Epidemiology and its Role in Drug Demand Reduction: The South African Community Epidemiology on Drug Use (SACENDU)



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Presentation: Drug Demand Reduction in Africa Prevention, Treatment and Epidemiology





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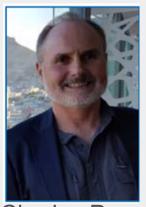
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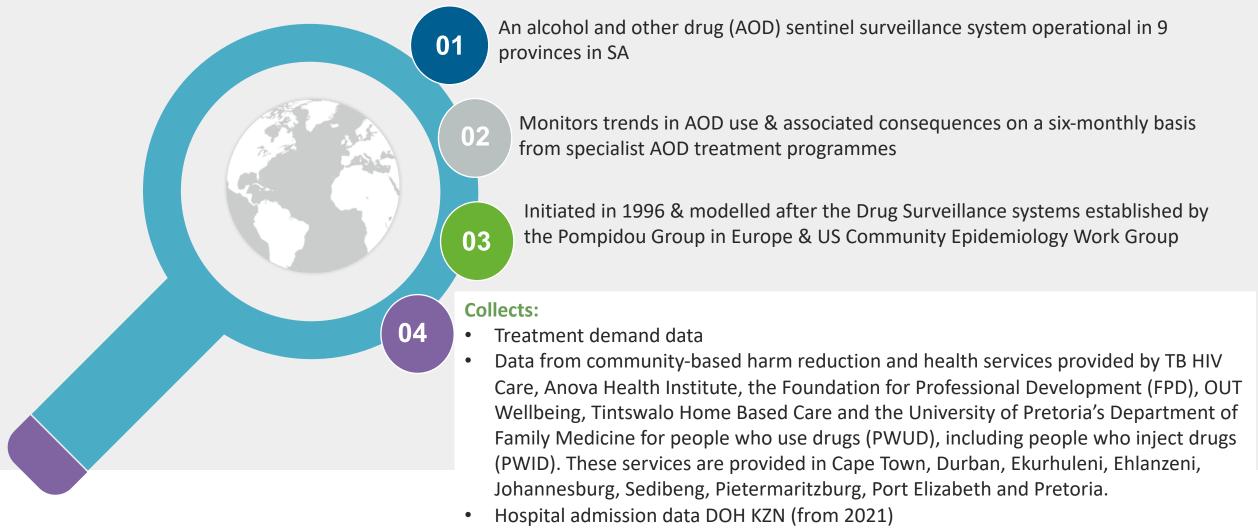
Implications for policy/practice/research + limitations

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SACENDU: SOUTH AFRICAN COMMUNITY EPIDEMIOLOGY NETWORK ON DRUG USE



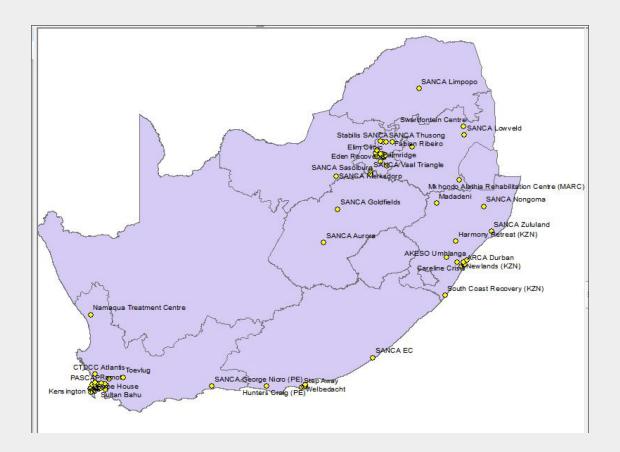
Funded initially by WHO later by NDoH & more recently DSD

SACENDU OBJECTIVES

- To identify changes in the <u>nature and extent of AOD use and</u> <u>emerging problems</u>
- To identify changes in alcohol and other drug-related negative consequences
- To inform policy, planning and advocacy efforts at local and other levels
- To <u>support networks of local role players</u> in the substance use area
- To <u>stimulate research</u> in new or under-researched areas that is likely to provide useful data to inform policy/planning decisions.
- To facilitate South Africa's full <u>participation in international fora</u> focusing on the epidemiological surveillance of drug use



- SACENDU operational in 9 provinces (with some provinces combined)
- ± 86 treatment centres (nationally) are part of the SACENDU network covering approximately 80% of treatment population and 75% of treatment centers
 - Includes state funded private and non-governmental organisations
- ± 10K persons seen in treatment every 6 months



	WC	KZN	EC	GT	NR (2)	CR (3)	Total
Treatment centres	36	11	5	18	11	3	84
# of patients (2019b)	2652	980	336	4224	1423	189	9804

METHODOLOGY

Membership of SACENDU

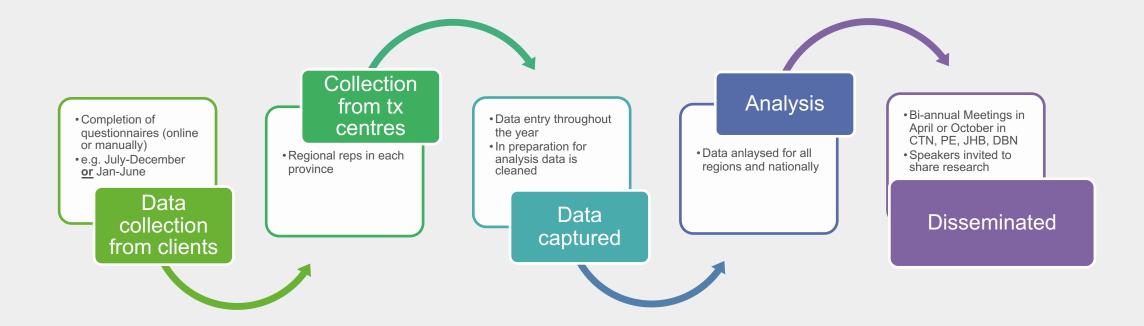
Bi-annual meetings to present / discuss meaning & implications of data from different sources



