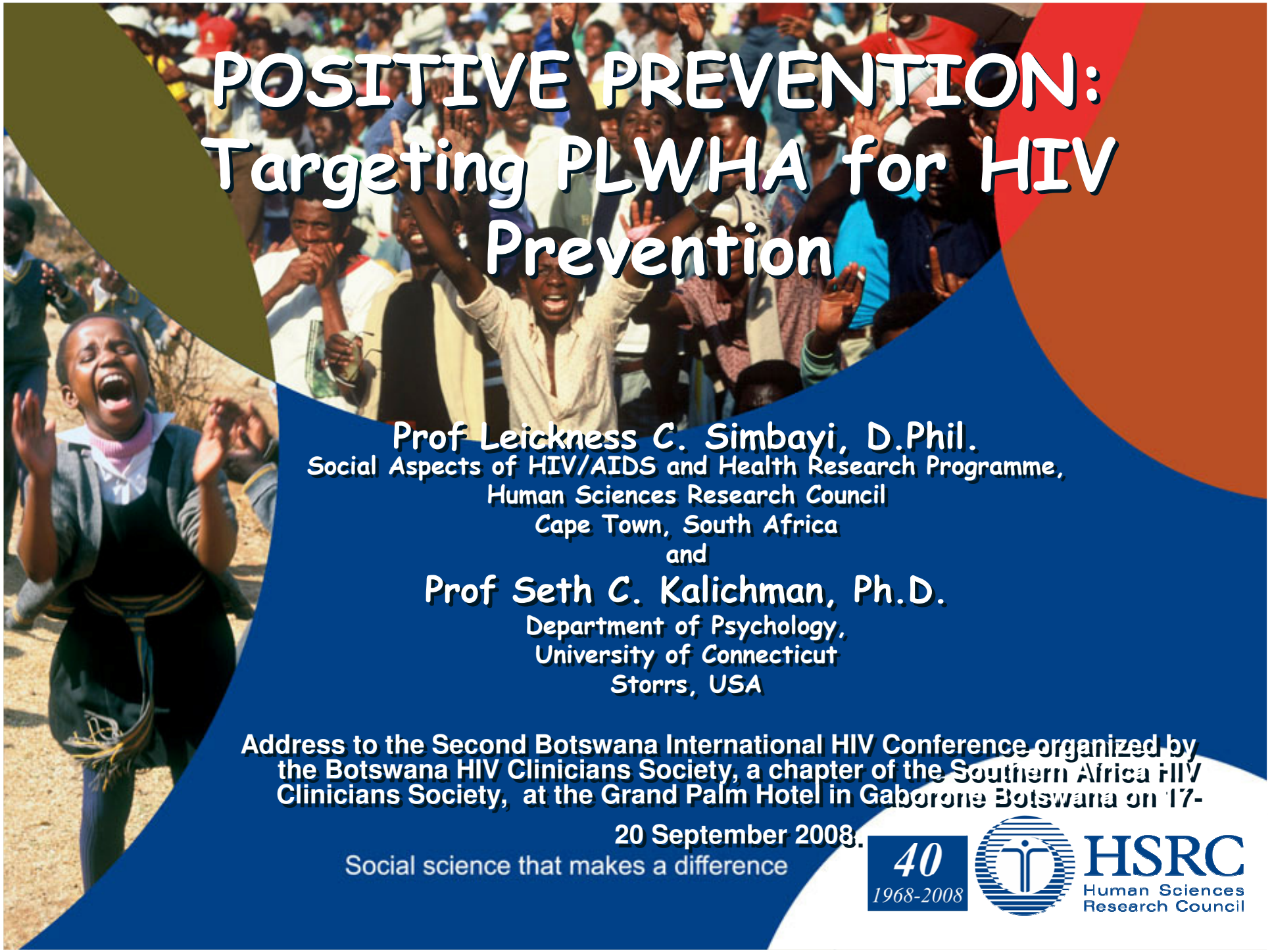

POSITIVE PREVENTION: Targeting PLWHA for HIV Prevention

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Address to the Second Botswana International HIV Conference organized by the Botswana HIV Clinicians Society, a chapter of the Southern Africa HIV Clinicians Society, at the Grand Palm Hotel in Gaborone Botswana on 17-20 September 2008.

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Outline of the presentation

- Background
- The Healthy Relationships programme
- Cultural adaptation and evaluation of Healthy Relationships intervention in Southern Africa
- The Options for Health programme
- Cultural adaptation and evaluation of Options for Health intervention in Southern Africa
- Conclusions

Background

- Until recently, HIV prevention efforts in most countries in the world have focused primarily on encouraging the majority of people, including those not at risk, to engage in safe(r) sex practices.

- Among the safer sex practices promoted are:
  - Abstaining (A) from having sex or delaying of sexual debut
  - Being faithful (B) to a single sexual partner, and avoid having multiple sex partners
  - Using condoms (C) consistently when having sexual intercourse
  - Not sharing unsterilised drug equipment.

Background (contd)

- Indeed, it is clear that the ABC approach has paid some dividends as both HIV incidence and prevalence rates have started to slow down in some countries.

- However, an alternative approach known as positive prevention which relies upon having people living with HIV/AIDS (PLWHA), especially those who are aware of their condition, playing a leading role in HIV prevention is less widely used.

Background (contd)

- There is a need for positive prevention among PLWHA because they engage in substantial risk behaviour.
  - Research shows that approximately 1 in 3 HIV+ people engage in sexual and drug use behaviours that place HIV-negative individuals at risk of infection.
- Positive prevention assists PLWHA to manage sexual situations and both to avoid transmitting STIs to themselves (secondary prevention) and HIV to uninfected partners (primary prevention).

Background (contd)

- Positive prevention has been the mainstay of prevention in some countries especially the USA since 2002.
- Clearly, from a public health perspective it is far more efficient to reduce transmission of HIV from people living with HIV/AIDS than in trying to increase condom use among masses of mainly uninfected people the majority of whom do not even believe that they are at risk.
- However, people who know they are HIV positive have been completely ignored in terms of prevention efforts in the Sub-Saharan Africa HIV epidemic until now.

Background (contd)

- The delay in addressing the prevention needs of PLWHA apparently stemmed from multiple factors including
  - early emphasis on vulnerable at-risk populations,
  - denial of continued transmission risks among people who know that they are HIV infected,
  - fear of negative social repercussions against already stigmatized people with HIV in the form of 'blaming the victim', and
  - HIV/AIDS having high mortality in a context of few effective treatments.

Background (contd)

- With the advent of effective combination ARV therapies, everything in AIDS changed, including the willingness of researchers, programme implementers, and policy makers to address sexual and drug use practices among people who know they are HIV positive.

"With increased access to antiretroviral (ARV) treatment in developing countries throughout the world, … there is an unprecedented opportunity to forge a comprehensive response to the global AIDS epidemic by integrating HIV prevention interventions into expanding treatment programmes" (Global HIV Prevention Working Group, 2004).

Background (contd)

- To date, only a few evidence-based interventions that encourage PLWHA to change their behaviour in order to reduce and control the spread of HIV are available in the world, with most of them having been developed and successfully tested in the USA.

- Unfortunately, none of them have been shown to be effective in Sub-Saharan Africa.

- However, some of the interventions have been successfully culturally adapted for use in Sub-Saharan Africa and have been tested for their efficacy or are currently being tested for their effectiveness in various countries such as Botswana, Mozambique and South Africa.

- The results obtained so far have been promising.

