



Lay counsellor-based risk reduction intervention with HIV positive diagnosed patients at public HIV counselling and testing sites in Mpumalanga, South Africa

Karl Peltzer, Cily Tabane, Gladys Matseke, Leickness Simbayi

ICAP presentation, Melbourne 2010
Social science that makes a difference



Mission statement

The HSRC is a non-partisan, public-purpose organisation that generates scientific knowledge through its research and analytical work in the social and human sciences.

It undertakes and promotes research that is often large-scale, multi-year, and collaborative in nature. It produces high-quality scientific evidence to inform further analysis, debate, advocacy and decision-making by role players in government, the media, academia, and community-based groupings.

Through its work the HSRC aims to inform policy development and good practice, thereby making a difference to the lives of people in South Africa and in the mother continent.

Social science that makes a difference



Background

- Denison et al. (2008) meta-analysis Voluntary HIV Counselling and Testing (VCT) efficacy in developing countries.
- Showed a moderate effect of VCT on unprotected sex [OR 1.69; 95%CI 1.25-2.31] and inconclusive evidence, regarding the effect of VCT on recipients' number of sex partners.
- Effect size estimates showed the largest effects seen among HIV positive individuals or discordant couples

HIV risk reduction counselling of PLHIV at VCT sites

- Little research has focused on developing effective HIV prevention interventions for PLHIV in HIV counselling and testing sites in South Africa or elsewhere (Fisher et al., 2006; Corman et al., 2008).
- The US-based Options Project is a clinic-based HIV risk reduction intervention with demonstrated effectiveness in reducing sexual risk behaviour among PLHIV (Fisher et al., 2006; Corman et al., 2008).

Options

- based on the information–motivation–behavioural skills (IMB) model of HIV preventive behaviour,
- uses motivational interviewing techniques to deliver HIV risk reduction information, motivation, and behavioural skills content to help PLHIV reduce their HIV transmission risk behaviour.

Objectives

- Assess an enhanced HIV risk reduction intervention in the context of VCT and in particular conducted by lay counsellors.
- Pre-post implementation evaluation with the Options Project intervention with PLHIV (Cornman et al., 2007) in an HIV counselling and testing site setting in South Africa, the fidelity with which the intervention could be implemented, and the potential effectiveness of the intervention in reducing risky sexual behaviour over a four months period

Method

- Sample: Patients (n=488) receiving services at 13 public HIV counselling and testing (HCT) clinics were enrolled after HIV post-test counselling
- Participants received a three session (each 20-30 minutes) theory-based motivational-skills building risk reduction counselling intervention

Intervention

- lay counsellor-delivered intervention that employs motivational interviewing techniques to
- 1) assist HIV-positive patients to identify their specific barriers to safer sex,
- 2) assist patients to develop strategies for overcoming these barriers including alcohol use, and
- 3) empower patients to enact these risk-reduction strategies.

Measures

[baseline-4 months follow-up]

- descriptive information (demographics, substance use, and HIV risk history),
- Information Motivation Behavioural Skills (IMB) constructs, and
- sexual behaviour
- Substance use.

Results: Sample

	Baseline/Time 1 N=488	Follow-up/time 2 N=360 (73.8% follow-up up from baseline)
	(Mean, SD)	(Mean, SD)
Age	32.6 (11.7)	32.8 (11.8)
Formal education completed in years (Mean, SD)	8.6 (2.8)	8.6 (2.8)
Number of children (Mean, SD)	2.6 (2.3)	2.5 (1.7)
How many people with HIV/AIDS have you known (Mean, SD)	1.8 (1.5)	1.9 (1.7)
	N (%)	N (%)
Sex		
Men	144 (29.8)	101 (28.3)
Women	340 (70.2)	256 (71.7)
Population group		
Black African	481 (99.0)	354 (98.6)
White	5 (1.0)	5 (1.4)
Employment status		
Yes	140 (28.8)	92 (25.7)
No	346 (71.2)	266 (74.3)
Marital status		
Married	91 (18.8)	69 (19.4)
Unmarried	392 (81.2)	287 (80.6)
Having children		
Yes	346 (71.5)	258 (72.3)
No	138 (28.5)	99 (27.7)