- Main data sources are from
- <u>1) Treatment episodes</u> from substance use treatment centres
- 2) CBS Harm reduction*
- Other sources have included and include:
 - Psychiatric hospitals*
 - SAPS arrest & seizure data & data from FSL
 - Household & school surveys
 - Arrestees
 - Ad hoc studies



SACENDU BI-ANNUAL PROCESS





DATA COLLECTION

A) TREATMENT DEMAND

• A standardized 1 page form is completed on each person treated by a given centre during a particular 6-month period

SACENDU Treatment Data Collection Form: Dute of sevening: Is the patient ewolled in the treatment pergramme? Dute of mollecular and the treatment pergramme? Dute of mollecular and the programme?	What language do you speak most often at home? How would you classify your English language ability? Flease select all that apply? I can understand English I can read English	Demographics: gender, age, race, suburb, education, employment, marital status	The main/principal referral to this facility? Select only the principal referral Self Hooptal Clinic Family/Friend Social services/Welfare Employer/Work Courts/correctional services Health Professional School Religious Group Other	Do you engage in the non-medical use of codeine related products (e.g. cough mature, painkillers)? If no, continue to quartion 15 If yes, What medication do you take How do you administer this substance? Take all atar Swallow Sandes (Snort Instiff Inject opp) Frequency Salect one Duly 2-6 days a Once a Not used in Salect one Salect one Only 10 Not you have been past month.
Name of Treatment Centre Patient unique reference number Interviewers initials Please read each question carefully and answer as accurately as possible. Where applicable, mark selections with an X.	Can write in English	Substance abuse info: 1° & 2° substance of abuse, mode of use, frequency of use, age of 1st use, prior treatment	Yes – but not in the past 12 months No	Do you currently ouffer from any of the following Illnesses? Select all that apply Cardiovascular disease Diabetes Respiratory disease Mental health problems Hypertension Liver Disease Gastrointestinal tract diseases
What gender do you identify yourself at? Male Female	Secondary 8 9 10 11 12 Teriary Completed qualification (diploma/degree) What is your employment status? Select gang only	HIV Testing in the past 12 months	Decline to answer	Do you we any of the following tobacco products more than once a week? Hene, continue to question 17 Hyes, what products do you use? (Select all that apply) Sunff
Coloured Other Indian How old are you?	Employed full-times Sindent apprentices intern	Referral Sources, sources of payment, types of treatment received.	Is this a 'mixed' drug? Yes No No How do you administer this substance? "If ther Swallow Smoke Smort 'miff Inject Spike Swallow Smoke Smort 'miff Inject Not used in Not used	Cigarettes 2 Hookah pipe 3 Pipe Chewable tobacco
	at months in part year) Usersployed (more than an months in part year) School/ learner at school Other	?s about common NCDs and use of codeine	Frequency Duly 2-6 Days on week Once a week Not used in years mouth Age of first use years It your 2 nd most frequently used substance? Is this a 'mixed' drug' Yes No	Have you ever been in treatment prior to this episode? If no, continue to question 18 If yes, how many times have you been treated? Immes What is the primary source of funding used to cover your treatment expenses? Select only the primary course
S Type of admission Voluntarily Involuntarily Diversion ,	3 II What treatment are you currently receiving? Impositent Outpatient		How do you administer this substance? The left shar Swallow Smoke Snort /miff Inject apply Frequency Dully 2-6 days a Once a week Not used in past month Age of first use years	State partly subsidised Employer State fully paid Self Medical aid Unknown Family Other (please specify) Friends
Correctional services	Please turn to page 2			, , ,



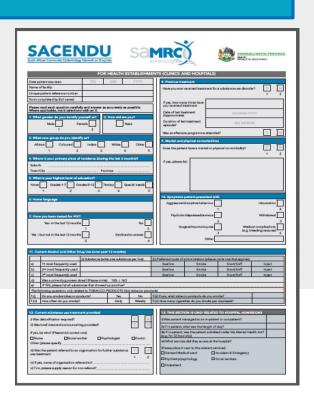
DATA COLLECTION

B) COMMUNITY BASED HARM REDUCTION SERVICES

- Provided by TB HIV Care, Anova Health Institute, OUT Wellbeing, the Foundation for Professional Development (FPD), Tintswalo Home Based Care and the University of Pretoria's Department of Family Medicine for:
 - people who use drugs (PWUD), including people who inject drugs (PWID), MAT, needle exchange services as well as HIV treatment services.
 - These services are provided in Cape Town, Durban, Ekurhuleni, Ehlanzeni, Johannesburg, Sedibeng, Pietermaritzburg, Port Elizabeth and Pretoria.

