Sexual Risk Behavior and Behavior Change Among Newly Diagnosed Persons with HIV:

The Impact of Targeted Outreach Interventions Among Hard-to-Reach Populations

National Evaluation and Program Support Center to conduct a multi-site evaluation of outreach activities designed to engage and retain individuals with HIV in medical care. Funded by Health Resources and Services Administration

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Background

- The CDC notes that a comprehensive HIV prevention strategy includes knowledge of HIV status, counseling to reduce high risk behavior, and referral for appropriate medical and ancillary care.
- The Advancing HIV Prevention Initiative includes a focus on prevention efforts with positives.

Prevention with Positives

- There is some literature to support that newly diagnosed persons living with HIV/AIDS (PLWHA) who undergo HIV counseling reduce risk behaviors, but up to 33% continue to engage in high risk sexual activity. *

- *Kalichman SC, Rompa D, Cage M, et al. Effectiveness of an intervention to reduce HIV transmission risks in HIV-positive people. *Am J Prev Med.* Aug 2001;21(2):84-92.

Study Objectives

- To examine the secondary effect of the HRSA Targeted Outreach Initiative in reducing sexual risk behavior among newly diagnosed PLWHA.
- To assess the number of program contacts that are associated with a reduction in sexual risk over 12 months of follow-up.

Study Hypothesis

- Sexual risk behavior will be reduced after participating in targeted outreach programs.
- A moderate amount of program contacts (1-3/month) will be significantly associated with a reduction in sexual risk behavior.

Methods

- Participants from 10 sites across the US were enrolled in outreach interventions designed to engage and retain PLWHA in medical care.
- Programs provided outreach, advocacy, HIV educ./risk reduction counseling, patient navigation and linkage to care.

Participant Interviews

- Conducted at Baseline, 6-month follow-up and 12-month follow-up.
- Questions related to HIV medical care use, barriers to care, facilitators to care, sexual risk behavior.

Statistical Methods

- Primary outcome = Unprotected sex in the last 6 months (y/n).
- Program contacts modeled using 3 indicator variables.
- Interaction between time and program contacts used to determine if differences post-baseline depended on the number of contacts.

Sample

- 116 PLWHA were considered newly diagnosed in the overall sample. The mean time since diagnosis was 2.4 months prior to enrolling in the study.
- Eligible patients were purposively sampled and were considered at risk of not obtaining adequate HIV primary care.

Baseline Characteristics of Sample

Gender	
Male	80%
Female	20%
Race/Ethnicity	
White	15%
Black/AA	59%
Latino/a	22%
Education	
High School or less	74%
Sexual Minority	61%
Housing	
Someone else's home	43%
Temporary housing	27%

Baseline Characteristics of Sample cont'd

Monthly Income, Mean (SD)	$366 (439)
SF-12 MCS, Mean (SD)	41.5 (13.0)
Reported no visits to an HIV provider since testing positive	31%
Median Viral Load at Intake	21,900
CD4 Count <350	47%

Results

Table 1

Purpose of Contact	N	%
Appointment Coordination	766	60
Relationship Building	418	32
Service Coordination	351	27
Provide Concrete Services	187	14
Accompany Client to Appointment	128	10
Counseling	86	7
Provide HIV Education/Risk Reduction Ed.	84	6
Provide Program Information	68	5
Health Care Referrals	52	4

Change from Baseline to Follow Up in Self Reported Unprotected Sex

Table 2
Association between time and reporting unprotected sex in the previous 6 months among newly diagnosed PLWHA

Time period	N	Reported unprotected sex	OR* (95% CI)	Robust variance based p-value
Baseline	116	53.5%	Referent	--
6 months post intervention	90	21.1%	.24 (.17, .32)	< .0001
12 months post intervention	78	19.2%	.21 (.13, .36)	< .0001
Post-baseline	95	20.2%	.22 (.17, .30)	< .0001

*Accounting for potential clustering by site

Association Between Program Contacts and a Decrease in Sexual Risk Behavior

Table 3

Association between the quantity of program contacts and a decrease in sexual risk behavior among newly diagnosed PLWHA assessed with multiple logistic regression analysis using GEE

Independent Variable	AOR† (95% C.I.*)	Robust variance-based p-value
Number of intervention program contacts in the first 6 months		
Less than or = 2	referent	referent
3 to 5	1.37 (0.37, 4.93)	.63
6 to 16	0.27 (0.08, 0.89)	.03
17 or more	1.98 (1.08, 3.64)	.03

* 95% confidence interval based on robust variance estimates

†Adjusted odds ratio: adjusted for relationships status at baseline (married or partnered vs. not), age sexual minority (yes/no), having ever used amphetamines or other stimulants without a prescription and the presence of an undetectable viral load post-baseline.

Limitations

- Demonstration project
- Primary aim of the Outreach Initiative was not to reduce risk behavior but to engage and retain PLWHA in care – Outcome variable is not detailed

Discussion

- Newly Diagnosed PLWHA enrolled in the Outreach Initiative demonstrated a marked reduction in sexual risk behavior over time.
- Those who had a moderate number of program contacts were more likely to sustain a reduction in sexual risk behavior over 12-months of f/u.

Discussion

- The Outreach Initiative may be seen as a complementary model to traditional standards of counseling, testing and referral.
- Provision of supplemental interventions by trained non-medical personnel is associated with higher linkage to care and perhaps, a reduction in risk behaviors.