rush."* Male PWID, Centurion FGD

A WSW PWID interviewee described how the cost of heroin can influence transitioning to injecting:

> *"I could not afford it [to continue nasally inhaling heroin]. My ex and I, we were both sniffing 6 quarts a couple of hours each, about 1.5 grams at R50 per quart. We could not afford to buy 12 quarts every 4 hours. She used to shoot up, 12 years ago, and so she went out to buy needles. I did not want to do it because I did not like needles. So she would shoot up in my arm for the first week; cause I could not look. And then one day she kept missing and then I said, 'Just give it to me', and I learnt very quickly. It was to save money. The high was better and I did not go into withdrawal so quickly".* IDI, WSW PWID, Cape Town

TABLE 7 Summary of survey participants' initial illegal drug use history

Province	Gauteng		KwaZulu-Natal		Western Cape		Total	
Biological sex	*Male n=123*	*Female n=27*	*Male n=116*	*Female n=34*	*Male n=124*	*Female n=26*	*Male n=363*	*Female n=87*
Age at first illegal drug use (years)								
Median (IQR)	16 (14–18)	18 (13–19)	16 (13–17)	16 (13–19)	15 (13–17)	15 (14–18)	15 (13–17)	16 (13–19)
Drug								
Cannabis	59% (72/123)	56% (15/27)	77% (89/116)	64% (22/34)	58% (71/124)	62% (16/26)	64% (232/363)	61% (53/87)
Methaqualone	6% (7/123)	4% (1/27)	2% (2/116)	0	19% (24/124)	12% (3/26)	9% (33/363)	5% (4/87)
Amphetamine-type stimulant	1% (1/123)	4% (1/27)	0	0	6% (8/124)	15% (4/26)	2% (9/363)	6% (5/87)
Designer drugs/ Ecstasy	6% (7/123)	19% (5/27)	4% (5/116)	9% (3/34)	5% (6/124)	8% (2/26)	5% (18/363)	11% (10/87)
Cocaine powder	4% (5/123)	0	2% (2/116)	3% (1/34)	2% (3/124)	0	3% (10/363)	1% (1/87)
Crack cocaine	2% (3/123)	7% (2/27)	2% (2/116)	0	1% (1/124)	0	2% (6/363)	2% (2/87)
Heroin	14% (17/123)	11% (3/27)	3% (4/116)	12% (4/34)	3% (4/124)	0	7% (25/363)	8% (7/87)
Heroin/ cannabis combination	5% (6/123)	0	1% (1/116)	0	0	0	2% (7/363)	0
LSD/ hallucinogen	2% (2/123)	0	1% (1/116)	0	1% (1/124)	4% (1/26)	1% (4/363)	1% (1/87)
Administration								
Smoked	80% (98/123)	74% (20/27)	90% (104/116)	71% (24/34)	88% (109/124)	85% (22/26)	86% (311/363)	76% (66/87)
Ingested	8% (10/123)	15% (4/27)	3% (4/116)	9% (3/34)	5% (6/124)	8% (2/26)	6% (20/363)	10% (9/87)
Reason for using drug*								
Peer pressure	34% (42/123)	19% (5/27)	47% (54/116)	41% (14/34)	45% (56/124)	46% (12/26)	42% (152/363)	36% (31/87)
Curiosity	39% (48/123)	48% (13/27)	28% (32/116)	32% (11/34)	19% (23/124)	19% (5/26)	28% (103/363)	33% (29/87)
Emotional reasons	15% (18/123)	19% (5/27)	22% (26/116)	23% (8/34)	10% (13/124)	15% (4/26)	16% (57/363)	20% (17/87)

* Other less common reasons for using first drug include for stimulation and for physical reasons, and are not included

Since 2009, seizure of heroin in Africa has increased about tenfold (1). Increased heroin availability could contribute to the transition to injecting drug use among heroin users in South Africa. In Asia, increased law enforcement around heroin use has been shown to increase heroin use (53). Efforts to treat heroin and ATS dependency before people inject these drugs would be a worthwhile intervention to prevent the transition to injecting. Additionally, increased efforts to reduce the supply of drugs may reduce drug availability for injecting, and would require multi-sector interventions that address the broader aspects of drug use.

TABLE 8 Overview of factors influencing survey participants' reasons for injecting a drug

Province	Gauteng		KwaZulu-Natal		Western Cape		Total	
Biological sex	*Male n=123*	*Female n=27*	*Male n=116*	*Female n=34*	*Male n=124*	*Female n=26*	*Male n=363*	*Female n=87*
Reason for injecting								
For stimulation/to get high	55% (67/123)	28% (23–31)	56% (64/116)	37% (13/34)	38% (47/124)	33% (9/26)	49% (178/363)	43% (37/87)
Curiosity	12% (15/123)	15% (4/27)	17% (20/116)	23% (8/34)	11% (13/124)	15% (4/26)	13% (48/363)	18% (16/87)
Peer pressure	10% (13/123)	4% (1/27)	14% (16/116)	18% (6/34)	14% (17/124)	19% (5/26)	13% (46/363)	14% (12/87)
Emotional reasons	13% (16/123)	7% (2/27)	10% (12/116)	21% (7/34)	5% (6/124)	8% (2/26)	9% (34/363)	13% (11/87)
Cost	3% (4/123)	4% (1/27)	0	0	11% (13/124)	4% (1/26)	5% (17/363)	2% (1/87)
Quality	2% (2/123)	0	0	0	8% (10/124)	7% (2/26)	3% (12/363)	2% (2/87)

First injecting experience

Among male survey participants, the median age of first injecting an illegal drug was 22 years (IQR 18–26), with 88% (319/363) first injecting heroin. Of them, 20%(74/363) were under the age of 18 years old when they first injected a drug. Among female participants, the median age of first injecting a drug was 21 years (IQR 18–25), with 87% (76/87) first injecting heroin. Of the female participants, 19% (17/87) first injected when they were under the age of 18 years old. An overview of survey participants' first injecting experiences is provided in Table 9.

TABLE 9 Overview of survey participants' first injecting experiences

Province	Gauteng		KwaZulu-Natal		Western Cape		Total	
Biological sex	*Male n=123*	*Female n=27*	*Male n=116*	*Female n=34*	*Male n=124*	*Female n=26*	*Male n=363*	*Female n=87*
Age at first injection								
Median (IQR)	20 (18–24)	21 (19–22)	21 (18–25)	22 (18/30)	24 (19–28)	22 (18–26)	22 (18–26)	21 (18–25)
Drug first injected								
Heroin	84% (103/123)	85% (23/27)	93% (108/116)	88% (30/34)	87% (108/123)	88% (23/26)	88% (319/363)	87% (76/87)
ATS	11% (13/123)	15% (4/27)	1% (1/116)	0	6% (7/123)	8% (2/26)	6% (21/363)	7% (6/87)

Heroin was the most common illegal drug to be first injected. Highest levels of ATS injection were found in the Western Cape. The MSM PWID interviewed described a sub-group of MSM who inject ATS and who use sexual and online social network sites to find sexual and drug-using partners. The findings of the ANOVA Health Institute's online surveys among MSM suggest that similar practices occur among a small proportion of MSM beyond the Western Cape (42). ATS causes sexual arousal and affects judgement that may result in decreased likelihood of safer sex practices, including condom use (31). The likelihood of HIV infection increases with the number of sexual acts and partners, which is high in contexts of group sex, where more than three people have sex together. The sexual transmission risk of HIV is higher from unprotected penile-anal sex compared to penile-vaginal sex and interventions to increase condom and lubricant use are recommended (54).

Most recent injecting experience

Among male survey participants, 44% (158/363) had injected an illegal drug on the day of the study, and 90% (325/363) had injected within the last 12 months. Of them, 90% (326/363) had last injected heroin; 6% (22/363) ATS and 4% (15/363) another drug (heroin mixed with methamphetamine=9; cocaine=3; morphine=1; methaqualone=1; dipipanone (Wellconal)=1).

Among female survey participants, 32% (29/87) had injected on the day of the study, and 70% (61/87) had injected an illegal drug in the last 12 months at least once. Of the female participants, 89% (77/87) had last injected heroin, 8% (7/87) an ATS, and 3% (3/87) another drug (morphine=1; dipipanone (Wellconal)=1 and ketamine=1). See Table 10 for a summary of most recent injecting experiences.

Duration of injecting drug practices

Survey participants had injected drugs for a median of five years (IQR 2–11 and 2–8 for males and females respectively) (see Table 10). The average survey participant's injecting career length was similar to that of the PWID recruited by Plüddemann et al. in Cape Town in 2004 (41).

The risks of injecting drugs accumulate over the course of an injecting career and the total number of times contaminated injecting equipment is used (52).

TABLE 10 Summary of survey participants' injecting drug use history

Province	Gauteng		KwaZulu-Natal		Western Cape		Total*	
Biological sex	*Male n=123*	*Female n=27*	*Male n=116*	*Female n=34*	*Male n=124*	*Female n=26*	*Male n=363*	*Female n=87*
Years of injecting drug use								
Median (IQR)	6 (3–12)	5 (3–8)	4 (2–8)	5 (2–10)	5 (3–11)	4 (2–6)	5 (2–11)	5 (2–8)
Drugs injected in last 12 months**								
Heroin	95% (117/123)	96% (26/27)	99% (115/340)	94% (32/34)	96% (119/124)	96% (25/26)	97% (351/363)	95% (83/87)
Amphetamine-type stimulant	24% (30/123)	37% (10/27)	9% (11/116)	15% (5/34)	59% (73/124)	47% (12/26)	31% (114/363)	31% (27/87)
Other drug (non-specified)	3% (4/123)	0	2% (2/116)	3% (1/34)	3% (4/124)	0	3% (10/363)	1% (1/87)
Timing of last injection								
Day of study	52% (64/123)	41% (11/27)	18% (21/116)	9% (3/34)	59% (73/124)	58% (15/26)	44% (158/363)	32% (29/87)
<12 months ago	93% (115/123)	78% (21/27)	77% (89/116)	56% (18/34)	98% (121/124)	85% (22/26)	90% (325/363)	70% (61/87)
>12 months ago	7% (8/123)	22% (6/27)	23% (27/116)	47% (16/34)	2% (3/124)	15% (4/26)	10% (38/363)	30% (26/ 87)
Last drug injected								
Heroin	88% (108/ 123)	85% (23/27)	98% (114/116)	85% (29/34)	84% (104/124)	96% (25/26)	90% (326/363)	89% (77/87)
ATS	9% (11/123)	15% (4/27)	0	6% (2/34)	9% (11/124)	4% (1/26)	6% (22/363)	8% (7/87)
Last injected with new/sterile needle and syringe								
	50% (62/123)	63% (17/27)	42% (49/116)	62% (21/34)	54% (67/124)	54% (14/26)	49% (178/363)	60% (52/87)

* Not all totals add up due to rounding off and due to the presentation of selected data.
** Participants could answer multiple binary questions for this subsection.

B.4 HIV prevalence

Overall HIV prevalence among survey participants was 14% (64/450). Analysed by province, HIV prevalence was 17% (26/15), 16% (24/150) and 9% (14/150) in KwaZulu-Natal, Gauteng and the Western Cape respectively. HIV prevalence among male survey participants across all sites was 14% (98/363) and 17% (15/87) among female survey participants. An overview of HIV prevalence, disaggregated by province, sex and race is provided in Table 11.

TABLE 11 Summary of HIV prevalence disaggregated by province, sex and race for survey participants

Province	Gauteng	KwaZulu-Natal	Western Cape	Total
Overall HIV prevalence % (n/N)	16% (24/150)	17% (26/150)	9% (14/150)	14% (64/450)
Male	15% (18/123)	16% (18/116)	10% (13/124)	14% (49/363)
Black	18% (7/40)	18% (9/49)	0 (0/8)	17% (16/97)
White	12% (8/66)	7% (3/43)	11% (4/35)	10% (15/144)
Coloured	21% (3/14)	20% (2/10)	10% (8/78)	13% (13/102)
Asian	0 (0/3)	29% (4/14)	33% (1/3)	25% (5/20)
Female	22% (6/27)	24% (8/34)	4% (1/26)	17% (15/87)
Black	60% (3/5)	86% (6/7)	0 (0/0)	81% (9/11)
White	7% (1/14)	0 (0/23)	0 (0/15)	2% (1/51)
Coloured	17% (1/6)	33% (1/3)	11% (1/9)	16% (3/19)
Asian	50% (1/2)	100% (1/1)	0 (0/2)	42% (3/7)

HIV prevalence among participants and other populations

General population: HIV prevalence among PWID in this study was higher than the HIV prevalence among adults in the general population among males (14% versus 10% respectively) and similar between female participants and females in the general population (18% versus 17% respectively) (49). The largest difference in HIV prevalence between sampled and provincial population estimates was found among males recruited in Gauteng (15%, 18/123, in the study versus 9% in the general adult male population) and in the Western Cape (10%, 13/124, in the study versus 4% in the general adult male population) (40). HIV prevalence among white male participants was 10% while HIV prevalence among white males in the general population is estimated at around 2% (12). The HIV prevalence estimates from this study are from a convenience sample, and as such, comparisons with findings from representative data of the general population (and other sub-populations) may be misleading. The HIV prevalence among PWID in this sample is notably higher than among people in the general population (see figures 7 and 8).

However, PWID are at increased risk for HIV due to their drug-using practices, sexual practices and other social and structural factors. As such, viewing the study findings in relation to other groups (notably, MSM, WSW and SW[62]) is also useful.

Men who have sex with men (MSM): HIV prevalence among MSM (including transgender women) in this study was 21% (20/92). HIV prevalence among MSM in Cape Town, Johannesburg and Durban participating in other studies has ranged between 10 and 50% (48).

Women who have sex with women (WSW): HIV prevalence among WSW (including transgender men) in our sample was 22% (7/32). Little research has been done on WSW and HIV in South Africa, and no HIV prevalence estimates for WSW exist.

62 Very few transgender PWID were recruited in this study (3 trans-men and 4 trans-women). No representative HIV prevalence estimates for transgender people in South Africa exist.

However, among a sample of 72 WSW living with HIV participating in another study conducted in Cape Town, 15% had ever injected a drug and 20% reported a sex partner who had injected a drug (31).

Sex workers: HIV prevalence among biologically male survey participants who had ever worked as sex workers was 30% (17/57) and 23% (10/44) among biological females. A systematic review of HIV prevalence among female sex workers from low and middle-income countries cited the HIV prevalence among 775 female sex workers in South Africa to be 59.6% (95% CI 56.2–63%) (73). Data on HIV prevalence among male sex workers in South Africa is lacking and has been identified as a strategic information gap (expert panel, South African MSM HIV data triangulation meeting, Cape Town, 3–6 December 2013). Figure 9 and Figure 10 provide a graphical representation of the PWID sample's HIV prevalence in relation to other population groups.

FIGURE 7

HIV prevalence of female PWID in relation to females (aged 15 and above) in the general population[63]

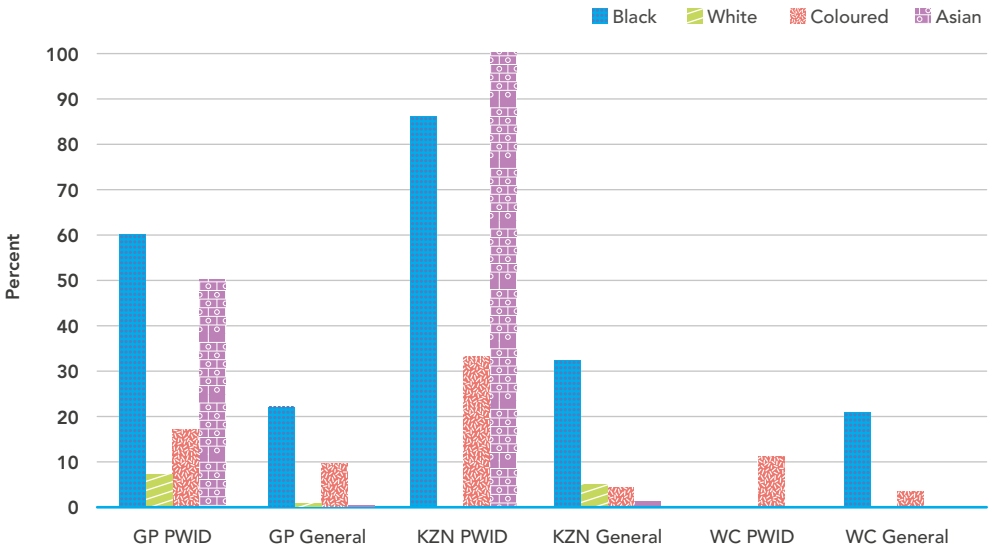
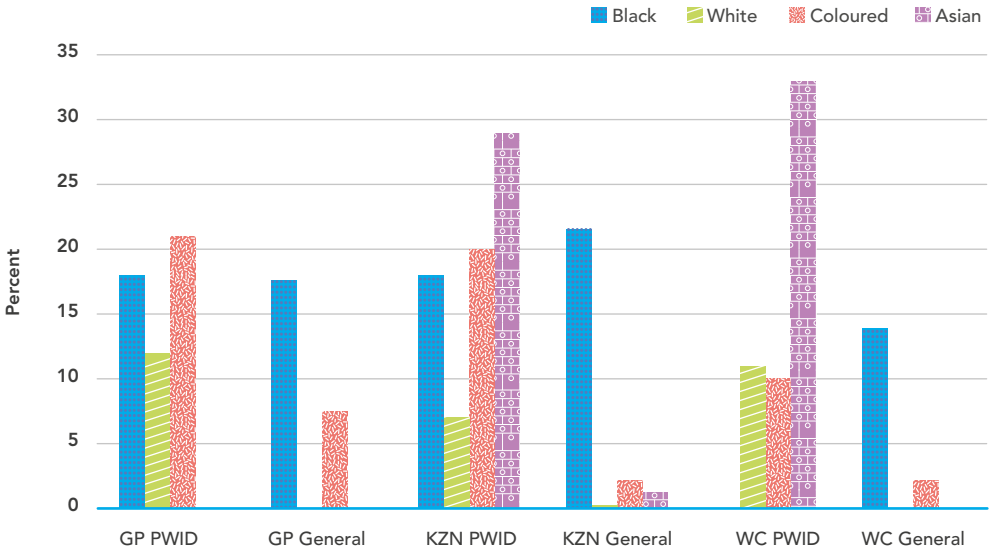


FIGURE 8

HIV prevalence among male PWID in relation to men (aged 15 years and above) in the general population[63]



63 HIV prevalence estimates for the general population were obtained from additional analysis done on data from the 2012 household survey completed by the Human Sciences Research Council. Due to limited sample size, it was not possible to estimate HIV prevalence among the general population for all population groups.

FIGURE 9
HIV prevalence among female PWID participants in relation to other population groups

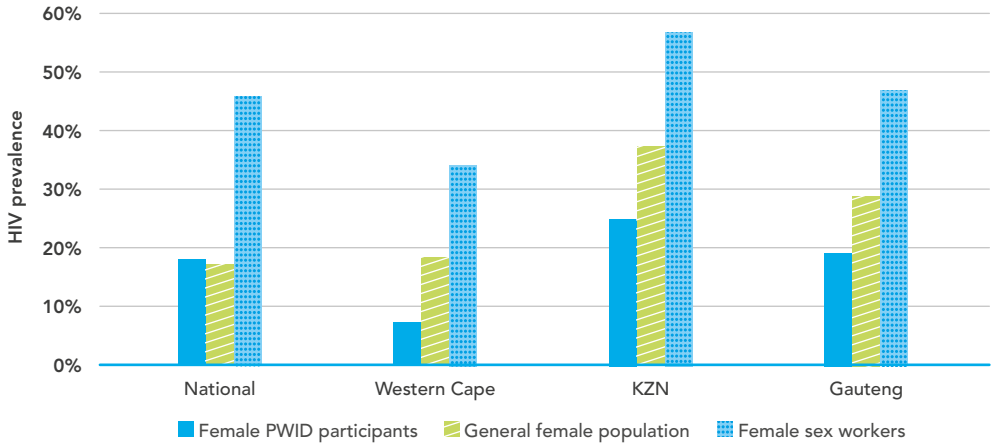
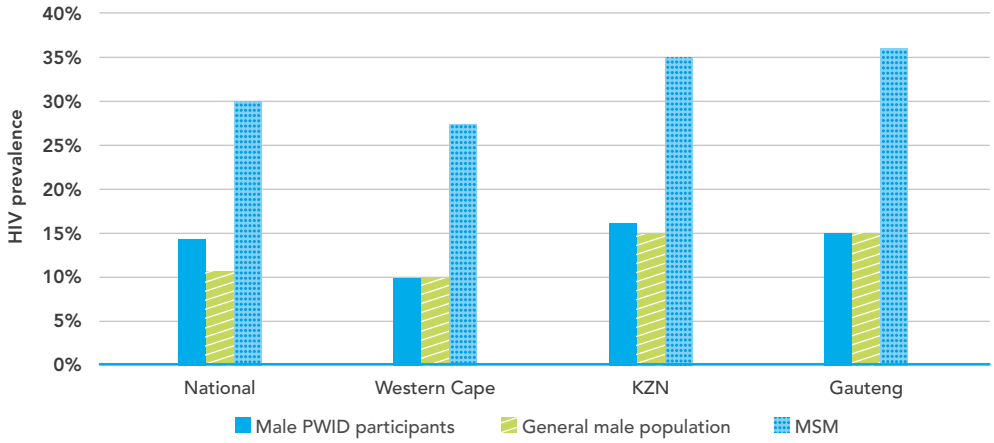


FIGURE 10
HIV prevalence among male PWID participants in relation to other population groups



B.5 Practices associated with HIV transmission risk

High-risk injecting and sexual practices were identified among this sample of PWID. This section describes some of these practices and associations with HIV. An overview of the unadjusted odds ratios from survey participants is included Appendix 10, and results of the multivariate logistic regression modelling are provided in Appendix 11.

B.5.1 High-risk injecting practices

Needle and syringe reuse

The reuse of needles, syringes, and other equipment represent a significant risk of local and systemic infections other than HIV and damage to blood vessels for PWID.

Nearly half of the male (51%, 185/363) and female (40%, 35/87) survey participants reused a needle and/or syringe the last time they injected. In this study, females who cleaned their needles and syringes most times compared to those who cleaned their needles and syringes every time they reused them were at increased odds of testing positive for HIV (OR 5.3, 95% CI 1.5–19.1, p=0.011). Females who cleaned their needles and syringes less frequently had lower odds than those who reported to clean them most times. However, these estimates are not precise (large confidence interval), reflecting the small sample size.

The survey data cannot be analysed to assess whether different cleaning methods were used by female participants who cleaned their needles most time versus those who cleaned them every time to account for this finding. Normative body standards for adequate cleaning (e.g. WHO guidelines) were not discussed with participants before the question was asked but an increased likelihood of HIV infection would normally be expected with a decrease in needle cleaning frequency. This association did not remain significant in the multivariate regression analysis.

Frequent needle reuse was reported by PWID who were interviewed. For example, a male PWID member of the study AG reported that when he injected drugs, he would use the same needle until it broke. The risk of blood-borne, skin and other injection exists every time a needle and syringe is reused; the use of new needles and syringes per infection can eliminate the risk of HIV transmission through contaminated needles and syringes. Programmes that increase access to new needles and syringes remove barriers to accessing needles and syringes and lower the risks of needle and syringe reuse (52).

Needle and syringe cleaning

Overall, low levels of effective needle and syringe cleaning were reported (see Table 12). Four per cent (16/363) of male survey participants and 14% (12/87) of females reported to use bleach to clean their needles and syringes.

Similarly, several PWID interviewees and FGD participants reported ineffective needle and syringe cleaning practices.

> *"We would only wipe it with a toilet tissue. Never put a detergent or a sanitiser."*
> Black male PWID, IDI Durban

> *"You would just burn the needle. Try and rinse it if there was water. If there wasn't water it would not matter, we would just keep going."* White male PWID, IDI Pretoria

Several PWID FGD participants believed that flushing[64] needles and syringes with air was effective in destroying HIV. Two of the Centurion FGD participants explained how several months ago they had shared a needle and syringe with a person who they suspected to be living with HIV – the FGD participants had cleaned the needle and syringe by flushing it with air before using it. A couple of months later the FGD participants re-tested for HIV, and were confirmed to be HIV negative.

