

**Alcohol use and its effect on HIV in Africa:
Designing effective policy responses**

Prof Charles Parry

*Alcohol & Drug Abuse Research Unit
South African Medical Research Council*

cparry@mrc.ac.za



South African Medical Research Council

BUILDING A HEALTHY NATION THROUGH RESEARCH



Outline

Building a healthy nation through research

1. Linkage between alcohol use and HIV (4)
2. Implications for policy and practice (6)
3. Levy on alcohol manufacturing for alcohol health promotion foundation (3)
4. Closing comments (2)

- **By the end of the presentation you should be able to:**
 - Describe how alcohol is related to the acquisition of HIV and progression of the disease
 - Have a clearer idea of how many HIV/AIDS deaths are caused by harmful use of alcohol in Afro region
 - Articulate what should be done to reduce the impact of alcohol and HIV/AIDS through interventions in:
 - **health clinics**
 - **substance abuse treatment centres/ psychiatric hospitals**
- and at a broader policy level

Linkage between alcohol and HIV (1): Alcohol and incidence of HIV

Building a healthy nation through research

- Alcohol usage is consistently associated with prevalence + incidence of HIVwe are almost at point of being able to agree on causality
 - Kiene et al, 2006 (AIDS): Undertaken in KZN
 - Study with PLWHA in clinical care: Moderate or higher risk drinking before sex (>1.8 drinks for women and >3 drinks for men) positively associated with an increased likelihood & number of subsequent unprotected sex acts
 - Fisher et al., 2007 (STDs): Africa wide
 - Review of 20+ studies in Africa: Drinkers were 57% (& problem drinkers 104%) more likely to be HIV+ than non-drinkers
 - Baliunas & Rehm, 2009 (Int J Public Health): Global – meta-analysis (n=10)
 - Compared to non-drinkers:
 - Alcohol consumers were at 77% higher risk of HIV
 - Persons consuming alcohol prior to, or at the time of sexual relations were at an 87% increased risk of HIV
 - For binge drinkers, risk of HIV was double that of non-binge drinkers

Linkage between alcohol and HIV (2): Alcohol and incidence of HIV

- **Shuper et al., 2009 (AIDS Bh): Global**
 - **Found a significant link between PLWHA's use of alcohol & their engagement in high-risk sexual behaviour, with any alcohol consumption & problematic drinking being found to be significantly associated with unprotected sex (63% - 69% higher)**
- **Townsend et al., 2010 (AIDS Care): Western Cape (males)**
 - **Problem drinkers (vs non-problem) more likely to report having any symptom of a STI; not using condoms due to drinking; inconsistent condom use with all partner types; having met their most recent partner at an alcohol-serving venue; and having had a once-off sexual relationship**
- **Rehm et al (under review) – a meta-analysis (n=10)**
 - **An increase in BAC of 0.1 mg/L leads to a 2.7% increase in the likelihood of engaging in unprotected sex (discounted risky personality theory)**
- **Friedman et al 2006**
 - **Alcohol consumption reduces the strength of a person's immune system thereby causing increased biological susceptibility to HIV infection**

Linkage between alcohol and HIV (3)

Reasons given to argue there is sufficient evidence for alcohol worsening the disease course for HIV/AIDS:

- **Shuper et al., 2010 (Alc & Alcoholism); Samet et al., 2007 (JAIDS)**
 - **Strong and consistent associations between alcohol consumption & death, re-infection in HIV+ persons**
- **Hendershot et al., 2009 (JAIDS)**
 - **Well-established pathways to explain these associations: a lower probability of treatment adherence, including lower adherence to medications schedules + weakening of the immune system**
 - **Alcohol drinkers 60% as likely to be classified as adherent to HIV medications compared to abstainers (vs 48% for problem drinkers)**
 - **More problematic alcohol consumption and abuse are linked to worse courses in the progression of disease**
- **Alcohol affects immune system through impacting on innate & acquired components (Shuper, 2010)**

