Phaphama interventions to reduce both alcohol use and HIV/STI risks

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Introduction

• There is considerable evidence that alcohol use contributes to the spread of sexually transmitted infections (STIs), including HIV in Sub-Saharan Africa.

• Higher STI prevalence has been found among drinkers in several Southern African countries such as Botswana, Zambia, Zimbabwe and South Africa.

*p<0.05
Previous research has shown that people living with HIV/AIDS (PLWHA) in Southern Africa are more than two times as likely as uninfected individuals to report a history of alcohol use.

- Any alcohol use, AOR 1.8*
- Alcohol use before/during sex, AOR 1.9*
- Binge drinking, AOR 2.2*

*p<0.05
Introduction (contd)

• Apart from increasing the risk of HIV infection, alcohol users with HIV/AIDS also experience the following:
  
  • ART complications
    • Reduced adherence
    • Increased toxicity
  
  • Immune system effects
    • Increased HIV viral replication in animal models
    • Increased co-morbidities, opportunistic infections, mortality
      • Heavy drinkers most severely effected
Introduction (contd)

• There is evidence of converging epidemics in Southern Africa
  • Highest global HIV prevalence (>15%)
  • Among highest global alcohol use (~43%)

• There is therefore a need for HIV behavioral risk reduction interventions for alcohol drinkers in Southern Africa
In this presentation I will introduce a set of HIV risk reduction behavioural interventions known as *Phaphama* (meaning “be wise” or “wisen up”) that have been developed in my work in South Africa during the past 8 years in collaboration with Prof Seth Kalichman of the University of Connecticut in USA.

One type of *Phaphama* interventions which are collectively called “*Phaphama Alcohol*” are aimed at reducing both alcohol use and HIV risk in different settings.

- Other *Phaphama* interventions include:
  - *Phaphama Men* which addresses both gender-based violence and HIV risk
  - *Phaphama Male Circumcision (MC)* which addresses behavioural disinhibition/risk compensation following MC
RCT STUDY 1:

*Phaphama Alcohol* for STI patients in PHC Clinics with alcohol drinking problems
Background

- In a study that we conducted in Cape Town in 2003, we found that 42% of men and 12% of women receiving STI clinic services reported drinking before sex.

- The rate of alcohol use before sex jumped to 61% among STI clinic patients who are problem drinkers.
• We reasoned that HIV behavioural risk reduction interventions for STI clinic patients may therefore require particular attention to alcohol use, especially in terms of drinking in sexual contexts.

• We conducted a RCT study in 2004 to test a *Phaphama “Alcohol”* HIV risk reduction counseling intervention for men and women who used alcohol and were receiving STI clinic services in a PHC clinic in Cape Town, South Africa.
The Information-Motivation-Behavioral Skills (IMB) Model

- AIDS Risk-Reduction Information
- AIDS Risk-Reduction Motivation
- AIDS Risk-Reduction Behavioral Skills
- AIDS Preventive Behavior
Methods

• An open randomized control trial (RCT) clinical design was used to test the efficacy of a brief HIV risk reduction counseling intervention for men and women receiving STI clinic services in Cape Town, South Africa.

• A 1-hour (brief) *Phaphama* behavioural risk reduction counselling model which we had developed earlier in 2003 was adapted to include a substantial component to directly address alcohol use in sexual contexts.
One-on-One counselling sessions which fit clinic service delivery contexts
Articulating the adapted IMB model in intervention components
Information

When you have sex, you can get an STI your partner’s past partners and all their partners.

Partner  You

How can you tell if someone has HIV-AIDS?

You can only get HIV from...

- Unprotected Sex
- Infected Blood
- Infected Mother - to - Child

Social science that makes a difference
Motivational Enhancement

How important is it to you not to get HIV & other STIs?

- Extremely
- Very
- Somewhat
- A little
- Not at all

WHY?

How confident are you that you can protect yourself from HIV & other STIs?

- Extremely
- Very
- Somewhat
- A little
- Not at all

WHY?
Behavioral Skills Building

What about talking with your partner about condoms?

What is your Goal?

Role Play...
What are your triggers?