Effective injection equipment cleaning requires the use of bleach, and reduces the risk of HIV transmission (55). Ineffective cleaning methods in turn increase the risk for HIV and other infections. Needle and syringe reuse and ineffective cleaning was common among participants in this study, however, the level of needle reuse is lower than previously documented in studies completed in the same cities in earlier research studies (28,35,41). The high levels of ineffective cleaning methods indicate good attempts at risk reduction. Ineffective cleaning methods may indicate poor knowledge of effective cleaning methods, limited access to bleach, or a combination of these factors.

Furthermore, data from the in-depth interviews and focus group discussions highlighted how needle and syringe reuse and cleaning practices are influenced by the degree of an individual's drug dependence and socioeconomic environment. Urgency to relieve the symptoms of withdrawal among heroin-dependent PWID was identified as the most important determinant of injecting practices.

In interviews and focus group discussions the choice as to whether or not a needle and syringe would be reused, shared, cleaned and even administered would depend largely on the severity of withdrawal symptoms. PWID with poorer socioeconomic circumstances had fewer choices and resources to inject more safely than PWID with access to more resources.

64 Flushing means to draw in air through the needle and syringe by pulling up the plunger and then exelling the air from the needle and syringe by pushing down on the plunger completely.

TABLE 12 Overview of participants' needle and syringe cleaning practices

Province	Gauteng		KwaZulu-Natal		Western Cape		Total	
Biological sex	*Male n=123*	*Female n=27*	*Male n=116*	*Female n=34*	*Male n=124*	*Female n=26*	*Male n=363*	*Female n=87*
Needle and syringe cleaning								
Never	1% (1/123)	7% (2/27)	6% (7/116)	12% (4/34)	4% (5/124)	15% (4/26)	4% (13/363)	11% (10/87)
Rarely	5% (6/123)	4% (1/27)	2% (2/116)	6% (2/34)	4% (5/124)	8% (2/26)	4% (13/363)	6% (5/87)
Most times	12% (14/123)	33% (9/27)	48% (56/116)	26% (9/34)	11% (14/124)	23% (6/26)	23% (84/363)	28% (24/87)
Always	79% (97/123)	56% (15/27)	31% (36/116)	36% (12/34)	73% (90/124)	46% (12/26)	61% (223/363)	45% (39/87)
Do not reuse needles	4% (5/123)	0	13% (15/116)	21% (7/34)	8% (10/124)	8% (2/26)	8% (30/363)	10% (9/87)
Normal cleaning method*								
With bleach	11% (13/123)	33% (9/27)	2% (2/116)	6% (2/34)	1% (1/124)	4% (1/26)	4% (16/363)	14% (12/87)
By boiling	11% (13/123)	11% (3/27)	7% (8/116)	6% (2/34)	8% (10/124)	12% (3/26)	9% (31/363)	9% (8/87)
With any water	62% (76/123)	37% (10/27)	11% (13/116)	12% (4/34)	6% (8/124)	15% (4/26)	27% (97/363)	21% (18/87)
By wiping	4% (5/123)	11% (3/27)	21% (24/116)	3% (1/34)	3% (4/124)	4% (1/26)	9% (33/363)	6% (5/87)

* Participants could answer multiple binary questions for this subsection

Needle and syringe sharing

Among male survey participants, 32% (116/362) reported to share needles and/or syringes most times and 13% (47/362) to always share them. About a quarter of the female survey participants shared their needles and syringes most times and always (26%, 23/87 and 26%, 22/87 respectively). On average, male and female participants had shared needles and syringes with a maximum of one other person at one time during their injecting drug career (IQR 0–3).

A third (31%, 113/363) of the male survey participants never shared other injecting equipment and 38% (139/363) always shared these items. About a quarter (24%, 221/87) of the female survey participants never shared other injecting equipment and 38% (33/87) always shared these items. Key informants explained that needles, syringes and other injecting equipment were shared with friends, their sexual partners and other people who used drugs.

In bivariate analysis the odds of female participants testing positive for HIV increased by about 30% for every additional person a needle and syringe was shared with (OR 1.3, 95% CI 1.1–1.6, p=0.008). This association did not persist in the multivariate analysis.

The study highlighted high levels of needle, syringe and other injecting material sharing practices. Higher levels of needle and syringe sharing were found among female participants compared to male participants. In other contexts, female PWID use injecting equipment that is used by their sexual partners, or have their sexual partners inject them. As a result, higher levels of contaminated needle and syringe use has been found among female PWID compared to male PWID (33).

Needle and syringe sharing increases the risk of HIV transmission through the use of HIV contaminated injecting equipment. The risk of infection, including HIV, is further increased if ineffective cleaning methods are used and needles and syringes are shared between PWID. Needle and syringe programmes have been proven to be an effective method of increasing access to new needles and syringes and have not been shown to contribute to an increase in needle and syringe sharing practices among PWID (52). Although HIV can also be transmitted through the sharing of other contaminated injecting equipment, including spoons and filters, the risk of HIV transmission is lower than through the use of a contaminated needle and syringe. The provision of other injecting equipment, along with needles and syringes, serves to increase access to injecting equipment and reduce the need for sharing of spoons and filters used to inject drugs (52).

A summary of needle, syringe and injecting equipment sharing practices is provided in Table 13.

TABLE 13 Summary of needle, syringe and other injecting equipment sharing practices

Province	Gauteng		KwaZulu-Natal		Western Cape		Total*	
Biological sex	*Male n=123*	*Female n=27*	*Male n=116*	*Female n=34*	*Male n=124*	*Female n=26*	*Male n=363*	*Female n=87*
Needle and syringe sharing[1]								
Never	36% (44/123)	52% (14/27)	36% (42/116)	44% (15/34)	53% (65/123)	31% (8/26)	42% (151/362)	43% (37/87)
Rarely	16% (20/123)	4% (1/27)	8% (9/116)	6% (2/34)	16% (19/123)	8% (2/26)	13% (48/362)	6% (5/87)
Most times	33% (41/123)	22% (6/27)	38% (44/124)	24% (8/34)	25% (31/123)	35% (9/26)	32% (116/362)	26% (23/87)
Always	15% (18/123)	22% (6/27)	18% (21/116)	26% (9/34)	7% (8/123)	27% (7/26)	13% (47/362)	26% (22/87)
Maximum needle sharing at one time, ever								
Median (IQR)	2 (1–4)	3 (1–5)	2 (1–3)	1 (0–2)	1 (0–2)	1 (0–2)	1 (0–3)	1 (0–3)
Sharing of other injecting equipment (spoon, filter)								
Never	24% (29/123)	18% (5/27)	21% (24/116)	23% (8/34)	48% (60/123)	31% (8/26)	31% (113/363)	24% (21/87)
Rarely	7% (9/123)	19% (5/27)	3% (3/116)	9% (3/34)	7% (8/123)	4% (1/26)	6% (20/363)	10% (9/87)
Most times	27% (33/123)	30% (8/27)	19% (22/116)	24% (8/34)	29% (36/123)	31% (8/26)	25% (91/363)	28% (24/87)
Always	42% (52/123)	33% (9/27)	58% (67/116)	44% (15/34)	16% (20/123)	35% (9/26)	38% (139/363)	38% (33/87)

[1] One participant did not provide data about needle and syringe sharing practices.
* Not all totals add up due to rounding off and due to the presentation of selected data.

Factors influencing needle and syringe sharing[65]

FGD participants explained how needle and syringe sharing was a common practice.

> *"Let's be honest here, we all share needles."* White male participant, Centurion FGD

> *"You try to use a new needle, but on certain occasions, sometimes you don't have your needle with you."* White male participant, Centurion FGD

FGD participants and interviewees described how needle and syringe sharing practices were influenced by structural factors (e.g. pharmacy opening hours and locations) and social factors (e.g. trust between drug using partners).

65 Quantitative data around factors influencing needle and syringe sharing was not collected.

The inability to purchase needles and syringes at times when they were needed contributed to needle sharing:

> *" …especially Sundays, the pharmacies were all closed. If you hadn't had a plan yet, and no needle, then you would go through the veld [grass], through all the shit to try find a needle"* White male PWID, IDI Cape Town

FGD participants and interviewees explained how the degree of trust between PWID, the cost of purchasing needles and syringes, lack of concern for one's health or knowledge about potential consequences all influenced needle sharing practices:

> *"We would always share. I never purchased a new needle every time - it was too expensive. I could use one for 2 weeks, [and use it] up to 5 to 6 times per day. Depending on the amount of money I had. The more money I had, the more I would use."* White male PWID, IDI Pretoria

> *"I feel more comfortable sharing with him [points to a person in the focus group] than with someone on the street."* White male PWID, FGD Centurion

> *"'Cause once you are craving, there is no time to go to pharmacy or hospitals, you are craving, you need to smoke [inject] now."* Black male PWID, FGD Durban

A MSM PWID from Cape Town reported that in contexts where MSM sexual encounters and drug use occur together, people usually use their own needles and syringes, but will share needles and syringes if required:

> *"[People] predominantly [use] new needles. Each uses their own one. People will say, 'Have you got a point [needle and syringe]? If you don't have a point you can use mine'."* IDI, white MSM PWID, Cape Town

Interviewees and FGD participants expanded on the contexts in which illegal drugs may be injected alone or with other PWID:

> *"It is not so much a sharing or community method of using [injecting]. It is a very isolated event. It is very rare that you would find a group of people injecting."* White male PWID, IDI Cape Town

> *"... they will even share a bag together ... one spikes [injects] and then the other spikes after that."* Asian female SW PWID, FGD Durban

> *"... there was an empty plot where we would often sleep, where many of the prostitutes would hang out. Black, white, coloured - there was no difference... that was a big gallery [place were people would inject together]."* White male PWID, IDI Pretoria

Other interviewees described how heroin and ATS were injected with drug-using and sexual partners. For instance, a MSM and a WSW interviewee from Cape Town explained how ATS was injected in the contexts of sex, including group sex, among MSM.

This study identified a range of factors that may influence needle and syringe sharing practices. Though recommendations to address the use of contaminated injecting equipment will be provided later, a few strategies present themselves. The provision of free needles and syringes through CSOs near locations where drugs are used and the sensitisation of pharmacy staff around injecting drug use and the effects of discrimination and unsafe injecting practices could address some of the structural factors that increase needle and syringe sharing practices. Addressing social factors contributing to needle and syringe sharing are more challenging. Increasing knowledge of the risks of needle and syringe sharing together with increased access to needles and syringes has been effective in the Netherlands and the United States to reduce needle and syringe sharing (55). Additionally, the use of PWID peers to increase knowledge around safe injecting practices is an effective modality to change practices and reach PWID with needles and syringes. Finally, improving the socioeconomic status of PWID through income generating opportunities could reduce the amount of drug injecting that occurs in hostile environments.

B.5.2 High-risk sexual practices

Participants' sexual behaviours, practices and HIV-related risk are presented in this subsection. Findings related to sexual practices, sexual partners and STI symptoms are provided in Table 14. PWID who have a high number of sexual partners, and who engage in unprotected sex (vaginal and anal), are at increased risk for the sexual transmission of HIV. These sexual transmission risks are additional to the risks for HIV transmission through injecting. Furthermore, HIV may be transmitted between PWID and their sexual partners and the clients of sex workers, linking the HIV epidemic among PWID and the broader population.

Sexual partners

On average, male and female survey participants had a median of two sexual partners in the last 12 months (IQR 1–4 for males and 1–6 for females). A quarter (25%, 92/363) of male survey participants reported to have ever had sex with another man and half (52%, 187/363) reported to have ever had sex with a sex worker. Over a third of female survey participants (39%, 34/87) reported ever having sex with another female and about a third (31%, 27/87) reported having had sex with a sex worker.[66] Among male survey participants, the odds of testing positive for HIV was positively associated ($p \leq 0.05$) with having ever had sex with another male (OR 2.2, 95% CI 1.2–4.0 p=0.016); however this association did not persist in the multivariate analysis.

The average number of sexual partners in the previous 12 months (n=2) is higher than among the general population (around 1) (40). However, a higher number of sexual partners was expected due to the high proportion of participants who had ever worked as sex workers. The survey did not assess details of sexual partnerships and sexual behaviours.[67] As a result, it is not possible to determine whether participants had worked as sex workers more than 12 months prior to the study, which would partially account for the low number of reported sexual partners in the previous 12 months. Heroin use is usually associated with decreased libido, and could partially explain the low number of reported sexual partners (24). The survey also found that WSW PWID were more likely to have been sex workers compared to other female participants. Researchers conducting the interviews anecdotally reported that female PWID SWs did have occasional female clients. The over-representation of MSM, WSW and SWs could have resulted from the recruitment of participants through organisations with established links with the MSM, WSW and SW communities in the cities where the study was implemented.

Transactional sex and sex work

Several interviewees and focus group participants described how transactional sex and sex work were commonly used to access drugs. Key informants provided different examples of people who had worked as sex workers and then began injecting drugs, and of PWID who subsequently became sex workers.

Just under half of the male survey participants (45%, 165/363) had exchanged sex for drugs, or sex for money to buy drugs. Fifteen per cent (56/363) of male survey participants had worked as sex workers. Over two thirds (68%, 59/87) of female survey participants had exchanged sex for drugs, or sex for money to buy drugs. Over half (51%, 45/87) of the female survey participants had ever worked as sex workers.

Having ever worked as a sex worker increased the odds of testing positive for HIV for both males (OR 4.0, 95% CI 2.0–7.7, p<0.001) and females (OR 2.2, 95% CI 0.7–2.2, p=0.177). The association between HIV and sex work persisted in the multivariate analysis (aOR 3.2, 95% CI 1.6–6.5, p=0.001).

However, not all participants viewed transactional sex as a viable option to obtain drugs, or to obtain money to buy drugs, particularly among males.

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66 The bio-behavioural survey did not specifically enquire about whether participants had a partner who was a sex worker, or whether they paid for sex. The frequency and timing of this behaviour was not included in the survey.

67 The bio-behavioural survey did not specifically enquire about: timing of sex work, sex of sex worker clients, whether participant's sexual partners were sex workers, nor the frequency of same-sex behaviours.

A male participant from a group of PWID in Centurion thought that there were many other ways to obtain money to purchase drugs:

> *"I think sex is like a last resort. I would rather steal than sell my body for drugs. Even if I am down and out on the street. But I know people who have."* White male participant, FGD Centurion

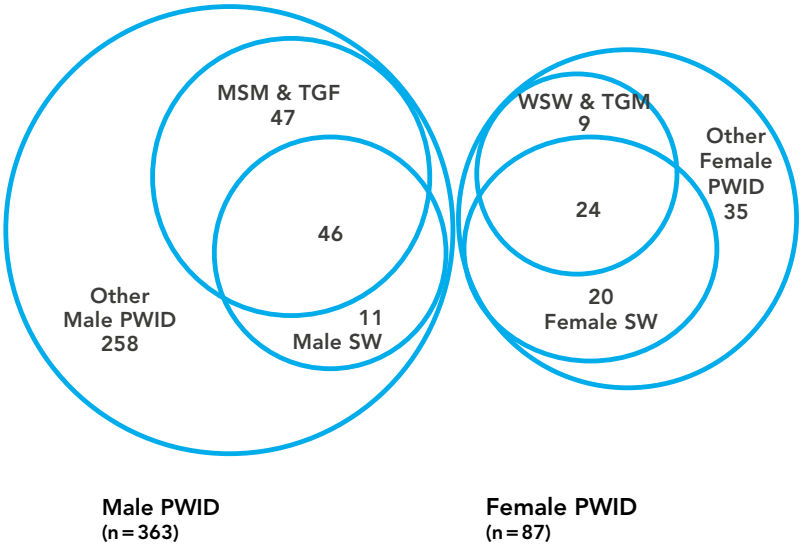
Transactional sex between men was described by a heterosexually identifying male PWID interviewee:

> *"I have had an experience with a gay injector. He would pay me to inject him, 'cause he did not want to do this. I would then get R250 and I would shoot him up, and then what ever happened after that, I would charge extra."* White male PWID IDI, Cape Town

Proportionally higher levels of sex work and transactional sex were found among female survey participants compared to males. A high prevalence of drug use, and to a lesser degree injecting drug use, has been found among SWs in South Africa (14, 70, 71). All aspects of sex work are illegal in South Africa, and sex workers have been shown to be at increased risk for HIV infection due to structural factors (including police harassment, poor health service access, limited access to condoms and condom confiscation), social factors (marginalisation, disempowerment, violence), in addition to behaviours (including high number of sexual acts and insufficient condom use) (72). The high risk for HIV infection among SWs was confirmed in the logistical analysis. Thus, programmes for PWID that consider the HIV risks associated with sex work are likely to be more effective than ones that do not. Furthermore, this study shows how PWID SWs can be reached using CSOs with links to the SW community; these CSOs could be appropriate organisations to implement PWID-focused programmes.

A diagrammatic representation of the participants and their sexual practices is provided in Figure 11.

FIGURE 11
Diagram of participants' sex and sexual practices



Condom use

The survey enquired about condom use generally and condom use during participants' last sexual encounter. The survey did not enquire about the use of condoms with different sexual partners or lubricant use.

Overall condom use

About a fifth (18%, 67/363) of male survey participants reported to never use condoms during sex and about a third (30%, 108/363) reported to always use condoms. Just under a quarter (24%, 21/87) of female survey participants reported to never use condoms during sex and just over a fifth (23%, 23/88) reported to always use condoms.

During the FGD among black men in Durban, condoms were thought to be easily available. An MSM PWID interviewee reported that sex without condoms was common practice in the context of group sex among MSM in Cape Town who use online social networks to find sexual partners.

> *"It is actually scary, they [MSM sexual partners found online] frown upon the use of condoms."*
> MSM PWID IDI, Cape Town

Condom use during last sexual encounter

Fewer than half (48%, 173/363) of the male survey participants reported condom use during their last sexual encounter. Fewer than half (47%, 41/87) of the female survey participants reported condom use the last time they had sexual intercourse.

TABLE 14 Summary of participants' sexual history and practices

Province	Gauteng		KwaZulu-Natal		Western Cape		Total	
Biological sex	*Male n=123*	*Female n=27*	*Male n=116*	*Female n=34*	*Male n=124*	*Female n=26*	*Male n=363*	*Female n=87*
Age at first act of sexual intercourse								
Median (IQR)	16 (14–17)	14 (13–17)	16 (14–17)	16 (14–18)	16 (13–17)	15 (13–17)	16 (14–17)	15 (14–17)
Sexual partners, last 12 months								
Median (IQR)	2 (1–3)	2 (1–3)	2 (1–4)	2 (1–60)	2 (1–3)	2 (1–10)	2 (1–4)	2 (1–6)
Ever had sex with someone of same sex								
	30% (29/123)	27% (7/27)	16% (18/116)	46% (16/34)	30% (37/123)	41% (11/26)	25% (92/363)	39% (34/87)
Ever had sex with sex worker								
	51% (63/123)	26% (7/27)	56% (65/116)	41% (14/34)	48% (59/123)	23% (6/26)	52% (187/363)	31% (27/87)
Usual condom use								
Never	12% (15/123)	19% (5/27)	17% (20/116)	33% (11/34)	26% (32/123)	19% (5/26)	18% (67/363)	24% (21/87)
Rarely	21% (26/123)	19% (5/27)	7% (8/116)	6% (2/34)	7% (9/123)	15% (4/26)	12% (43/363)	13% (11/87)
Most times	41% (51/123)	29% (12/27)	52% (60/116)	29% (10/34)	21% (26/123)	39% (10/26)	38% (137/363)	37% (32/87)
Always	24% (29/123)	19% (5/27)	24% (28/116)	33% (12/34)	41% (51/123)	27% (7/26)	30% (108/363)	23% (23/87)
Never had sex/not sexually active	2% (2/123)	0	0	0	5% (6/124)	0	2% (8/363)	0
Condom used at last sex								
	41% (51/123)	44% (12/27)	47% (55/116)	41% (14/34)	54% (67/123)	58% (15/26)	48% (173/363)	47% (41/87)
Ever exchanged sex for drugs or sex for money for drugs								
	42% (52/123)	74% (20/27)	51% (59/116)	62% (21/34)	44% (54/123)	69% (18/26)	45% (165/363)	68% (59/87)
Ever worked as sex worker								
	19% (24/124)	31% (8/27)	10% (12/116)	63% (22/34)	16% (20/123)	56% (15/26)	15% (56/ 362)	51% (45/87)
STI symptoms, last 12 months								
	15% (18/123)	19% (5/27)	43% (50/116)	38% (13/34)	16% (20/123)	23% (6/26)	24% (88/363)	28% (24/87)

Symptoms of STIs

Almost a quarter of males (24%, 88/363) reported symptoms of a sexually transmitted infection (STI) in the previous 12 months. Just under a third (28%, 24/87) of female survey participants reported STI symptoms in the last 12 months. Among male and female survey participants, the odds of testing positive for HIV was positively associated with reporting symptoms of a STI in the last 12 months (OR 2.4, 95% CI 1.3–4.5, p=0.007 and OR 12.5, 95% CI 3.5–45.4, p<0.001, respectively). The association between reporting symptoms of a STI in the previous 12 months and testing positive for HIV remained significant in the multivariate logistic regression analysis (OR 2.3, 95% CI 1.2–4.4, p = 0.016).

Most STI are transmitted through unprotected sex. However, the survey questions around STI symptoms were not very specific, limiting the ability to make inferences within the sample about unprotected sex. However, the majority of STIs are asymptomatic and dysuria (discomfort on urination) may also occur from a urinary tract infection, which is common among women of reproductive age and is not a STI (56). In comparison, 46% (523/1136) of sex workers participating in a recent evaluation of a national sex worker programme reported symptoms of a STI in the last 12 months (57).

B.6 Access to comprehensive services for PWID

Findings from the study that related to elements of the WHO/UNODC/UNAIDS comprehensive package of services for PWID are provided below.

B.6.1 Access to needles and syringes

The majority of all participants (79%, 355/450) obtained new needles and syringes from health facilities. Interviewees and focus group discussion participants explained how needles and syringes were sometimes stolen from healthcare facilities or obtained under false pretences (e.g. for a family member who is a diabetic requiring insulin). Needles and syringes were reported to cost between ZAR5 and ZAR25 (US$0.05–US$0.25). In Pretoria, FGD participants reported that needles and syringes were more expensive in areas where there were there was a higher concentration of PWID (e.g. the city centre) compared to other areas of the city.

Almost all of the PWID who were interviewed and who took part in focus group discussions described how needles and syringes could not be easily bought at pharmacies. Focus group participants in Pretoria explained how several pharmacies refused to sell needles and syringes to suspected PWID. In Cape Town, an MSM PWID and a WSWS PWID explained in separate interviews how different pharmacies needed to be visited to prevent being suspected as a PWID. Both of these people explained how pharmacy staff sometimes requested a script for an injectable medication in order to purchase needles and syringes. A participant from the focus group in Centurion explained how he would also get other people to buy his needles, or he would reuse them, because of the discrimination he experienced when entering pharmacies to purchase needles and syringes.

Similar challenges in obtaining needles and syringes, even when money is available, has been described in other South African studies. Of the PWID participating in the study conducted by Plüddemann et al., 56% (32/56) had been refused needles and syringes in the 30 days prior the study. Pharmacy or hospital staff refused needles and syringes to 85% (27/32) of those PWID who had been refused needles and syringes (41). An MSM-focused programme in Cape Town is the only needle and syringe programme in South Africa.

PWID need to decide whether to use available money to purchase needles and syringes or drugs. Parry et al. found that the frequency of needle and syringe reuse increased with increasing levels of poverty among PWID participants from Pretoria (28). Participants from that study stated how the purchasing of drugs took priority over purchasing needles and syringes, and that many people would reuse needles if they did not have money to purchase new needles and syringes (28). The links between needle access and HIV risks are discussed earlier.

