

## **Objective:**

To examine the relationship between exposure to violence and HIV/HCV high risk-behaviors in a cohort of young African-American IDUs. Of particular interest is how different types of violence exposure impact participants' high risk health behaviors.

## Methods:

part of a National Institute on Drug Abuse (NIDA) - funded harm reduction intervention study, 221 young incarcerated African American IDUs were tested for HCV (Abbott Laboratories) and interviewed using ACASI. Data collected included *direct/vicarious violence exposure* within six months before their most recent incarceration and *direct/vicarious violence exposure in the family in which they grew up*. Risk behaviors examined included direct/indirect sharing (syringes, filters, cotton and/or rinse water) practices, frequency of injecting and number of years injecting, high risk sexual behavior practices including condom use, prior history of sexually transmitted infections (STIs) and engagement in street drug use.

# Table 1 – Participant Exposure to Violence (N = 221)

Type of Exposure/Crime	Sample %	N
<b><i>Participant Witnessing Violence</i></b>		
Witnessed another threatened w/gun or knife	72.4%	160
Witnessed another beaten up	76.0%	168
Witnessed another beaten severely	70.1%	155
Witnessed another killed	61.1%	135
Witnessed another yelled at/threatened verbally	56%	124
Witnessed another called names/humiliated	50%	111
<b><i>Participant Victimized</i></b>		
Participant threatened w/gun or knife	38%	84
Participant beaten	17%	38
Participant shot/stabbed/or otherwise wounded	18%	39
<b><i>Violence in Participants' Homes</i></b>		
Witnessed physical fighting among adult family members	45%	98
Fought Physically w/Parents	17%	37
Fought Physically w/Siblings	46%	101

## RESULTS

The mean age of the participants was 24.8 years, 97.7% (152) were male, 68.8% (152) were HCV infected and 4.1% (9) were co-infected with HBV.

Table 1 presents the participants' exposure to violence through three types of experiences: 1) exposure to violence through *witnessing violence* perpetrated on others; 2) exposure to violence through *direct victimization of the participants themselves*; and 3) exposure to violence as a result of *violence within the participants' own homes*.

In the 6 months prior to latest arrest, 73% witnessed another person threatened with a gun/knife, 70% saw another person beaten severely, and 61% witnessed a murder, while 38% were threatened with a gun/knife, 17% had been beaten, and 18% had been shot, stabbed, or otherwise wounded.

Characteristics	% > 3 on risk scale	Odds Ratio	95% CI
<b>Witnessed someone beaten up</b>			
No	15.1		
Yes	38.1	3.46	1.534-7.812***
<b>Witnessed someone beaten severely</b>			
No	21.2		
Yes	37.4	2.221	1.132-4.357*
<b>Witnessed someone killed</b>			
No	24.4		
Yes	37.8	1.879	1.029-3.433*
<b>Witnessed someone threatened w/ gun or knife</b>			
No	23.0		
Yes	36.3	1.909	.969-3.761
<b>Participant threatened with gun or knife</b>			
No	27.7		
Yes	40.5	1.772	.998-3.146*
<b>Participant beaten</b>			
No	30.6		
Yes	42.1	1.649	.806-3.377
<b>Participant shot/stabbed or wounded</b>			
No	32.4		
Yes	33.3	1.042	.500-2.173

**Table 2** presents the participants' Non-Family violence exposure *through witnessing violence perpetrated against others and through personal victimization* in relationship to their high risk injection practices through the use of a 4-point additive scale of high risk direct and indirect injection behavior (sharing syringes, cookers, cotton and/or rinse water, backloading).

Young IDUs who, in the 6 months prior to last incarceration, witnessed someone being beaten up (OR 3.12; 95%CI, 1.534-7.812), witnessed someone being beaten severely (OR 2.221; 95%CI, 1.132-4.357), witnessed someone being killed (OR 1.879; 95%CI, 1.029-3.433), were threatened themselves (OR 1.772; 95%CI, .998-3.111) were more likely to report participating in more than 3 high risk direct or indirect injection practices.