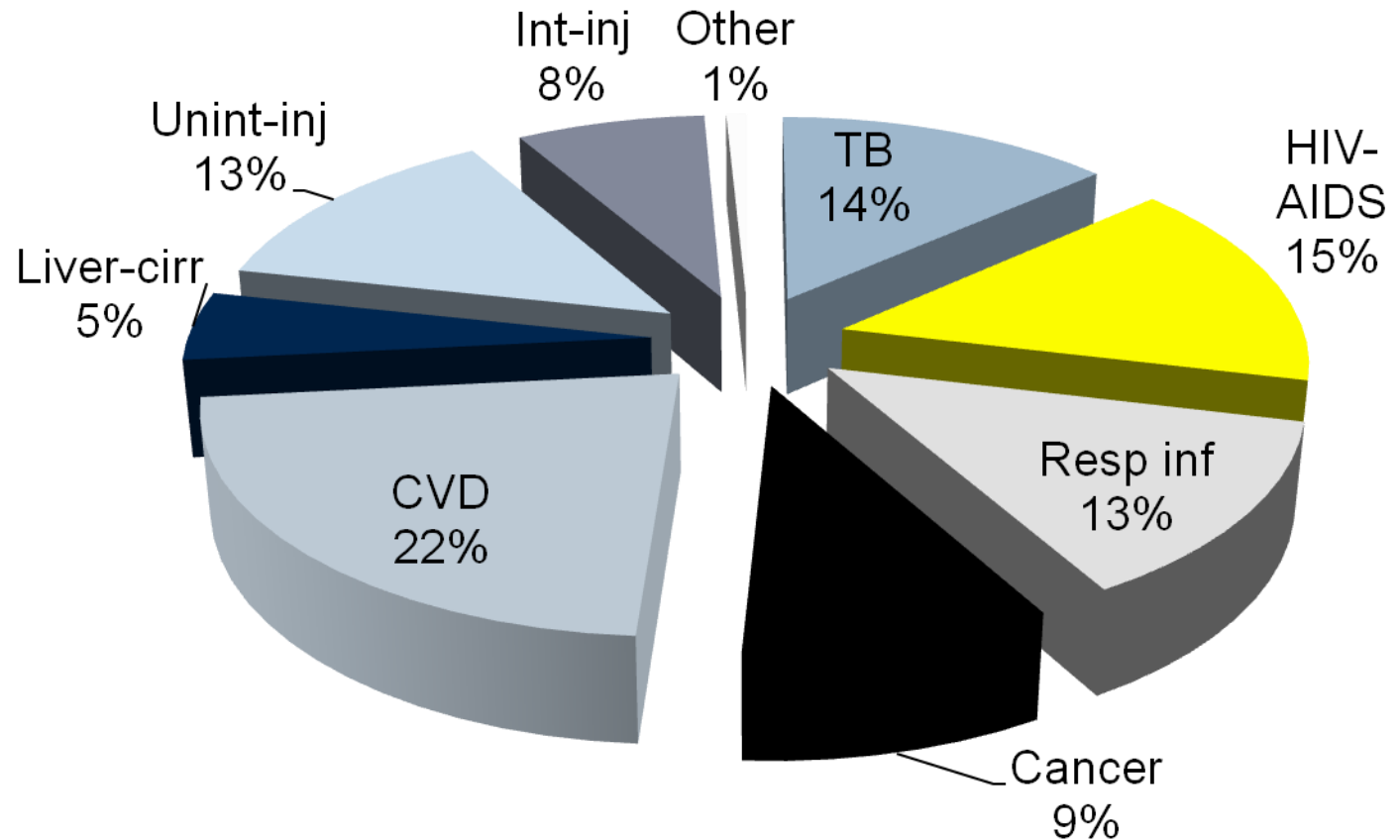
Quantifying impact of alcohol on HIV disease progression in WHO Africa Region (Rehm et al., 2009)

Building a healthy nation through research

Conservatively:

- In 2004 3.3% of all deaths attributed to alcohol (4.8% for m, 1.8% for f)
- Alcohol was estimated to directly contribute to **32 163 AIDS deaths in Afro region**
- **In S Africa over both genders: 5% AIDS deaths, 3% of AIDS-related DALYS are caused by alcohol use**

Alcohol-related deaths by disease category (females): 2004



SA: 32.8%, Botswana 61.8%, Kenya 37.7% for HIV/AIDS deaths (females)

1. **In general, policies that reduce consumption & especially heavy drinking are likely to impact on the incidence and progression of alcohol-specific infectious diseases**
 - **Especially those that regulate the availability, price and marketing of alcohol, For example**
 - **Reducing# of outlets, hours and says of alcohol sales**
 - **Increasing alcohol excise taxes**
 - **Restricting hours of alcohol advertising, banning billboards/sports sponsorships – or restricting if youth exposure**
 - **Possibly targeted interventions in high risk venues/high risk populations (persons frequenting shebeens/bars, servers/managers/owners):**
 - **Train servers & popular opinion leaders**
 - **Referrals to counselling**
 - **Free condoms**



2. Alcohol treatment (e.g. in specialist treatment centres or psychiatric hospitals) & prevention workers should

- **Include *HIV/AIDS-related issues* as part of alcohol-prevention**
- **Screen alcohol patients for alcohol-related HIV risk: Ask about:**
 - Drinking before sex
 - Drinking during sex
 - Condom use when having sex (use, correct use)
 - Choice of sexual partners when drinking in high risk contexts (e.g. Bars apart from regular sex partner)
 - Number of sex partners when drinking
 - Regretted sex when drinking
- **Intervene by risk**
 - **LOW:** Provide information by brochures etc.
 - **MEDIUM:** offer VCT to patients & include alcohol-related HIV risk reduction as part of intervention package
 - **HIGH:** as above, but more active case management or intensive AOD treatment

3. Conversely we need to sensitize HIV/AIDS treatment & prevention workers about alcohol issues and.....

– HIV/TB/STI Treatment

- Consider screening for alcohol at all HIV/TB/STI clinics (later all PHC clinics) – possibly use AUDIT or something shorter (CAGE) – shown below
- Intervene according to risk level
 - *LOW*: Information via brochures etc.
 - *MEDIUM*: Brief interventions for persons (5 minutes risk redn counselling/MI) & address at follow up visits
 - *HIGH*: Refer to active case management to reduce risk of re-infection or non-adherence (DOTS) or even alcohol treatment (and aftercare. E.g. AA)