TABLE 15 Summary of needle and syringe access among survey participants

Province	Gauteng		KwaZulu-Natal		Western Cape		Total	
Biological sex	*Male n=123*	*Female n=27*	*Male n=116*	*Female n=34*	*Male n=124*	*Female n=26*	*Male n=363*	*Female n=87*
Needle and syringe access*								
Pharmacy	89% (109/123)	70% (19/27)	71% (82/116)	82% (28/34)	77% (95/123)	85% (22/26)	79% (286/363)	79% (69/87)
Friends	19% (23/123)	31% (8/27)	23% (27/116)	11% (4/34)	13% (16/123)	7% (2/26)	18% (66/363)	16% (14/87)
Healthcare facility	4% (5/123)	11% (3/27)	6% (7/116)	15% (5/34)	9% (11/123)	4% (1/26)	6% (23/363)	10% (9/87)
NGO	4% (5/123)	11% (3/27)	0	0	6% (7/123)	0	3% (12/361)	3% (3/87)

* Participants could answer multiple binary questions for this subsection.

TEXT BOX 2

Access to drugs

Drug access and cost

Almost all (98%, 440/450) participants obtained their drugs from a drug dealer. Despite high levels of unemployment in the sample (60%, 272/45), participants obtained money to purchase drugs. Male and female key informants and FGD participants explained how different people used begging, theft, fraud and sex work to obtain money to purchase drugs.

The cost of a quarter of a gram of heroin was reported to cost between R25 and R50 (US$2.50–US$5.00), depending on the location where the heroin was obtained. Heroin in combination with other drugs ('sugars', 'nyaope' and 'whoonga') were less expensive than unmixed heroin. In Cape Town, a female key informant explained that heroin could be delivered to a home address, providing an order of at least ZAR300 (US$30) was made at one time. A white male PWID from Centurion explained that over the past 10 years the price of heroin had not increased. Participants did not report on the price paid for ATS.

B.6.2 Access to opioid substitution therapy and drug dependence treatment

Overall, 11% (17/450) of survey participants had previously accessed opioid substitution therapy (OST): 11% of males (40/363) and 13% (11/87) of females.

The majority of FGD and IDI participants knew about OST, and their perspectives were based on personal experiences or awareness of others who had accessed it. Those who had made use of OST had done so privately through both illicit and legal methods. Except for participants in Centurion, participants who had accessed OST had done so without psychosocial support. Several participants questioned the effectiveness of OST:

> *"Most of my friends use it – they go three months, then they start using [drugs again]. People often misuse things. The person knows there is Subutex [buprenorphine], if they are tired they can then use Subutex – some keep them for use when they are craving. A friend of mine's mother bought it. Others have managed [to stop using drugs], others not, the majority have not succeeded."* Black male PWID, IDI Durban

OST is almost exclusively available in the private sector in South Africa. In Centurion, OST was sponsored for up to 5 heroin users as part of a CSO drug dependency treatment programme until 2012, when this programme ended. Two of the four PWID in the Centurion FGD who had been part of the OST programme had relapsed once the programme ended. Many PWID do not find abstinence-based drug dependency treatment programmes appropriate for them, yet failure to provide an alternative contributes to the likelihood of ongoing injecting drug use and associated risks. In February 2014, a CSO based in Cape Town, in partnership with the Western Cape Department of Social Development, is providing OST and psychosocial support to 20 people who are dependent on heroin, however, very few of these people were PWID.

Drug dependency treatment

The majority (90%, 406/450) of all survey participants had tried to stop using drugs at least once in their lifetimes. Over half of the survey participants (60%, 271/450) had ever received some kind of assistance for their drug use. Among males, private (for-profit) drug dependency clinics had been accessed more than other drug dependency treatment facility types (27%, 99/363). Of female survey participants, 76% (65/87) had received some kind of support for their drug use; services from a CSO had been accessed more than other facility types (45%, 39/87). Almost half (44%, 197/450) of all survey participants had at some time in their drug-using career received psychosocial support, and 40% (181/450) had received medically assisted detoxification. Just fewer than half of all survey participants (48%, 214/450) had previously been admitted to a facility for some form of in-patient drug treatment, while a fifth (21%, 93/450) of participants had accessed some form of drug treatment and support services on an outpatient basis. Details on participant drug dependency treatment (e.g. duration of treatment and frequency of treatment episodes) were not collected. An overview of drug dependency treatment access is provided in Table 16.

Most of the services accessed were in the private sector. CSOs providing drug dependency treatment, and private drug dependency treatment centres, were most commonly used, but several participants had used publicly funded drug treatment centres. Key informants generally reported that free and more subsidised drug treatment and support services were needed, and almost all key informants listed the cost of private treatment as a barrier to accessing services. Several participants had accessed treatment through sponsored beds at private facilities.

B.6.3 HIV counselling and testing

In this study, over half of the male (53%, 191/363) and female (63%, 55/87) survey participants reported having had an HIV test in the previous 12 months and knew their results. Nevertheless, key informants mentioned that although HIV testing services were available they were not utilised, and FGD participants in Durban reported that getting and using drugs took priority over testing for HIV. Parry et al. identified stigmatisation around HIV to be a major barrier to HCT among drug users who were interviewed in their study (24).

In the general adult population (aged 25–49) in 2010, only 26% of males and 31% of females reported to have had received an HIV test in the 12 months before and knew the result (49). Contrastingly, among sex workers, 88% of participants who took part in a 2012 evaluation of a Global Funded Sex Work Programme (n=1003) reported having had an HIV test in the 12 months before, of whom 92% knew their results (57). Almost two-thirds (70%) of MSM from Gauteng, KwaZulu-Natal and the Western Cape (n=1045)[68] who took part in a community-based survey among MSM reported having ever had an HIV test, of whom 71% had reported testing in the 12 months before (58).

The reported HIV testing and counselling practices of the study sample were more than the general population, but less than samples of MSM and SW who have taken part in similar research. As the HIV transmission risks among PWID are higher than the general population, and similar or even higher than among MSM and SWs, high rates of HIV testing (above 75%) are required in order to detect HIV infection early and refer to treatment (21).

68 Survey data was collected during 2002–2005 using a combination of online and face-to-face questionnaires.

TABLE 16 Summary of drug dependency treatment access

Province	Gauteng		KwaZulu-Natal		Western Cape		Total*	
Biological sex	*Male n=123*	*Female n=27*	*Male n=116*	*Female n=34*	*Male n=124*	*Female n=26*	*Male n=363*	*Female n=87*
Needle and syringe access**								
Pharmacy	89% (109/123)	70% (19/27)	71% (82/116)	82% (28/34)	77% (95/123)	85% (22/26)	79% (286/363)	79% (69/87)
Ever tried to stop using drugs								
	93% (114/123)	93% (25/27)	87% (101/116)	97% (33/34)	87% (108/324)	96% (25/26)	89% (323/363)	95% (83/87)
Ever received any help for drug use[1]								
	66% (81/123)	81% (22/27)	41% (48/116)	74% (25/34)	62% (77/123)	72% (18/26)	57% (206/362)	76% (65/87)
Service providers accessed, ever**								
Public clinic	25% (31/123)	22% (6/27)	3% (4/116)	0	6% (8/123)	12% (3/26)	12% (43/363)	10% (9/87)
Public drug centre	10% (12/123)	7% (2/27)	15% (17/116)	15% (5/34)	27% (34/123)	27% (7/26)	17% (63/363)	16% (14/87)
NGO	22% (27/123)	41% (11/27)	19% (22/116)	53% (18/34)	14% (17/123)	38% (10/26)	18% (66/363)	45% (39/87)
Private for-profit drug clinic	37% (46/123)	33% (9/27)	16% (18/116)	35% (12/34)	28% (35/123)	58% (15/26)	27% (99/363)	41% (36/87)
Religious organisation	23% (28/123)	22% (6/27)	9% (10/116)	18% (6/34)	14% (17/123)	15% (4/26)	15% (55/363)	18% (16/87)
Private GP/doctor	24% (30/123)	30% (8/27)	7% (8/116)	15% (5/34)	9% (11/122)	23% (6/26)	14% (49/362)	22% (19/87)
Type of treatment obtained								
Psychosocial support	38% (47/123)	70% (19/27)	34% (40/116)	53% (18/34)	46% (57/123)	62% (16/26)	40% (144/363)	61% (53/87)
Detoxification (medically assisted)	46% (56/123)	26% (7/27)	28% (33/116)	59% (20/34)	40% (49/123)	62% (16/26)	38% (138/363)	49% (43/87)
Detoxification (non-medically assisted)	15% (18/123)	26% (7/27)	12% (14/116)	18% (6/34)	14% (17/123)	19% (5/26)	14% (49/363)	21% (18/87)
Maintenance therapy	11% (13/123)	7% (2/27)	7% (8/116)	12% (4/34)	15% (19/123)	19% (5/26)	11% (40/363)	13% (11/87)
Mode of treatment								
Outpatient	28% (35/123)	63% (17/27)	8% (9/116)	12% (4/34)	16% (20/123)	31% (8/26)	18% (64/363)	33% (29/87)
Inpatient	49% (60/123)	48% (13/27)	33% (38/116)	71% (24/34)	49% (61/123)	69% (18/26)	44% (159/363)	63% (55/87)

* Not all totals add up due to rounding off and due to the presentation of selected data.
** Multiple options were allowed for needle and syringe access.
[1] Data not provided by one participant.

TEXT BOX 3

Health-seeking practices and stigma

During their drug using career, 35% (156/450) of survey participants did not make any effort to seek health services or drug dependency treatment when they were most ill. A PWID interviewee from Pretoria explained how he went to a public hospital when a dental abscess affected his speech:

"I only went there because I couldn't talk. The only time I would go and get help is when I was like, 'Oh my God'; when it [the health condition] was not manageable anymore." White male PWID, IDI Pretoria

Some participants explained that their hesitation to seek healthcare was a result of stigmatisation within healthcare settings. Two-thirds of survey participants (60%, 268/450) felt that they were treated in a negative way because of their drug use when they visited a health facility or healthcare provider. The survey did not elicit details of perceived negative treatment. However, one participant from the FGD among females in Durban explained how healthcare workers discriminated against drug users:

"They [health workers] treat them [drug users] like waste, especially if you tell them that you are using drugs – they have no time." Black female PWID, Durban FGD

Experiences of stigmatisation and discrimination by pharmacy staff towards PWID who purchased needles is described earlier. Parry et al. identified health worker discrimination and stigmatisation of drug users as a barrier to accessing healthcare services (24). Similarly, health worker stigmatisation of SWs and MSM have been described as barriers to engaging with the health system (6). In response, the draft Operational Guidelines for Key Populations recommend health-worker sensitisation around key populations (including people who use drugs) to enable healthcare access by drug users (43). PWID who are SWs, MSM, living with HIV, or any combination of these characteristics, face cumulative stigmatisation that prevents access to HIV-related and drug dependency services (see Appendix 13 for more details on health-seeking practices).

B.6.4 Targeted information, education and communication for PWID and their sexual partners

In total, 53% (191/363) of male and 69% (60/87) of female survey participants had previously received some form of HIV prevention information for drug users. However, only the Cape Town-based CSO that runs a NSP provides information on safe injecting practices for PWID. None of the key informants, nor FGD participants, reported to have received any information that targeted their partners. The provision of targeted information, education and communication material for PWID could improve current injecting practices.

B.6.5 Vaccination, diagnosis and treatment of viral hepatitis

Just under a quarter (24%, 110/450) of all survey participants had previously been tested for hepatitis C, and few of the focus group discussion members had a good understanding of hepatitis. Study coordinators in Durban perceived hepatitis C to be more prevalent than HIV among PWID in that city.

B.6.6 Prevention, diagnosis and treatment of tuberculosis

The study did not specifically enquire about TB screening. However, 7% (32/450) of participants self-reported to have previously had TB. A key informant from Pretoria explained that people were diagnosed with TB while hospitalised for respiratory or other medical conditions. PWID who have poor immunity, particularly those infected with HIV, are at increased risk for developing TB, which carries high morbidity. PWID living in impoverished conditions and in close proximity to persons infected with TB who are not on treatment are at increased risk for TB infection due to poor nutrition and associated immune function (61).

TEXT BOX 4

Other consequences of injecting drug use

Overdose

Many participants had previously experienced an overdose: 48% (173/363) of males and 61% (53/87) of females. Of them, both males and females had overdosed an average of 2 times ever (IQR for men 1–4; IQR for women 1–5). Several of the FGD participants in Centurion and key informants from Pretoria reported the deaths of people known to them as a result of drug overdose. Injecting drug use carries a higher risk of death due to overdose than other methods of drug administration. Overdose prevention strategies, including the provision of opioid antagonist medications (e.g. naloxone), are recommended by UNODC to reduce the morbidity and mortality associated with drug overdose (60).

Health consequences

The majority of survey participants reported weight loss (84%, 382/450) during their injecting drug careers. Over a third of participants reported ever having an abscess (39%, 174/450). Other reported health complications are listed in Appendix 12.

Engagement with law enforcement and correctional services

Almost all of the male survey participants (97%, 348/363) had been in police lockup at some time in their lives. The majority of male survey participants who had been in police lockup (74%, 259/348) reported drugs could be obtained while there. About a quarter (27%, 95/348) of the male survey participants who were ever in police lockup injected drugs while there, and about half (45%, 43/95) were able to obtain clean needles and syringes. The majority (77%, 280/363) of male survey participants had been in prison and the majority of them (84%, 236/280) reported that it was possible to get drugs there. A third (31%, 87/280) of the male survey participants who had been in prison reported injecting drugs while there, and over half (56%, 49/87) of them were able to obtain clean needles and syringes.

The majority (83%, 72/87) of the female survey participants had been in police lockup at some time in their lives. About half (49%, 35/72) of female survey participants who had been in police lockup reported that it was possible to get drugs while there, and 14% (10/72) injected drugs while inside, with just under half (40%, 4/10) able to get clean needles and syringes. Almost half of the females survey participants (43%, 37/87) had ever been in prison. Two-thirds (62%, 23/37) of them reported that it was possible to get drugs there, with 8% (3/37) injecting drugs while there; 67% (2/3) could obtain clean needles and syringes.

The bio-behavioural survey did not elicit details around the reasons or duration of police lockup and imprisonment. However, one key informant and two of the female FGD participants had been in prison and provided some information. Participants had been placed in police lockup or imprisoned for a variety of reasons, ranging from theft to murder. Participants described how drugs, needles and syringes were available in some prisons for a price, but that availability varied between prisons and between different prison sections. One of the key informants underwent unassisted heroin withdrawal while awaiting trial.

The criminalisation of drug use and the use of criminal activities to enable drug use are likely contributing factors to the high numbers of participants that had been in police lockup and prison. In many contexts, entry into the prison system increases the likelihood of ongoing drug use and other health risks, including exposure to TB (61).

TABLE 17 Summary of HIV and hepatitis C testing practices

Province	Gauteng		KwaZulu-Natal		Western Cape		Total	
Biological sex	*Male n=123*	*Female n=27*	*Male n=116*	*Female n=34*	*Male n=124*	*Female n=26*	*Male n=363*	*Female n=87*
Received HIV prevention information for drug users								
	67% (82/123)	74% (20/27)	44% (51/116)	82% (28/34)	47% (58/124)	46% (12/26)	53% (191/363)	69% (60/87)
Had HIV test in last 12 months								
	50% (62/123)	46% (12/27)	50% (58/116)	71% (25/34)	61% (76/124)	74% (20/26)	54% (196/363)	65% (57/87)
Had HIV test in last 12 months & knows result								
	50% (61/123)	48% (13/27)	49% (57/116)	71% (24/34)	59% (73/124)	69% (18/26)	53% (191/363)	63% (55/87)
Ever tested for hepatitis C								
	30% (37/123)	27% (7/26)	16% (19/116)	26% (9/34)	23% (28/124)	38% (10/26)	23% (84/363)	30% (26/87)

B.7 Knowledge of HIV transmission and risk perception

A summary of participant knowledge and perception of HIV transmission risk is presented in this section. Details for this section are included in Table 18.

TABLE 18 Summary of survey participants' HIV-related knowledge and risk perception

Province	Gauteng		KwaZulu-Natal		Western Cape		Total	
Biological sex	*Male n=123*	*Female n=27*	*Male n=116*	*Female n=34*	*Male n=124*	*Female n=26*	*Male n=363*	*Female n=87*
Had heard of HIV/AIDS								
	97% (119/123)	100% (27/27)	100% (116/116)	100% (34/34)	99% (123/124)	100% (26/26)	99% (358/363)	100% (88/87)
Correctly answered 5 questions on the sexual transmission of HIV								
	50% (62/123)	44% (12/27)	62% (72/116)	85% (29/34)	49% (61/124)	69% (18/26)	54% (195/363)	68% (59/87)
Self-perception of risk for HIV infection								
	59% (72/123)	30% (8/27)	72% (83/116)	59% (20/34)	52% (65/124)	54% (14/26)	61% (220/363)	48% (42/87)
Self-perceived HIV risks*								
Unprotected sex	36% (26/72)	44% (4/8)	64% (53/83)	75% (15/20)	43% (28/65)	36% (5/14)	49% (107/220)	57% (24/42)
Unprotected sex with multiple sexual partners	25% (18/72)	25% (2/8)	53% (44/83)	60% (12/20)	17% (11/65)	29% (4/14)	33% (73/220)	43% (18/42)
Use of non-sterile injecting equipment	83% (60/72)	75% (6/8)	42% (35/83)	25% (5/20)	74% (48/65)	36% (5/14)	65% (143/220)	38% (16/42)
Violence	4% (3/72)	50% (4/8)	6% (5/83)	20% (5/20)	12% (8/65)	14% (2/14)	7% (16/220)	26% (11/42)

* Participants were able to respond to more than one option for their perceived risks for HIV infection.

B.7.1 Knowledge of HIV transmission risks

Almost all (99%, 445/450) survey participants had heard of HIV before, and over half (56%, 254/450) correctly answered five knowledge questions relating to the sexual transmission of HIV. Some participants had heard about the risk of HIV transmission through needle and syringe sharing while at school. However, the understanding of HIV-related risks of injecting drug use among IDI and FGD participants was found to be limited:

> *"Needle sharing – I have no idea of the risks, most people don't."* White male participant, Centurion FGD

B.7.2 Perception of risk

In total, 61% (220/363) of male survey participants perceived themselves to be at risk for HIV infection. Of them, 65% (143/220) thought they were at risk for HIV due to the use of non-sterile needles, 49% (107/220) due to unprotected sex and 33% (73/220) due to having multiple sexual partners. Just less than half of the females survey participants (48%, 42/87) thought that they were at risk for HIV infection. Of them, 57% (24/42) thought they were at risk for HIV due to unprotected sex, 43% (18/42) due to having unprotected sex with multiple partners and 38% (16/42) due to using non-sterile needles. Female PWID had lower self-perceived risks of the use of contaminated injecting equipment compared to male PWID (39%, 16/42 versus 65%, 143/220 respectively).

B.8 Attitudes towards risk reduction

Several of the key informants explained how the value of life and health is linked to personal mental health and socioeconomic circumstances. Key informants suggested that as people's sense of self-worth decreases so does their concern about the potential consequences that their drug using or sexual practices may have. A white male PWID interviewee from Cape Town described how among PWID, this translated into a lack of concern about becoming HIV-infected:

> *"The lower your self-worth goes, the more worthless you feel. You kind of don't want to live anymore, so you are in a way welcoming [illness], you almost chance fate when it comes to using dirty needles."* White male PWID, IDI Cape Town

A black male FGD participant in Durban explained how drug use is usually the most important priority for many drug users. Among drug users living on the street in Durban, their actions, including sexual practices and condom use, were guided by their desire to use drugs:

> *FGD facilitator: And condoms? Can you get them? Do you want them?*
> *[Several participants laugh]*
> *Durban FGD participant 2: You don't care about anything – if you are on the streets. You just forget who you are when you are on the streets.*
> *Durban FGD participant 1: Nothing is important anymore.*
> *FGD facilitator: What is important for you?*
> *Durban FGD participant 2: To get the drug.*
> FGD among black male PWID, Durban

The majority of key informants thought that interventions to reduce the risk of HIV transmission through injecting were a good thing. However, their opinions of NSP and OST were mixed. Only some of the key informants had heard of needle and syringe programmes, and some participants thought that providing free needles and syringes would encourage the transition to injecting drugs:

> *"Ja [yes], people will inject more. Most of them will not know about this [injecting]. If they hear about this they will get hooked. Especially the teenagers. They still know how to smoke weed and chase, but if you introduce the needle to them you are going to get into serious trouble."* Asian female SW PWID, FGD Durban

Other participants thought that the provision of needles and syringes would be useful to reduce HIV-related risks:

> *"A brilliant idea. It is a risk sharing a needle with some whose status you don't know. I think that it would be better, rather than them sharing a needle who you don't know or trust. I think that is better."* Black female SW PWID, FGD Durban

Risk awareness was generally found to be better for risk associated with sex than for injecting drug use. However, even where understanding of the risks of injecting practices existed, high-risk injecting practices still occurred. The physiological and psychological elements of drug dependence, particularly among heroin-using PWID, appear to overrule intentions to reduce injecting-related risk.

B.9 Adverse events and challenges

Low level of voluntary HCT uptake

Despite offering referral to voluntary HCT as part of standard operating procedures, no participants opted to make use of on-site HCT where it was available (5 of 9 CSOs and implementing partners offered on-site HCT). HCT information was provided, but data on numbers of participants later accessing HCT was not captured. This study used anonymous, unlinked HIV testing among participants because many PWID participating in earlier studies opted not to have an HIV test (4, 24).[69] The high level of stigmatisation in health services, as reported by FGD participants, may have contributed to this low level of HCT update. In other contexts, for example Thailand, fear of arrest and harassment by police have contributed to poor uptake of HCT among PWID (59).

Low level of drug dependence treatment and service referrals

This study did not include drug treatment services to PWID, however, referral to available drug treatment services was facilitated. Despite this, only seven PWID requested drug treatment and were provided support to access these services.

Low levels of 'snowballers' returning to study sites

Fewer than half of the participants who referred other participants to the study as part of snowballing procedures returned to the study sites to collect their incentives. Participants may have moved to other areas, been arrested or decided not to make the effort to come to the study site to collect their reimbursements.

Protocol violation

During study implementation, one participant who had only injected a steroid medication obtained illicitly was enrolled in the study. The researcher completing the survey was only aware that the steroid medication was illegal after study procedures had been completed. Another participant was screened but research procedures were not completed as it became apparent to the researcher that the participant had not previously injected a drug. Data from these participants were not included in the analysis.

Key informant suicide

In July 2013 the Centurion study coordinator was informed that one of the participants had committed suicide. The Centurion study coordinator was experienced in working with PWID in that area, and had invited PWID with whom she had developed a previous therapeutic relationship to attend a FGD. The discussion was held in June 2013, at which time the participant who committed suicide was injecting heroin. The participant had been attempting to access opioid substitution therapy and support for rehabilitation before his death, and had been requesting support from his family, but was unable to receive it. The suicide was not related to the study, and we were only made aware of it due to the relationship between the study coordinator and the participant.

69 Thirty per cent (39/ 131) of participants in the study conducted by Parry et al. opted out of HIV testing (24). Twelve per cent (28/239) of participants in the study conducted by Plüddemann et al. did not self-report their HIV status (4).

PART C
CONCLUSION

C

This study identifies injecting and sexual practices among a sample of 450 PWID from five South African cities. It also highlights broader structural and social factors that influence HIV risk among PWID, and identifies routes of HIV transmission between PWID and the broader population. Although this study is not representative, and is likely to overrepresent MSM, WSW and SWs, the risk of an exponential increase in HIV prevalence among PWID – as seen in other countries in Europe, Asia and Africa – exists.

High-risk injecting practices identified include needle and syringe reuse, ineffective cleaning practices, and needle and syringe sharing

- Needles and syringes can be bought, but the cost and experienced stigmatisation and discrimination by pharmacy and healthcare staff towards PWID create barriers to purchasing needles.
- Nearly half of the participants reused a needle and/or syringe the last time they injected.
- Needle and syringe reuse is more common among people who do not have money to buy new needles and syringes, and they are also more likely to inject in unsafe environments.
- Needle and syringe sharing is more common among women than men.
- Very few PWID use effective methods to clean their needles and syringes.
- The majority of PWID who reuse needles and syringes attempt to clean their injecting equipment. Low levels of knowledge of effective cleaning practices, and limited access to bleach, are likely to be contributing to current ineffective cleaning practices.
- Knowledge around risks of unsafe injecting practices appear to be lower among female PWID compared to male PWID.
- Needles and syringes are commonly shared between PWID. Even though the number of people who PWID share needles with is low, the risk of HIV infection exists and is increased in the presence of ineffective cleaning practices.

