Readiness To Change HIV/HCV Risk Behavior Among Young African American IDUs .

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Objective:

To examine the differential effects of self-efficacy and self-esteem on stimulating readiness to change HIV/HCV sexual and drug use risk behaviors in a cohort of young African American IDUs participating in a longitudinal study comparing the relative efficacy of three HIV/HCV risk reduction interventions.

thods:

part of a National Institute on Drug Abuse (NIDA) - func
reduction intervention study, 228 young incarcerat
can American IDUs were tested for HBV and HCV (Abb
oratories) and interviewed using an audio comput
isted interview schedule (ACASI) designed w
estionnaire Development System (QDS) software. Da
ected included participant demographics, high risk inject
ctices including sharing syringes, cookers, cotton, rin
er, and backloading, high risk sexual behavior practic
well as measures of readiness to change, self efficacy a
esteem.

thods:

baseline participants were randomized into one of three rvention arms:

Basic counseling and testing arm with pre and post test nseling using a standard CDC protocol

P- Pharmacy Syringe Purchase– Participants were taugh to purchase syringes at pharmacies (permitted by isiana law) without calling attention to themselves and atening pharmacy personnel

BI- Brief client centered behavioral intervention using ivational Interviewing techniques

thods:

ee Measures of Readiness to Change

ention not to Share Syringes

ention to Purchase Syringes at a Pharmacy

ention to use Condoms

h was measured at baseline and 6 month follow-up usin
5 point scale ranging from 1=never to 5=always

thods:

ction Risk Scale-- measured at baseline and 6 month
ow-up. The scale is a summary measure of the
notomous responses (0=no, 1=yes) to 5 self reported
ction risk behaviors (range 0-5; Chronbach's alpha=.86)

aring Syringes

aring Cookers

aring Rinse Water

aring Cotton

ckloading

thods: Self Esteem and Self Efficacy measured at eline and 6 month follow-up

f-Esteem– (Rosenberg, 1965)– 10 item scale where ticipants are asked to respond to questions about mselves on a 4 point scale ranging from (0) strongly agree to (3) strongly agree Chronbach's alpha = .82; rang 0. Example: "I feel that I have a number of good qualities

f Efficacy– HIV/HCV– 2 item scale- self report of self cacy related to prevention of HIV/HCV infection; range fr ow self efficacy to 6= high self efficacy; Chronbach's ha=.74. Example: "How much can you do to keep from ing HIV/AID?" and "How much can you do to keep from ing Hepatitis C?"

sults:

the 228 participants interviewed at baseline, 7 we
ceased at 6 month follow-up, 28 were re-incarcerated a
were lost to follow-up. With the exception of gender the
re no differences in the demographics of participan
npleting only baseline data and those completing bo
seline and 6 month follow-up (Table 1). Similarly the
re no differences in baseline and 6 month participa
aracteristics across intervention arms (Table 2).

ble 1 Comparison of Participants who completed 6 month follow-up d those who completed only baseline interviews

haracteristic	Baseline	6 month	statistic
	(N=69)	(N=159)	
ean Age	25.09	24.74	t=.774
ean # incarcerations	9.22	9.20	t=.007
ean age 1st injection	20.46	20.48	t=.045
ean times in drug Tx	1.81	1.42	t=1.41
ean mo. Income	$1249.00	$1138.48	t=.618
ale	64(92.8%)	159(100%)	x^2=11.78
ngle never married	48(69.6%)	126(79.2%)	x^2=4.71
High School	41(59%)	110(69%)	x^2=4.89
omeless	12(17.4%)	36(22.6%)	x^2=.798
CV+	46(67.6%)	109(69.4%)	x^2=.070
BV+	1(1.5%)	9(5.7%)	x^2=++

05

Chi square not computed due to cell count less than 5

ble 1 (cont.) Comparison of Participants who completed 6 month follow- and those who completed only baseline interviews

haracteristic	Only Baseline (N=69)	6 month (N=159)	statistic
tervention Arm			
Control	24(34.8%)	65(40.9%)	x^2=.07
PSP	31(44.9%)	62(39.0%)	x^2=.07
CCBI	14(20.3%)	32(20.1%)	x^2=.07

