Burden of Addictive Disorders in South Africa – A Public Health Concern

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The South African Medical Research Council recognizes the catastrophic and persisting consequences of colonialism and apartheid, including land dispossession and the intentional imposition of educational and health inequities.

Acknowledging the SAMRC’s historical role and silence during apartheid, we commit our capacities and resources to the continued promotion of justice and dignity in health research in South Africa.
Substance use disorders contribute substantially to the global burden of disease, **not only through SUDs but other health outcomes.**

A high proportion of disease burden attributable to alcohol and drug use due to increased risk of other health outcomes, i.e infectious diseases, non-communicable diseases including intentional and unintentional injuries. Together these make a substantial contribution to the burden attributable AOD use.

AOD use/Addiction can have negative consequences on the health, economy, productivity, and social aspects of communities.

Extent of burden varies – low to middle income countries (LMIC) carry a huge burden as SUDs. Alcohol-attributable burden highest in countries with a low SDI, whereas the burden due to drugs higher in countries with a higher SDI level.

Globally, in 2016, 99.2 million DALYs (95% UI 88.3–111.2) and 4.2% of all DALYs (3.7–4.6) were attributable to alcohol use, and 31.8 million DALYs (27.4–36.6) and 1.3% of all DALYs (1.2–1.5) were attributable to drug use (table 5).

Globally, alcohol accounted for around three-quarters (76%) of all substance-use-attributable DALYs.

DALY combines information about morbidity and mortality and is expressed in terms of numbers of healthy years lost.


<table>
<thead>
<tr>
<th>Burden attributable to alcohol</th>
<th>Burden attributable to drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>DALYs, in thousands (95% UI)</td>
<td>Age-standardised DALYs per 100 000 people (95% UI)</td>
</tr>
<tr>
<td>Southern sub-Saharan Africa</td>
<td>2054.4 (1710.3–2409.4)</td>
</tr>
<tr>
<td>Tropical Latin America</td>
<td>12433.3 (10547.1–14476.7)</td>
</tr>
<tr>
<td>Western Europe</td>
<td>4347.6 (3601.0–5101.9)</td>
</tr>
<tr>
<td>Western sub-Saharan Africa</td>
<td>7079.6 (5951.2–8252.9)</td>
</tr>
<tr>
<td>Global</td>
<td>99204.9 (88310.4–111168.3)</td>
</tr>
</tbody>
</table>

### Drinking context in South Africa

<table>
<thead>
<tr>
<th></th>
<th>% current drinkers</th>
<th>Adult per capita consumption per drinker in g AA</th>
<th>Heavy episodic drinking among drinkers (≥5 drinks: 60g) in single occasion past 30 days - (%) of drinkers</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>43.0</td>
<td>32.8</td>
<td>50.2</td>
</tr>
<tr>
<td>AFR</td>
<td>32.2</td>
<td>40.0</td>
<td>39.5</td>
</tr>
<tr>
<td>South Africa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>31.0</td>
<td>64.6</td>
<td>59.0</td>
</tr>
<tr>
<td>Females</td>
<td>19.4</td>
<td></td>
<td>70.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>33.7</td>
</tr>
</tbody>
</table>

If SA drank at ‘moderate’ or ‘intermediate’ levels, alcohol sales volumes would shrink to 32%, equivalent to an 8–9-month sales ban  
(Matzopoulos, derived from van Walbeek & Chalwa, 2021 in SAMJ)
Alcohol-attributable deaths globally, per country in 2016

6.2%-7.8% of all deaths in SA can be attributed to alcohol:
171/day or 62,300 per year
Alcohol-attributable disability adjusted life years (DALYs) lost through dying early or living with a disability, per country in 2016.

5.5%-6.6% of all disability adjusted life years lost in SA can be attributed to alcohol.
Pattern of *binge-drinking* and its impact on violence and injuries were specifically targeted during Covid lockdowns

Weekly unnatural deaths in South Africa

Week 1(2020)-Week 15(2021)

### TREATMENT COVERAGE FOR PEOPLE WITH SUBSTANCE USE DISORDERS (SUD) IN SOUTH AFRICA - REPRESENTATIVE COMMUNITY HOUSEHOLD SURVEYS IN 26 COUNTRIES.

<table>
<thead>
<tr>
<th></th>
<th>12-month diagnosis</th>
<th>Perceived need for treatment</th>
<th>Minimally adequate Rx for SUD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>2.6 (± 0.1)</td>
<td>39.1 (± 1.1)</td>
<td>7.1 (± 0.5)</td>
</tr>
<tr>
<td>LMIC</td>
<td>2.0 (± 0.2)</td>
<td>31.5 (± 2.2)</td>
<td>1.0 (± 0.4)</td>
</tr>
<tr>
<td>UMIC</td>
<td>3.3 (± 0.2)</td>
<td>35.6 (± 2.2)</td>
<td>4.3 (± 0.8)</td>
</tr>
<tr>
<td>HIC</td>
<td>2.6 (± 0.1)</td>
<td>43.1 (± 1.4)</td>
<td>10.3 (± 0.8)</td>
</tr>
<tr>
<td>South Africa</td>
<td>5.8 (± 0.6)</td>
<td>39.3 (± 3.9)</td>
<td>2.3 (± 0.1)</td>
</tr>
</tbody>
</table>

3 Potential Barriers:
- Awareness/perceived treatment need,
- Accessing treatment once a need is recognized,
- Compliance (on the part of both provider and client) to obtain adequate treatment.

*Degenhardt et al. World Psychiatry 2017; 16:299-307*
A high proportion of the disease burden attributable to SUDs is due to increased risk of other health outcomes.