High-risk sexual practices identified include sex work and unprotected sex

- Sex work and transactional sex was common among survey participants, particularly among female PWID. Sex work was significantly associated with testing HIV positive in logistic regression modelling.
- PWID who become infected with HIV may transmit HIV to their sexual partners.
- PWID who are sex workers are at high risk of HIV infection.
- Knowledge around the sexual transmission of HIV is fair, but unprotected sex still commonly occurs. High levels of STI symptoms were reported and reported STI symptoms were found to be strongly associated with HIV infection.
- Among MSM PWID who inject ATS, unprotected sex with multiple concurrent partners is common, and carries a high risk for HIV infection and rapid transmission.

Social and structural factors contribute to HIV risk among PWID in South Africa

- A greater burden of HIV was identified among non-white PWID, which could be associated with other social determinants of health that in the South African context are linked to race (e.g. poverty, access to education, livelihood opportunities, exposure to crime and drug use, etc.).
- Access to drug dependency treatment appears to be inequitable, with greater access to PWID with more money. As a result, racially aligned socioeconomic inequality could be the main reason for fewer non-white PWID accessing services.
- Broader social issues, including low levels of education, unemployment and lack of housing, increase the likelihood of unsafe injecting practices and HIV risk.

- The majority of drug-dependency treatment services are accessed through the private sector. However, only one CSO provides NSP to MSM PWID and at the time of compiling this report, only 20 people who were dependent on heroin were accessing government-funded OST.
- Reported rates of HCT were higher than in the general population, but lower than HCT rates among MSM and SWs. However, none of the PWID participants offered to make use of available on-site HCT and HCT referrals.
- Lack of comprehensive services for PWID is likely to be contributing to the high-risk injecting and sexual practices identified in this study.

The HIV epidemic among PWID could be effectively managed if appropriate action is taken

- HIV prevalence among participating PWID was similar to that of previously completed studies. Very high HIV prevalence was not found among participating PWID, identifying a window of opportunity to provide effective HIV prevention among PWID and their drug -using and sexual partners.

Important data gaps still exist

Conclusions about access to ART, screening and treatment of STIs, and condoms cannot be made as these elements were not explicitly explored during the study. This study did not estimate the number of PWID in the areas where the study was conducted and PWID size estimates are needed to inform programming.

PART D
RECOMMENDATIONS

D

Service provision

- Establish and provide a package of comprehensive HIV prevention services for PWID:
    - Provide peer-led outreach, harm reduction (including elements defined in the NDoH Mini Drug Master Plan 2013-2014), education, and social and behaviour-change interventions focusing on safer injecting practices, effective injecting equipment cleaning techniques, overdose management and safer sex
    - Provide psychosocial support, including individual and peer-based group support
    - Provide gender-specific services by using female peers to engage with female PWID, and provide tailored messages to female PWID
    - Provide the four priority interventions of NSP, OST, HCT and ART, as well as linkage to care and treatment services, focusing on PWID with limited financial resources
    - Include TB screening and linkage to care as part of good practice
    - Provide access to harm-reduction and drug dependency treatment services to PWID in detention settings, including prisons
- Increase access to sexual and reproductive health services for PWID:
    - Increase, in particular, access to condoms, lubricant, STI screening and treatment
    - Include sexual and reproductive health needs of female PWID (including contraception and perinatal services)
- Include harm-reduction services within HIV programmes for sex workers, MSM and prisoners
- Establish new services and increase access to existing in/outpatient treatment facilities for PWID
- Sensitise service providers on stigma and discrimination related to PWID and on drug dependency and harm-reduction interventions available for PWID
    - Target health, law enforcement and pharmacy staff

Strategic information and future research

- Establish a PWID surveillance system to identify, quantify and monitor PWID and HIV-related risks in South Africa:
    - Conduct size estimation and geographical mapping of PWID in other major metropolitan areas and among less urban populations
    - Conduct regular (every 2–4 years), representative bio-behavioural surveys among PWID, where populations of PWID have been identified, assessing HIV prevalence, risk practices, and health and drug dependency treatment service usage
    - Use programmatic data to inform service delivery
- Identify and describe the typologies of people who use drugs in South Africa and document their real-life experiences to inform the development of interventions
- Assess the scope of injecting drug use in detention contexts and prisons
- Review factors influencing the transition to injecting drugs in order to inform interventions to prevent injecting drug use

- Review and quantify the health, economic and social consequences of injecting drug use (including viral hepatitis, TB and overdose) in South Africa to inform government prioritisation
- Conduct costing exercises on OST provision for people dependent on heroin
- Assess the quality of services, including OST, provided by drug dependence treatment facilities
- Assess and quantify the prevalence of mental health conditions among PWID to inform interventions that address commonly occurring comorbidities

Advocacy and community mobilisation

- Develop a high-level advocacy agenda
- Advocate for the establishment of services for PWID
- Strengthen networking and build capacities of PWID and CSOs working with PWUD and PWID
- Enable the community of PWID to articulate their priorities and to advocate for their rights
- Enable participation of PWID in various drug- and HIV-related structures

Policy and legal environment

- Review existing policy and legal frameworks at various levels (national, provincial, departmental) to address PWID issues
- Include comprehensive HIV prevention package for PWID in further strategic planning exercises based on available evidence
- Develop country-specific harm-reduction guidelines to enable the implementation of the National Drug Master Plan

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APPENDIX 1
SUMMARY OF PWID AND HIV RESEARCH IN SOUTH AFRICA

Year and author (reference)	Location	Sample size	HIV prevalence	Injecting risk factors and practices	Sexual risk factors and practices	Research/Project methods	Comments
2004 Plüddemann et al. (4)	Cape Town	239 heroin users	6% (self-report)	24% were PWID (57/239). Most injected in home or in the house of a friend. 89% had shared a needle and syringe with another person in preceding 30 days. 56% denied needles in preceding 30 days, 85% at a pharmacy or hospital.	65% had two or more sexual partners in last 12 months. 6% had ever workers as sex workers. 28% reported consistent condom use.	Cross-sectional survey, employing street intercepts and snowballing.	Heroin users (non-injecting and injecting). Participants were mostly white, fairly well educated and predominantly male.
2005 Parry et al. (24)	Cape Town, Pretoria and Durban	96 PWID	20%	40% (96/240) reported previously injecting a drug[1]. Fifty-two per cent (17/33) of the MSM who injected drugs were also sex workers.	42% (40/96) were also SW. 34% (33/96) were also MSM.	Key informant interviews (KII) and focus group discussions (FGDs). Recruited using street intercepts and snowballing.	240 people who use drugs, including PWID, recruited. 37% of PWID refused HCT as part of study.
2005 Simbayi et al. (62) and Cloete et al. (63)	Cape Town	1054	N/A	15% (11/72) of participating WSW living with HIV reported having ever injected a drug and MSM more likely to have ever injected a drug compared to other male study participants.	20% (15/72) of WSW reported to have ever had a partner who had injected drugs. MSM more likely to have ever had a sex partner who injected drugs compared to other males.	Cross-sectional survey; opportunistic sampling methods.	People living with HIV. MSM living with HIV (n=92) and WSW living with HIV (n=72).
2008 Baral et al. (64)	Cape Town	200	N/A	3% (5/200) peri-urban MSM had injected a drug in the last 6 months before the study.		Cross-sectional Survey; venue based sampling.	MSM in peri-urban Cape Town, HIV prevalence among MSM was 26%.
2008 Lane et al. (65)	Soweto	378	Not published	Two participants reported to have ever injected an illicit drug.		Cross-sectional survey; responded driven sampling.	MSM from Soweto. HIV prevalence among MSM was 21%.
2008 and 2009 Rossouw (66)	Hillbrow, Johannesburg, Gauteng	Not stated	Not collected	Brown heroin was more commonly available than white heroin. PWID reported confiscation of injecting equipment and the injection of uncooked heroin.	Associations between drug use and sex work, particularly among female PWID are mentioned.	Discussions[2] during outreach including needle and syringe, education and meal provision.	Male and female PWID. Female PWID, were "in deep hiding". Other PWID mentioned that only PWID who were impoverished and forced to live and use drugs on the street are visible, and that many other PWID existed.

1 No mention is made in the report as to whether the drug that had been injected was an illegal substance or a substance obtained and, or, used illictly
2 The report published by Charles Rossouw does not quantify the number of interviews with PWID, but includes quotes from PWID interviewed.

Year and author	Location	Sample size	HIV prevalence	Injecting risk factors and practices	Sexual risk factors and practices	Research/Project methods	Comments
2010 Dos Santos, Trautmann & Kools (5); Kools & Trautmann (36)	Pretoria, Johannesburg and Cape Town	63	Not collected	Authors concluded that injecting drug use practices were on the rise in these areas, particularly among non-white and female PWID (35,36).		Rapid assessment and response (RAR), interviews, sampling.	Interviews were conducted among injecting and non-injecting drug users (49 males, 14 females).
Dannatt et al., unpublished	Cape Town	141	Not collected	12% (17/141) of drug users admitted for in-patient detoxification had injected drugs previously.	Not stated.	Record review.	Patients admitted to the Stikland Psychiatric Hospital Detoxification unit during 1 April to 30 Sept 2012.
2012 ANOVA Health Institute (37)	Cape Town	127	Not collected	12% (15/127) of participants reported to have injected a drug previously. 3% (4/127) reported injecting to be their primary method of drug use. ATS was the mostly commonly injected drug (12/15 versus 3/15 for heroin). Over half (8/15) of PWID who were MSM injected monthly or less often.	Group sex and unprotected sex, multiple partners.	Online survey assessing drug use among MSM in South Africa to inform the harm reduction programme.	One hundred and twenty-seven MSM completed the online survey. Several questions were posed.
2012 ANOVA Health Institute (unpublished)	South Africa	1 466	Not collected	59/940 reported to have ever injected a drug previously.	The mean number of sexual partners in the last 6 months among MSM who had injected at least twice (15, SD 13.5, n=32) was more than those who had only injected once (10.8, SD 11.6, n=21) and those that had never injected (5.6, SD 8.3, n=866). 9% (84/907) had ever been paid for sex.	Online survey.	1 466 respondents from across South Africa completed aspects of the survey.[3] 940 of the mostly white, well-educated, employed MSM completed questions on drug use.
2012 SACENDU (9)[4]	Drug treatment centres that are part of SACENDU	N/A	Not collected	5% (24/477) of clients from the Western Cape, 16% (57/355) of clients from Gauteng and 8% (14/180) of clients from Mpumalanga and Limpopo with heroin dependence had ever injected heroin.	Not collected.	Treatment records.	Report on data from July–December 2012. Data from clients admitted to drug dependency treatment centres.

3 Few of the participants completed all parts of the online survey. Data from several questions was missing, influencing the outcome.
4 SACENDU is a formal network of 63 drug treatment providers that publishes drug treatment data on a biannual basis.

APPENDIX 2
DETAILS ON STUDY METHODOLOGY

2

Protocol development and ethical review

A scientific research protocol was developed to achieve the objectives of this study. A draft protocol was developed by the study investigators and submitted to the AG for comments. Suggestions were incorporated into the protocol and accompanying study tools (survey questionnaire, interview guide, focus group discussion guide, informed consent form). The protocol and tools were submitted to the University of Cape Town Faculty of Health Science's Human Research Ethics Committee (HREC) for review on 04 March 2013.

The HREC reviewed the protocol and highlighted their joint comments and issues of concern. In particular, the HREC suggested the following:

- The research team provide additional information on how participants would be made aware of potential risks of participation in a focus group before attending the discussion.
- Provide further description on ensuring participant safety where street intercepts would be conducted.
- More efforts be made to ensure the safety and confidentiality of study participants were ensured particularly in the case of the police obtaining study documentation.
- Provision of brief risk- and HIV-related counselling.
- The reimbursement for participant travel be increased.
- Further efforts be made to enable drug-using participants to access HIV testing and drug treatment services.
- Improvements to the consent forms to explicitly describe study activities and the benefits and risks of participation.
- Confirmation that audio recordings of interviews and focus groups would be destroyed once transcription had been completed.

In consultation with the AG, the suggestions made by the HREC were incorporated into the study procedures and tools. Additional descriptions were provided for areas where this was requested by the HREC. The updated protocol and tools were subsequently resubmitted to the HREC and ethical clearance for the study was provided on 02 May 2013 (HREC reference 138/2013).

The principal researcher will complete and submit the required HREC's Standard Closure form once the relevant study publications have been finalised and disseminated.

Ethical applications were also sent to the KwaZulu-Natal and Western Cape Provincial Research Ethics Committees. This was done to enable effective results dissemination and to allow for participant recruitment through public health facilities in these provinces. The AG decided that due to time and financial constraints an ethics application to the University of Stellenbosch Ethics Committee for recruitment at the Stikland Detoxification Unit would not be submitted. Ethics approval was received from the KwaZulu-Natal ethics committee on 21 May 2013 (Reference: HRKM 103/13). Ethics approval was received from the Western Cape Department of Health ethics committee on 21 Novermber 2013 (Reference: RP 075/2013).

Logistic regression modelling

A logistic regression model for HIV infection was developed. Demographic characteristics (age as a categorical variable – less than 25, or equal to or greater than 25[5]; biological sex; education; race; income and employment), duration of drug injecting and province of recruitment were included into the baseline model. Risk variables were then added independently. Significant variables (significance level of $p < 0.05$) identified during the bivariate analysis were added to the baseline model. Variables documented in other literature to be strongly linked to risk for HIV infection and transmission risk were also included into the model separately to develop the best model.

Models consisting of different variables were compared to each other to assess quality of fit using the Aikaikes Information Criterion. Due to missing data for five different data points, other forms of model comparisons were not used to identify the final logistic regression model. The adjusted odds ratios (aOR) from the model that best fit the data are presented in this report.

5 Age categories based on UNGASS indicator categorisation.

APPENDIX 3
STUDY SITE TRAINING AGENDA

3

Study staff training: Gauteng/KwaZulu-Natal/Western Cape

DAY 1		
Time	**Activity description**	**Facilitator(s)**
09:00–09:15	Welcome and overview of agenda	David Makapela
09:15–09:30	Introductions and organisational overview	Harsheth Virk
09:30–10:00	PWID and HIV in South Africa	Monika dos Santos
10:00–10:30	Study overview (protocol, approach, objectives, methods)	Andrew Scheibe
10:30–10:45	**Tea**	
10:45–11:15	Study recruitment methods	Andrew Scheibe
11:15–11:45	Ethics, privacy, confidentiality and good clinical practice	Ben Brown
11:45–12:00	Visit flow	Andrew Scheibe
12:00–12:30	Visit tools, sheets and templates	Andrew Scheibe
12:30–13:30	**Lunch**	
13:30–14:30	Survey tool (review, practice)	Andrew Scheibe
14:30–15:30	Participant visit dry run	Andrew Scheibe
15:30–16:00	Roles and responsibilities	Andrew Scheibe
16:00–16:30	Recap & closing	David Makapela
DAY 2		
Time	**Activity description**	**Facilitator(s)**
09:00–09:15	Welcome, recap and overview of day 1	David Makapela
09:15–09:45	Conducting field work with PWID (street intercepts, snowballing)	Riku Lehtovuori
09:45–10:45	Brainstorming and mapping of recruitment areas and populations	Andrew Scheibe
10:45–11:00	**Tea**	
11:00 - 12:45	HIV testing (procedure, practice, data entry, storage, quality control)	The Scientific Group cc
12:45–13:00	HIV counselling and testing and information sheets	Andrew Scheibe
13:00–14:00	**Lunch**	
14:00–15:00	Data entry and quality control (survey tool; HIV test kit)	Andrew Scheibe
15:00–16:00	Potential problems and troubleshooting	Riku Lehtovuori and Andrew Scheibe
16:00–16:30	Next steps and wrap-up	Andrew Scheibe

APPENDIX 4
IN-DEPTH INTERVIEW CONSENT AND DISCUSSION GUIDE

Introduction

The United Nations Office on Drugs and Crime is conducting a study on injecting drug use and HIV in Cape Town, Durban, Pretoria, Centurion and Johannesburg. At the end, we will make a report including recommendations to improve treatment and support services for people who inject drugs, particularly around HIV prevention, treatment and support.

All information will be kept confidential and private. We will NOT ask your name. You will be asked to sign this consent form but it will be kept private and not be linked to any other information you provide.

We will not tell other people any of the personal detail that we discuss, although some information might be used in a report; but it will not be possible to link that information to you. The interview should take one hour. We want to accurately understand your responses, so we ask your permission to record this interview. The recording will be destroyed afterwards. During this interview we will explore your background, experience of drug use and/or treatment, your sexual practices, your understanding of HIV/AIDS and its links with drug use and your knowledge and/or experience of health services.

To take part, you must be:
(1) 18 years or older (2) have ever injected an illegal drug or work with/ have a good understanding of injecting drug use (3) be willing to take part.

If you agree to take part you will be given R30 food vouchers for your time and R 30 cash for travel. We will also give you information about HIV and on how to prevent HIV infection. We will give you information about available drug use and HIV testing and treatment services. Your information will be used to develop recommendations to improve services for people who inject drugs.

Interviews will be conducted among people who have ever injected a drug. There is a risk that some of the questions may make you uncomfortable. You do not have to answer any questions if you do not want to. You can stop at any time without any negative consequences to yourself. There is a chance that study documents may be seen by someone else, however we will not include your name or contact details anywhere. We will do our best to keep all information safe and in our possession and completed documents will be kept at our research sites in a locked cupboard.

If you have any questions about the study you can contact _____ on _____ .
If you have any questions or comments about the ethical conduct of this study, you may contact the ethics committee on _____ . Do you understand about this interview and agree to be interviewed?

Consent to participate

I have read and understand the reason for the study and the risks and benefits of taking part. I have been given the opportunity to ask questions. I hereby give consent to participating in this study.

Signed _____ Date _____

Investigator

I have explained this consent to the participant and answered their questions. In my opinion the participant understands the purpose, procedures, risks and benefits of study participation

Signed _____ Date _____

In-depth interview guide

Interviewer name: _____ Date: _____
Location: _____ Time: _____
Interview ID: _____ Recording number: _____

After signing the informed consent form confirm with the participant that you may begin the recording. Affirm the participant that there are no right or wrong answers and explain that you are interested in the situation and their experiences. When we talk about drugs we are focusing on illegal drugs.

I. Demographics/background

First, I would like to ask you a few questions about yourself.

For (previous) drug users

1. How long have you lived in this city?
2. With what gender do you identify?
3. How old are you?
4. What is your marital status?
5. How do you earn money?
6. What was the highest grade of schooling you completed

For key-informants

1. How long have you lived in this city?
2. With what gender do you identify?
3. How old are you?
4. How do you know about injecting drug use in this city?

II. Injecting and illegal drug use

The first part of the interview is about illegal drugs and drug use. I will ask you some general questions and then some more detailed questions.

1. What can you tell me about injecting drug use (mainline/ slamming) in this city?
   Prompts:
   - What kind of illegal drugs are injected?
   - How are they injected?
   - Where do people inject illegal drugs (park, street, at home, shooting gallery)?
   - What equipment do they use (cookers, filters, etc)?
   - How do people use? (alone or in groups, or maybe at a shooting gallery)
   - Who injects? (women, men, racial groups, ages)

2. What can you tell me about needles and cooking materials?
   Prompts:
   - Where do people get needles and syringes?
   - Do people have their own equipment or do they share?
   - Do people reuse their needles and syringes? How many times?
   - Do people inject alone or with others? How do you know?
   - What happens to the needles and equipment once people are finished?

Remember, you do not need to answer any question that makes you uncomfortable and also know that all identifying information will be removed from this interview. I would now like to ask you a bit about your injecting drug experience.

[*If the person has not taken an illegal drug skip to question II.7*]

3. Tell me about the last time you took an illegal drug.

4. Tell me about the last time you injected an illegal drug.
   Prompts:
   - Where did you get the [drug]?
   - Who from? (remember, no personal names) What time was it?
   - How long from when you bought [drug] until you used it? Where did you use it?
   - Was anyone else with you?
   - If alone: where did the needle and syringe come from? Did you get the needle and syringe before or after you got the drugs? Was it new? If not, who had used it before? Was it cleaned? How?

- With others: Did they use too? Who went first, second, third, etc? Was there n/s or other equipment sharing? Cleaning? How was it cleaned? What happened to the equipment afterwards?

5. Is this the way it usually goes when you use [drug]?
6. Can you tell me about how you started injecting.

Now I would like to talk about how and where people get drugs.

7. How easy is [drug] to find?
8. Can you tell me where people by [drug]? Who can they buy [drug] off? (these are challenging questions, note we don't want names, just some details e.g. from people who work in certain places, from friends, from an anonymous source)
9. Does the place change by time of day, day of week, month/season?

III. Sexual activity

Thank you for giving me those details. Now I want to ask you some questions about illegal drug use and sex.

1. Can you tell me about illegal drug use (injecting and non-injecting) and sex?
   Prompts:
   - When does that happen?
   - What illegal drugs do people use when they have sex?
   - Do people use drugs first and then look for sex or have sex?
   - Do they take drugs with the people they have sex with?
   - Who do people have sex with when they use illegal drugs? (Is it in their primary relationship, with sweethearts, sex worker, others?)
   - Do people use condoms when they are using drugs?

2. Have you ever mixed drug taking and having sex? [If yes: can you tell me about that experience?] [*If this question is not relevant, i.e. a key-informant, skip to question IV.6*]
   Prompts:
   - What drug(s) did you use?
   - Does you sexual experience change when you take illegal drugs?
   - How? Did you use the drug(s) first and then look for sex or have sex?
   - Did you take the illegal drug(s) with the person you had sex with?
   - Did the drug influence your sexual behaviours (sex acts, use of condoms, lubricant etc.)

IV. HIV/AIDS risk perception

The next few questions are about HIV & AIDS.

1. Tell me what you know about HIV & AIDS.
2. How is it transmitted?
3. How can you prevent being infected with HIV?
4. Do you know anybody who has HIV or AIDS?
5. Have you ever received any information about HIV/AIDS (e.g. picked up a pamphlet or seen an advertisement) or had any education about it (e.g. talked to a health worker or other person trained to talk about HIV & AIDS?)
6. Where did you/do people get HIV-related information from?

V. Services

The final group of questions is about services related to illegal drug use, HIV and health services.

1. Where can people go if they want to get information about drugs or drug use, including about how to get treatment for drug use?

[*Skip to question V.11 if interviewee not a (previous) drug user*]

2. Have you ever used these types of services? [If yes] For each service.
3. What did you like and dislike about it?
4. What services do drug users need? Who would be good people to provide these services?

5. What services are there to help people prevent the spread of HIV?
6. Have you ever used any of these services? [If yes] For each service
7. What did you like and dislike about it?
8. [If no] Why not?
9. Have you ever had an HIV test? How was that experience?
10. Have you ever been tested for hepatitis C?
11. What services are there for people who are HIV+ and/ or injected with hepatitis C? What services do you think are needed?

VI. Closing questions

Is there anything else you would like to tell me about illegal drug use or HIV/AIDS?

This information is important and the more we understand the situation the better our report and recommendations will be: do you know anyone else who might be willing to talk to me about these issues? How can I contact them?

Once again, thank you very much for taking the time to talk to me. [stop recording]

APPENDIX 5
FOCUS GROUP CONSENT AND DISCUSSION GUIDE

Focus group informed consent

Introduction

Thank you for considering to join this focus group discussion (FGD). The United Nations Office on Drugs and Crime is doing this study. We are interested in your views because we want to better understand the situation related to injecting drug use and HIV in Cape Town, Durban, Centurion, Pretoria and Johannesburg. We also want to know what health and support services people who inject drugs use and need. We will produce a report that will help plan drug use and HIV prevention and care services in South Africa.

What you tell us is important and we would appreciate your input. The discussion should take more than two hours. We will not ask you for any personal identifying or contact information. You may choose to use another name. All information will be kept confidential and private. We will not tell other people about our discussion, within the confines of the law. We want to accurately understand your responses, so we ask your permission to record this discussion. The recording will be destroyed afterwards. Later this material will be used to write our report. We may use quotes from this discussion, but there will be no way that people will be identifiable in the report. The discussion will be around injecting drug use trends, drug taking practices, sexual practices among injecting drug users and the use of drug treatment and health services by injecting drug users in general.