Background (contd)

- Two US-developed evidence-based positive prevention interventions have been successfully culturally adapted and are currently being tested in Southern Africa.
- The two interventions are:
  - the Healthy Relationships programme which is based on social support groups developed by my co-author Seth Kalichman and his associates
  - the clinically-based Options for Health developed by Jeff Fisher (also of the University of Connecticut) and his associates.
- Both are theoretically-based, rigorously evaluated interventions that were developed and successfully tested in the USA.

The Healthy Relationships programme

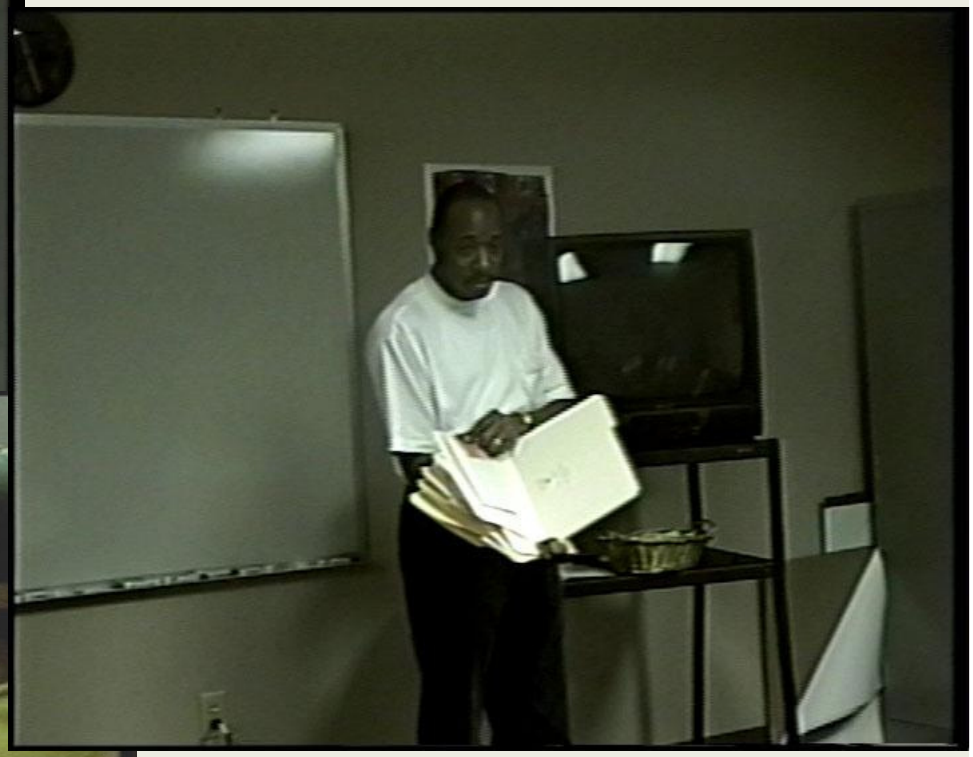
- The Healthy Relationships intervention is a multi-session, small-group, skills-building programme for both HIV-positive men and women.

- The programme is designed to reduce participants' stress related to safer sexual behaviours and disclosure of their sero-status to family, friends, and sexual partners.

- The programme is based on Social Cognitive Theory, which states that persons learn by observing other people successfully practice a new behaviour.

The Healthy Relationships programme (contd)

- Involves five 3-hour sessions
- Small Groups (n = 10 to 12)
- Paired Peer &/or Professional Counsellor Teams
- Focus on HIV Status Disclosure Skills & Safer Sex Negotiation Skills
- Heavy Reliance on Videotapes
- Use of Movie-Clips for Negotiation Skills