- People / Partners
- Place
- Substances
- Moods / Feelings

NGABANTU____________________

ZIINDAWO____________________

ZIZIYOBISI____________________

YINDLELA OZIVA NGAYO

Social science that makes a difference
The World Health Organization’s (WHO) brief alcohol counseling model

- The model provides feedback to the patient on their alcohol consumption and associated risks.
- Participants are given their Alcohol Use Disorders Identification Test (AUDIT) score and are shown how the score represents the potential hazards of drinking.
- Alcohol risk reduction is tailored to the level of drinking indicated by the AUDIT score using the algorithm suggested by the WHO.
- Decisional balance techniques are used to elicit self-motivating statements for alcohol reduction. Among the personal concerns about drinking examined by the counselor are those associated with increased HIV risk behavior.
- Alcohol use in sexual contexts is specifically discussed in relation to a patient’s self-identified risk situations.
- Alcohol use is then integrated into the remaining segments of the HIV risk reduction counseling.
- Beliefs about how alcohol may influence sexual behavior and relationships becomes a central focus of the counseling.
Clinic recruitment

Self admin & interviewer assessments
Study design

465
Approached

294 / 465
64% Scheduled

171 / 465
36% not interested

78 / 294
26% Not Drinkers
73 / 294
25% Unable to attend

143 / 294
49% Baseline & Randomized

69 / 143
60 min. Phaphama+A

50 / 69
72%

51 / 69
74%

74 / 143
20 min. HIV Education

51 / 74
69%

51 / 74
69%

3-month follow-up

6-month follow-up
Participants

• 122 men & 21 women STI patients in a Cape Town clinic

• 77% Xhosa-speaking

• 20% married

• 5% employed

• 36% AUDIT* score 10+**
  
  * Alcohol Use Disorder Identification Test
  
  ** Scores of 9 or above are used to identify individuals who may be at risk or who are experiencing alcohol problems.
Results: Unprotected Intercourse in past month

F = 3.9, Cohen’s d = .41 for 3-month, and
F = 5.6 Cohen’s d = .53 for 6-month
Adjusted for age, gender, education, and baselines

Kalichman et al., JAIDS, 2007
Percent condom use in past month

F = 5.1, d = .47 for 3-month and F = 5.7, d = .54 for 6-month
Adjusted for age, gender, education, and baselines

Kalichman, Simbayi et al., JAIDS, 2007
Alcohol use in sexual contexts in past month

F = 6.2, d = .53 for 3-month and F = 0.1, d = .06 for 6-month
Adjusted for age, gender, education, and baselines

Kalichman, Simbayi et al., JAIDS, 2007
Conclusions

• The *Phaphama* alcohol brief HIV risk reduction counselling intervention was found to be efficacious as it reduced HIV transmission risks for up to 6 months among STI patients within a clinic setting.
  • There was more than a 25% increase in condom use
  • A 65% reduction in unprotected intercourse

• However, there was only a short-lived reduction in alcohol use in sexual contexts and expectancies that alcohol enhances sexual experiences.

• This suggests that the effects may be sustained with structural interventions within communities to reduce alcohol use in sexual contexts and support risk reduction behaviour changes over the long term.
RCT STUDY 2:

*Phaphama* “Community Alcohol” for men and women who patronise informal drinking places (or shebeens) in community settings
Background

• We undertook a survey among 500 men and 500 women living in or around racially mixed township in Cape Town in 2004.

• The survey results suggested the need for an HIV prevention programme for both men and women in the community who drink alcohol.
### HIV Risk Factors

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Men %</th>
<th>Women %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never have used condoms</td>
<td>36</td>
<td>43</td>
</tr>
<tr>
<td>2 or more sex partners in past 3-month</td>
<td>44</td>
<td>22</td>
</tr>
<tr>
<td>History of STI</td>
<td>17</td>
<td>10</td>
</tr>
<tr>
<td>Genital ulcers</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>
## Substance Use

<table>
<thead>
<tr>
<th>Substance</th>
<th>Men (%)</th>
<th>Women (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>80</td>
<td>60</td>
</tr>
<tr>
<td>Dagga</td>
<td>37</td>
<td>14</td>
</tr>
<tr>
<td>Mandrax</td>
<td>10</td>
<td>1</td>
</tr>
</tbody>
</table>
We then adapted the Phaphama alcohol for STIs risk reduction model for use in community-based groups.