To take part in this focus group discussion, you must be:

- 18 years or older
- Reside in Cape Town, Durban, Centurion, Pretoria and Johannesburg
- Have ever injected an illegal drug
- Are willing to participate

Risks and benefits

This study is voluntary and you do not have to participate. If you have agree to participate in this focus group you will be reimbursed at the end of the discussion in recognition of your time and input.

If you agree to take part you will be given a R30 food voucher for your time and R30 cash for travel. We will also give you information about HIV and on how to prevent HIV infection. We will give you information about available drug use and HIV testing and treatment services. Your information will be used to develop recommendations to improve services for people who inject drugs.

We may discuss some things that may make you uncomfortable. You may choose to not answer any question and may stop participating at any time, without any negative consequences for you. There is a chance that people in the group may discuss what we talk about outside. We will do all we can to ensure your information is kept private and confidential. However, there is also a chance that the notes taken and recording of the discussion may be seen or heard by other people, but no names will be included in our notes or during our discussion.

Questions

If you have any questions about the study you can contact the investigator on . If you have any questions or comments about the ethical conduct of this study, you may contact the Human Research Ethics Committee at this number: .

Do you understand about this interview and agree to be interviewed?

Informed consent

I have read and understand the reason for the study and the risks and benefits of taking part. I have been given the opportunity to ask questions. I hereby give consent to participating in this study.

Signed _____ Date _____

Investigator

I have explained this consent to the participant and answered their questions. In my opinion the participant understands the purpose, procedures, risks and benefits of participation.

Signed _____ Date _____

Focus group discussion guide[6]

There are no right or wrong answers to the questions I am going to ask. This is not a test and everyone's experience is valuable so everyone should have their chance to express their ideas.

Please switch your cell phones off. Also we ask that nothing of what gets said in the discussion gets told to other people.

[Start recording]

For our discussion, when we talk about drugs we are referring to illegal drugs.

I. Injecting drug use

1. I am interested to hear about the injecting drug use here in your city. What is happening now?
   Prompts:
   - Has it changed, over time?
   - Have there been changes in price, purity or sources of drugs, type of drugs available, Changes in who is using drugs?
   - Other things?

2. What types of drugs are being injected in your city?

3. For the drugs that are injected, how are and where are they used?
   Prompts:
   - Alone, with friend/partner, in a group?
   - Where it is used (home, street, club, parties)?

4. Do you think that people have always injected [drug]? How long have people been injecting [drug]?

5. Why do people inject [drug]?

6. What reasons do you think motivate people to start injecting [drug]?

7. What are the injecting trends among women?

8. What is your experience/opinions of injecting among groups of people? (women, different racial groups) (If there are differences, what might be causing these?)

9. You mentioned that people inject [drug(s)]. Where do people get needles and syringes?
   Prompts:
   - Are there any other places?
   - What about at different times of the day/night? Weekdays/weekend?

10. Are people sharing needles and syringes? Do they share other equipment that the use for injecting (spoons, cookers, swabs).

II. HIV-related risk behaviours

Now I'd like to ask some questions about drug use and HIV.

1. Is there any link between drug use and the risk of HIV transmission?
   Prompts:
   - Particular drugs
   - Particular ways of using drugs
   - Doing particular things when under the influence of drugs, e.g. an increase in the likelihood of unsafe sex
   - Perception of HIV risk among injecting drug users

6 Adapted from Interview Guidelines for I-RARE: Drug Use & Sexual HIV Risk Behaviour in Cambodia (62). (2005). O'Connell et al.

III. Services

1. Please tell me what you have heard about HIV counselling and testing. Thinking about people who use drugs, would you recommend that they get tested for HIV? Why, or why not?

2. Please tell me what you have heard about hepatitis C
   Prompts:
   - Have you been tested?
   - Do you know about treatment options?

3. What other types of services are there for drug users?
   ***Prompts*:**
   - What if they are sick, say they overdose?
   - What if they need to get needles & syringes?
   - Have you heard about the needle and syringe programme?
   - What if people want to stop using drugs, where can they go?

4. What kind of services should there be for injecting and other drug users?
   ***Prompts*:**
   - What would make existing services better
   - What services are needed

5. How about services for people who are living with HIV?

6. What ideas would you suggest to improve services or create new ones?

Does anyone have anything they would like to add? Questions?

Thank you once again.

[Stop recording]

Distribute reimbursement and information/referral information.

APPENDIX 6
ELIGIBILITY ASSESSMENT FORM

Ineligible	
Does not fit criteria	1
Unwilling to consent	2
Other	3

Questions for potential participant			
Questions	**Criteria**	**Eligible**	**Ineligible**
1. How old are you?	18 or older	Yes	No
2. Where do you live?	Lives in greater Cape Town, greater Durban, Centrurion, Pretoria or Johannesburg	Yes	No
3. Have you ever inject any type of drug?	Ever injected	Yes	No
4. Are you interested in taking part in this study?	Interested	Yes	No
5. Is this the first time you are completing this bio-behavioural survey?	Participants may only complete the BBS once	Yes	No
Questions for interviewer			
6. Has this person engaged with you in a way that shows that he/she is interested in learning more about the study?	Yes	No	
7. Is this person likely to understand the information provided during the informed consent process?	Yes	No	

If the participant answers **YES to all of the questions** then take informed consent.

If you answered **NO** to questions 6 & 7, reschedule an appointment with the potential participant for another day if appropriate.

APPENDIX 7
BIO-BEHAVIOURAL SURVEY INFORMED CONSENT

7

Introduction

Thank you for considering to take part in this survey being done by the United Nations Office on Drugs and Crime. We are interested in your views because we want to better understand the situation related to injecting drug use and HIV in South Africa. We also want to know what health and support services people who inject drugs use and need. We will use the information we collect to produce a report that will help plan drug use and HIV prevention and care services.

Procedures

We will not ask you for any personal identifying information. If you agree to take part a researcher will ask you questions using a standard questionnaire. The questionnaire will ask about your background, drug usage, sexual practices, your knowledge and understanding of HIV/AIDS and your knowledge and experience of health services and the local drug market. All information will be kept confidential and private. The researcher will then take a saliva sample from your mouth. This is painless and is like brushing your gums. In total it will take one hour for the survey and the sample to be taken. We will use a unique number to link the survey to the saliva sample. We will use the saliva sample to do a rapid anonymous HIV test. We will not give you the result of this HIV test. We will refer you for free HIV counselling and testing with a trained health professional if you like. We will also give you information about existing drug treatment and HIV-related services in your area. After taking part in the survey, we will encourage you to refer people in your network who have ever injected an illegal drug and who may be interested in taking part in this study.

To take part in this survey, you must be:

- 18 years or older
- Live in Cape Town, Durban, Centrurion, Pretoria or Johannesburg
- Have previously or currently injected an illegal drug
- Are willing to participate

Benefits

If you agree to take part you will be given R30 food vouchers for your time and R30 cash for travel. We will also give you information about HIV and on how to prevent HIV infection. We will give you information about available drug use and HIV testing and treatment services. Your information will be used to develop recommendations to improve services for people who inject drugs.

We will also give you R30 worth of food vouchers for any eligible person you refer and who takes part in the study. You will be able to refer up to 3 people. At the end of the study we will also give you R30 cash for transport when you come and collect your vouchers for the people you referred who were eligible.

Risks

The survey may cover things that may make you uncomfortable. You may choose to not answer any question and may stop participating at any time, without any negative consequences for you. There is a chance that the survey sheet may be seen by other people, however no names will be placed on the survey and so it will not be possible to link you to the answers on the survey form.

We will do all we can to ensure that your information is kept private and confidential.

Questions

If you have any questions about the study you can contact the investigator on. If you have any questions or comments about the ethical conduct of this study, you may contact the Human Research Ethics Committee at this number: .

Informed consent

I have read and understand the reason for the study and the risks and benefits of taking part. I have been given the opportunity to ask questions. I hereby give consent to participate.

Signed _____ Date _____

Investigator

I have explained this consent to the participant and answered their questions. In my opinion the participant understands the purpose, procedures, risks and benefits of participation

Signed _____ Date _____

APPENDIX 8
BIO-BEHAVIOURAL SURVEY QUESTIONNAIRE

8

Thank you for taking part in this survey. At the end of the survey we will take a saliva sample for HIV testing. Only your participant identification number will be placed on the sample. We will not give you this result, but will refer you for HIV counselling and testing after this process, if you are interested. All information is confidential.

A. Demographic information

A1	How old are you?			_years old	
	What is your gender?	Male	1	Transgender male	3
		Female	2	Transgender female	4
A3	What city do you live in?	Cape Town	1	Durban	2
		Pretoria	3	Johannesburg	4
		Centurion	5		
A4	What type of accommodation do you live in?	Homeless	1	House	2
		Flat	3	Other	4
A5	What is your marital status?	Single	1	Living with partner	2
		Married	3	Divorced	4
		Widowed	5		
A6	What racial group do you belong to?	Black	1	White	2
		Coloured	3	Indian	4
		Other	5		
A7	What is your highest level of education?	Primary School	1	High school	2
		Grade 12	3	College/University	4
A8	What work do you do?	Full-time job	1	Part-time jobs	2
		Unemployed	3		
A9	If you do not have a job how do you support yourself?	Family/spouse	1	Friends	2
		Welfare/NGO	3	Theft	4
		Selling drugs	5	Other	6
		Has a job /N/A	7		
A10	How much money do you earn, or get, in a month, on average?			R	

B. Drug taking and injecting history

We are going to talk a bit about the drugs you may have taken. This information is private and your name is not placed anywhere on this sheet.

B1	How old were you when you first used any illegal drug?			_years old	
B2	What was this drug?	Cannabis—Dagga	1	Cocaine Powder	2
		Crack Cocaine/Rocks	3	Methamphetamine (METH/Crystal/TIK)	4
		Mandrax/White-Pipe	5	Designer Drugs, e.g. Ecstasy	6
		LSD	7	Heroin	8
		Dagga/Heroin mix (Nyaope/Whoonga)	9	Other	10
B3	How did you take this drug when you first used it?	Inject – intra-muscular			1
		Inject – intra-venous			2
		Swallow or Drink			3
		Smoke			4
		Keep under lips/tongue			5
		Sniff			6
		Other			7
B4	Why did you start using this drug?	Due to curiosity	1	Peer pressure	2
		To cope emotionally	3	For stimulation	4
		To cope physically	5	Other	6

Injecting practices

B5	How old were you when you first injected any drug (intra-muscular/ slamming or intra-venous/mainlining)?			_years	
B6	What was this drug?	Heroin	1	Methamphetamine (METH/Crystal/TIK)	2
		Other			3
B7	Why did you start injecting this drug? (choose one answer)	Due to curiosity	1	Peer pressure	2
		To cope emotionally	3	For stimulation	4
		To cope physically	5	Needed to get high	6
		Due to cost	7	Due to quality	8
		Other	9		
B8	When was the last time you injected?	Today	1	Last 3 days	2
		Last 30 days	3	Last 12 months	4
		Other : years	5		
B9	What was this drug?	Heroin	1	Methamphetamine (METH/ Crystal/TIK)	2
		Other	3		
B10	How was this drug injected?	Inject – intra-muscular	1	Inject – intra-venous (spiking, main-line)	2
		Other	3		
B11	Did you use a new or cleaned needle and syringe the last time you injected? (cleaned with bleach and water)			Yes	1
				No	0
B12	When you inject/injected how often do you/did you share the needle & syringe?	Always	1	Most times	2
		Rarely	3	Never	4
B13	What is the most number of people you have EVER shared a needle and/or syringe with during one injecting session?				N/A

B14	If you do not/did not use a new needle and syringe, how often do you/did you clean the needle and syringe before using it?			Always	1
				Most times	2
				Rarely	3
				Never	4
				N/A	5
B15	When you injected, how do you/did you normally clean the needle and syringe? (*more than one answer possible*)	With bleach	1	With clean water	2
		By boiling	3	With hot water	4
		With any water available	5	Wiping with a cloth	6
		Other	7	N/A	8
B16	Where do you/did you get new needles and syringes? (*more than one answer possible*)			Pharmacy	1
				Hospital	2
				NGO	3
				Friends	4
				Other	5
B17	When mixing up drugs before injecting, how often do you/did you share the mixing up equipment (e.g. spoon or vial or cooker, filter, water vessel)?			Always	1
				Most times	3
				Rarely	4
				Never	5

Drug-taking history

B18	What illegal drugs have you taken?	Never	At least once	Last 12 months	Last 30 days	Last 3 days
B18a	Cannabis—Dagga	0	1	2	3	4
B18b	Cocaine Powder	0	1	2	3	4
B18c	Crack Cocaine/ Rocks	0	1	2	3	4
B18d	Amphetamines	0	1	2	3	4
B18e	Mandrax/White-Pipe	0	1	2	3	4
B18f	Designer Drugs/Ecstasy MDMA	0	1	2	3	4
B18g	LSD	0	1	2	3	4
B18h	Heroin – smoked	0	1	2	3	4
B18i	Heroin – injected	0	1	2	3	4
B18j	Methamphetamine – smoked (TIK/Crystal Meth)	0	1	2	3	4
B18k	Methamphetamine – injected (TIK/Crystal Meth)	0	1	2	3	4
B18l	Drug mix – smoked (e.g. nyaope/whoonga)	0	1	2	3	4
B18m	Other – smoked	0	1	2	3	4
B18n	Other – injected	0	1	2	3	4

C. Sexual behaviour

The following questions are about sexual behaviour. This topic is often embarrassing and difficult to talk about. Everything you tell us will be kept confidential. You do not have to answer questions that you do not want to.

[*As far as possible, female interviewers should interview female participants*]

C1	Have you ever had sexual intercourse?	No	0		
		Yes	1	How old were you when you first had sexual intercourse?	_ years

C2	How many sexual partners have you had in the last 12 months?	_partners	
		N/A	0
C3	Have you ever had sex with a sex worker?	No	0
		Yes	1
C4	Have you ever worked/ do you work as a sex worker?	No	0
		Yes	1
C5	Have you ever exchanged sex for drugs or sex for money for drugs?	No	0
		Yes	1
C6	Have you ever had sex with somebody of the same sex as you?	No	0
		Yes	1
C7	When you have sex how often do you use condoms?	Always	1
		Most times	2
		Rarely	3
		Never	4
		N/A	5
C8	Did you use a condom the last time you had sex with someone?	No	0
		Yes	1
		N/A	3
C9	Have you had symptoms of a STI (urethral or vaginal discharge/drop, sores on the ano-genital region) in the past 12 months?	No	0
		Yes	1

D. HIV/AIDS & Hepatitis

D1	Have you ever heard of HIV/AIDS?	No	0
		Yes	1
D2	Have you ever received any information about HIV prevention for drug users?	No	0
		Yes	1

I am now going to ask you a few questions about your understating of HIV

D3	Can a person get HIV by sharing food with someone who is HIV infected?	No	0
		Yes	1
D4	Can a person reduce the risk of getting HIV by using a condom every time they have sex?	No	0
		Yes	1
D5	Can a person get HIV from mosquito bites?	No	0
		Yes	1
D6	Can a healthy looking person have HIV?	No	0
		Yes	1
D7	Does a person have less chance of getting HIV if they only have sex with one person and that person is HIV negative?	No	0
		Yes	1

I am now going to ask you a few questions about your perceived risk for HIV infection

D8a	Do you think you are at risk for getting HIV/AIDS?	No	0	Yes	1
		N/A	2	Other	3
D8b	If you answered yes, what risks do you think you may face? (*more than one option is allowed*)	N/A			0
		Unprotected sex (no condom usage)			1
		Multiple sexual partners (no condom usage)			2
		Use of non-sterile injecting equipment			3
		Violence (sexual and/or physical)			4
D9	Have you had an HIV test in the last 12 months?	No			0
		Yes			1
D10	Do you know the result?	No			0
		Yes			1
D11	Have you ever been tested for viral hepatitis?	No			0
		Yes			1

E. Treatment and support history

Complications of injecting

E1	Since you began using drugs, have you suffered from any of the following? (*more than one option is allowed*)	Tuberculosis	1
		Jaundice (*explain that this means eyes and urine turn yellow and remain so for a few weeks*)	2
		Weight loss	3
		Diarrhoea for more than a month	4
		Fever for more than one month	5
		Abscess	6
		Any other illness:	7
E2	If yes, what did you do for a cure when you were most sick (while using drugs)?	N/A	0
		See doctor	1
		Treated yourself	2
		Did nothing	3
		Other:	4

Overdose

A drug overdose is when a person takes too much of a drug and suffers a serious negative effect. When a person overdoses on morphine or another opiate they might pass out and stop breathing.

E3	Have you ever overdosed on a drug you consumed or injected?	No	0		
		Yes	1	How many times?	
E4	If you have overdosed did you receive medical assistance or help from a friend	No			0
		Yes			1
		N/A			2
E5	Do you know what to do if somebody overdoses from a consumed or injected drug?	No			0
		Yes			1

Stigma and discrimination

E6	When you go and see a doctor or go to a hospital do you feel that you are treated in a negative way because you are a drug user?	No	1
		Yes	2

Drug dependence treatment

E7	Have you ever tried to stop using drugs?	No	1
		Yes	2
E8	Have you ever received any help for your drug use?	No	1
		Yes	2

E8a	If so, from whom? (*more than one answer is allowed*)	Public clinic	1	Public drug centre	2
		Non-governmental organisation	3	Private clinic (for profit)	4
		Religious organisation	5	GP	6
		Other:	7	N/A	8
E8b	What type of treatment did you get?	Psychosocial support	1	Detoxification (medically assisted)	2
		Drug maintenance	3	Detoxification (non-medically assisted)	4
		Other	5	N/A	6
E8c	If you got treatment, was it:			Outpatient	1
				In-patient	2
				N/A	3
E9	What help do you need/ did you need to reduce the negative effects of your drug use? (*more than one answer is allowed*)	Psychosocial support	1	Information on safe injecting	2
		Information on infections (HIV, hepatitis C)	3	Improved access to condoms and lubricant	4
		Access to free, steile needles & syringes	5	Access to cleaning equipment	6
		Easier access to HIV testing	7	Access to health services	8
		Other:			9
E10	What kind of help do you think you would need/ have needed to stop injecting drugs? (*more than one answer is allowed*)	Psychosocial support	1	Detoxification	2
		Drug maintenance programme (e.g. OST)	3	Private (for profit) clinic	4
		Other:			5

F. Drug market questions

F1	Where do you/did you most often buy or get drugs from?	Pharmacy – **with** a prescription	1	Pharmacy – **without** a prescription	2
		Hospital	3	Directly from a doctor/ nurse (no script)	4
		From a drug dealer	5	From friends	6
		From a bar	7	Other:	8

G. Arrest history

G1	Have you ever been in police lock up?			No	0
				Yes	1
G2	Was it possible to get drugs inside police lock up?	No	0	Yes	1
		N/A	2		
G3	Did you ever inject drugs inside police lock up?	No	0	Yes	1
		N/A	2		
G4	If you did ever injected drugs inside police lock up, did you get clean needles/syringes?	No	0	Yes	1
		N/A	2		
G5	Have you ever been in prison?			No	0
				Yes	1
G6	Was it possible to get drugs inside prison?	No	0	Yes	1
		N/A	2		
G7	Did you ever inject drugs inside prison?	No	0	Yes	1
		N/A	2		
G8	If you did ever inject drugs inside prison, did you get clean needles/syringes?	No	0	Yes	1
		N/A	2		
COMMENTS					

Quality control check

Date:

Initial:

Entered into database

Date:

Initial:

APPENDIX 9
AGENDA FOR THE RESULTS DISSEMINATION WORKSHOPS

Rapid assessment of HIV and HIV-related risks among people who inject drugs in three South African provinces

Background

In 2013, it is estimated that there are around 14.0 million (range: 11.2 million–22.0 million) people who inject drugs (PWID) worldwide, and approximately 1.6 million (range: 1.2 million to 3.9 million) PWID living with HIV, representing a global HIV prevalence among PWID of 11.5% (1). Although data on drug use in South Africa is scarce, the country is estimated to have one of the highest levels of heroin use in Africa. Drug users may be at risk for HIV transmission through various drug-related sexual practices. PWID may also be at risk for HIV infection through the use of non-sterile injecting equipment. Accumulated evidence and experience show that HIV can spread explosively once it enters a drug-injecting population.

A rapid assessment of HIV prevalence and HIV-related risks was conducted among people who inject drugs in Gauteng, KwaZulu-Natal and the Western Cape. In total, 450 people were recruited between May–July 2013.

This workshop will provide a platform to share the findings of the rapid assessment; discuss the implications thereof, and collectively develop next steps for advocacy and provision of services for PWID in South Africa.

Workshop objectives

- Disseminate the results of the rapid assessment among PWID.
- Develop and support advocacy initiatives on HIV prevention among people who inject drugs and non-injecting drug users.
- Outline next steps to provide comprehensive services for PWID and other drug users.

Expected workshop outcomes

- Increased participant awareness of PWID and the identified HIV prevalence and risks.
- Increased participant understanding of the need for and gaps in PWID-focused services.
- A prioritised advocacy agenda on injecting and related drug use.
- An outline of next steps to provide services to PWID.