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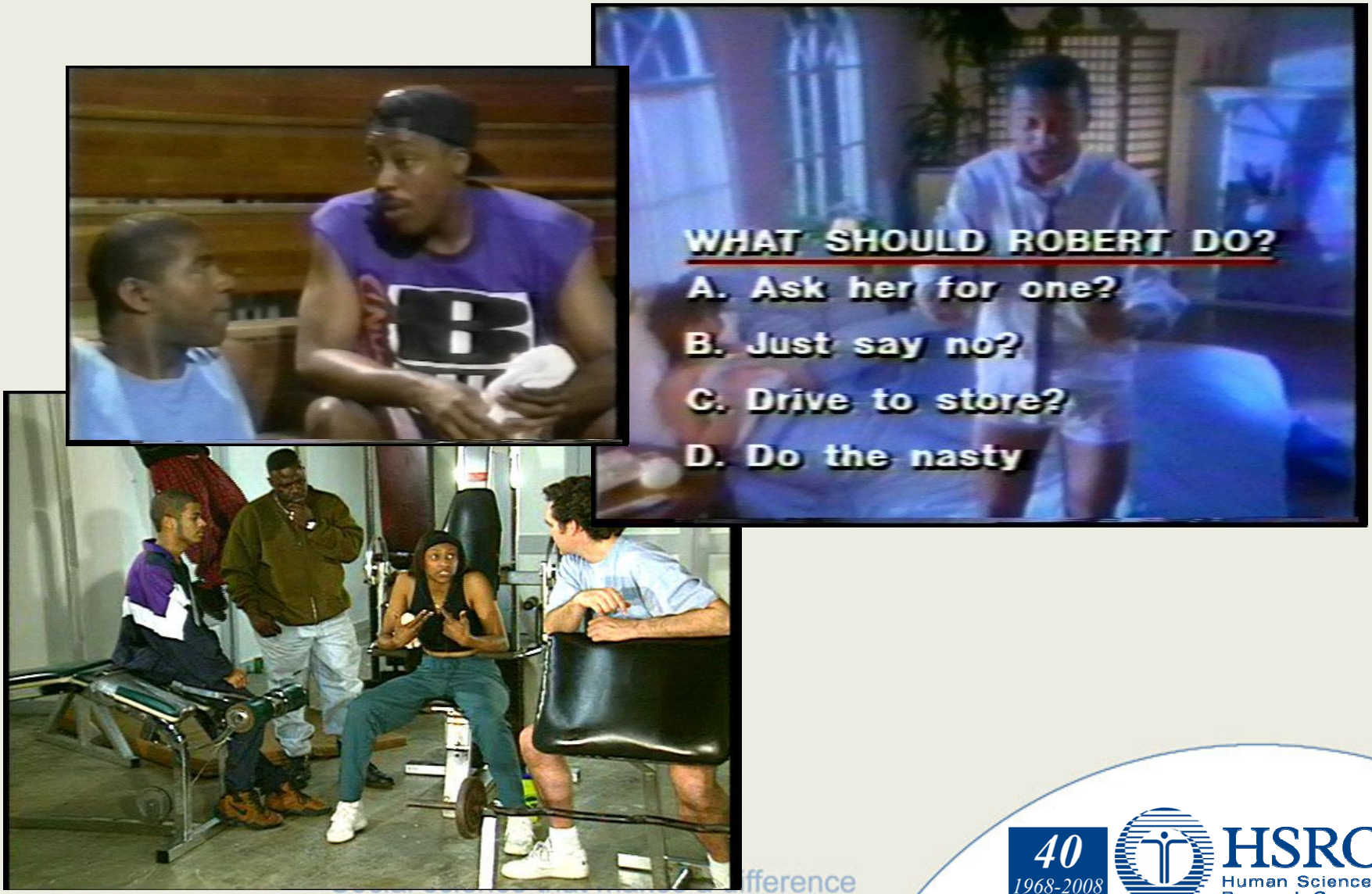
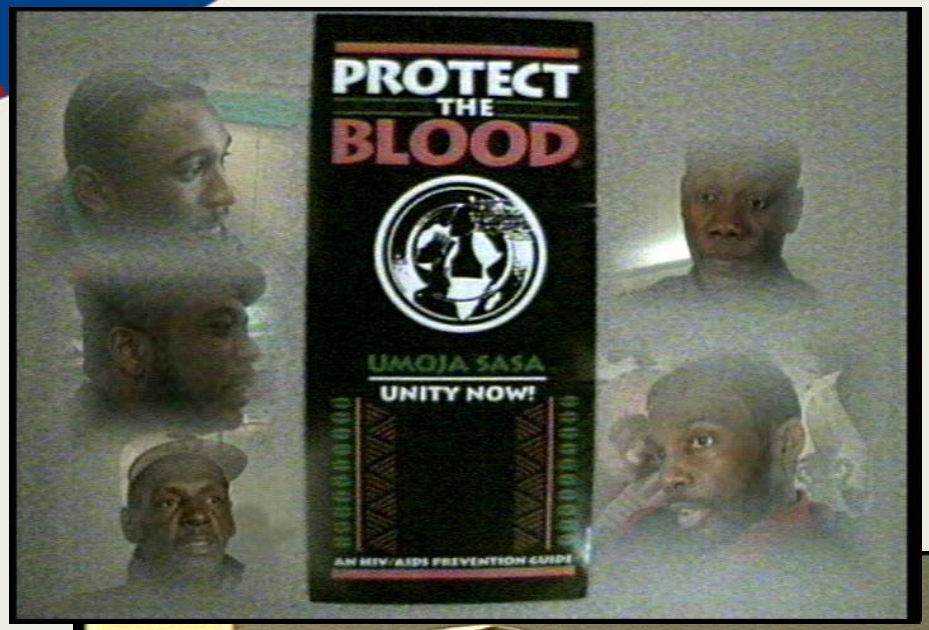
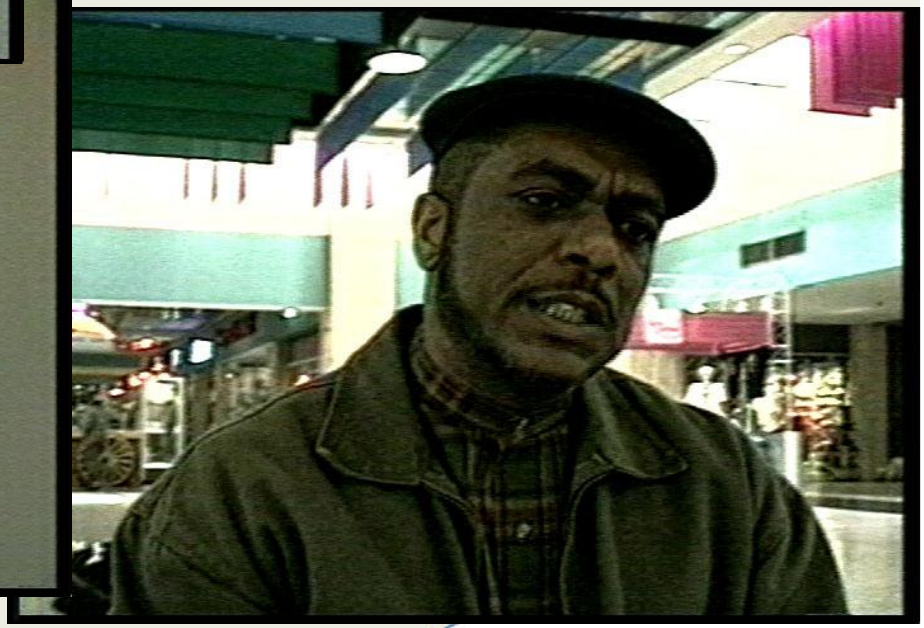
Prevention information-education



Stigma and Disclosure





Skills Building

How movie clips were used for skills building….

Disclosure Decision Skills

Communication Skills

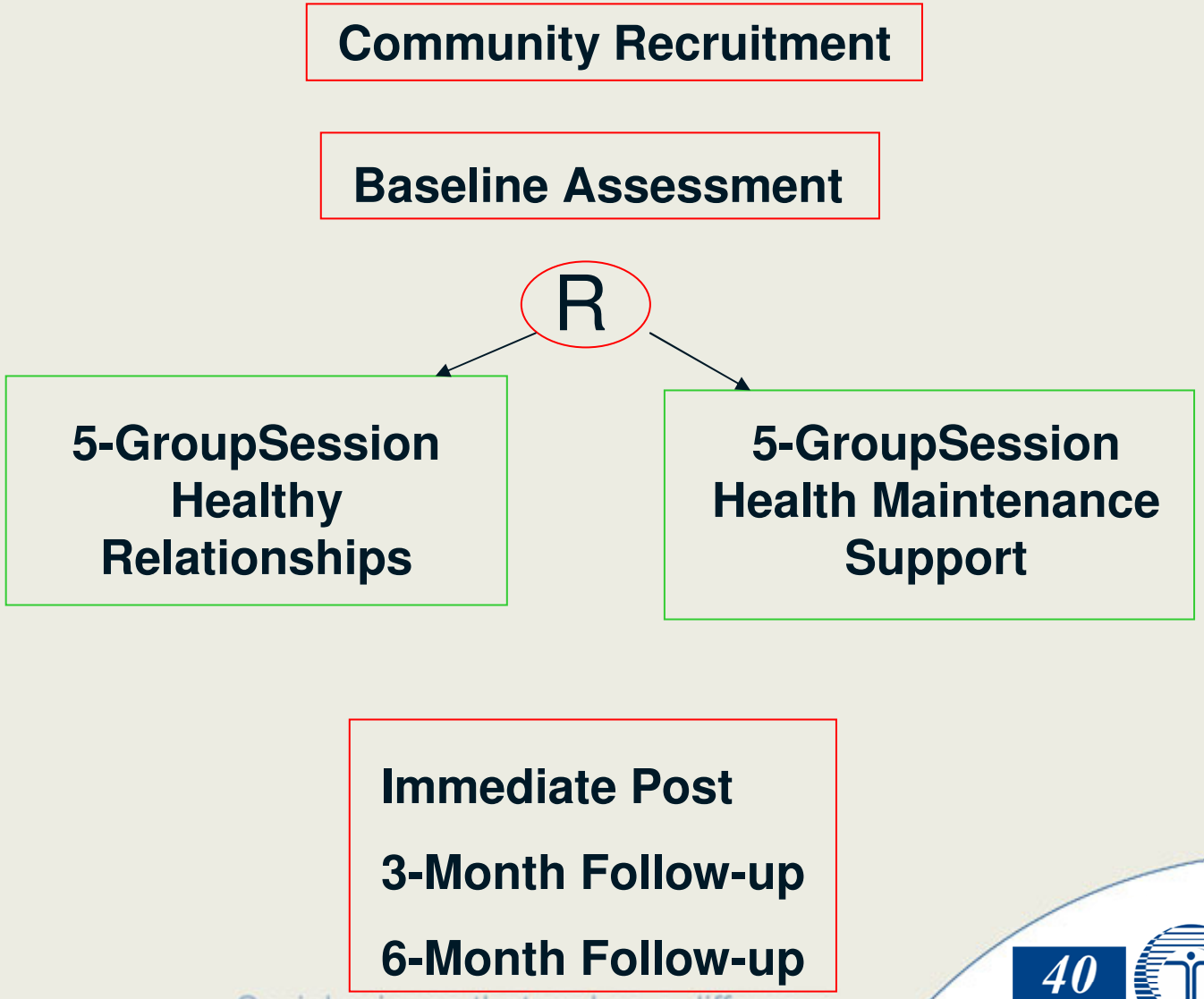
Risk Reduction Skills

Movie Clips* for Communication and behavioural Skills

- Realistic situations
- Non-threatening and engaging
- Identify risky situations and triggers
- Problem solving
- Communication skills building

* Now changed to story boards.