Used it among groups of 8-12 people and lasted 3 hours.
Phaphama “Community Alcohol” Risk Reduction Session

Information
Local HIV prevalence
Modes of HIV transmission
HIV transmission myths
Continuum of risk behaviors

AIDS Destigmatization
Risk reduction values clarification
Risk reduction goal setting

Behavioral Skills Building
Drinking and risky sex
Examination of risk situations
Identifying risk antecedents
Sexual communication skills
Condom skills
When you have sex, you can get an STI your partner’s past partners and all their partners

How can you tell if someone has HIV-AIDS?

You can only get HIV from...

- Unprotected Sex
- Infected Blood
- Infected Mother – to – Child
Destigmatization

People who have HIV/AIDS are just like you and me.

You cannot get HIV from...

- Kissing
- Touching
- Toilets
- Insects
- Food
- Sharing Utensils
Motivational Enhancement

How important is it to you not to get HIV & other STIs?

- Extremely
- Very
- Somewhat
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WHY?

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WHY?
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Role Play....
What are your triggers?

- People / Partners
- Place
- Substances
- Moods / Feelings
Recruitment from the informal drinking places

Baseline

3-Hour Phaphama
n=183

1-Hour Education
n=170

3-Mon 6-Mon FU
85% 90%
RESULTS

The 3-hour and 1-hour groups both:

- Increased knowledge about AIDS
- Decreased AIDS stigmas
- Improved condom attitudes
- Increased motivation to reduce risks
Unprotected Intercourse in past month

HIV/STI Risk Reduction Skills

HIV/STI Education

Rates of Unprotected Intercourse

Baseline 3-Months 6-Months

Social science that makes a difference
Drinking Before Sex in past month

Rates of Unprotected Intercourse

- HIV/STI Risk Reduction Skills
- HIV/STI Education

Baseline 3-Months 6-Months
Conclusions

• Alcohol is associated with HIV transmission risks in South Africa.

• Skills building workshops for alcohol and HIV risk reduction can be efficacious.

• There is a need to expand the intervention to be at multiple levels such as individual, social network and community levels.
Other *Phaphama Alcohol* studies (1)

- We are currently undertaking another RCT on *Phaphama Alcohol* and Neighbours (for men’s networks and communities in which they live) among 12 communities in Cape Town, six for the intervention and six controls.

- Based on the IMB Model as well as also both social cognitive and social networking theories, *Phaphama Alcohol* and Neighbours involves multiple levels of interventions, namely, among the men themselves, their social networks and at community level.

- Men are recruited from informal and formal drinking places (i.e., shebeens) and run through small groups of about 6-7 men each and 10 groups from each community using the revised *Phaphama Community Alcohol* lasting over three 3-hour sessions. In addition, community level interventions such as posters and HIV/AIDS plays are also implemented.

- The study is half-way through its 5 years of implementation.
Other *Phaphama* Alcohol studies (1)

- *Phaphama* Alcohol for HIV-negative people who have just undergone VCT - We recently completed a demonstration project which involved implementing *Phaphama* Alcohol for people who have just undergone VCT and found they are HIV-negative in 13 clinics in Mpumalanga Province.

- We found that *Phaphama* could be implemented successfully using VCT counsellors who are also trained.

- Three months later there was some evidence of both reduction of drinking linked to sex and risky behaviour such as having unprotected sex and not using condoms.
Other *Phaphama Alcohol* studies (3)

- *Phaphama Alcohol* for STIs RCT Study 2 – we are completing a very large-scale RCT involving 1800 STI patients in three PHC clinics (CT, QT,& Thembisa/Ekurhuleni) to further test the generalisability of the intervention this month.
  - Data will be analysed within the next 2 months.

- There is a sub-study of some 400 PLWHA who also received *Phaphama Alcohol* for STIs. This will be tested for potential as a positive prevention intervention (i.e., combining both primary and secondary prevention).
  - The data will be analysed by September.
Conclusions

• The Phaphama Alcohol interventions have been classified as promising interventions by:
  • USAID’s AIDSTAR programme.
  • the Global Health Literature Digest produced by UCSF Global Health Sciences (GHS) (see [http://hivinsite.ucsf.edu/InSite?page=jl-00-00 Part 1](http://hivinsite.ucsf.edu/InSite?page=jl-00-00 Part 1)).

• There is clearly a need for more research work of the kind presented here to provide evidence-based interventions that work.

• Above all, there is a need to undertake implementation research to make the link from research into policy and practice (“GRIPP”).