3. Conversely we need to sensitize HIV/AIDS treatment & prevention workers about alcohol issues and.....

– HIV Prevention

- Include alcohol issues in HIV prevention: how alcohol affects immune system, medication, sexual risk behaviour.
- Take to account complexity of relationship between alcohol use & SRB (alcohol use related to condom negotiation, proper application of condom, having multiple partners, choice of partner, taking setting into account)

4. Broader policy/systemic issues (Part 1)

- **Advocacy** (need more articles on alcohol & HIV in local public health publications & health departmental material)
- **Better *integration of alcohol and HIV* (and TB) services** – over time reduce vertical nature of programmes
- ***Cross-training & general capacity building*** (to screen and do risk reduction counselling, brief interventions, & refer) --- as part of general training & continuing education
- ***Address stigma*** associated with alcohol misuse (in general health settings) & with HIV (in substance abuse settings)

Implications for policy & practice: Alcohol & HIV (6)



4. Broader policy/systemic issues (Part 2)

- *Community-based interventions...*
 - **Via CBOs, community media, schools, etc.**
 - Work on changing attitudes towards multiple partnering
 - Increase open communication about safe sex
 - Empower parents of teenagers to understand & reduce teen alcohol/sex risk bh (e.g. encourage healthy interests, deal with peer pressure, guide & set limits, make contracts re alcohol use/consequences, encourage LT focus, be good role models) & how to respond to problem bh
- *Other policy recommendations*
 - **Health department (re informal/illicit alcohol which is cheap)**
 - Issue warnings about contaminants & other health threats from informal/illicit alcohol
 - Initiate steps to improve quality control wrt production & distribution
 - **Police (to decrease access to alcohol by minors)**
 - Ensure swift enforcement of underage drinking laws & punishment for violators

Levy on alcohol: 1% for Health (Slide 1 of 3)

Building a healthy nation through research

- **Systemic changes needed to how govt & civil society address harmful use of alcohol**
- **To fund a SA Alcohol Health Promotion Foundation to:**
 - kick start new initiatives & support more effective implementation of a National Alcohol Strategy, but not be used to replicate existing programmes or gov't response,
 - facilitate a dynamic partnership between civil society and gov't
 - separate from government but complementary to it, & accountable
- **How much are we talking about**
 - +/- R300 million per year
- **How accessed**
 - 1% levy on turnover in manufacturing sector. Other health foundations access \$ from: Taxes on tobacco and/or alcohol (e.g. a 2% tax on both alcohol/tobacco, Thailand); Levies on health insurance (Switzerland); Appropriations from Treasury budgets (VicHealth, WA, Malaysia)

What should a levy be used for? (Slide 2 of 3)

Building a healthy nation through research

- Funds would be used to:

1. Support *strategic thinking/advocacy (GLP)*
2. Support *special projects*
(commissioned/model projects, e.g. alt. economic activities for survivalist sellers, counter-advertising, grants to applicants)
3. Conducting *research & support knowledge dissemination* (e.g. support research grants, commission evaluation research, support knowledge translation (clearinghouse))
4. Support *sporting & cultural organisations*
5. Support *capacity building*



What should a levy be used for? (Slide 3 of 3)

Building a healthy nation through research

- **Other country's experiences of health promotion foundations**

- Low administrative costs, operate c/out bureaucratic impediments, can fund projects quickly, can include community inputs, can shield gov't from unpopular funding decisions
- VicHealth success in reducing road trauma
- Healthway (WA): Average project reached 7000. Participation rates highest in persons from disadvantaged areas c/ negative behaviour risk profiles
- ThaiHealth – established in 2001. In 2004 33% of population drink, 2007 29%



VicHealth



healthway



Conclusion

- **If we**
 - intensify targeted efforts to reduce consumption of alcohol & particularly heavy drinking episodes (especially in contexts of particular risk), &
 - if we intervene more proactively with HIV patients who drink
- **we will**
 - **potentially accelerate the drop off in HIV acquisition in the region, reduce non-adherence to ARVs (and consequently AIDS deaths), & more rapidly reduce the burden of HIV on individuals, the public health system & society at large**

- Parry, C.D.H., Rehm, J., & Morojele, N.K. (2010). Is There a causal relationship between alcohol and HIV? Implications for policy, practice and future research. AJDAS, 9(2), 81-91.

AFRICAN JOURNAL

of
DRUG
and
ALCOHOL STUDIES

In this Issue

Relationship between drinking and HIV/AIDS

Smoking habits of undergraduates in Nigeria

Community-based outpatient treatment in Kenya

Solvent use among Nairobi street children

Sensation seeking and drug use

Sexual risk behaviours and drug use among psychiatric patients

Raves and ecstasy in Egypt

Interview: Dr Lee Rocha-Silva