05

Chi square not computed due to cell count less than 5

ble 2 Descriptive characteristics by intervention arm at follow-up

haracteristic	CT	PCP	CCBI	statistic
	(N=65)	(N=62)	(N=32)	
ean Age	24.35	25.18	24.69	f=1.14
ean # incarcerations	8.07	11.38	7.00	f=1.26
ean age 1st injection	19.91	21.20	20.26	f=1.91
ean times in drug Tx	1.40	1.57	1.16	f=1.41
ean mo. Income	$952.21	$1133.03	$1522.31	f=2.58
ale	65(92.8%)	62(100%)	32(100%)	x^2=na
ngle never married	46(70.8%)	51(82.3%)	29(90,6%)	x^2=5.70
High School	44(67.7%)	44(71.0%)	22(68.8%)	x^2=.163
omeless	17(26.2%)	11(17.7%)	8 (25%)	x^2=1.41
CV+	47(74.6%)	42(67.7%)	20 (62.5%)	x^2=1.60
BV+	4(6.3%)	4(6.5%)	1 (3.1%)	x^2=++

Chi square not computed due to cell count less than 5

**ble 3 High Risk Injection Practices at baseline and 6 month follow-
by intervention arm**

haracteristic	CT	PCP	CCBI	statistic
hared Syringes				
baseline	28(43.0%)	29(47.0%)	15(47.0%)	x^2=4.64
6mo follow up	11(17.0%)	9(15.0%)	9(28.0%)	x^2=2.91
hared Cookers				
baseline	29(44.6%)	34(54.8%)	15(46.9%)	x^2=1.40
6mo follow up	16(25.0%)	21(34.0%)	6(19.0%)	x^2=3.76
hared Rinse Water				
baseline	27(41.5%)	28(45.2%)	16(50.0%)	x^2=.632
6mo follow up	12(18.0%)	16(26.0%)	6(19.0%)	x^2=.539
hared Cotton				
baseline	26(40.0%)	28(45.2%)	13(40.6%)	x^2=.384
6mo follow up	14(22.0%)	15(24.0%)	6(19.0%)	x^2=.539
ckloaded				
baseline	18(27.7%)	23(37.1%)	9(28.1%)	x^2=1.51
6mo follow up	7(11.0%)	10(16.0%)	8(25.0%)	x^2=3.21
ean Injection Risk Score				
baseline	1.97	2.29	2.13	f=.424
6 month follow-up	.923	1.15	1.09	f=.311

High Risk Injection Practices

As Table 3 demonstrates, all participants significantly reduced their high risk injecting practices

Changes in high risk injecting practices were equivocal across intervention arms

ble 4 Readiness to change risk behavior at baseline and 6 month low-up by intervention arm

haracteristic	CT (N=65)	PCP (N=62)	CCBI (N=32)	statistic
an not to share needles in future				
baseline	62(95.4%)	62(100%)	32(100%)	x^2=.1.50
6mo follow up	61(93.8%)	61(98.4%)	31(96.9%)	x^2=.972
an to use pharmacies to purchase syringes				
baseline	8(12.3%)	17(27.4%)	5(15.6%)	x^2=15.74
6mo follow up	24(36.9%)	25(40.3%)	12(37.5%)	x^2=1.41
an to use condoms in the future				
baseline	47(72.3%)	46(74.2%)	25(78.1%)	x^2=6.17
6 month follow-up	42(64.6%)	39(62.9%)	20(62.5%)	x^2=.725

ble 4 Self Esteem, and HIV/HCV Self Efficacy by Intervention Arm signment

haracteristic	CT	PCP	CCBI	statistic
ean Self Esteem Score				
baseline	19.02	18.34	18.91	f=.220
6mo follow up	17.05	17.79	19.00	f=.876
ean HIV/HCV Self Efficacy Score				
baseline	5.00	5.40	4.75	f=1.807
6mo follow up	4.48	5.03	5.06	f=1.564

Correlations Among Self Esteem, HIV/HCV Self Efficacy HIV/HCV Risk Behavior and Readiness to Change Risk Behavior

- Self esteem and HIV/HCV self efficacy are significantly positively correlated at both baseline an six-month follow-up (r=.23 p≤.01; r=.43 p≤.01)
- Self esteem is significantly inversely correlated to injection risk behavior scores at 6 month follow-up (r=.24 p≤.01)
- Self esteem is significantly positively correlated with intention to not share syringes (r=.20 p≤.05), intentic to use pharmacies to purchase syringes (r=.21 p≤.0 but not to intention to use condoms (r=.15 p=ns)

Conclusions:

The findings from this study support our clinical experiences with IDUs seeking substance abuse treatment and strongly suggest that increasing self-esteem and self efficacy can both promote recovery and reduce HIV/HCV related high risk behaviors. Therefore, employing HIV/HCV interventions that increase self-esteem and self-efficacy are likely to result in significant reduction of HIV and HCV high risk injecting practices and should be incorporated into risk reduction programs targeting young injecting populations.