C) HOSPITAL ADMISSION DATA DOH KZN

- Collaboration with the substance abuse directorate at the Department of Health in KwaZulu–Natal.
- Data collection to commence in 2021.
- Psychiatric facilities, Community Health Centres and general hospitals, accidents and emergencies.
- Demographics, past 12 month HIV testing, previous treatment, mental and physical co-morbidities, symptoms at admissions, ATOD use, treatment provided (detoxification, referral)

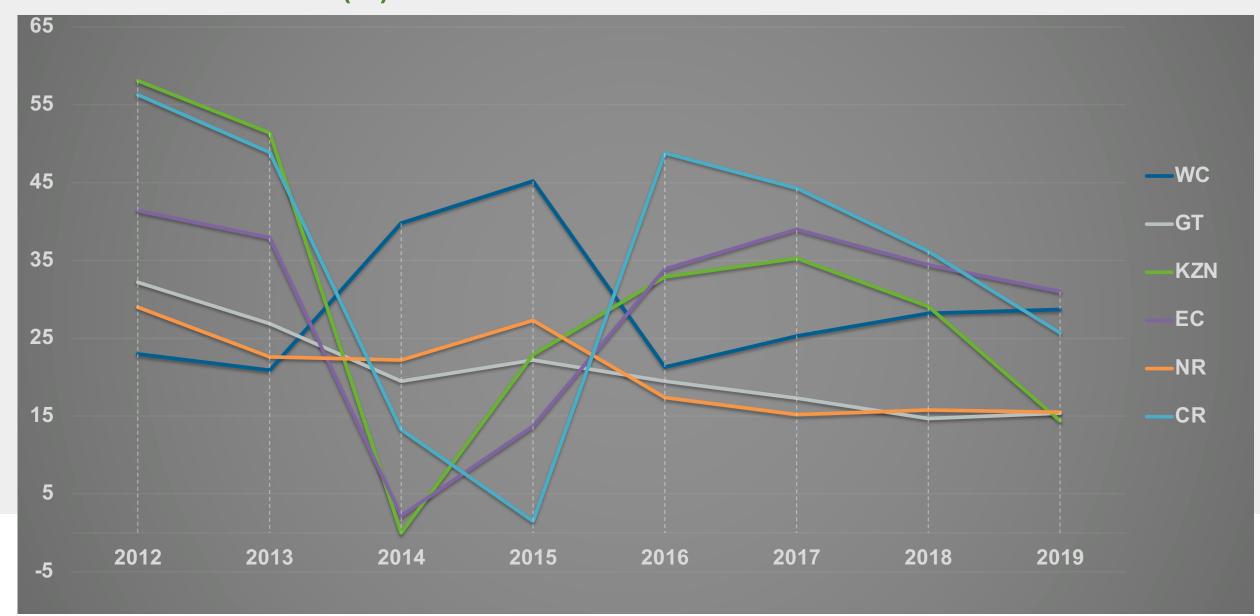




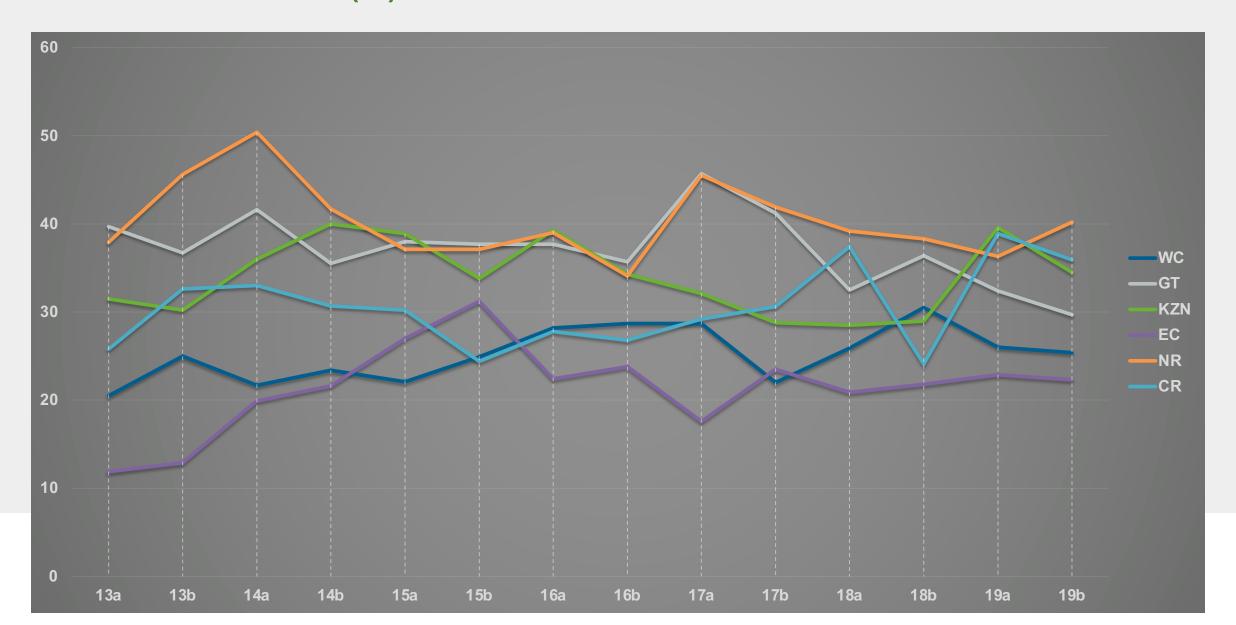




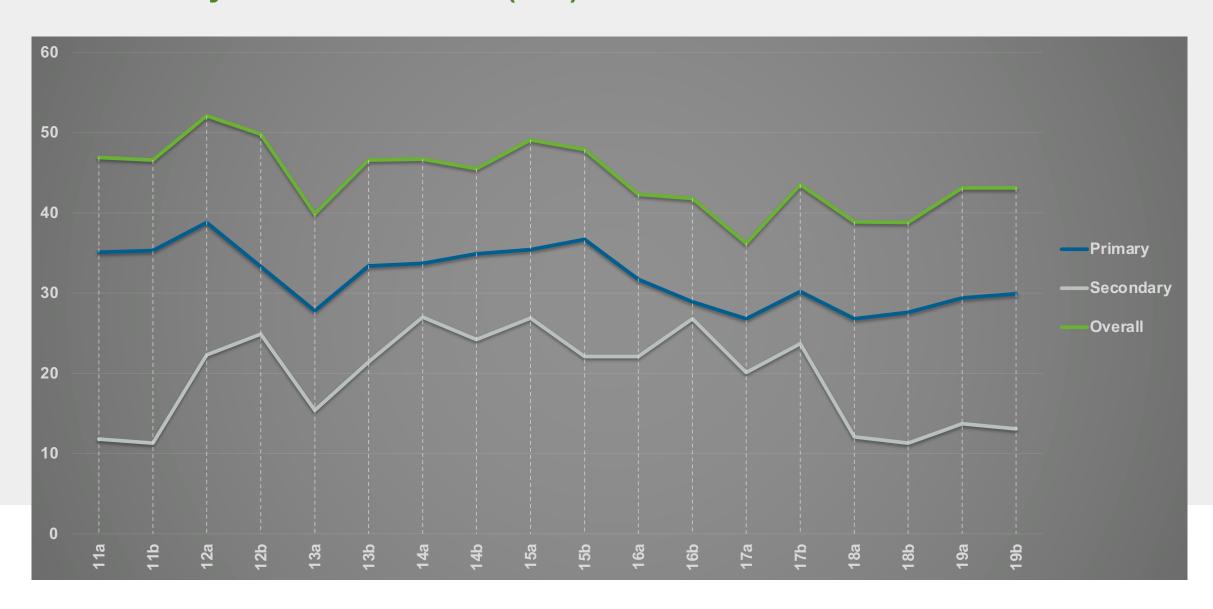
Proportion of persons in treatment with Alcohol as their primary substance of use (%) – 2012 to 2019



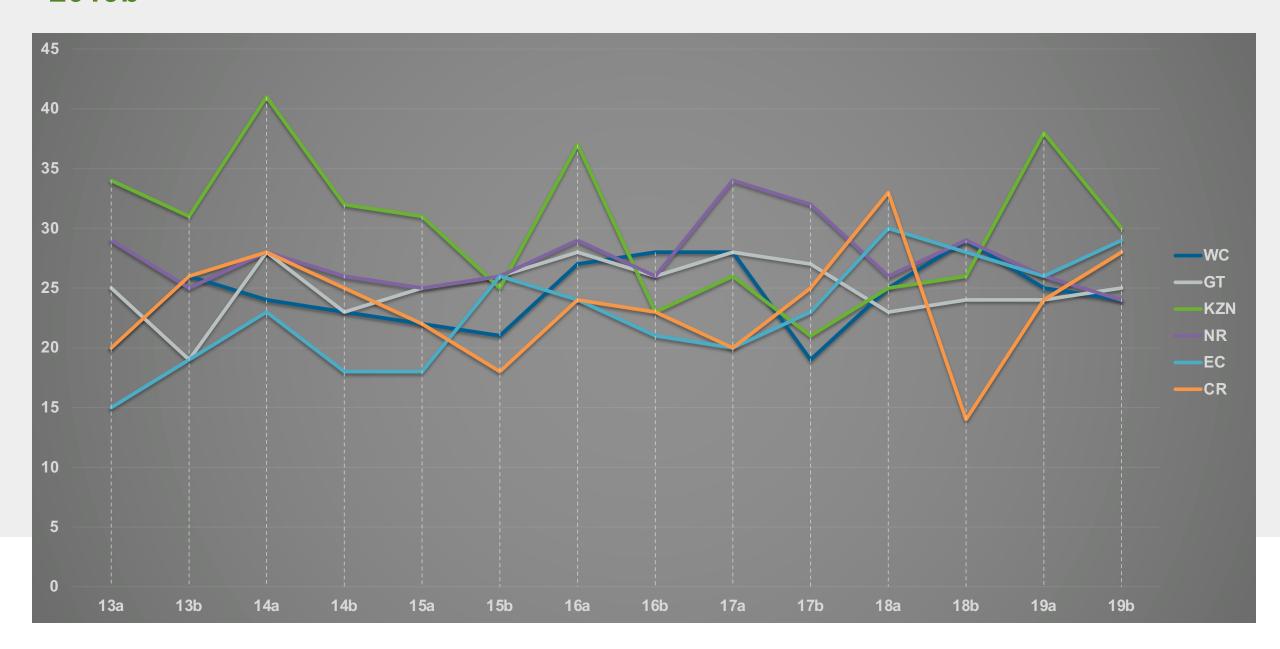
Proportion of persons in treatment with Cannabis as their primary substance of use (%)