South Africa - HIV/AIDS accounts for 51.9% of deaths in 15-44 age group. Followed by interpersonal violence (8.7%), road injuries (6.4%), TB (5.3%) and self-inflicted injuries (2.8%). NCDs older age groups - ischaemic heart disease (4.8) and diabetes mellitus (4.0%).
SUDS AND INFECTIOUS DISEASES (HIV/AIDS, TUBERCULOSIS, HEPATITIS)

• Top rankings for alcohol-attributable DALYs for specific causes, TB accounted for 22.6%.

• Heavy alcohol and drug use has been causally linked to TB incidence and outcomes of disease.
  • Two pathways are involved:
    • biological via weakening of the immune system ↑ susceptibility among heavy drinkers,
    • social via social exclusion and drift, resulting in about a threefold increased risk of tuberculosis.

• Higher rates of treatment defaults and development of drug-resistant forms of TB

Clear and consistent associations between alcohol use and HIV/AIDS, with a relative risk of 1.6–2.0 for problem drinkers versus non-drinkers.

Top rankings for alcohol-attributable DALYs for specific causes were 16.0% for HIV/AIDS.

- Injection drug use, unsafe sex have been associated with contracting of HIV/AIDS.

Alcohol use associated with substantially lower adherence to antiretroviral therapy, in a dose-dependent manner.

Treatment is key for survival and alcohol seriously affects HIV mortality.
VIRAL HEPATITIS

- PWUD incl PWID, sex workers (SWs) and men who have sex with men (MSM) are at increased risk of HIV and viral hepatitis infection.
- Engaging in risky sexual behavior + drug use increases the risk of contracting HBV, HCV.
- Study on KPs accessing HIV-related health services in 7 cities -
  - Among the 3439 people included in the study (1528 SWs, 746 MSM, 1165 PWUD/ID) 82% reported substance use in the last month, including alcohol (46%) and heroin (33%).
  - 75% were sexually active in the previous month, with condom use at last sex at 74%.
  - HIV prevalence was 37% (highest among SWs at 47%), HBsAg prevalence 4% (similar across KPs) and HCV prevalence was 16% (highest among PWUD/ID at 46%).

NON-COMMUNICABLE DISEASES (NCDS) AND SUBSTANCE USE DISORDERS

- NCDs defined as any medical condition or disease that is non-infectious and non-transmissible among people.
- The NCD risk factors such as high blood pressure, poor diets, air pollution, high body-mass index, tobacco smoking, alcohol and drug use, high fasting plasma glucose, high total cholesterol, and low physical activity are the top 10 global risk factors for death.
- Cardiovascular diseases, chronic respiratory diseases, diabetes, and cancers share a set of four key behavioral risk factors: tobacco use, harmful alcohol use, physical inactivity, and unhealthy diet.

Top rankings for alcohol-attributable DALYs for NCDs road traffic injuries (15.9%), interpersonal violence (12.8%), cardiovascular disease (11.1%), cancer and cirrhosis (both 4%).
Over the next decade, it is projected that NCD associated DALYs will surpass that contributed by infectious diseases, perinatal and maternal conditions combined.
FURTHER COMPOUNDED

**Political**
Lack of a focused political drive address SUDs in a multi-focused way following EB best practice.
- Central Drug Authority (CDA) but need resources to channel services

**Economic**
Slow investment and upscaling of low threshold services (trained/accredited peer counsellors, NGOs, home-based carers, outreach, community based).
Support the work of NGOs – funding cuts
Affordability of Treatment – disparities

**Social Factors/Services**
- Poverty and Unemployment
- SES factors
- Indiv, Social, structural barriers to treatment/treatment coverage
- SUDs not seen as an essential service
- Ping Pong Saga DOH vs DSD
- #Addiction specialists
- Health professionals trained in Addictions
- Focus still on downstream drivers

**Technological**
Tech resources to enable work and service delivery – Covid 19.
Tapping into innovative measures - pandemic

**Environment**
Climate change - undermining the mental and physical health of global populations?
Other environmental risk factors – gangsterism, safety concerns/ alcohol sales outside of schools

**Legal**
Legal, policy, service and even law-enforcement barriers to people with substance use disorders being able to access services
Criminalization
MULTI-PRONGED STRATEGIES NEEDED TO ADDRESS SUD HARMs

- Upstream and downstream intervention focus.
- Public focus on SUDs has never been greater during COVID 19 pandemic – subsequent slump but use the COVID 19 experience:
  - Advocate for greater investment in range of services for SUDs.
  - Adapt knowledge base, preventive practices, health care reform-introduce whole-of-government strategies more broadly to cope with what are already the leading causes of health loss.
  - Quality improvement initiatives, such as adoption of the evidence-based WHO Mental Health Gap Action Programme (mhGAP) Intervention Guide and UNODC.
  - Service Quality Measures (SQM) performance management.
• Capacity building is essential to upskill/develop a specialization esp. where substance use disorders are addressed within/outside of the health system – PG Dip under threat – DSD no longer funding – potentially catastrophic.

• IRO Alcohol – interventions aimed at WHO “best buys” and “good-buys” are cost effective and can have an impact alcohol burden i.e. advertising, marketing minimum unit pricing and other strategies. *Enforcement of policies.

• ↑National response to SUDs and gaps in SUD continuum of care – Upscaling of Treatment and Brief Interventions (SBIRT) ↑
  – Build/expand a treatment system that is responsive to the needs of people with SUDs and their communities. E.g., SUD treatment as an essential service
• Universal Prevention Initiatives – all tiers of society - whole of community approach – interventions targeting vulnerable populations – e.g. pregnant women.
  - *United Nations’ Sustainable Development Goals for 2030* targets incl need to strengthen prevention and Tx for SUDs and NBs of universal health coverage.

• Telemedicine/digital interventions: harness digital health to improve access in rural and remote communities + other low threshold services.