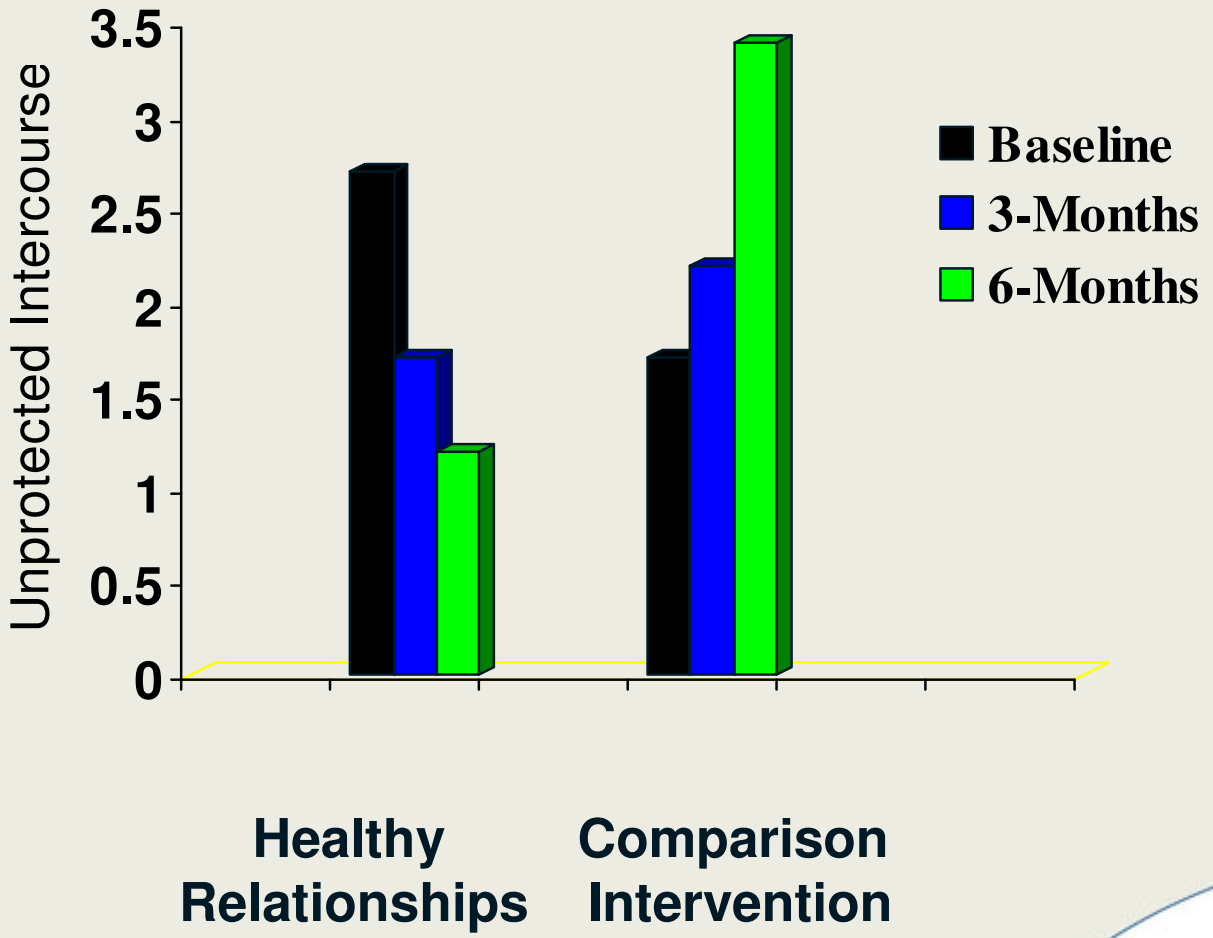
The original Milwaukee Pilot Study Design



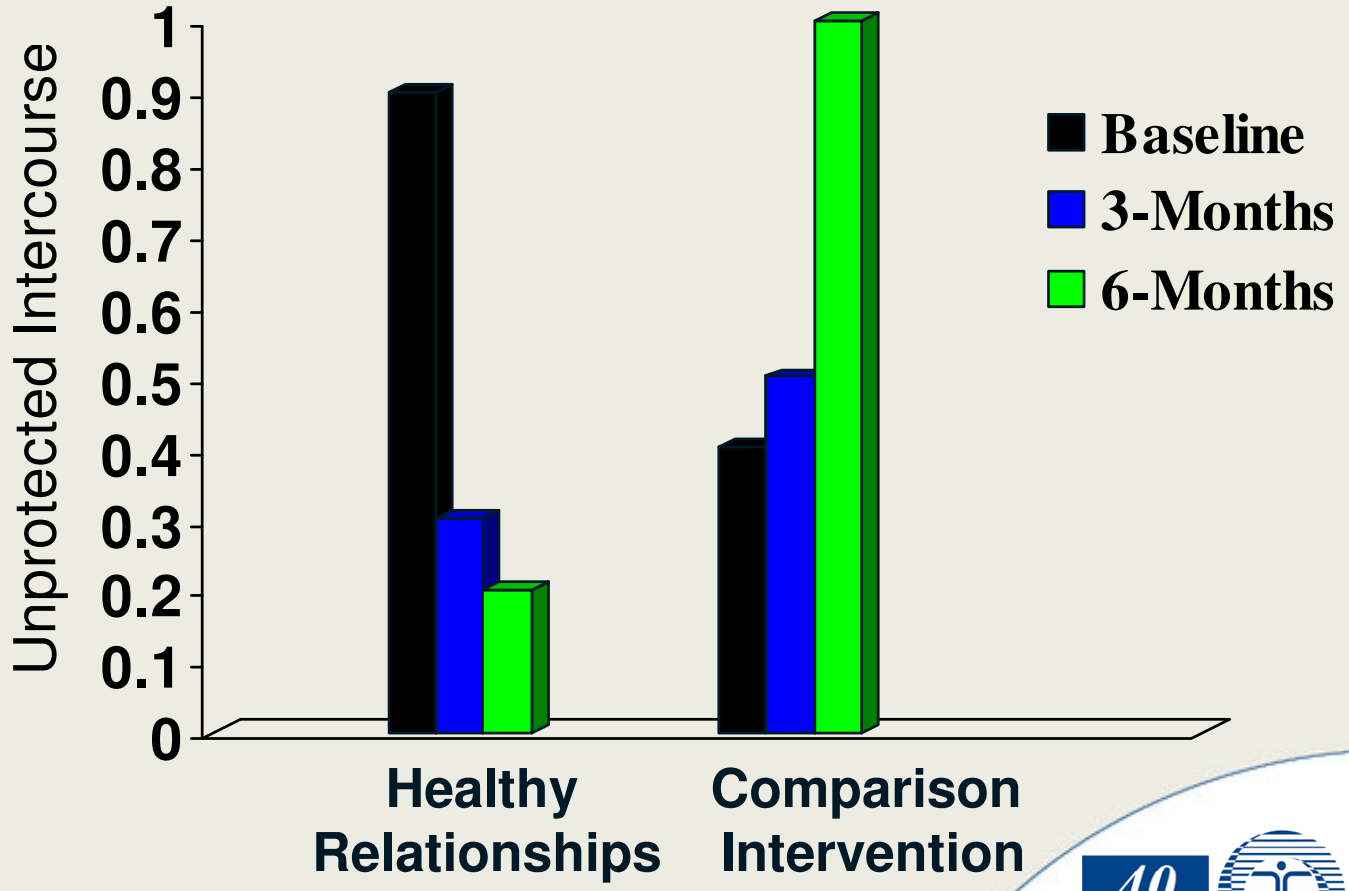
Characteristics of Participants

- 233 HIV+ men & 99 HIV+ women recruited from community services
- Mean age 40.1 years
- 39% heterosexual
- 74% African-American, 22% white
- 56% incomes under $10,000
- 53% currently received disability benefits