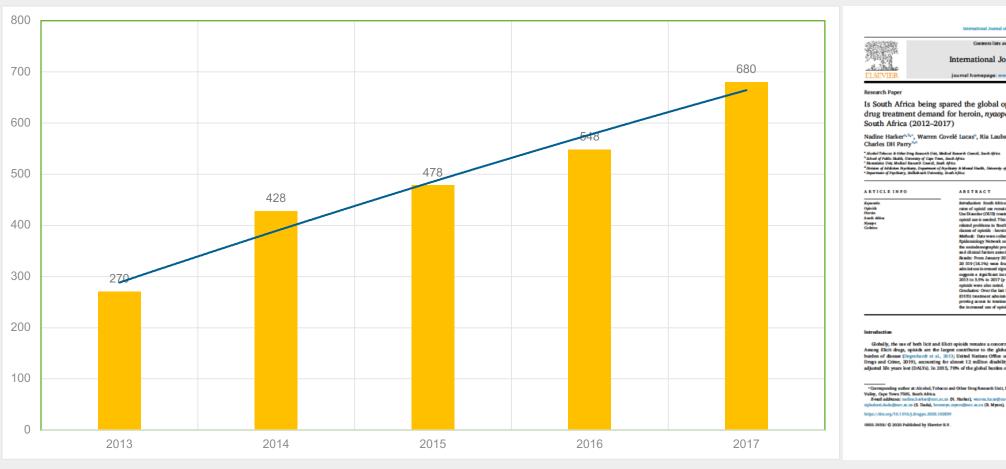
Treatment demand trends: Methamphetamine (%) as primary and secondary substance of use (WC)



Treatment admissions trends - % of patients <20 years July-December 2019b



TRENDS IN OVERALL INJECTION DRUG USE BETWEEN 2012 AND 2017



Contents lists available at ScienceDirect International Journal of Drug Policy Is South Africa being spared the global opioid crisis? A review of trends in drug treatment demand for heroin, nyaope and codeine-related medicines in Nadine Harker^{a, b, e}, Warren Covelé Lucas^a, Ria Laubscher^e, Siphokazi Dada^a, Bronwyn Myers^{a, e} Introduction: South Africa has seen a sharp increase intrestment admission trends for opioids despite beliefs th rates of opioid use remain low and do not represent a major problem. To advocate for the extension of Opioid Usin Standard (OUTS) treatment and harm minimal action services in Stook Africa, better estimates of the extent of opioid use is needed. This paper responds to this need by describing (I) trends in treatment utilization to opioidrelated problems in South Africa and (ii) differences in the profile of patients accessing to classes of optoids - herein, "sysope" and codeine use.

Medic: That were closted from 83 specialist resement centres participating in the South African Community

Reidemiology Network on Drug (the between 2012 and 2017. Descriptive analyses were conducted to describe the sociodemographic profile of put exts and multiple I ogistic regression was used to explore socio-demographic and clinical factors associated with admission to treatment for opiced use disorders (OUD). Results: From January 2012 to December 2017, data from 11 2023 treatment epichose were collated. Of these, 20 319 (18.1%) were from patients admitted for an OUD. Over time, the proportion of overall coicid-related administrate increased significantly from 16.1% of all administrate in 2012 to 20.0% in 2017 ϕ < 0.001). Data also suggests a significant increase in the overall proportion of parameter reporting bijection day use, from 1.5% in 2013 to 3.5% in 2017 ϕ < 0.0010. Clear differences in employment status, whereast sources between classes of opioids were also noted.

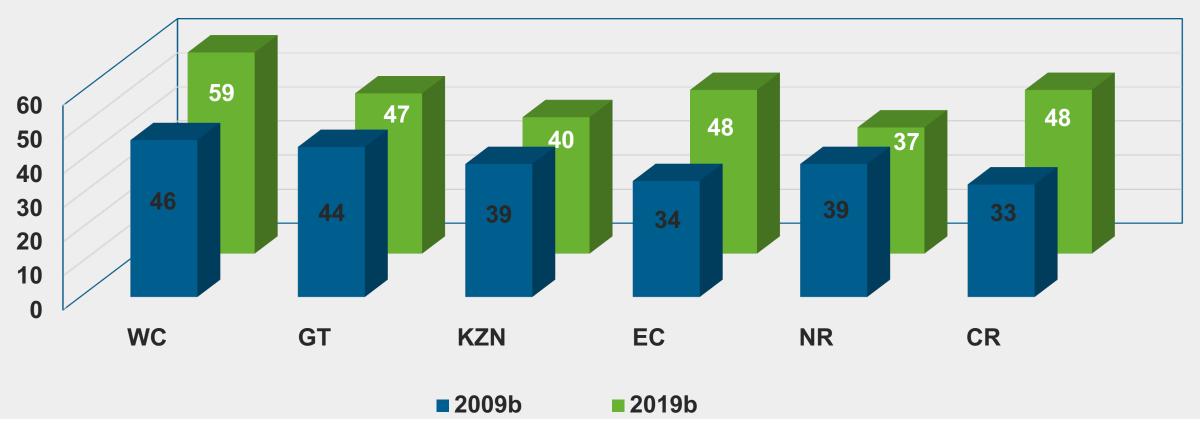
Grocksive: Over the last 5 years, South Africa has seen an increase in the proportion of opioid related disorders. (OUD) treatment admins one. Public health interventions, evidence-based harm reduction approaches and im proving access to treatment are among the interventions urgently needed to reduce the harms associated with disease associated with illicit drug use was attributable to opioid use (Roxbursh et al., 2017). Globally, the use of both licit and illicit opioids remains a concern. While the global lens has been focused on the opioid epidem within high-income countries such as the US (Palamar, Shearston, Dawson, Mateu-Gelabert, & Ompad, 2016), pre-Among illeit drugs, opioids are the largest contributor to the global burden of disease (Degenhardt et al., 2013; United Nations Office on Drugs and Crime, 2019), accounting for almost 12 million disability scription and non-prescription opioid use has been increasing in many adjusted life years lost (DALYs). In 2015, 70% of the global burden of * Corresponding author at: Alcohol, Tobacco and Other Drug Research Unit, South African Medical Research Council, Francis Van Zyl Drive, P.O. Box 19070, Parow Valley, Cape Town 7505, South Africa.