### Table 3 – Violence in Home and High-Risk Injecting Behaviors (N = 221)

<b>Characteristics</b>	<b>% &gt; 3 on rsk scale</b>	<b>Odds Ratio</b>	<b>95% CI</b>
<b>Experienced physical fighting among adult family members</b>			
No	32.5		
Yes	32.7	1.006	.571-1.772
<b>Personally fought with parents</b>			
No	33.2		
Yes	29.7	.853	.395-1.840
<b>Personally fought with siblings</b>			
No	29.2		
Yes	36.6	1.404	.798-2.469

**Table 3** presents the participants' *violence exposure, through violence in the home*, in relationship to their *high risk injection practices* using the injection risk scale. Exposure to violence in participants' homes through witnessing adults fighting, participants fighting with parents, and participants fighting with siblings was not significantly associated with high risk injecting behaviors.



**Table 4 – Non-Family Violence Exposure (7 item non-Family Violence scale and High-Risk Sexual Behaviors = 221)**

<b>Characteristics</b>	<b>% &gt;3 on violence scale</b>	<b>Odds Ratio</b>	<b>95% CI</b>
<b>Exchanged Sex for Drugs</b>			
No	3.7		
Yes	23.0	7.75	1.785-33.644**
<b>Exchanged Drugs for Sex</b>			
No	24.5		
Yes	34.1	1.590	.774-3.267
<b>Always used condoms</b>			
No	87.3		
Yes	92.4	1.770	.687-4.561
<b>Had Sex with HIV positive partner</b>			
No	5.6		
Yes	7.4	1.360	.359-5.146
<b>Had Sex with HVC positive partner</b>			
No	3.7		
Yes	1.5	.391	.054-2.849

< .01

**Table 4** presents the participants' violence exposure in relationship to high risk sexual practices using a seven item non-family violence exposure scale (witnessing someone threatened with a gun or knife, witnessing someone beaten up, severely beaten, or killed, or the participant's having been personally threatened, beaten or shot/stabbed, or otherwise wounded).

Participants scoring three or more on the seven item scale were more likely to report exchanging sex for drugs (OR 7.75; 95%CI, 1.785-33.644). Exposure to violence was not significantly associated with participants exchanging drugs for sex, failure to use condoms, or having sex with HIV or HCV positive partners.

## Table 5—Direct and Indirect Sharing Risk Behavior Scale and Non-Family Violence Scale

### Item Direct and Indirect Sharing Risk Behavior Scale

Shared Needle/Syringe 6 Months prior to Incarceration

Shared Cooker 6 Months prior to Incarceration

Shared Cotton 6 Months prior to Incarceration

Shared Rinse Water 6 Months prior to Incarceration

Backloaded 6 Months prior to Incarceration

Range (0—5)      Mean = 3.258

### Item Non-Family Violence Scale

Witnessed someone threatened with gun/knife 6 Months prior to Incarceration

Witnessed someone beaten up 6 Months prior to Incarceration

Witnessed someone beaten severely 6 Months prior to Incarceration

Witnessed someone killed 6 Months prior to Incarceration

Been threatened 6 Months prior to Incarceration

Been beaten 6 Months prior to incarceration

Been shot/stabbed/otherwise wounded 6 Months prior to incarceration

Range (0—7)      Mean = 3.5249

**Table 5** presents the 5 item injection risk scale and its association with the 7 item non-family violence exposure scale. Participants with a score of 3 or more on the non-family violence scale were more likely to have a score of more than 2 on the high risk injecting behavior scale (OR 2.292; 95% CI 1.0-4.570) than participants scoring less than 3 on the non-family violence scale.

## conclusions:

study demonstrates that IDUs are differentially impacted by their exposure to violence committed by others, and that one of the primary effects of this violence is an increase in high-risk health behaviors. An effective intervention for reducing high-risk health behaviors, therefore, should not only include information relative to direct and indirect sharing risks, but also should address the negative impact of exposure to violence committed by others on the health risk behaviors of the population.