Differences in Unprotected Intercourse All Sex Partners in Past 3-months



Differences in Unprotected Intercourse Non-HIV+ Sex Partners in Past 3-months



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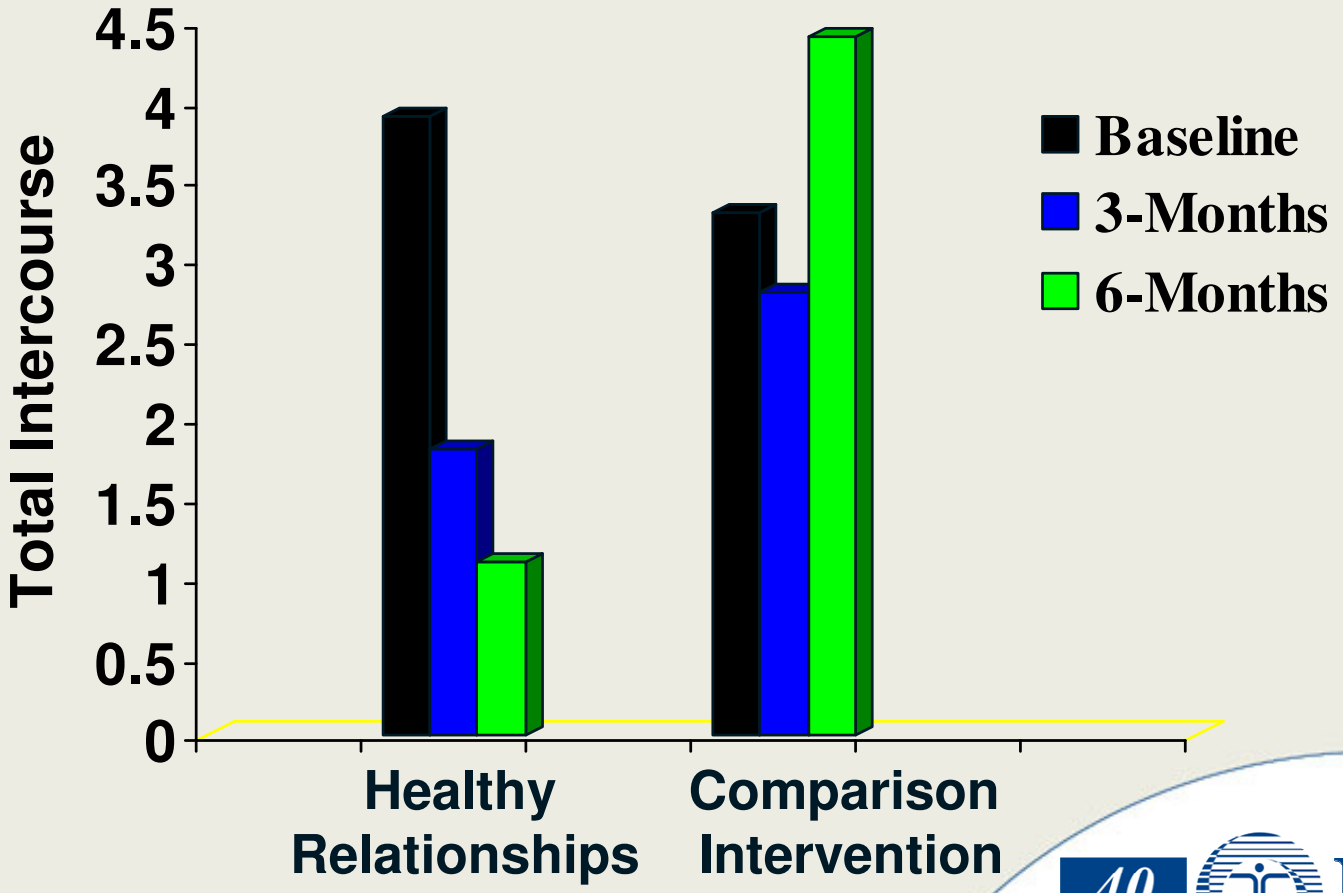
Differences in Total Intercourse Non-HIV+ Sex Partners in Past 3-months



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The Healthy Relationships programme (contd)

- This intervention has been found to be effective, and has been packaged and disseminated for community use as part of CDC's Diffusion of Effective behavioural Interventions (DEBI) initiative.

- The Healthy Relationships intervention is now part of the CDC's Replication (REP) Project which is packaging and disseminating the intervention for community use.

- Healthy Relationships is now being implemented by over 300 agencies in several states throughout the USA and within statewide demonstration projects for the new CDC initiative for HIV prevention.

The Healthy Relationships programme (contd)

HEALTHLY RELATIONSHIPS - Produced by University of Texas Southwestern Medial School

Cultural adaptation and evaluation of Healthy Relationships intervention in Southern Africa

- As part of an 8-country study which also included countries in both East and West Africa which I led about 4 years ago, we undertook formative research which led to workshops which culturally adapted of Healthy Relationships in four Southern African countries (Botswana, Lesotho, South Africa and Swaziland).

- The workshop was facilitated by Seth Kalichman who developed the original intervention.

- The intervention has been piloted here in Botswana among 10 experimental groups and 10 control groups. The study involved assessing the durability of the effects after 3 months.

- The results are currently being analysed and should be available by the end of this month.

Cultural adaptation and evaluation of Healthy Relationships intervention in Southern Africa (contd)

- In South Africa I am the PI for a large 2-year field trial involving testing the impact of the intervention among 1200 PLWHA in 120 groups (60 experimental and 60 control).

- The study is half-way through and proceeding nicely. It involves assessing the durability of the effects up to 6 months afterwards.

- The study is expected to be completed next July and the analysis of the results and writing up of the report will be completed by September next year.

Options for Health programme

- The intervention programme is aimed at assisting PLWHA who are patients at a clinic or hospital setting to practice safer behaviours so they do not transmit HIV to others or infect themselves or their partners with other pathogens.

- It involves a brief patient-centered protocol administered on an ongoing basis and on repeated occasions over the course of routine care, with the goal of decreasing HIV transmission risk behaviours among HIV-positive patients.

- The intervention is based upon the Information—Motivation—behavioural Skills (IMB) theoretical framework and employs Motivational Interviewing (MI) techniques as an intervention delivery system to convey critical HIV risk reduction information, motivation, and behavioural skills content.