E-mail addresse: nadme.harker@me.ac.za (N. Harker), warren.locas@me.ac.za (W.C. Locas), rial-subscher@me.ac.za (R. Laubscher). siphokazi.dada@mrc.ac.za (S. Dada), bronwyn.mysre@mrc.ac.za (R. Mysrs), charles.pany@mrc.ac.za (C.D. Pany).

Data suggests a small but statistically significant increase in the overall proportion of patients reporting injection drug use, from 1.6% (270/18919) in 2013 to 3.5% (680/19493) in 2017 (p <0.001)

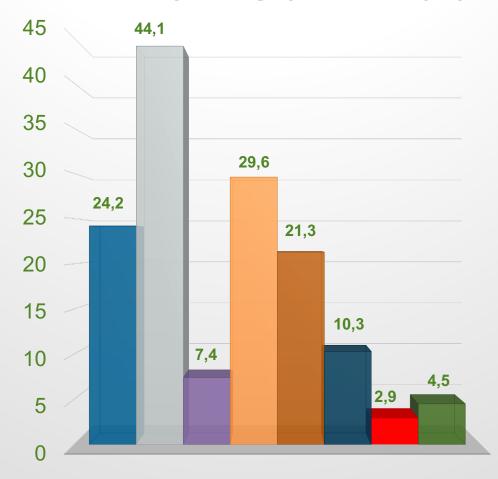


POLYDRUG USE (2 OR MORE DRUGS OF ABUSE %)





Tx demand data based on data from 9 provinces (primary+secondary drugs): 2019b (%)













DATA ON COMMUNITY BASED HARM REDUCTION SERVICES







Dr Andrew Scheibe





SERVICES PROVIDED ARE IN LINE AS PER THE WORLD HEALTH ORGANIZATION'S GUIDELINES AND INCLUDE:

HIV, STI and TB prevention

Testing and linkage to care

Harm reduction behaviour change interventions

Needle and syringe services

Opioid Substitution Therapy (OST)

Monitoring of human rights violations and referral for other available substance use disorder treatment services

Routine hepatitis B (HBV) and hepatitis C (HCV) diagnostic and treatment services (in 2019 - limited due to resource constraints)

TB HIV CARE'S STEP UP PROJECT

- Provides harm reduction services to people who inject drugs (PWID)
 - Cape Metro (Western Cape),
 - Nelson Mandela Bay (Eastern Cape)
 - eThekwini (KwaZulu-Natal)
- Comprehensive services provided through community-based outreach modalities and also from Drop-In Centres in Cape Town and eThekwini.

- January and March 2019:
 - 1 566 PWID accessed the services (623 in the Cape Metro, 440 in eThekwini, and 503 in Nelson Mandela Bay).
- April and June 2019
 - o 1 592 PWID accessed services across these sites (640 in the Cape Metro, 564 in eThekwini, and 388 in Nelson Mandela Bay).
- Across sites, 98% were over the age of 20 years
- Majority were men (ranging from 76% in Nelson Mandela Bay to 87% in eThekwini).
- Racial characteristics of service users varied by site:
 - o Coloured in the Cape Metro (77%),
 - White in Nelson Mandela Bay (80%),
 - o Black African in eThekwini (83%).
- 8 392 needle and syringe service contacts with PWID were made (0 in eThekwini, 5 722 in the Cape Metro and 2 670 in Nelson Mandela Bay)
- 238 677 needles and syringes were distributed (150 659 in the Cape Metro and 88 018 in Nelson Mandela Bay), with **return rates of 68% and 74%** respectively.



HIV AND TB SERVICES

- Among PWID who accessed additional health services:
- 440 tested for HIV (209 in eThekwini, 106 in the Cape Metro, 125 in Nelson Mandela Bay), 11% (47/440) of whom tested positive (26 in eThekwini, 15 in the Cape Metro, 6 in Nelson Mandela Bay).
- Eight clients were started on antiretroviral therapy (ART) (3 in eThekwini, 4 in the Cape Metro, 1 in Nelson Mandela Bay).
- Additionally, 522 PWUD were screened for tuberculosis (TB) (209 in eThekwini, 188 in the Cape Metro, 125 in Nelson Mandela Bay) with 1 being symptomatic (1 in Nelson Mandela Bay).

CLIENTS ON OPIOID SUBSTITUTION THERAPY, LOST TO FOLLOW-UP AND EXITED PROGRAMME - BY SITE (JANUARY – JUNE 2019)

		No. on OST at start of period	No. initiated on OST for first time during period	No. restarted during period that were lost to follow-up at start of period	No. LTFU during period	No. exited during period	No. died during period	No. on OST at end of period	Retention rate for period
	People who smoke heroin	23	0	0	0	23*	0	0**	N/A
KZN	People who inject heroin	0	0	0	0	0	0	0	N/A
	Total	23	0	0	0	23*	0	0**	N/A
wc	People who inject heroin (total)	31	0	2	1	3	1	28	85% (28/33)



^{*} All clients were down-titrated as per the time limited nature of the project.