City (Province)	Cape Town (Western Cape)	Durban (KwaZulu-Natal)	Centurion (Gauteng)
Venue	Capetonian Hotel	Protea Hotel Edward	Leriba Lodge
Date	11 November 2014	13 November 2014	19 & 20 November 2014
Contact/ RSVP	Andrew Scheibe (andrew.scheibe@gmail.com) Linda Vernout (Linda.VERNOUT@unodc.org)		

Results dissemination and advocacy workshop agenda

DAY 1 (Cape Town, Durban, Centurion)		
TIME	**SESSION**	**PRESENTER**
08:00–08:30	Welcome and introductions	*UNODC representative*
08:30–08:40	Overview of the day	*Representative of implementing partner*
08:40–08:45	Addressing the needs of PWID: a global priority	*UNODC representative*
08:45–09:00	Patterns and trends of Heroin/ ATS use and injection behaviour in South Africa	*Representative of the Medical Research Council, Alcohol, Tobacco and Other Drugs Unit*
09:00–09:20	Overview of rapid assessment study on PWID: methods, findings, conclusions & draft recommendations	*Lead Consultant*
09:20–10:00	Group discussion around results and recommendations – Report validation	*UNODC representative*
10:00–10:45	National/ Provincial Drug Plan and providing harm reduction services for people who use drugs	*National/Provincial Department of Social Development representative*
10:45–11:15	**Tea**	
11:15–11:30	National/ Department of Health: overview of interventions for people who use drugs	*National/Provincial Department of Health representative*
11:30–11:45	Evidence-based HIV prevention, treatment, care and support interventions for PWID	*UNODC representative*
11:45–12:00	Presentation of the PWID Harm Reduction Demonstration Project	*TB HIV Care Association/OUT representative*
12:00–12:30	**Lunch**	
13:30–15:30	Group discussion around harm reduction policy and services for PWID	*Group facilitators*
15:30–16:00	**Tea**	
16:00–16:20	Feedback to group	*Group representatives*
16:20–16:30	**Closing**	*Consultant*

DAY 2 (Centurion)		
TIME	**SESSION**	**PRESENTER**
08:30 – 08:45	Welcome and introductions	*UNODC Representative*
08:45 – 09:00	Overview of day 1	*Andrew Scheibe, Consultant*
09:00 – 09:30	Presentation of the PWID HIV Prevention Demonstration Project	*Harry Hausler and Andy Lambert, TB HIV Care Association*
09:30–10:00	Sharing lived experiences of PWID in Pretoria	*PWID community representative*
10:00–10:30	Debates and discussions	*UNODC representative*
10:30–11:00	**Tea**	
11:00–11:30	Sharing suggestions from workshop discussions	*Consultant*
11:30–12:30	Discussion, next steps and closing	*UNODC representative*

APPENDIX 10
SUMMARY OF UNADJUSTED ODDS RATIOS FOR HIV INFECTION AMONG SURVEY PARTICIPANTS

		MALES		FEMALES	
Variable		OR (95% CI)	p value	OR (95% CI)	p value
Age	Years	1.0 (1.0–1.1)	0.128	0.9 (0.8–1.0)	0.084
	Less the 25 years old	Reference		Reference	
	Aged 25 years or older	2.1 (0.94–5.04)	0.068	0.5 (0.2–1.7)	0.294
Race	White	Reference		Reference	
	Black	1.7 (0.8–3.6)	0.170	153.0 (14.3–1639.2)	<0.001
	Coloured	1.3 (0.6–2.8)	0.540	10.2 (1.0–105.4)	0.051
	Asian	3.7 (1.2–11.0)	0.020	34.0 (2.4-490.0)	0.010
	Other racial groups	Reference		Reference	
	White	0.6 (0.3–1.7)	0.135	0.0 (0.0–0.2)	0.001
Education	Did not complete high school	Reference		Reference	
	Completed high school	1.0 (0.5–1.8)	0.968	0.4 (0.1–1.3)	0.129
Employment	Not working	Reference		Reference	
	Part-time	1.5 (0.8–1.6)	0.191	1.3 (0.3–5.2)	0.241
	Full-time	0.4 (00.8–2.8)	0.232	2.2 (0.3–5.2)	0.753
Income		1.0 (1.0–1.0)	0.778	1.0 (1.0–1.0)	0.257
Province	Western Cape	Reference		Reference	
	Gauteng	1.3 (0.6–2.85)	0.435	7.1 (0.8–64.1)	0.079
	KwaZulu-Natal	1.4 (0.7–3.1)	0.338	7.7 (0.9–66.0)	0.063
Injecting history	Years	1.0 (1.0–1.1)	0.138	1.0 (0.9–1.1)	0.526
Last drug injected	Heroin	0.7 (0.3–1.6)	0.341	2.0 (0.2–17.1)	0.527
Needle cleaning	Always	Reference		Reference	
	Most times	1.6 (0.8–3.2)	0.155	5.3 (1.5–19.1)	0.011
	Rarely	1.3 (0.3–5.9)	0.774	2.2 (0.2–24.4)	0.518
	Never	0.9 (0.7–1.2)	0.435	0.8 (0.3–1.7)	0.496
Needle sharing	Number of people	1.0 (0.9–1.2)	0.380	1.3 (1.1–1.6)	0.008
Overdose	Ever overdosed	0.9 (0.5–1.7)	0.800	1.0 (0.3–3.0)	0.936
	Number of overdoses	1.0 (1.0–1.1)	0.207	1.1 (1.0–1.3)	0.170
Sexual partners	Number in last 12 month	1.0 (1.0–1.0)	0.330	1.0 (1.0–1.0)	0.077
Same sex practice (ever)		2.2 (1.2–4.0)	0.016	1.6 (0.5–5.1)	0.386
Transactional sex for drugs or money for drugs		2.2 (1.2–4.0)	0.013	3.7 (0.8–17.6)	0.103
Sex work	Ever had sex with a sex worker	1.6 (0.9–3.0)	0.113	4.5 (1.4–14.4)	0.011
	Ever worked as a sex worker	4.0 (2.0–7.7)	<0.001	2.2 (0.7–7.2)	0.177
Condom use at last sexual intercourse		0.9 (0.5–1.6)	0.766	1.1 (0.4–2.9)	0.835
STI symptoms in last 12 months		2.4 (1.3–4.5)	0.006	12.5 (3.4–45.4)	<0.001
Received HIV drug use prevention information		0.7 (0.4–1.3)	0.314	1.3 (0.4–4.5)	0.688
Perceives self to be at risk for HIV infection		1.4 (0.8–2.4)	0.308	2.3 (0.8–6.5)	0.117
HIV test in last 12 months		1.0 (0.5–1.8)	0.999	0.4 (0.1–1.3)	0.122
Ever received some help for drug use		0.7 (0.4–1.2)	0.200	0.4 (0.1–1.4)	0

APPENDIX 11
MULTIVARIATE LOGISTIC REGRESSION FOR HIV INFECTION AMONG SURVEY PARTICIPANTS

11

		Adjusted odds ratio (aOR)	
Variable		aOR (95% CI)	p value
Biological sex	Male	Reference	
	Female	0.9 (0.)	0.820
Age	Less than 25 years 25 years and older	Reference 1.8 (0.8–3.8)	 0.132
Race	Other racial group	Reference	
	White	0.3 (0.1–0.6)	0.001
Education	Did not complete high school	Reference	
	Completed high school	1.0 (0.5–1.9)	0.924
Employment	Not working	Reference	
	Part-time	0.9 (.02–2.0)	0.503
	Full-time	0.7 (0.0.2–2.0)	0.860
Income	ZAR	1.00 (1.00–1.00)	0.976
Province	Western Cape	Reference	
	Gauteng	2.4 (1.1–5.3)	0.028
	KwaZulu-Natal	1.6 (0.8–5.0)	0.120
Injecting history	Years	1.1 (1.0–1.1)	0.044
Needle cleaning	Always	Reference	
	Most times	1.3 (0.7–2.8)	0.367
	Rarely	1.4 (0.3–7.2)	0.367
	Never	0.9 (0.6–1.2)	0.397
Number of sexual partners in last 12 months		1.0 (1.0–1.0)	0.226
Ever worked as a sex worker		3.2 (1.6–6.5)	0.001
Symptoms of STI in last 12 months		2.3 (1.2–4.4)	0.016

APPENDIX 12
SUMMARY OF PARTICIPANT EXPERIENCE OF OVERDOSE AND OTHER COMPLICATIONS OF INJECTING DRUG USE

Province	Gauteng		KwaZulu-Natal		Western Cape		Total*	
Biological sex	*Male n=123*	*Female n=27*	*Male n=116*	*Female n=34*	*Male n=124*	*Female n=26*	*Male n=363*	*Female n=87*
Overdose								
Ever overdosed	63% (78/123)	63% (17/27)	46% (53/116)	65% (22/34)	34% (42/124)	54% (14/26)	48% (173/363)	61% (53/87)
Median number (IQR)	3 (2–4)	2 (1–8)	3 (2–5)	3 (2–5)	1 (1–2)	2 (1–5)	2 (1–4)	2 (1–5)
Received assistance during an overdose	88% (69/78)	100% (15/15)	91% (48/53)	100% (22/22)	83% (35/42)	93% (13/14)	89% (152/173)	98% (52/53)
Aware of what to do if witnesses an overdose	65% (80/123)	63% (17/27)	50% (58/116)	74% (25/34)	35% (43/124)	46% (12/26)	50% (181/363)	62% (54/87)
Health complications**								
Jaundice	14% (17/123)	7% (2/27)	24% (28/116)	9% (3/34)	14% (17/124)	15% (4/26)	17% (62/363)	10% (9/87)
Weight loss	84% (103/123)	63% (17/27)	89% (103/116)	97% (33/34)	83% (103/124)	88% (23/26)	85% (309/363)	84% (73/87)
Diarrhoea for > 1 month	23% (28/123)	19% (5/27)	35% (41/116)	18% (6/34)	11% (14/124)	19% (5/26)	23% (83/363)	18% (16/87)
Fever for > 1 month	24% (30/123)	19% (5/27)	46% (53/116)	41% (14/34)	15% (18/124)	19% (5/26)	28% (101/363)	28% (24/87)
Abscess	40% (49/123)	30% (8/27)	42% (49/116)	38% (13/34)	31% (38/124)	65% (17/26)	37% (136/363)	44% (38/87)
Tuberculosis	3% (4/123)	0	5% (6/116)	9% (3/34)	14% (17/124)	7% (2/26)	8% (27/363)	6% (5/87)

* Not all totals add up due to rounding off and due to the presentation of selected data.
** Participants could answer multiple responses for this subsection.

APPENDIX 13
SUMMARY OF PARTICIPANT HEALTH-SEEKING PRACTICES AND EXPERIENCES

13

Province	Gauteng		KwaZulu-Natal		Western Cape		Total	
Biological sex	*Male n=123*	*Female n=27*	*Male n=116*	*Female n=34*	*Male n=124*	*Female n=26*	*Male n=363*	*Female n=87*
Healthcare during time when most ill								
Sought medical help	29% (35/121)	52% (13/25*)	22% (24/111)	44% (15/34)	42% (42/101)	48% (12/25)	30% (101/333)	48% (40/84)
Self-treatment	32% (39/121)	16% (4/25)*	19% (21/111)	12% (4/34)	23% (22/101)	20% (5/25)	25% (82/333)	15% (13/84)
Did nothing	39% (47/121)	28% (7/25)	59% (66/111)	44% (15/34)	25% (25/101)	24% (6/25)	41% (128/333)	33% (28/84)
Felt that they were treated in a negative way at health facility due to their drug use								
	75% (93/123)	88% (23/27)	41% (47/116)	69% (24/34)	56% (69/123)	44% (12/26)	58% (209/363)	67% (59/87)

* Data not provided by all participants.

APPENDIX 14
SUMMARY OF ENGAGEMENT WITH THE LAW

Province	Gauteng		KwaZulu-Natal		Western Cape		Total*	
Biological sex	*Male n=123*	*Female n=27*	*Male n=116*	*Female n=34*	*Male n=124*	*Female n=26*	*Male n=363*	*Female n=87*
Ever been in police lock up								
	97% (119/123)	89% (24/27)	93% (108/116)	74% (25/34)	98% (121/124)	88% (23/26)	98% (348/363)	83% (72/87)
Ever been in prison								
	62% (76/123)	26% (7/27)	85% (99/116)	56% (19/34)	85% (105/124)	42% (11/26)	77% (280/363)	43% (37/87)

* Data not provided by all participants.
Not all totals add up due to rounding off and due to the presentation of selected data. Participants could answer multiple responses for this subsection.

ADA SA

The Anti Drug Alliance Annual Survey and Report

Contents

Foreword

At the end of the apartheid era, South African research relating to the nature and extent of use of drugs (other than alcohol and tobacco) among the general adult population in South Africa was practically non-existent.

In South Africa alcohol and drug abuse was spoken of by former President Nelson Mandela in his opening address to Parliament in 1994 as a problem among social issues that needed to be combated.

By February 1999, the South African Drug Advisory Board hailed an unacceptable increase in substance abuse and its associated problems.

This problem has been identified by the National Drug Master Plan, as a fuel for crime, poverty, reduced productivity, unemployment, dysfunctional family life, political instability the escalation of chronic diseases, such as AIDS and TB, injury and premature death (Drug Advisory Board, 1999).

The Anti Drug Alliance of South Africa is committed to giving the public the truth about drugs and addiction in South Africa.

With this in mind, five years back, we started using the information we received from those people contacting us to put out statistics. We started contacting treatment facilities and many shared information such as which drugs were most abused by those receiving treatment in their facilities.

We started talking with the Police, and now and then got some information, but quickly found their statistics unrealistic and unreliable, simply because they are working from a legal perspective, and numbers of arrests and convictions only scratch the tip of the proverbial iceberg.

We spoke with paramedics, finding out how often they got called out to drug related cases.

We spoke to as many role players we could, and slowly it began to happen - a very clear picture started to emerge about the reality of drug use in South Africa.

“The picture was a very different one to what we expected.”

It showed us as a nation under siege. Through the media, many hundreds of emails and phone calls, we called on Government to do something. We had a very real picture of drugs in this country, and yet, it seemed that no matter how many successes were lauded in the media, the problem seemed to worsen.

Meetings with those in “the know”, seemed to point to one very scary conclusion. The reality is that everyone seemed to be saying the war against drugs was lost, that South Africa had been hit by a drug tsunami, and that fighting the problem was ineffective to say the least.

“Today, we take a very different stance.”

It is clear that the war against drugs is lost. We see on a daily basis that more and more dealers are on the streets.

The obvious reaction would be to say, ''Arrest them! Put them behind bars!''

Sadly, there would not be so many drug dealers if there were not so many drug users. Speaking to drug dealers, we have found it a clear situation of these people supplying a demand.

We could have the great which came first, the chicken or the egg debate, but right now that would be too little too late. The fact is that we have lost the war, and all that government is doing is spending billions on catching a few criminals who are trafficking large amounts of drugs.

A drug dealer supplies a demand, and by taking a few out of the equation the problem is not solved. They are simply replaced by other dealers who learn by their predecessors' mistakes and now take longer to get caught.

The fact is that we simply have to look at legalization and or decriminalization as a very real solution to the problem.

Speaking to the role players on the street, the policemen, the social workers, the counsellors and even the prosecutors and magistrates, (many of them fearful of reprimand) agree with us with hushed tones or behind closed doors.

This year's survey included a question about this very topic. Should we look at legalization or decriminalization as an option? Last year, less than 10% of respondents answered yes. This year, over a third answered yes.

“South Africa is no longer the third world country at the bottom of the world.”

We have become a global player in many industries, we are the financial and industrial powerhouse of Africa, and our country boasts the most progressive constitution in the world. Yet, we suffer from archaic prohibitionist belief systems, and foolishly believe that we can stop drug use in our country.

It is time that we woke up and realized that this viewpoint will not carry us anymore. Ours is truly a country of wonderful and dramatic change, but at the same time, ours is a country that is floating high on a cloud of marijuana smoke and a cornucopia of other drugs.

It is time we looked at change. Start questioning who is actually in control of the drug war, and you will see that it is time we changed strategy and looked at changing for the greater good of our children.

This year, we used a number of portals to gather the information that we have used in this annual report.

Our national helpline, together with thousands of emails and submissions to our websites and social media contact points accounts for roughly half of the data, whereas the annual survey, which was completed by over 35000 respondents accounts for the other half. Our online survey did have a number of responses from many overseas countries; however, we used special filters on the online platform to ensure that those were ignored.

Our data comes from 35433 respondents to the online survey, as well as 22376 emails, telephone calls, submissions to our websites and social media portals.

This gives us a total of 57809 points of information that we can base our statistics on, which as far as we know is the largest private research that has ever been done in South Africa on the subject.

As you read through each of the pages, please remember – these figures represent real people, real situations and real lives. These are not just numbers, these are voices. Together we have a voice, and this voice needs to call on government to look at real change, not just big talk and show of force. The latter is easy, but real change takes commitment to the people government represents.

We thank you, South Africa, for speaking with us. Thank you for each and every email you send us. Thank you for every phone call to tell us where dealers hang out and sell drugs.

Thank you to the men and women out there making a difference on the streets – the policemen, paramedics, counsellors, social workers, prosecutors, magistrates, NGO's, treatment facilities and those I have not mentioned.

Most importantly, thank you for sharing our sentiment for change. Our only prayer is that one day you can speak out about your beliefs without recrimination or fear of reprimand for daring to think about change.

It is only with your help that we can make sure that South Africa hears the real truth about drugs and addiction in our country.

Quintin van Kerken
Chief Executive Officer
Anti Drug Alliance South Africa

Where we get the numbers

Our data was retrieved from a number of sources.

We receive an average of 1800 contacts on a monthly basis. This is via our social media pages, our website submission forms, direct emails, face to face meetings and other contact points such as text messages (through various channels such as SMS, BBM, and WhatsApp).

We use the information from these contacts to answer a number of questions which we believe to be most pertinent with regards to our annual report. Questions asked (amongst others) include:

- Age;
- Income;
- Expenditure on drugs;
- What drugs are used;
- And lifestyle (amongst others).

These questions help form a picture of drugs and addiction in South Africa. The information we receive is confidential.

We cannot and will never give names, or any other information out that may challenge the privacy of the person that is furnishing us with the information.

The reality is that although addiction is a health issue, many substances that fuel addiction are illegal, and also most people suffer severe embarrassment about their addictions.

We also do a direct survey, which is filled out by the public via an online form. We use our various social media sites, websites and contacts in the media to request the public to fill out the survey.

No personal information about the respondent is captured, however, we do have a filter on the form to ensure that only forms filled out within South Africa are saved. Anyone outside of our borders may fill the form in, however the information that is captured on these forms is auto deleted on submission.

We believe this anonymity offers the respondent the chance to be completely truthful regarding their thoughts on drugs and addiction.

There are obviously checks and balances when we check the numbers. We already have an idea (based on previous statistics) what the numbers should be. We know that there is a growth rate, and we account for that as well. At the end of the day, we are able to supply the statistics in a balanced and unbiased manner.

We do not ask too many questions. Experience has taught us what to ask, and generally people do not like to answer too many questions. We ask what we need to know, and that is all. No other information is necessary.

We have rounded off percentages to the nearest tenth of a percent for ease of use.

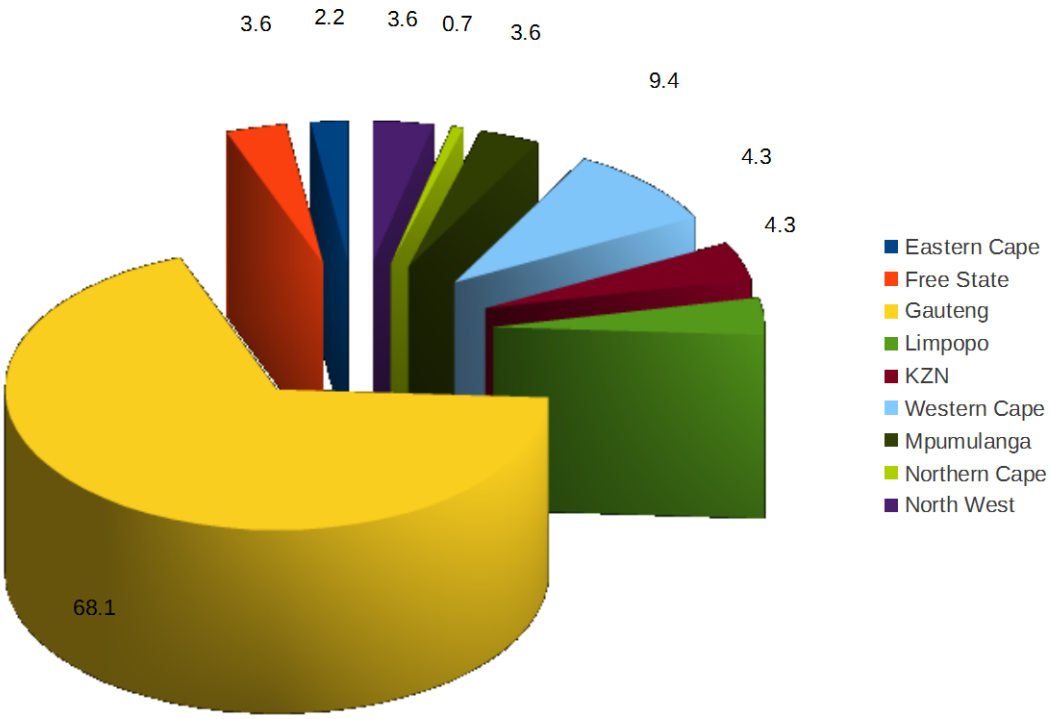
The Results

Following is the graphical view of the results. We have rounded off the results to the nearest tenth of a percent for ease of use.

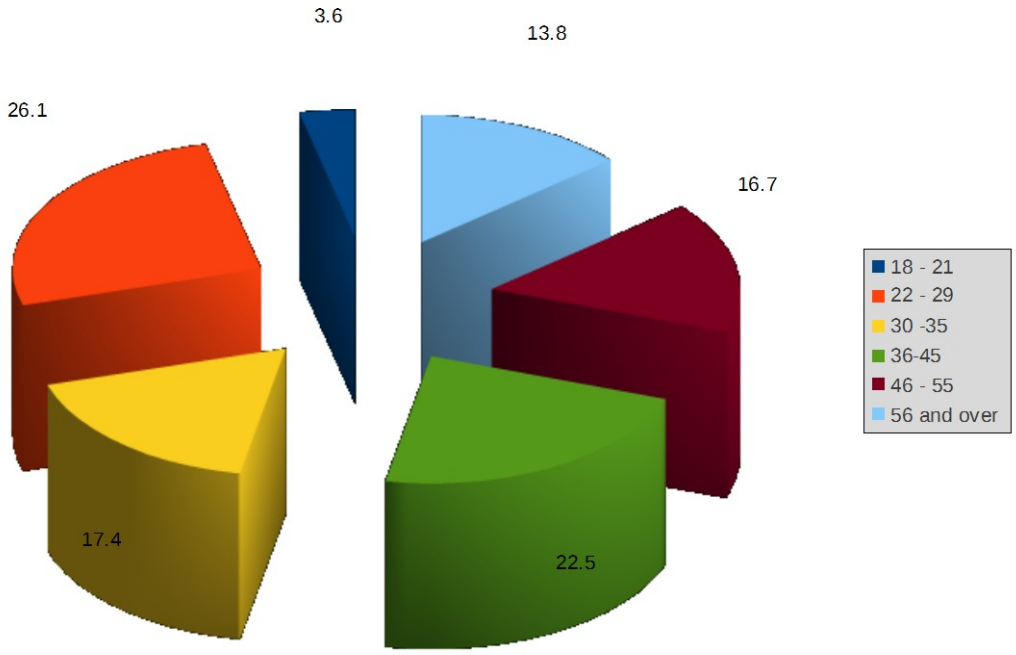
We will discuss the results in the following section.

(Please note the numbers on the pie chart represent the percentage of respondents.)

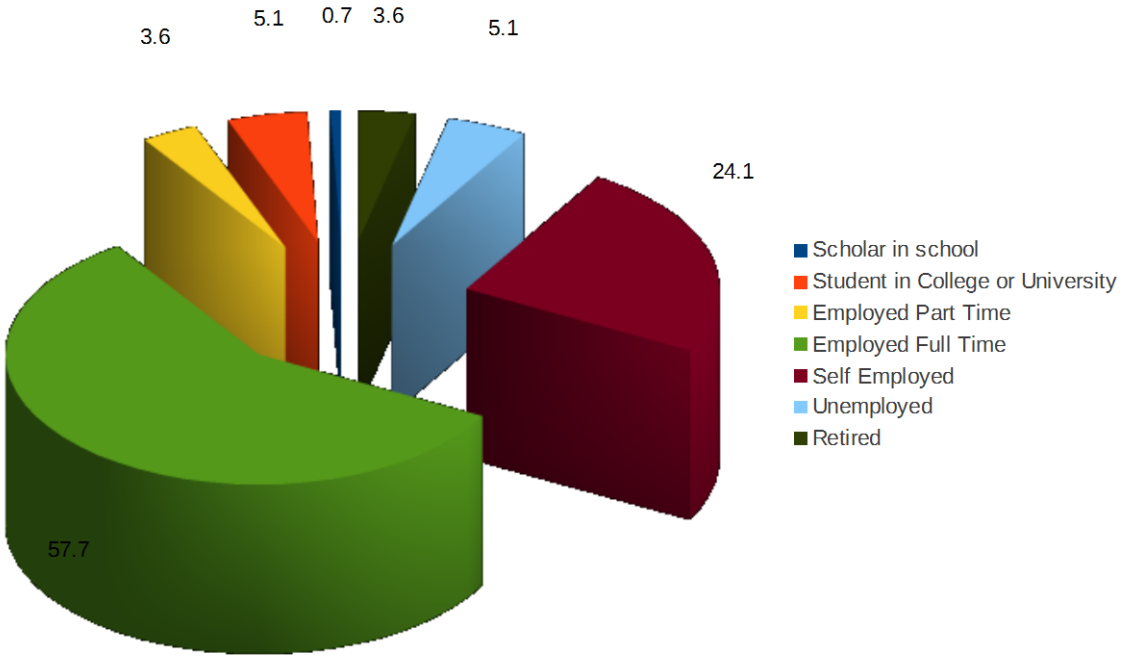
What province do you live in?