Options for Health programme (contd)

- Options intervention consists of a brief collaborative discussion between healthcare provider and patient where provider:
  - Assesses patient's risk behaviour.
  - Seeks to understand patient's barriers to consistent practice of safer behaviour.
  - Elicits strategies from patient for overcoming barriers and moving towards change.
  - Negotiates behaviour change goal or plan of action with patient.
  - Implements these steps in 5 to 10 minutes at every routine medical visit.

Options for Health programme (contd)

- 8-step framework for tailoring discussion to patient's specific risk reduction needs:
  - Introduce discussion of safer sex.
  - Assess patient's sexual risk behaviours.
  - Summarize patient's responses, and if there are multiple sexual risk behaviours, ask patient choose one on which to focus.
  - Assess *importance* of changing risky (or maintaining safer) behaviour and *confidence* that patient can do so.
  - Ask what would need to happen for safer sex to become more *important* or for patient to feel more *confident* about safer sex.
  - Elicit strategies for overcoming identified barriers to safer sex.
  - Negotiate behaviour change (or maintenance) goal with patient.
  - Document agreed upon goal on behavioural prescription form, and give form to patient.

Options for Health programme (contd)

- *Advantages of Options Intervention*
  - Provides a framework that can be adapted and tailored to needs of patient.
  - Designed to be used for both sexual and drug use behaviours.
  - Can be utilized for a variety of health behaviours.
  - Part of a team approach where healthcare provider acts as gatekeeper.

The original New Haven-Hartford Pilot Study Design

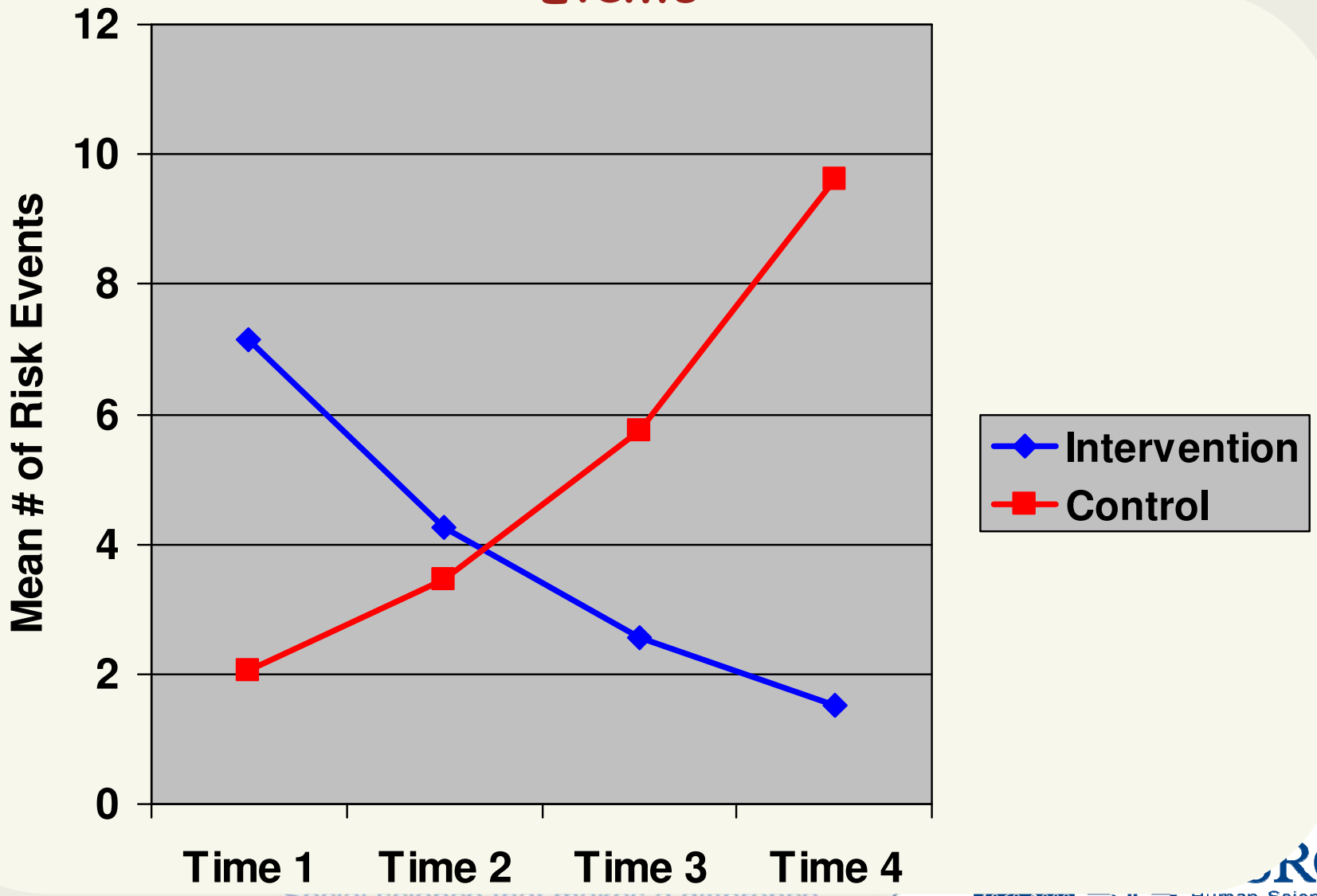
- Compared Intervention Clinic to Standard-of-Care Control Clinic.
  - Selected two clinics that are largest providers of HIV care in Connecticut, U.S.
    - Similar in patient populations, clinic environments, and procedures.
  - Approximately 250 patients were recruited from each site.
  - Assessed sexual and drug use behaviours at baseline, 6, 12, and 18 months using self-report measures.

The original New Haven-Hartford Pilot Study Design (contd)

