

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



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20 October 2020

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







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Conclusion



SACENDU: SOUTH AFRICAN COMMUNITY EPIDEMIOLOGY NETWORK ON DRUG USE

An alcohol and other drug (AOD) sentinel surveillance system operational in 9 provinces in SA

Monitors trends in AOD use & associated consequences on a six-monthly basis from specialist AOD treatment programmes

Initiated in 1996 & modelled after the Drug Surveillance systems established by the Pompidou Group in Europe & US Community Epidemiology Work Group

Collects:

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- Treatment demand data
- Data from community-based harm reduction and health services provided by TB HIV Care, Anova Health Institute, the Foundation for Professional Development (FPD), OUT Wellbeing, 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). These services are provided in Cape Town, Durban, Ekurhuleni, Ehlanzeni, Johannesburg, Sedibeng, Pietermaritzburg, Port Elizabeth and Pretoria.
- Hospital admission data DOH KZN (from 2021)

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



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- To support networks of local role players 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





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)



TREATMENT DEMAND DATA



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



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 (%)



■ Alcohol ■ Cannabis ■ Cocaine ■ Heroin ■ Methamphetamine ■ Mandrax ■ OTC/PRE ■ CAT











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.
 - **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:
 - Coloured in the Cape Metro (77%),
 - White in Nelson Mandela Bay (80%),
 - 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)		
Johannesburg (n = 1 518)	92%	8%	94%	2%	2%	2%	-



OUT WELLBEING AND FPD'S HARMLESS PROJECT

- The HARMIess 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/ NEW DATA SOURCES



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 >>>>>>>	↓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)
	Strategy				
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	х
	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		x		
drinking	Enforcement of local public drinking by-laws	х			
Increase price	Consider raising benchmarks for excise taxes (additional 22% of RSP)		x	x	x
	Tax AFBs at the same rate as spirits				х
	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	x	x	х
	Implement tracking system for tracking alcohol products back to source of supply		?	x	х
Treatment & brief	Intensify availability of counselling & medically assisted treatment for				
intervention	persons struggling with dependence standard drinks (24 x 330ml beers or 4 t	attles 750 ml u	x	X	X

*-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.

APPLY FOR FUNDING HOME > / ALERTS / OPPORTUNITY 1: REFLECTION AND ANALYSIS / STRATEGY?

ABOUT

Five urgent and effective measures to curb the abuse of alcohol

ARTICLES -

PRESS RESOURCES CONTACT



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

1. Ban advertising of alcohol (except on the site of sale, where it should not be visible to those under 18 years).

2. Increase the price of alcohol, both through excise taxes and by introducing a minimum price 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. 4. 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).

5. 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

#COVID19WellnessSurvey

Want to assess individuals' changes in
overall wellness, physical health, mental
health, and the impact of lockdown
restrictions on alcohol, tobacco and other
drug use in South Africa.

- 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