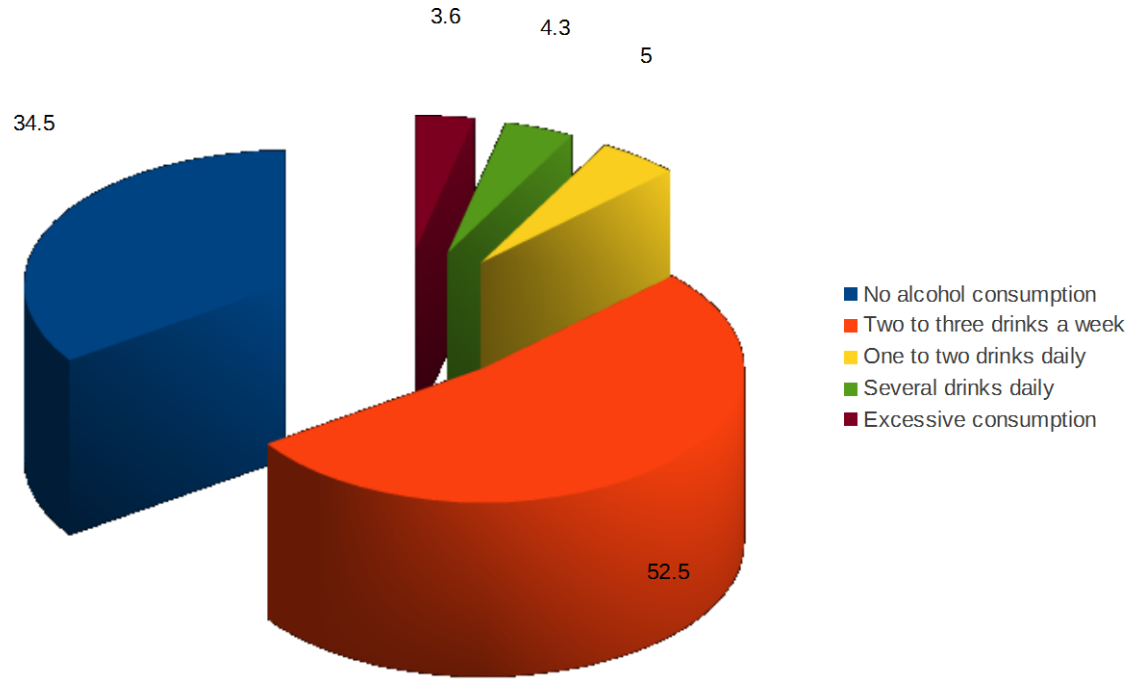
What age group do you fall into?



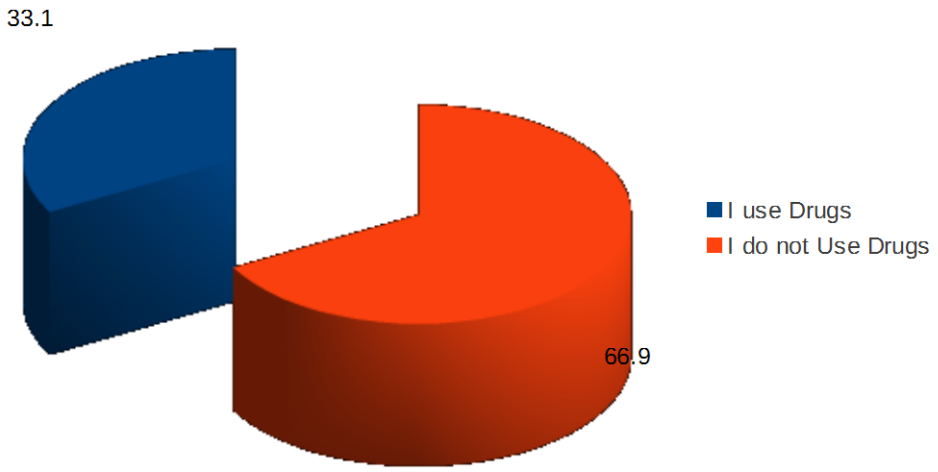
What is your work status?

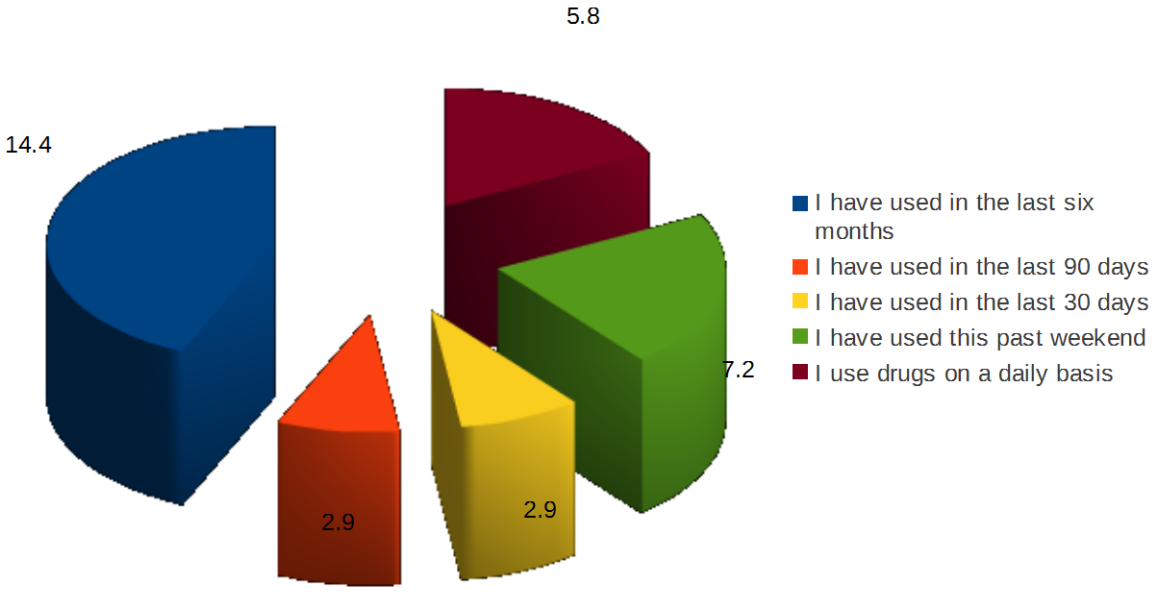


How much alcohol do you consume?

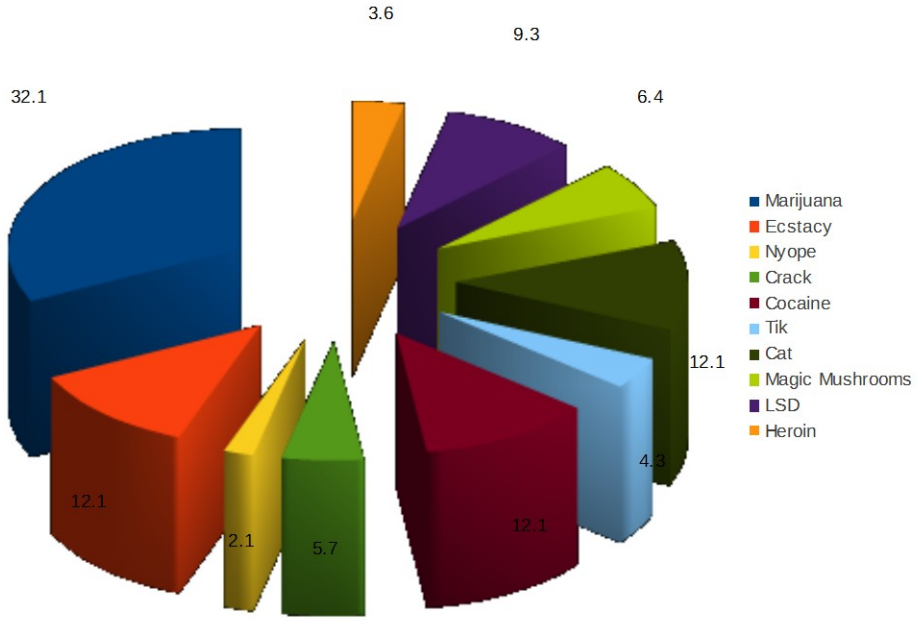


Do you use drugs, and if so, when last did you use?

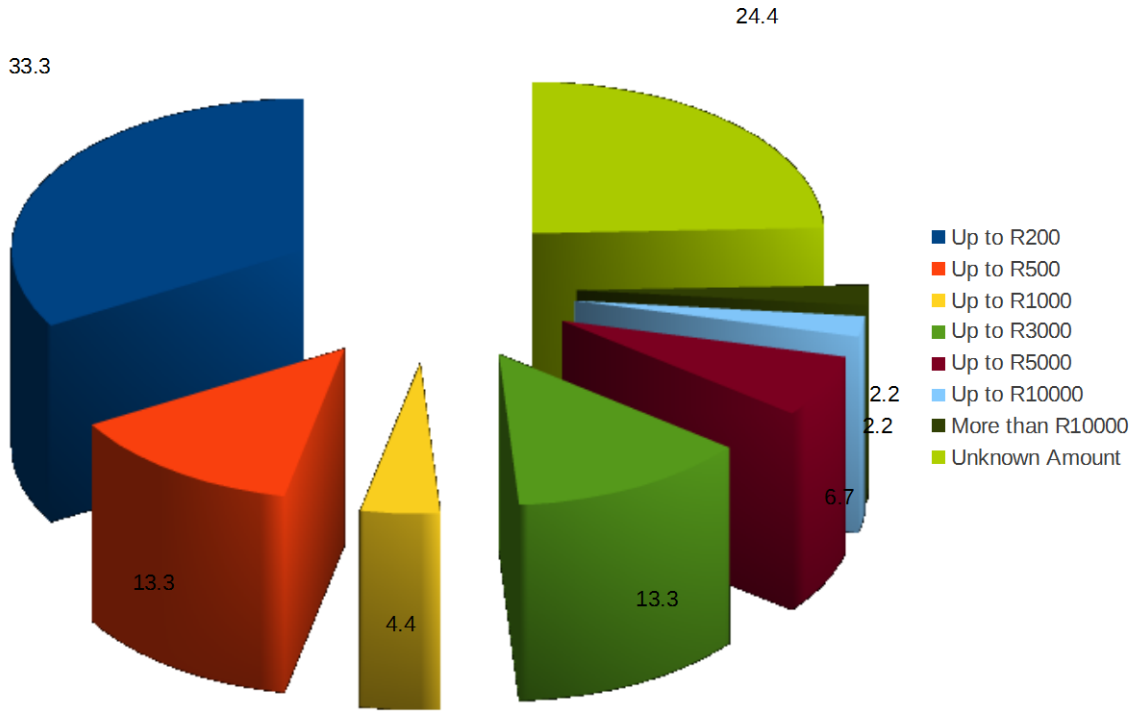




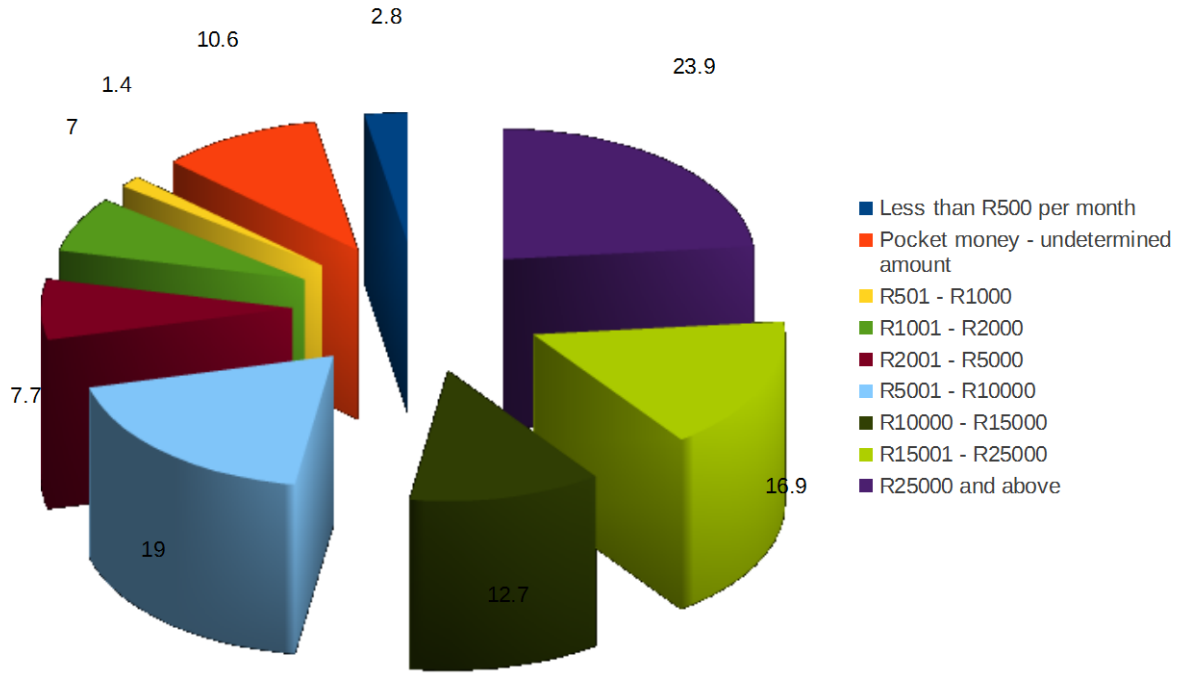
What drugs do you use?



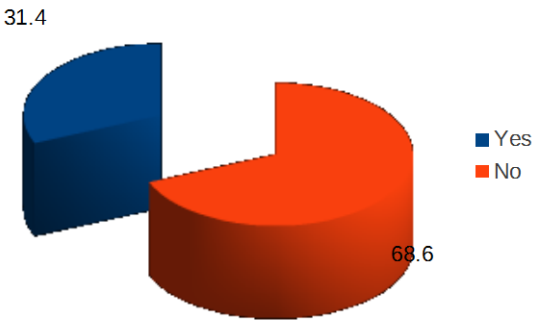
What do you spend on drugs on a monthly basis?



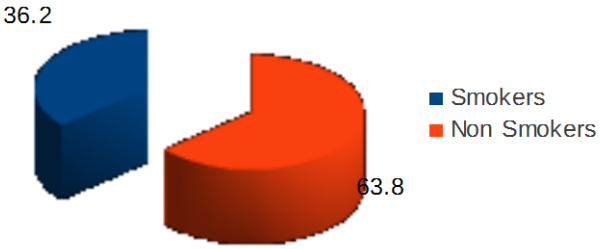
What do you earn?



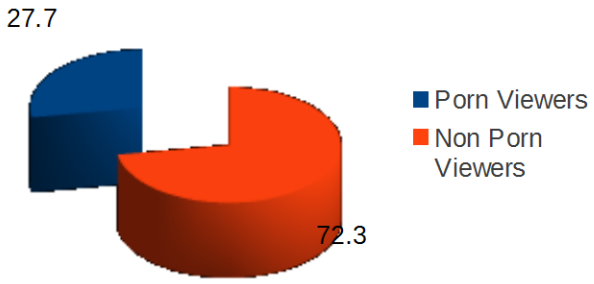
Do you have any tattoos or piercings, other than ear piercings?



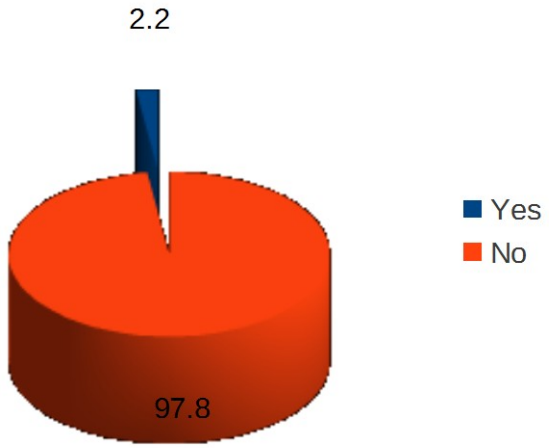
Do you smoke cigarettes?



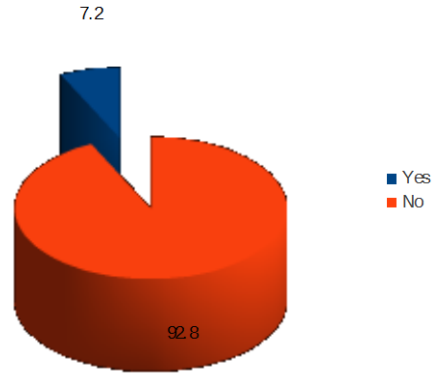
Do you view porn on a regular basis?



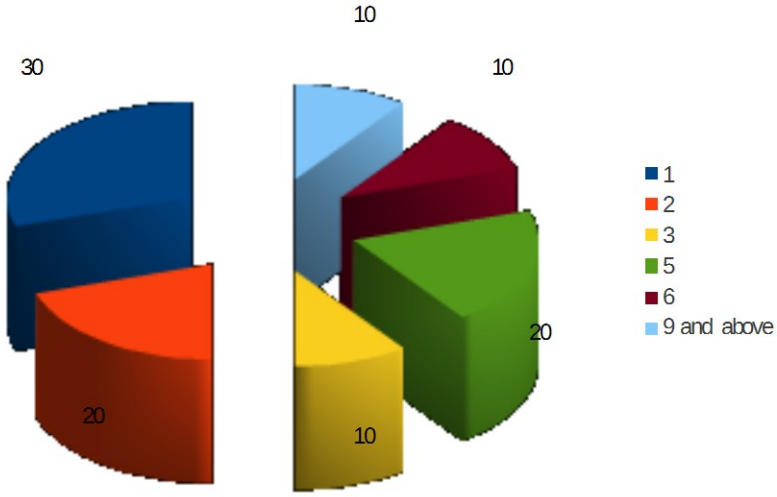
Have you gambled in the last 30 days?



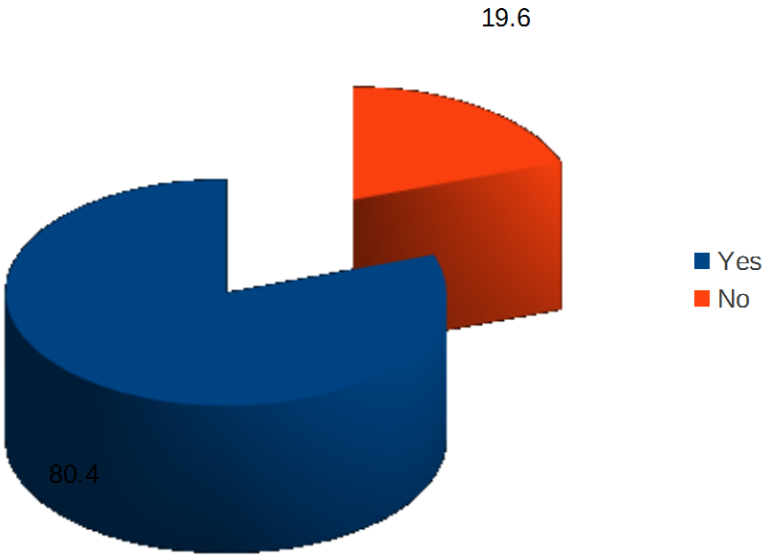
Have you attended rehabilitation for an addiction?



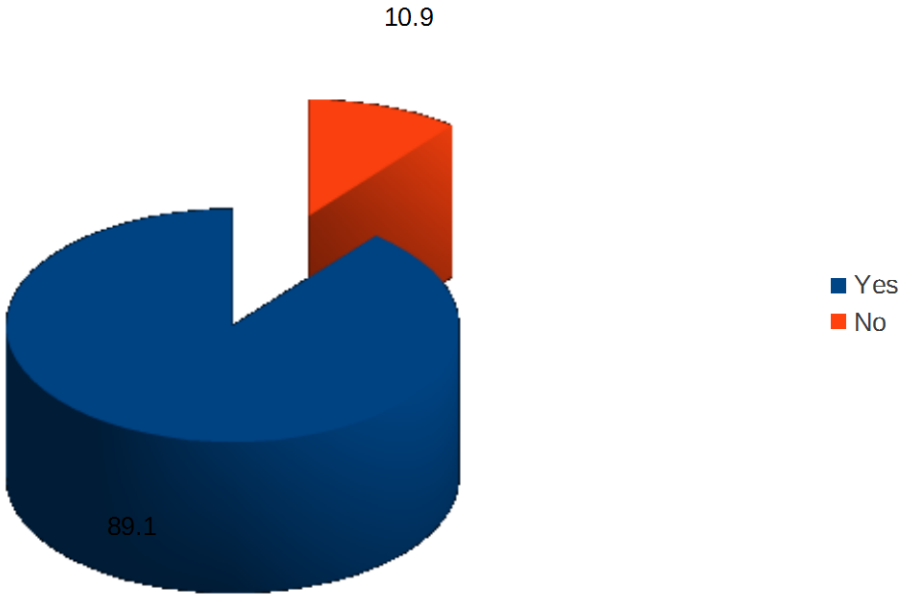
If you have attended rehabilitation for an addiction, how many times have you been?



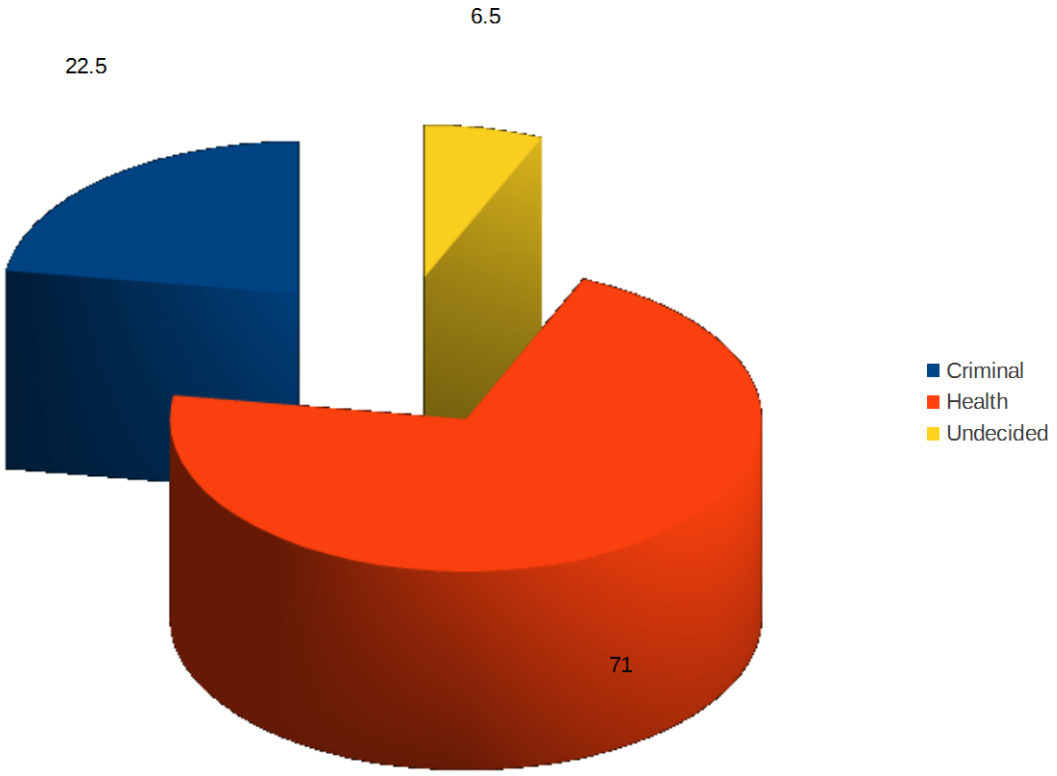
Do you believe you city or town has a drug problem?



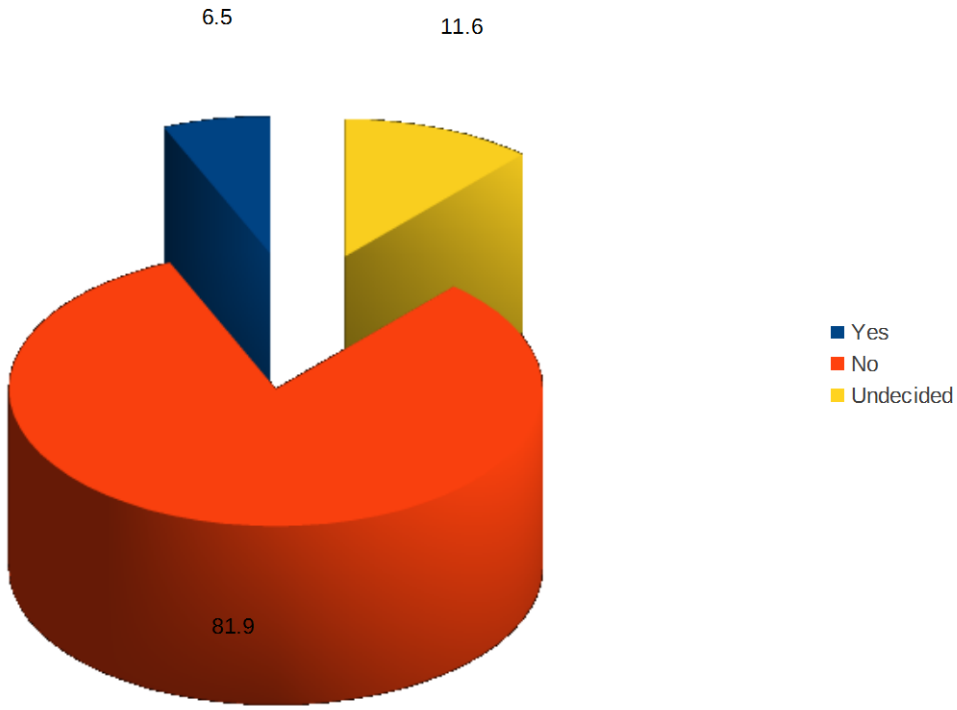
Do you believe South Africa as a whole has a drug problem?