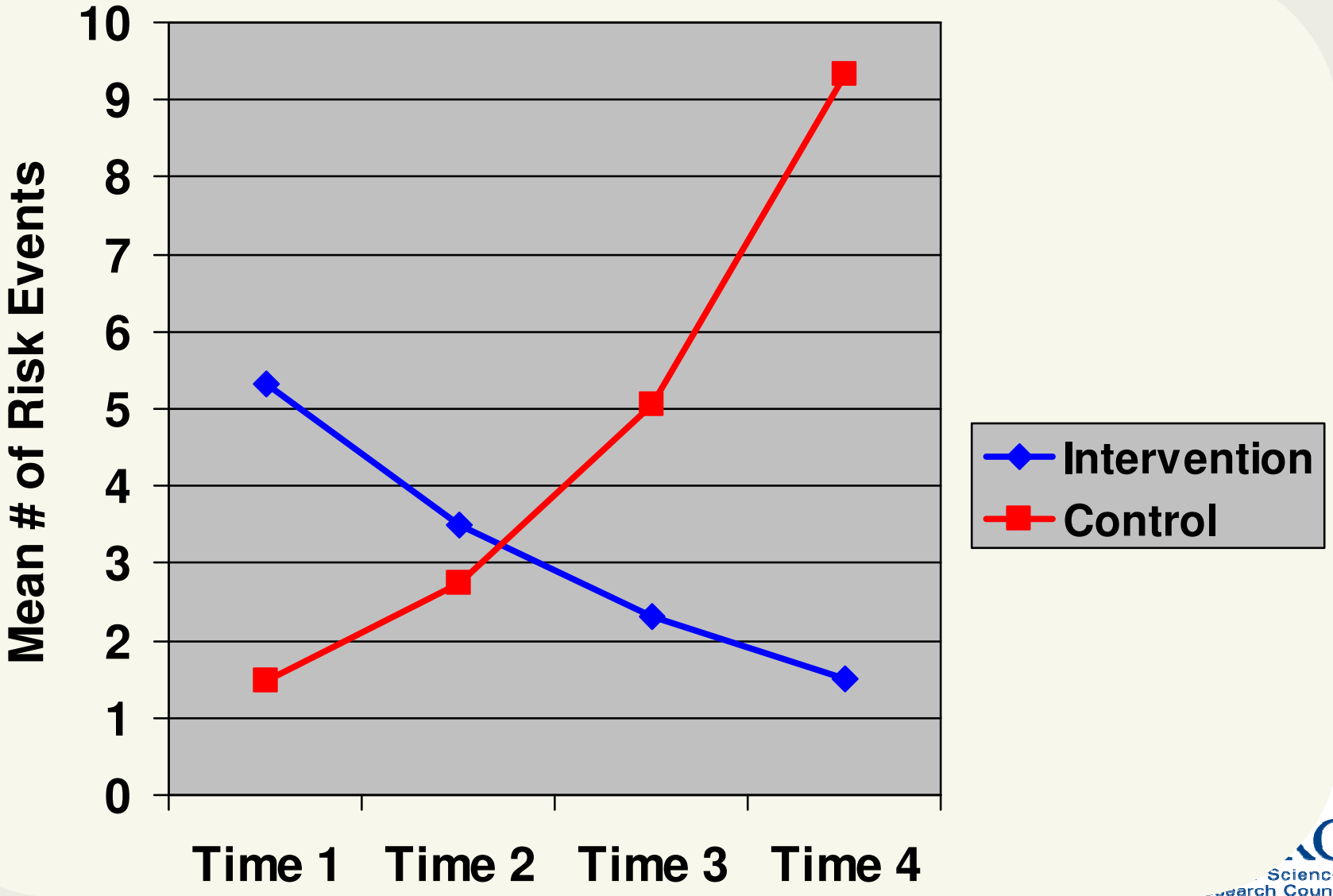
Options Intervention Effectiveness

- Analyzed effects of intervention on sexual risk behaviour over time.
  - Significant time by condition interaction.
  - Over time, sexual risk behaviour decreased significantly in intervention condition and increased significantly in control condition.

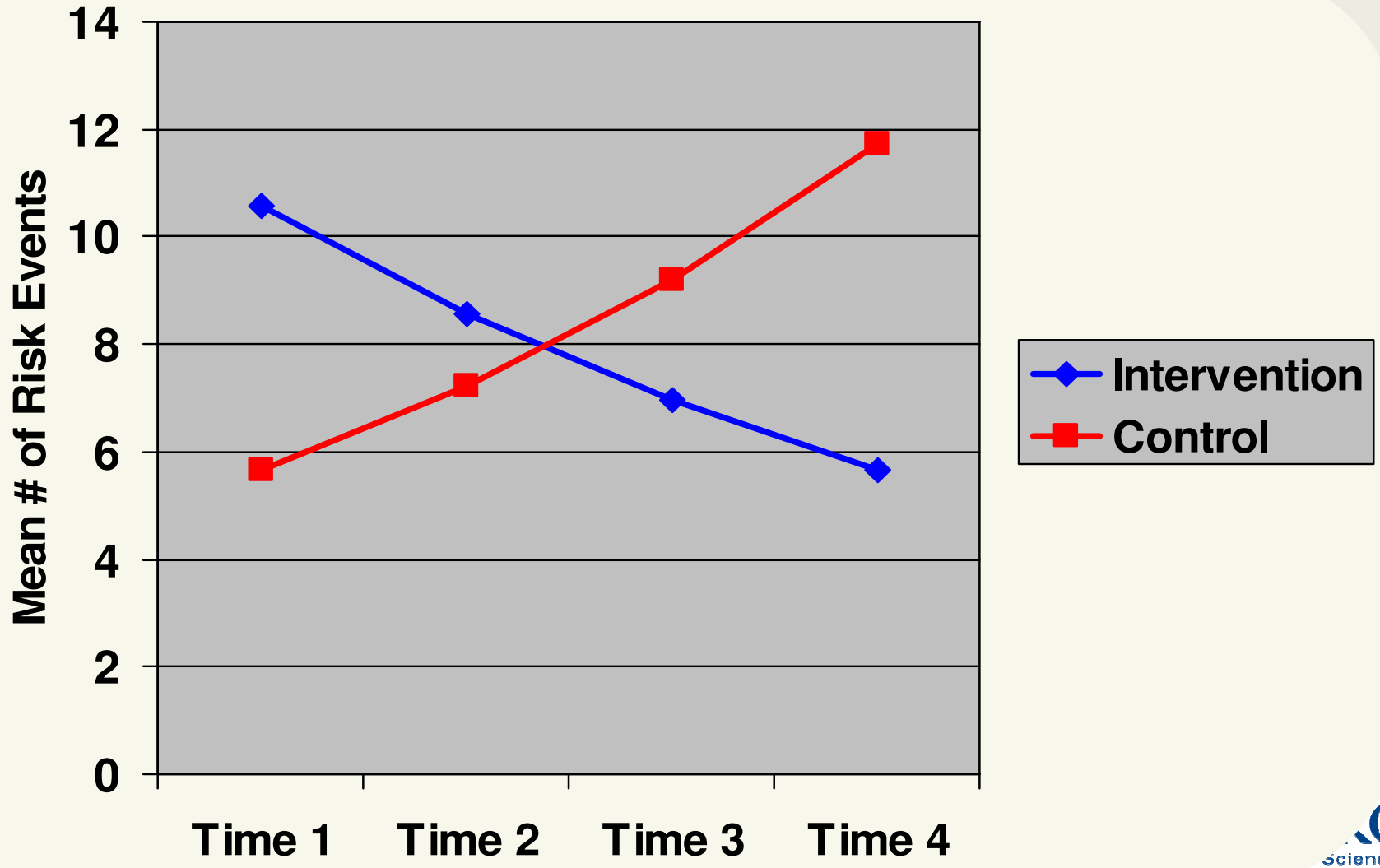
OUTCOME 1:
Unprotected Vaginal, Anal, & Oral Insertive Sexual Events



