

ALCOHOL DIAGNOSTIC VALIDATION FOR INJURY-RELATED TRAUMA (AVIRT): FINDINGS FROM A QUALITATIVE STUDY

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BACKGROUND

- Globally, **alcohol indicators** obtained from patients seen in emergency departments or admitted to hospital are one of the key and most **cost-effective** data sources to **estimating the impact of alcohol** on communities and health to quantify problem drinking, alcohol-impaired driving, trauma readmissions and premature death.
- Effective **monitoring** of alcohol-related morbidity and mortality requires the collection of **alcohol-related indicators** in which regular reports on the key predefined indicators are submitted by hospitals, primary health-care units or emergency services.

BACKGROUND

- Studies from sub-Saharan Africa (SSA) have highlighted the impact of **alcohol** on **injury and violence**.
- In South Africa, approximately a third (31.2%) of alcohol-attributable deaths in 2012 occurred as a result of injuries; while 15.9% and 12.8% of alcohol-attributable disability adjusted life years (DALYs) were caused by road traffic injuries and interpersonal violence respectively. (Matzopoulos et al, 2022)
- COVID-19, and the related alcohol-bans in SA, has brought the **impact of alcohol on trauma** presenting to health facilities into sharp focus in the country.
- The COVID-19 period also highlighted the absence of **practical, cost-effective and accurate alcohol diagnostic tools** in the South African trauma setting.
- Having such an accurate tool would improve **surveillance** and influence **the clinical management** of trauma, **inform and improve government policies** to address heavy drinking and assess the impact of alcohol policy reform.

STUDY AIM

This qualitative study aimed to determine what type of alcohol information will be useful for different stakeholders in the trauma and injury prevention sectors.

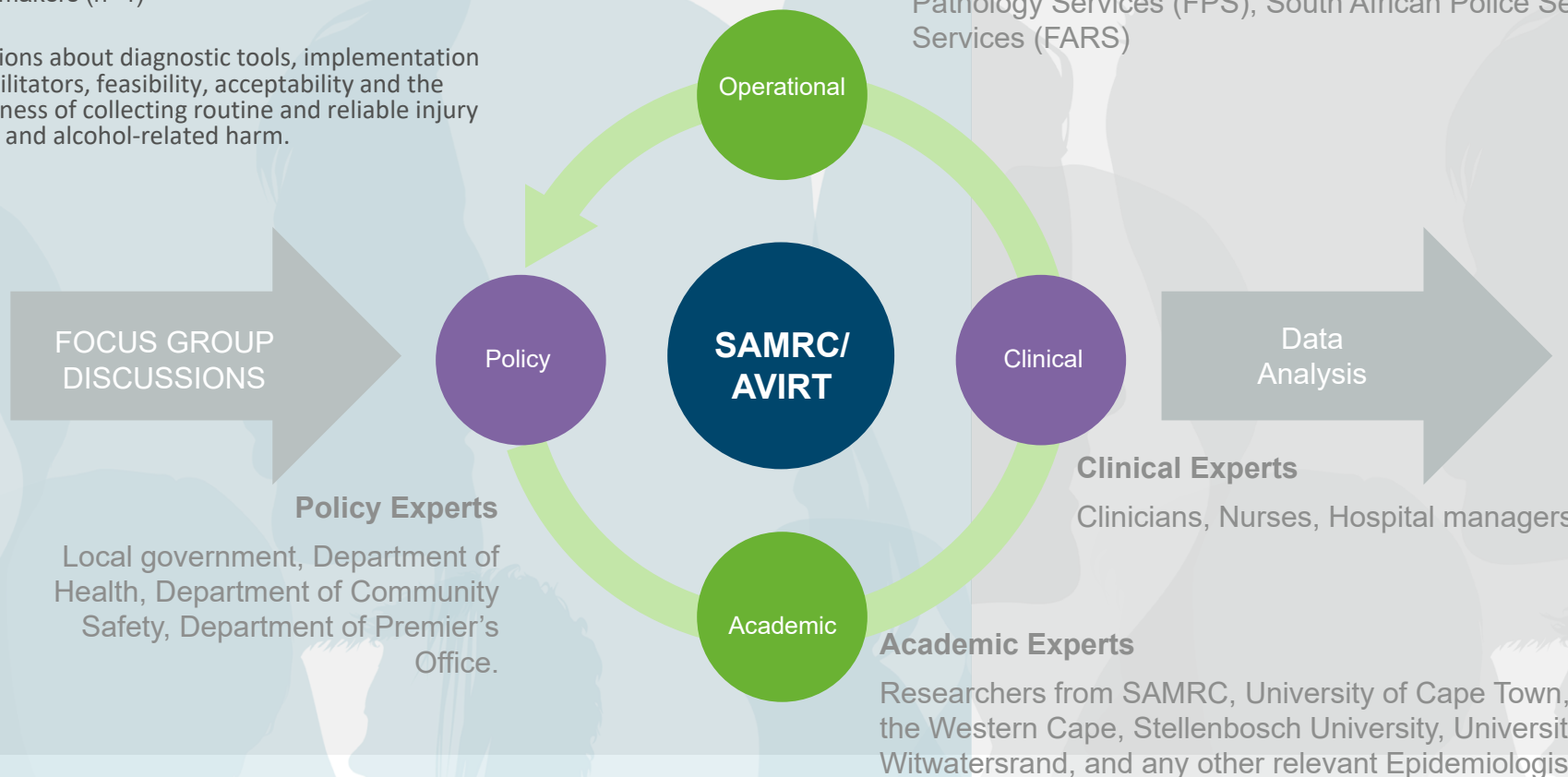
This research activity was conducted to inform a validation study of alcohol diagnostics for injury-related trauma.