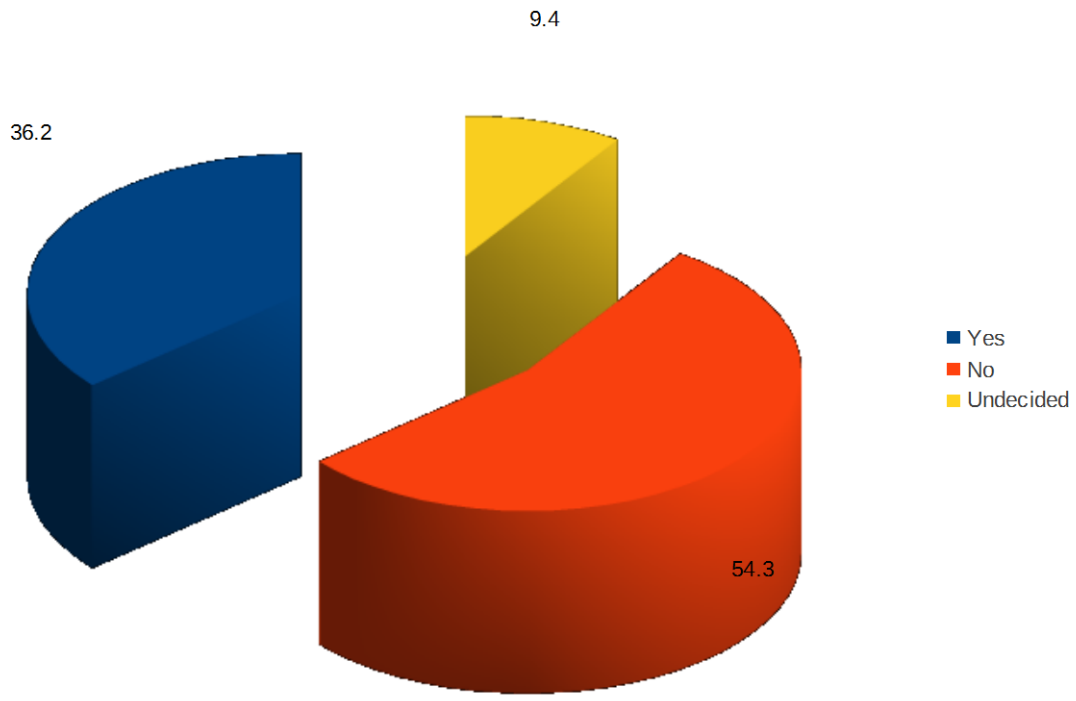
Do you believe that addiction is a criminal or health problem?



Do you believe the government is doing enough to combat drugs?



Do you think that a possible solution to the drug problem we face would be to legalise / decriminalise certain drugs?



Results of other channels

The results of the other channels all but mimic the results of the online survey (in the adult segment). There are insignificant differences in the results of each question, so much so that we found that it would be unrealistic to literally duplicate results in chart format.

In this part of the document we will discuss other findings over and above the results of the online survey, and will speak of the results of the teen segment.

Let us begin with the teen segment results.

Teen Segment Results

As mentioned previously, we found that the teen segment that answered the online survey was very unreliable. After much investigation and debate, it was concluded that teens simply did not see the seriousness of the survey questionnaire, and found it boring and uninteresting.

Our best results came from personal interaction with teens. This interaction allowed us to ask questions more pertinent to the individual, and helped us gain an overall picture of this segment.

Our information came from 2512 teens that ADA-SA representatives interacted with at various engagements at schools and functions throughout the past year. Questions were asked informally and responses were recorded by hand. Please note that we have rounded of percentages to the closest percent for ease of use.

Does peer pressure play a role with you wanting to use / experiment with drugs?

51% Yes 49% No

Are drugs available to buy at your school?

69% Yes 22% No 9% Prefer not to say / Do not know

Have you personally used drugs in the past? (This included any type of illegal drug)

34% In the last 6 months
32% In the last 3 months
32% In the last 30 days
27% In the last 7 days

What is the most available drug in your school?

Marijuana 88% Cat 5% Tik 2% Cocaine 2% Other drugs combined 3%

Have you been sexually active in the past 30 days?

Yes 29% No 68% Prefer not to say 3%

How much pocket money do you get?

- 9% received no pocket money at all.
- 91% received an average of R450 per month (Highest amount R3000, lowest R50 per month)

This result varies somewhat. We have found typical middle-class children average out at R850, whereas children in high income areas and more exclusive schools average R1500.

Other highlights:

- The average 14 year old owned a cellphone
- BBM and WhatsApp were the most common ways of communicating, with only a handful of children using sms (about 3%).
- Over 80% of teens knew how to use the Internet
- Over 60% of teens aged 16 had already consumed alcohol with consent of their parents
- The average age of first experimentation with drugs was 15.

Although the greatest care was taken whilst compiling the figures for teens, we cannot verify the complete accuracy of the figures, as these figures were taken from personal notes of ADA-SA staff / representatives. With this having been said, we used previous years' statistics to cross reference the numbers. Once this was done, we found that the figures compared relatively well to previous survey results. Those figures we found discrepancies of greater than 7% were not published.

Discussing the Results

Overall, we were very happy with results of the 2012 survey. Below, we will list the questions of the survey once again, and discuss the results.

1. What province do you live in?
2. What age group do you fall into?
3. What is your work status?
4. How much alcohol do you consume?
5. Do you use drugs?
6. If you use drugs, when last did you use?
7. What drugs do you use?
8. What do you spend on drugs on a monthly basis?
9. What do you earn?
10. Do you have any tattoos or piercings, other than ear piercings?
11. Do you smoke cigarettes?
12. Do you view porn on a regular basis?
13. Have you gambled in the last 30 days?
14. Have you attended rehabilitation for an addiction?
15. If you have attended rehabilitation, how many have you attended?
16. Do you believe your city or town has a drug problem?
17. Do you believe South Africa has a drug problem?
18. Do you believe that addiction is a criminal or health issue?
19. Do you believe government is doing enough to combat drugs in South Africa?
20. Do you believe that legalisation / decriminalisation could be a possible solution to the drug problem?

1. The largest percentage of respondents came from Gauteng province. As Gauteng is the most densely populated province with the highest amount of internet users, we found that this result was satisfactory.
2. As we were most interested in the adult population, we were satisfied with the results. We did not include the results of the under 18 respondents to the online survey. We found that this age group simply did not take the survey seriously, and the answers we received were in stark contrast to the answers we had from the other channels, hence we negated these results completely.
3. The response to the work status question was satisfactory. Respondents to this survey would have to have an internet connection or smart phone to access the questionnaire; hence we show a high employment rate within the respondents to the survey.
4. On alcohol consumption, we were satisfied with the results, as they correlated to various other alcohol related surveys.
5. In previous surveys, we have found that roughly a third of respondents use drugs, and the results of this survey were no different. It is now a fact that 1 in 3 adults in South Africa uses drugs on a regular basis. This is in stark contrast to numbers the United Nations' numbers (http://www.unodc.org/documents/data-and-

analysis/WDR2012/WDR_2012_Chapter1.pdf) which state that roughly only 5% of the world adult population uses drugs. We believe that this is an interesting anomaly, as the UN document is more geared to those addicted to illicit drugs. Our survey asked about use (and not necessarily abuse) of substances, which brought in a wider response. It is a clear indication that use and addiction numbers are very different. We find similar figures with alcohol use versus alcohol addiction, with many openly admitting alcohol consumption, with a very small minority actually admitting alcoholism.

6. The response to this question shows that many use the drug recreationally, compared to the amount of users that are dependent on drugs.
7. These results were in line with our projections. Marijuana use is up by 11% on last year's figures, and Nyope is up by 8.46%. Methamphetamine usage (Cat and Tik) is growing exponentially. Tik usage has nearly doubled in the last year (up 88%), and Cat has seen similar growth (82%). The age groups using these drugs are across the board, but the biggest growth rate is in the 22 – 35 groups. Cocaine and crack cocaine usage remained relatively static, however we have seen many addicts migrating from cocaine to Cat, and a small percentage from Crack to Tik. This could be attributed to cost, as cocaine's prices have seen an increase in price per gram, whereas Cat and Tik's prices per gram have remained roughly the same for the past 8 years. Marijuana remains the single biggest drug consumed out of all drugs in South Africa, with roughly a third of all drug users using this drug regularly. Interestingly, Magic Mushrooms have surged in popularity, as well as LSD. We see their popularity fluctuate, and find that the greatest number of users fall into the 18 – 25 age groups, and then the 36 – 45 age groups. We find an increase in use of these drugs in summer, mainly attributed to dance festivals, and an increase in the number of dance parties at clubs etc. Ecstasy remains a ''party'' drug. Most users of this or MDMA will use it occasionally, and not exclusively. The bulk of addicts these days prefer to use a drug which will allow them to be able to ''function normally'' (sic).
8. The responses to this question were in line with previous results and with our projections. The average (recreational) drug user will spend roughly R200 per month on drugs, whereas the extreme addicts can spend extremely excessive amounts on drugs.
9. With respondents' earnings, we found the bulk of respondents fell into the LSM 4 to 8 ranges (Lower middle class to Upper Middle Class). This question helped us answer a lot more than income. Based on the spread of income, it is clear that we covered from the very poor to the very wealthy with regards to respondents. It also shows that drugs use is not limited to certain classes, yet is across the board.
10. Body art has seen an increase over the last few years, and this year is no different. We projected a 7% increase on last year's numbers, and were not far off with an increase of 7.31%
11. Cigarette smoking has increased in the 18 – 25 age groups by 18%, but is down in the older groups by an average of 4%.
12. Viewing of porn increased by 8%, which is less than the projected 11%.
13. Gambling is down dramatically (24.67%), but we feel that this can be directly attributed to a weaker economy. This figure constantly fluctuates, and although this survey may show a downturn, we can expect fluctuations throughout the year. This figure is always a bit of a mystery, as many people see gambling as something one

does strictly in a casino, and other forms of gambling such as Lotto or Horse Racing are not seen as gambling per se.

14. The response to this question was in line with our projections and has seen an increase of 17.2%.
15. The rehabilitation sector is seeing massive growth. In an informal poll, we polled 50 centres nationwide and asked if they had seen growth in numbers in the last year. Most told us that they had seen an average growth of 25%. This coincides very well with our figures. Numbers of people attending rehab is up by 26.33%. This is a good thing as more people are admitting addiction; however, what is alarming us is return business. It is clear the current rehabilitation system is failing somewhere if there are figures of people returning to rehabilitation up to 9 times before finding recovery. This is definitely something we plan to investigate further.
16. We found that the percentage of people answering no came from provinces such as the Northern Cape and North West, where proliferation of hard drugs is much less.
17. In previous surveys, we found that there has always been a rough 50/50 split between yes and no. However, it is clear people are seeing that SA definitely has a massive proliferation of drugs, more so than ever before.
18. We were very surprised by this response. This was a question that we have not asked before in a formal survey, and we believe the answer is very progressive for South Africa. South Africans are generally very conservative when making statements of this regard. This result also shows us that people are now making cognitive differentiation between the condition of addiction and the offenses an addict may commit to pay for their addiction. A minor percentage of people were undecided on this subject, and in cross referencing, we found that the 45 and up age groups made up the bulk of the percentage. This can be attributed to old fashioned and uninformed ways of looking at addiction.
19. This conclusively shows that our nation is fed up with the way the government is handling drugs and addiction in South Africa. The results of this question should make the government sit up and pay attention.
20. We believe that the questions 19 and 20 are at the core of the survey. It is clear that many people are seeing that the so called war on drugs is lost. Looking back a decade ago in the United States, Gallup Polls showed that roughly a third of people were saying that that country should look at legalization. Looking at our results, most interesting is the undecided figures in the question of legalization. Yes, over 36% of people are saying it is a possible solution, but over 9% are saying that more information is necessary, and that they would like to know more before they commit to an answer. In South Africa we have a very prohibitionist viewpoint on drugs such as marijuana. Unfortunately, many people believe the propaganda that is disseminated about the drug. We believe however the tide is turning. Looking at the above results, it is clear that many people are beginning to question the status quo and are realizing that there is a lot more involved here. As we compile this report, CANSA has come out strongly against marijuana, stating that Morphine is a cheaper and more beneficial alternative. Yes they state that perhaps we can look at synthetic canniboids, however, it is as an afterthought. We will speak of this later in the document. We simply ask the public to start questioning and looking at reality. In the question asking whether the government is doing enough, a massive 81.9% of respondents are sending a clear message. NO. We grouped these questions together

for a reason. It clearly shows we are a nation that is experiencing a paradigm shift. We have no confidence in the war on drugs, and at the same time are beginning to question the motives of the war, as well as seeing the futility of it. Mainstream media is beginning to speak about these issues. The Police remain tight lipped, however we cannot blame them. They have to enforce the laws of the land, which currently means that drug addicts are many times criminalized for their addictions. We are seeing a trend with the legal system which shows the courts more often than not letting possession cases (of small amounts for personal use) off with a warning, as it simply does not make sense to criminalize a person who suffers from an addiction, or uses drugs for recreational purposes.

Pricing of Drugs

Herewith we include a list of prices of various illicit narcotics in South Africa. We polled numerous users in major cities in South Africa, and have included on the major drugs of abuse.

1. Cocaine – An average price of R250 per gram is charged by dealers, with some charging up to R300 per gram, depending on purity.
2. Crack cocaine – A rock (roughly 5mm in diameter) sells for around R120. A half moon (roughly 40mm long) sells for around R1500, and a golf ball (slightly smaller than an actual golf ball) sells for between R2500 and R3000.
3. Cat – Pricing on this drug varies between R150 and R200 per gram.
4. Tik (Crystal Meth) – A straw (a piece of plastic straw roughly 50mm in length) sells for between R30 and R50. A gram sells for around R200, up to R350, depending on location.
5. Ecstasy – Prices here vary between R10 and R80 per pill.
6. Marijuana – The greatest differences in pricing lie in this drug. Depending on type of cannabis, a “banky” (plastic bank bag) is sold for anywhere between R50 and R500. A matchbox varies between R10 and R50.
7. LSD – Prices here are roughly R50 per “square”, and roughly R300 for 5ml of liquid LSD.
8. Magic Mushrooms – Prices vary between R100 and R300 for a banky.
9. Heroin – A “baggy” (about 1/5 to 1/8 of a gram) goes for around R30, with a full gram for around R200.

Where to from here?

The only constant we can be assured of in South Africa is change.

Several years back, had you asked our organization what our viewpoint on legalization was, we would point at our name. The ***Anti Drug*** *Alliance.*

We have undergone many changes. Working so closely with addicts, treatment facilities, counsellors and the legal system, we have seen that the system as it currently stands is simply not working.

The public rehabilitation system is overflowing and is failing. Proof of this is the number of times addicts have to return to rehabilitation. We have reports of some people returning up to 14 times to a rehabilitation centre, and still continue to use.

Private rehabilitation still remains out of reach for many South Africans, as they simply cannot afford it. Pricing here can be anywhere between R2500 per month, up to R180 000 for six weeks.

Many seeking treatment are now looking at inpatient rehabilitation as a last resort, preferring outpatient based programs which allow the person to stay in work or school whilst they undergo treatment.

The legal system is looking at drugs differently, and although there may not be anything in black and white, it is blatantly obvious that possession (of soft drugs such as marijuana) is now seen as nothing more than a time waster in court, and these cases simply get a warning and are let go. A three strike rule seems to be the norm.

More South Africans are using drugs than ever before. We have to ask whether this the fault of those dealing drugs, as they are really only supplying an existing (and growing) demand for their product? Or is it a deep rooted societal problem?

Police are spending more and more on combating drugs, and although they are very quick to publicize big busts in the media, what about the fish that keep getting away?

ADA-SA are in the opinion that the Police are maybe stopping 5 -10% of the drugs flowing in the country, if that. A big bust does not stop the supply, only one supplier - one supplier of many.

We can never, and will never stop drugs in South Africa; even thinking that is naive and pointless.

Thinking in a prohibitionist way is simply not logical. America proved with Prohibition that it does not stop the demand, and that it simply gives more power to organized crime.

The 2012 survey has shown that South Africa is a country of contrasting beliefs especially when it comes to drugs and addiction. Our older citizens have firm, (somewhat) unshakable beliefs that seem to be holding back change.

Although we have a massively progressive constitution, those pages were written by the few, and often cultural and religious beliefs and systems are in stark contrast to the reality we actually find ourselves in.

Change needs to happen.

Propaganda tells us drugs are bad. A progressive younger generation, who have information at the click of a button, and drugs at their beck and call, are now beginning to question the status quo. On one side we see the devastation of addiction, on the other side we see a massive amount of people who use drugs recreationally, yet escape addiction.

The reality is that many are starting to see the fact that we need to re-visit the law, and bring it into line with the changing times, thoughts and beliefs. New laws are made, old laws are scrapped and many laws are amended as time passes. South Africa is the epitome of change, and yet, why is it we do not see that the current prohibitionist laws are overloading the justice system?

The playing field has changed dramatically in South Africa. We are no longer the little sheltered colony at the edge of the world. We are a global player, we are recognized in many fields as pioneers and leaders, and yet, with the most advanced constitution in the world, we cannot see the reality that we will spend billions on fighting a war that is long lost.

Obviously we are not saying that we should legalize drugs tomorrow and let people go wild, as that makes no sense at all.

We are saying that we need to look at a way that we can regulate the industry, put standards and checks and balances into place, and allow people to make their own choices. There are many models that could be followed for regulation, and these must be looked at.

Fiscally, the country can only benefit. Take the billions spent on a lost war, funnel it into a health system that provides help for those that have found themselves addicted. Tax money derived from the sale of marijuana alone could ensure a health system that is properly funded and works.

Casinos need to pay toward a fund that helps treat people with gambling problems. Why is it that the alcohol producers do not have to do the same?

Alcohol has accounted for more deaths in this country than all the wars we have ever had and all the drugs related deaths COMBINED.

When gambling was legalized in this country, there was a massive outcry by the conservative quarter. Yet the law was passed. The industry has created thousands of jobs, and is a big contributor to GDP. Still, there are many thousands whose lives have been ruined by

gambling. Yet a standard disclaimer in adverts and outside the casino seems to indemnify the industry against the devastation it has brought on countless families. Winners know when to stop. If they actually understood that addiction is a condition that affects the brain on a cellular level, they would pull that slogan immediately, because an addict who is winning does not know when to stop.

Alcohol sales grow exponentially year on year. Producers line their pockets and laugh all the way to the bank. The industry employs many thousands of people, contributes to the GDP handsomely, and yet has ruined hundreds and thousands of lives due to alcoholism, and alcohol related crimes and accidents. Yet they continue to produce alcohol.

These companies shrug their shoulders and think that putting a warning on a beer or on the wall outside of a casino indemnifies them from those who become addicted to their products.

Just as this makes no sense, keeping certain drugs illegal makes no sense either. Regulating the industry would ensure purity of product, with no added extras like rat poison or drain cleaner. Regulating the industry would ensure that the poor black farmer in the mountains that grows a crop of marijuana and sells a ton of it for a few hundred rand (so that he can feed his family) is no longer exploited by organized crime, but can make a fair living.

Regulating the industry would mean that SARS gets their fair share, and that those people who have become addicts are no longer marginalized and cast out, but can get the help that they need, from a health system that is well funded and geared to helping the addict.

Regulation does not stop addiction, which is a fact. If it did, there would be no gambling addicts and no alcoholics, and people would only smoke cigarettes socially.

The only time government will ''see the light'' is when someone clever enough is able to convince them that legalization of drugs would ''benefit the country'' the same way the alcohol, gambling and tobacco industries do.

Below are some statistics on alcohol we got from www.alcohol.co.za/statistics.htm

- 67% of domestic violence in the Cape Metropolitan area was alcohol related (MRC).
- In a study of women abused by their spouses, 69% identified alcohol/drug abuse as the main cause of conflict leading to the abuse (MRC).
- 76% of domestic violence in rural areas in the South-Western Cape was found to be alcohol related (MRC).
- Six out of ten drivers that die in accidents have dangerously high alcohol levels in their blood. http://www.frontline.org.za/articles/alcohol_abuse%20in%20SA.htm
- 3000 Adult pedestrians are killed in motor accidents per year. 70% of them are drunk when killed. http://www.frontline.org.za/articles/alcohol_abuse%20in%20SA.htm
- Half of all murders were the result of drunkenness (MRC).
- Over 50% of non-natural deaths received at state mortuaries in Cape Town had high levels of blood alcohol concentrations. http://www.frontline.org.za/articles/alcohol_abuse%20in%20SA.htm

- 58% of people fatally injured in train related trauma (who either fell from or walked in front of trains) in Cape Town had high blood alcohol concentrations. http://www.frontline.org.za/articles/alcohol_abuse%20in%20SA.htm
- Over 50% of those who had died by drowning in greater Cape Town, over a ten year period, were found to have high concentrations of alcohol in their blood stream. http://www.frontline.org.za/articles/alcohol_abuse%20in%20SA.htm
- "More than three-quarters of homicides perpetrated with a sharp object are alcohol related" - The National Injury Surveillance System in its "Profile of Fatal and Non-fatal Injuries in South Africa" of May 2000.
- Approximately 40% of firearm and 58% of blunt instrument homicide victims have consumed alcohol prior to their fatal injury. Not only are those perpetrating the crimes likely to be under the influence of alcohol, but the victims also tend to have much higher alcohol levels as well - The National Injury Surveillance System in its "Profile of Fatal and Non-fatal Injuries in South Africa" of May 2000.

In the meantime, drug money bribes policemen everyday to look away and drug money oils the machine of organized crime.

We often hear the words, “Look at the devastation drugs cause!”

Well, look at the devastation ADDICTION causes.

Does the substance or action really matter?

At the end of the day, whether you drink, gamble or do drugs, the end results of the addiction are the same. You lose your dignity, self respect, money, friends, family, freedom, and ultimately your life.

Gambling addicts also steal to support their habit, prescription medication addicts also lie to their families, and alcoholics also pawn or sell their belongings to buy alcohol.

What is the difference between them and a person who prefers to smoke a plant that grows in the wild?

They say drugs contribute to family violence. We say alcohol does so even more. So does gambling addiction. So does porn addiction. So does sex addiction. We say addiction as a whole causes a whole lot of problems, at the end of the day, does the substance really matter?

Conclusion

By Quintin van Kerken
CEO, Anti Drug Alliance

This 2012 survey has changed the way I think in many aspects.

In 2010 I read an article proposing legalization of Marijuana in the United States. The article stirred up something inside of me. My emotions told me that it was just wrong, morally reprehensible, and it angered me.

Yet the part of me, the part that questions everything, started questioning the status quo. What followed were many late nights on the Internet, many emails sent and received, and many meetings behind closed doors with anyone who had an opinion on legalization.

The theme used to report the findings of this survey changed somewhat as we started to put everything together. Once we saw the figures on what people thought about legalization, it just made sense to take things in that direction.

Had we spoken of this issue sooner, perhaps it might have been considered professional suicide, after all our organization is named the *Anti Drug Alliance*. Yet, we find that addiction is a greater threat than drugs. Alcohol accounts for countless shattered lives, gambling has destroyed thousands of families, prescription medication addiction has done significant damage, and even something as porn addiction can wreak havoc in the lives of family members. If addiction is the symptom of a deeper rooted problem, it is clear South Africa is in trouble.

It's time for change. We simply cannot go on like this anymore. We ask you to think. We ask you to question. We ask you to get all the information you can, and make a rational and factually based decision.

The way things have been working simply does not work anymore.

“They say drugs contribute to family violence. We say alcohol does so even more. So does gambling addiction. So does porn addiction. So does sex addiction. We say addiction as a whole causes a whole lot of problems, at the end of the day, does the substance really matter?”

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