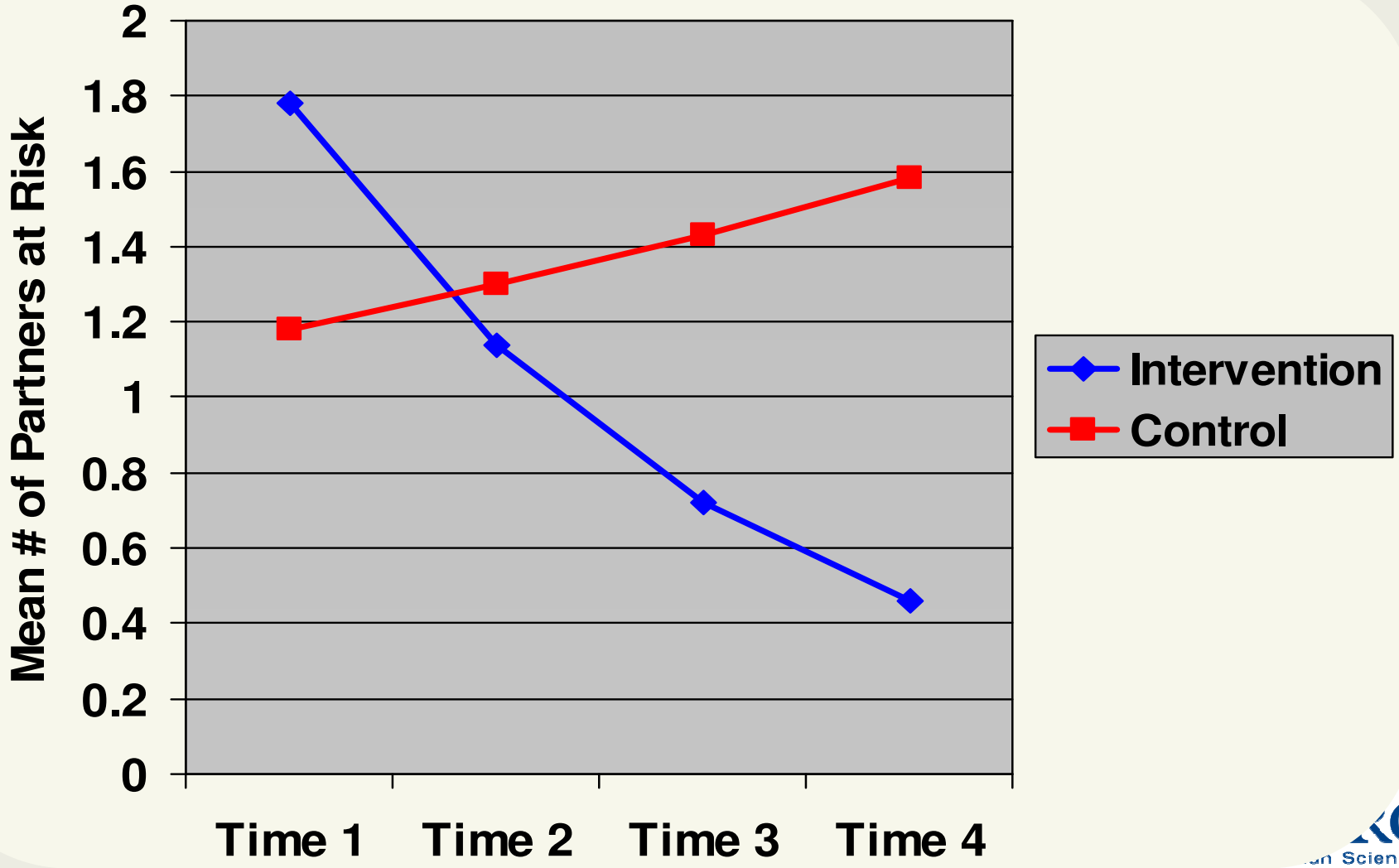
OUTCOME 2:
Unprotected Vaginal and Anal Sexual Events



OUTCOME 3:
Unprotected Vaginal, Anal, & Oral Insertive Sexual Events with HIV- or Status Unknown Partners



OUTCOME 4:
Total Number of HIV- or Status Unknown Partners Involved in Risk behaviour



Options for Health programme (contd)

- These results were interpreted as providing strong evidence that in the USA a healthcare provider-delivered intervention that is embedded within the clinic visit appears to be...
  - Feasible
  - Practical
  - Effective

South Africa Evaluation of Options for Health Intervention: Feasibility, Fidelity, and Effectiveness

- There are currently two studies being carried out in South Africa and one in Mozambique.
- The first is by the Fisher team itself which are currently undertaking a large 5-year randomised clinical trial in 20 clinics in the Pietermaritzburg area.
- The Fisher team is also undertaking another and much smaller study among the military in Mozambique.
- Both of these studies are being done after they completed two pilot studies – the first one using medical doctors at a public hospital in Durban as they had done in the USA which did not work and a second one also in Durban which was implemented by lay VCT counsellors that was successful.

South Africa Evaluation of Options for Health Intervention: Feasibility, Fidelity, and Effectiveness (contd)

- The intervention is called *Izindlela Zokuphila* in Zulu.
- The adapted intervention using lay counsellors was piloted at a public hospital in Durban in South Africa
- Intervention was delivered to patients one-on-one by HIV counselors at each clinical care visit.
  - Intervention was evaluated for feasibility, fidelity, and effectiveness.
    - Assessed sexual and drug use behaviours at baseline, 6, and 9 months using self-report m[illegible]es.

South Africa Evaluation of Options for Health Intervention: Feasibility, Fidelity, and Effectiveness (contd)

Characteristics of Participants

- Sample Size: 152 (69 males, 83 females)
- Mean Age: 34
- Ethnicity: 92% Zulu, 2% Indian
- Employment Status: 71% unemployed
- Income: 56% said they didn't have enough money for food or basics
- HIV Disclosure: 97% had disclosed their status to someone other than clinic staff
- Medications: 73% currently on ARVs

South Africa Evaluation of Options for Health Intervention: Feasibility, Fidelity, and Effectiveness (contd)

Outcomes: Intervention Efficacy

- Analysis of intervention impact on total number of unprotected vaginal and anal sexual events revealed a significant condition x time interaction ($p < .05$).
  - Intervention Condition: Significant decrease over time in unprotected vaginal and anal sexual events ($p < .05$).
  - Control Condition: Marginally significant increase over time in unprotected vaginal and anal sexual events ($p = .05$).

South Africa Evaluation of Options for Health Intervention: Feasibility, Fidelity, and Effectiveness (contd)

Outcomes: Intervention Efficacy

Study Arm	Women		Men	
	Baseline	Follow-Up	Baseline	Follow-Up
Intervention	3.12	0.60	2.19	0.11
Control	2.18	3.85	2.32	3.85

Mean # of events per sexually active participant

Conclusions about Options for Health evidence

- Individual risk reduction counseling for PLWHA is an important prevention strategy.
  - Offers the potential to link prevention with ARV care in Sub-Saharan Africa with the ARV rollout.
  - Revised OPTIONS intervention appears to be feasible to implement in an urban South African clinic and able to be implemented with fidelity.
  - Intervention appears to be effective at reducing unprotected sex in both South Africa and U.S.

Cultural adaptation of Options for Health in Southern Africa (contd)

- A second pilot study to test for the generalisability of the intervention is currently underway in Cape Town.
- The study is being conducted a joint team of researchers drawn from the South African Medical Research Council, the University of the Western Cape and from my own research team at the Human Sciences Research Council.
- The plan is to undertake a phased implementation of the intervention throughout all 60+ clinics providing ARV treatment in the Western Cape province of South Africa in different waves every 6 months to allow for the possibility of evaluating its impact.
- This study is also addressing the issue of adherence at the same time with HIV risk reduction.

Conclusions

- Theory-based behavioural interventions can reduce transmission risks in HIV+ adults.
- Both Healthy Relationships and Options for Health have proved useful and highly adaptive.
- The growing population of people living and thriving with HIV infection demands expanding positive prevention services.
- Positive prevention should be part of a comprehensive HIV prevention strategy

Acknowledgement

- We wish to thank Dr Debbie Cornman of The Center for Health, Intervention, and Prevention (CHIP) at the University of Connecticut in the USA for sharing some slides on findings on the evaluation of Options for Health Intervention in both the USA and South Africa which were used in this presentation.

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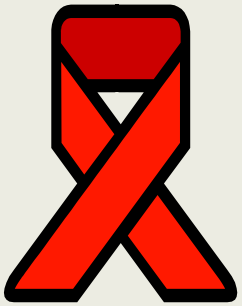

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