**Ethical approval to conduct the study was granted by the South African Medical Research Council's Human Research Ethics Committee

We conducted five virtual Focus Group Discussions (FGDs) with four groups of stakeholders:

- clinicians (n=9)
- academics (n=4)
- hospital and other operational staff (n=6)
- policymakers (n=4)

Obtain opinions about diagnostic tools, implementation barriers, facilitators, feasibility, acceptability and the appropriateness of collecting routine and reliable injury surveillance and alcohol-related harm.



FINDINGS: 3 major themes

Burden of alcohol-related injuries

- Alcohol's role in injury causation and mortality
- Description of injury types, time and place related to alcohol
- Impact of availability of alcohol on burden
- Burden on hospital resources and patient management

Assessment Practices

- Methods of data collection
- Challenges related to alcohol assessment and measurement
- Utility of diagnostic tools

Actionable intelligence, assessment, policy and practice

- Utility of alcohol data and information
- Feasibility of policies
- Sustainability of alcohol testing

BURDEN OF ALCOHOL-RELATED INJURIES

The injury that they caused during alcohol binge drinking, we will never be able to stop it and will never be able to get people to realize **the crime** they actually committing by **driving under the influence**. Operational P3

And, how that does affect us is in the **utilization of all the distribution of staff** where now you are getting the surge of **weekends** on top of all the other stuff that you normally have which comes in **drips and drabs during the week**. Clinical P7

In the trauma situation, it's very clear that **alcohol alters the Physiology** of the individual concerned. The is a dilates, it gives other problems if somebody's a habitual alcohol user. They may **have different responses to drugs** and so on. Clinical P4