Information, Motivation, and Behavioural Skills among participants at baseline and 4 months follow- up following intervention

	Baseline	4-months follow-up	Paired samples t-test value	DF	P
	M (SD)	M (SD)			
HIV and AIDS knowledge (26 items) ($\alpha=.87^a; .79^b$) “One session” (n=117) “Two sessions” (n=155) “Three sessions” (n=88)	18.2 (5.8)	20.8 (4.1) 20.5 (4.3) 20.8 (4.3) 21.3 (2.7) ^c	-7.90	337	.000
Behavioural intentions (7 items) ($\alpha=.85; .87$) “One session” “Two sessions” “Three sessions”	31.7 (8.7)	33.6 (8.2) 33.7 (9.6) 33.0 (7.4) 34.9 (6.1) ^c	-3.95	351	.000
Risk reduction skills (14 items) ($\alpha=.91; .85$) “One session” “Two sessions” “Three sessions”	8.8 (4.4)	9.7 (4.6) 10.2 (4.9) 9.0 (4.7) 10.2 (4.0) ^c	-3.09	331	.002
Risk reduction self-efficacy (9 items) ($\alpha=.94; .95$) “One session” “Two sessions” “Three sessions”	64.4 (25.4)	71.8 (24.3) 68.6 (26.8) 72.7 (23.3) 77.1 (19.9) ^c	-5.33	352	.000

Sexual risk and risk reduction outcomes among participants at baseline and 4 months follow-up following intervention

	Baseline	4-months follow-up			P
	N (%)	N (%)	McNemar Chi-square test		
			Contingency coefficient		
≥2 sex partners	75 (20.7)	18 (8.2)	.32		.000
Never used a condom with partner 1 in the past 3 months	206 (54.8)	35 (16.4)	.23		.000
No condom at last sex with partner 1	204 (52.6)	52 (23.6)	.22		.000
Use of alcohol or drugs before or while having sex the last time with partner 1	65 (16.8)	8 (3.7)	.29		.000
Partner used alcohol or drugs before or while having sex the last time with partner 1	83 (21.9)	31 (14.6)	.29		.020
Given someone money or drugs to have sex with you in the past 3 months	28 (7.9)	5 (1.4)	.05		.000
Had sex with someone to get money and/or drugs in the past 3 months	29 (8.2)	7 (2.0)	.10		.000
Had sex with someone to get food or a place to stay in the past 3 months	39 (11.0)	8 (2.3)	.10		.000
Sexually abstinent in past 3 months	119 (25.5)	125 (36.4)	.13		.017
Hazardous or harmful drinking	77 (15.8)	25 (7.0)	.32		.000
	M (SD)	M (SD)	Paired samples t-test value	Df	P
Total AUDIT* score	3.1 (6.9)	1.2 (4.3)	5.69	358	.000

Conclusion

- First to demonstrate that a brief lay counsellor-delivered HIV risk reduction intervention for PLHIV immediately after diagnosis can be implemented into routine care,
- Is acceptable to HIV-infected patients, and
- May be effective in reducing HIV risk behaviour (multiple sexual partners, unprotected sex, and alcohol or drug use in the context of sex) among HIV-infected patients

Conclusion

- Training of the lay counsellors in the Options intervention took a relatively short time (3 days) and can be readily integrated into ongoing lay counsellor trainings of the Department of Health,
- Positive results of this study suggest that this intervention may be a promising in reducing HIV risk behaviour among PLHIV immediately after diagnosis.
- A two session Options intervention is recommended for more feasible implementation.

Acknowledgement

- Funding:
Bill & Melinda
Foundation



Social science that makes a difference