** Clients were offered referral to another site to continue OST through self-funding

ANOVA HEALTH INSTITUTE'S JAB SMART PROJECT

This project provides harm reduction and HIV prevention services for PWID in sub-district F of the City of Johannesburg. Between January and June 2019, 1 518 unique PWID accessed services.

Characteristics of people who use drugs accessing needle and syringe services (January – June 2019)

Site	Male	Female	Black African	Indian	Coloured	White	Median age
Johannesburg	(%	%			(yrs)	
(n = 1 518)	92%	8%	94%	2%	2%	2%	-



OUT WELLBEING AND FPD'S HARMLESS PROJECT

- The HARMless Project works in Region 3 of the City of Tshwane.
- Comprehensive services are provided mainly through communitybased outreach modalities and also from a Drop-In Centre.
- Between January and June 2019, 1 707 unique PWID accessed services.

 264 116 needles and syringes were distributed, with a return rate of 88%. Among PWID who accessed additional health services:

- 993 tested for HIV
 - 292 (29%) of whom tested positive and,
 - 169 (58%) were started on antiretroviral therapy (ART).
- Data on HIV viral suppression was unavailable.



THE DEPARTMENT OF FAMILY MEDICINE AT THE UNIVERSITY OF PRETORIA'S COMMUNITY ORIENTATED SUBSTANCE USE PROGRAMME (COSUP)

 COSUP project offered needle and syringe services and OST across several regions of the City of Tshwane.

 A total of 55 659 needles were distributed with a 86% return rate.

 A total of 7 695 needle and syringe service contacts were made. Characteristics of people who use drugs started on opioid substitution therapy – Demographics (January – June 2019)

Site	Male	Female	Black African	Indian	Coloured	White	Median age
		%		yrs			
Tshwane (COSUP) (n=357)	92	8	78	4	10	8	30



Clients on opioid substitution therapy, lost to follow-up and exited programme (January – June 2019)

A total of 770 people were on OST at the beginning of January 2019.

During the period 357 people who use heroin (injecting and non-injecting) were initiated, 34 were reinitiated, 27 people were lost to follow-up, 14 people exited, 4 people died, and 1116 were on OST at the end of June.

Tshwane / COSUP	Number on OST at start of period	Number initiated on OST for first time during period	Number restarted during period that were lost to follow-up at start of period	Number LTFU during period	Number exited during period	Number died during period	Number on OST at end of period	Retention rate for period
People who smoke heroin*	-	159	19	9	7	2	162	-
People who inject heroin	-	198	15	18	7	2	188	-
Total	770	357	34	27	14	4	1116	99% (1116/1161)**

^{*} Data not available for this period



^{**} Retention influenced by high number of people started on OST during this period.

CITY OF TSHWANE HOUSEHOLD ASSESSMENTS BY COMMUNITY HEALTH CARE WORKERS

- During January June 2019 10 489 households were visited across 7 sub-districts (regions) of the City of Tshwane by community health care workers.
- Standard household health and social screening assessments.
- 705 households (7%) were identified to have at least one person residing in the household with a substance use problem (defined as "experiencing health and social problems due to substance use").
- The most commonly reported substances that were used were:
 - alcohol (53%),
 - cannabis (17%)
 - heroin (4%).
- Thirty-three individuals reported injecting drugs for non-therapeutic reasons.
- Fifty-six households (8%) had one household member who requested assistance for their substance use.







COVID-19 AND ALCOHOL

Reducing Covid19 individual and social risks related to alcohol during lockdown level 3

Prof Charles Parry, SAMRC (24/6/2020)

(Many would be good to consider also as we consider 'new normal' vis-à-vis alcohol)

Covid-19 goal vis-	à-vis alcohol >>>>>> Strategy	√risk for community transmission by ensuring physical distancing	↓risk for alcohol- related trauma	↓risk for alcohol- related GBV	√risk for compromised lung health & immunity – (heavy drinkers)
Limit Availability	Limit hours for off-consumption sales from outlets with off-consumption licenses (Mon-Thurs: 09:00-17:00#	х			х
	Limit on quantities purchased*#		х	х	X
	Alternate income generation for home-based shebeens	х	х	Х	х
	Raise drinking age to 19 years**	х	х	Х	
	No delivery by driver not employed by outlet with liquor license***				х
	No off-sales by on-consumption outlets (or any unlicensed outlet)	х			
Drink driving countermeasur	↓BAC level for drivers to 0.02 g AA/100ml blood		Х		
es and policing of public	Test blood alcohol after serious motor vehicle collisions		х		
drinking	Enforcement of local public drinking by-laws	х			
Increase price	Consider raising benchmarks for excise taxes (additional ≥2% of RSP)		х	х	х
	Tax AFBs at the same rate as spirits				X
	Implement minimum unit pricing (R10/unit)		х	Х	х
Advertising and packaging	Only permit advertising factual information about product (not lifestyle) & only at point of sale	х		х	х
	Ban sale of alcohol in containers linked to heavy drinking e.g. <u>1 liter</u> beers, 5L wines	х	х	х	х
	Implement tracking system for tracking alcohol products back to source of supply		?	х	х
Treatment & brief	Intensify availability of counselling & medically assisted treatment for				
intervention	persons struggling with dependence		Х	Х	Х

^{*-}Equivalent of 24 standard drinks (24 x 330ml beers or 4 bottles 750 ml wine or 1 bottle 750ml spirits); **everybody to present ID at point of sale/delivery. ***-delivery no sooner than 2 hours after order made & do age
verification before handing over. *Revisit after Covid19 sorted.