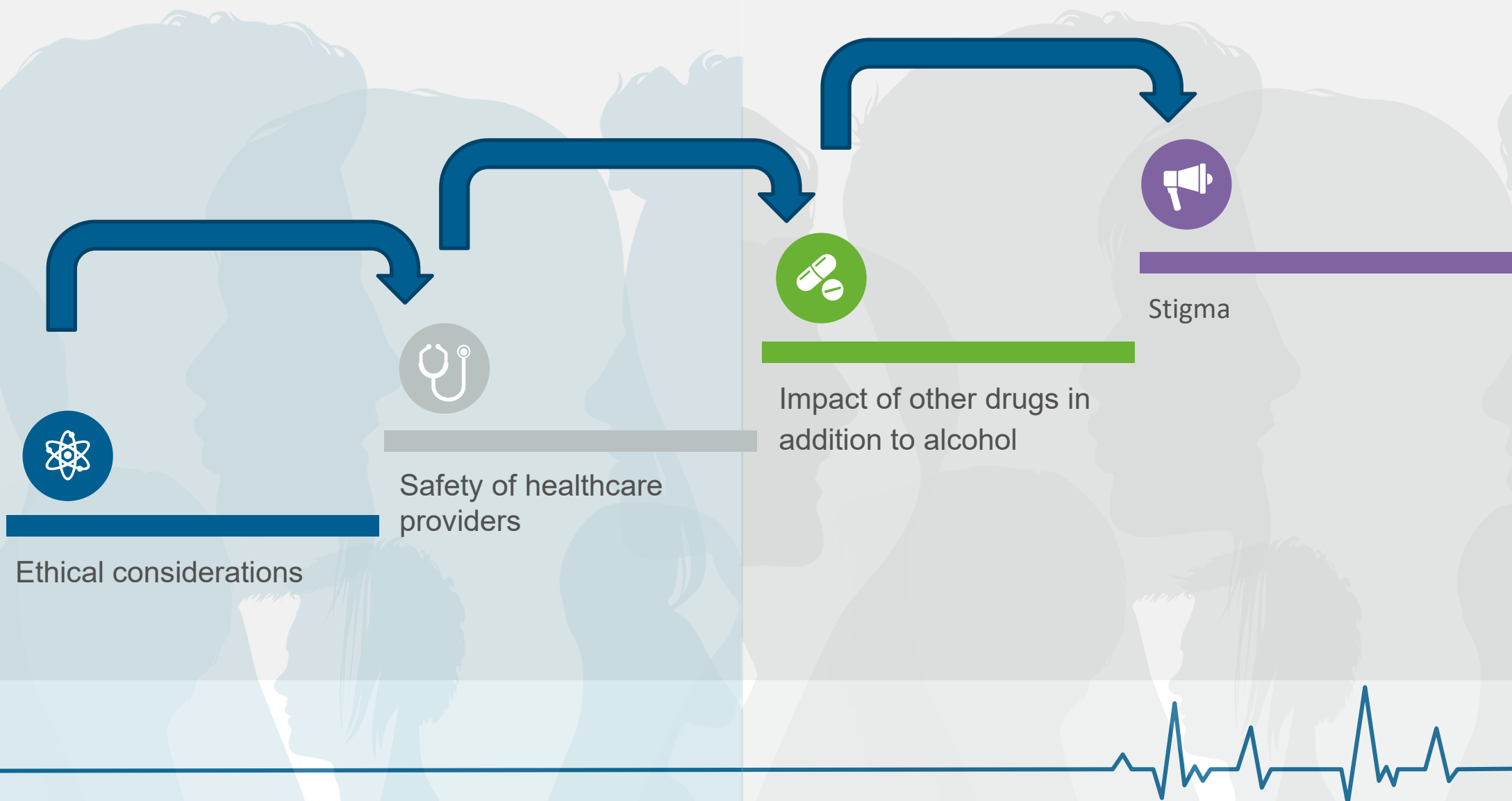
ACTIONABLE INTELLIGENCE, ASSESSMENT, POLICY AND PRACTICE

Well, I think the idea of, you know, *Sentinel sites* at different levels might be useful, but it is kind of costly business to organize. And, you know, I think he's absolutely right. We know what the problem is. There's enough evidence out there. It's not good. Lack of evidence. We're not doing the right thing, and *I'm not sure evidence will create political will* or whatever you call it. So that's a different problem.
Academic P3

But I just wanted to comment on the issue of resources.. *that we're not just talking about the actual instrument we're talking about the administration of it* and the complexity of that and the resources you require to administer those tests in terms of person. Policy P3

But I suspect my colleagues right across the board any *government hospitals do not have the infrastructure.* Clinical P4

Emerging issues



Conclusions

- Availability of alcohol brings the impact of alcohol on injury and trauma into sharp focus.
- Alcohol increases the burden of injury in trauma facilities, by patients who present with intentional and unintentional injuries, both as victims and/or perpetrators.
- Understanding the intent and type of injuries, when alcohol-related injuries are most likely to be seen, and upstream policy decisions around where injuries are taking place and where interventions should be focused was highlighted.
- Alcohol places a huge burden on clinical assessments of patients and overall management of intoxicated patients with limited support and referral in hospital settings.
- Alcohol places a burden on resources such as additional testing and overburdens staff resources and impacts other hospital services (beyond emergency medicine).



Conclusions

- Positive and negative views related to diagnostic tools for alcohol testing.
- Challenges of testing for alcohol include accuracy of tests, issues related to consent and lack of time available for testing.
- Knowing the exact BAC @ presentation would not change clinical management and CT scans would still be given, but there should be stronger policies upstream.
- Greater interest in knowing alcohol status from a follow-up and long term management point of view (other than as part of routine assessment).
- Concerns were raised about legal and ethical implications of collecting alcohol-related data; the value to HCPs; whether the health system is geared up for implementation; the feasibility of policies connecting alcohol with injury; cost implications; availability of resources; and stigma....all leading to concerns that routine acute alcohol screening in ERs will not change current practice.

However, it was evident that there was consensus that there is a need for some type of understanding of alcohol use, which would be useful from a broader public health approach to the issue.





Thank You



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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.

Thank you!