HOME > / ALERTS / OPPORTUNITY 1: REFLECTION AND ANALYSIS / STRATEG

Five urgent and effective measures to curb the abuse of alcohol



In his speech to the nation on Wednesday 17 June 2020, President Ramaphosa stated that, "we will also need to look at further, more drastic measures to curb the abuse of alcohol". We now call on the government to draw on the best international evidence, follow the advice of the World Health Organisation and implement those measures which have been shown to be effective in other countries.

These measures are to

- Ban advertising of alcohol (except on the site of sale, where it should not be visible to those under 18 years).
- Increase the price of alcohol, both through excise taxes and by introducing a minimum price
 present of pure sleekel in linear products.
- per unit of pure alcohol in liquor products.

 3. Reduce the legal limit for drinking and driving to a blood alcohol content of 0.02% or below.
- Reduce the availability of alcohol, especially in residential areas (by limiting the density of liquor outlets, shorter trading hours, and ending the sale of alcohol in larger containers like 1litre bottles of beer).
- Intensify the availability of counselling and medically assisted treatment for persons struggling with dependence.

Decrease in trauma-related admissions during level 5 and 4. Prior COVID 19: Approximately 35000 trauma cases a week at about 400 secondary and tertiary hospitals.

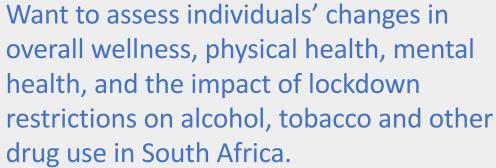
Since the lockdown, approx two-thirds of trauma cases disappeared, including an estimated 9000 alcohol-related admissions. Parry and Matzopolous, 2020



CURRENT STUDIES UNDERWAY

- Many studies running although not national surveys
 - COVID 19, 2 online surveys
- Community/high risk population based surveys
- Exponential increase in traumarelated admissions in June versus Level 4 and 5 Lockdown
- SACENDU monitoring tx need during COVID 19





- Alcohol Survey with Massey University
 Alcohol use 2019 vs Covid 19
- Tx Centres Treatment need, impacts and challenges during Covid 19





SELECTED ISSUES FOR CONSIDERATION (2019B)

Implications for policy

- Consider setting up a national strategy to address use of opiates (use of Nyaope/heroin and misuse of codeine) and a provincial strategy to address use of "Lean" (codeine syrup & sweetened drinks) among young persons in EC & KZN.
- Consider increasing testing for HIV and viral hepatitis among patients in treatment, especially young adults/youth and PWID.
- Implement steps to address consequences of legalization of private use of cannabis (including preventive measures aimed at young people and options for persons experiencing problems).
- Counter push back on harm reduction approaches in KZN, PE, WC (e.g. needle & syringe programmes).
- Consideration to be given to making Naloxone available at a community level as a harm reduction approach to reduce the risk of opioid-related overdose.
- Increase efforts to bring women into treatment & improve access to harm reduction services.
- Address structural barriers to accessing HCV testing & make services available where PWID access clean needles.
- Address stigma aimed at PWID in hospitals.
- Scale up OST services for heroin users in the WC.
- The lack of OST in Durban now that the demonstration project has ended.
- Effectiveness of community based treatment for HCV using direct acting antivirals

Issues to monitor

- Increase in heroin and cannabis treatment demand in the EC, including Nyaope in <20s.
- Decrease in mean age of heroin users in the EC.
- Decrease in court referrals in GT and the NR.
- Mandrax use among females in the NR.
- Decrease in mean age of patients coming to treatment for OTC/PRE medicines use in the NR and monitor the drop in number of <20s coming for treatment in that region.
- Increase in methamphetamine and heroin use (especially among <20s for heroin) in the WC.
- Increase in injecting of heroin in the EC and KZN.
- # of PWID diagnosed &/ or living with HCV &/ or HIV
- (Mis)use of Fentanyl, Tramadol/Tramaset
- Use of Lean (codeine syrup & sugary beverages) by young persons to get high







SELECTED ISSUES FOR CONSIDERATION (2019B)

Research questions

- Extent of unmet treatment need in general.
- Effect of legalization of private use of cannabis among adolescents & young adults.
- What is the reason for the drop off in treatment demand related to cannabis use in GT?
- How big is the use of Lean and Xanax in schools in KZN?
- Are we adequately dealing with mental health problems at substance abuse treatment centres?
- What is the extent of youth dropping out of school because of substance use?
- Identify best ways to screen for drug use in drivers routinely, especially cannabis use.

Challenges/limitation

- Not all centres participate
- Sometimes data are missing
- Not everyone has equal access to treatment centres (e.g. rural populations, poor)
- Funding

Successes

- Project has been going for 23 years
- Ongoing support from National Department of Health
- New support from Department of Social Development & linkage to SQM project
- New ongoing data on Harm Reduction



FOR MORE INFORMATION

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http://www.mrc.ac.za/intramural-research-units/ATOD-sacendu

















