CHAIN 2016-3 Report

Trauma Exposure and HIV in New York City

Maiko Yomogida
Angela Aidala
Brittney Cavaliere

Columbia University
Mailman School of Public Health
In collaboration with the NYC Department of Health and Mental Hygiene, the Westchester Department of Health, the HIV Health and Human Services Planning Council of New York, and Public Health Solutions

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C.H.A.I.N. REPORT

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Introduction

Service providers funded by Ryan White Part A programs in the New York Eligible Metropolitan Area are now required to provide services using a Trauma-Informed Care (TIC) approach. To support provider implementation of trauma-informed approaches to service delivery, CHAIN investigators were asked to assess the relationships among trauma exposures, behavioral and situational characteristics, and health and HIV clinical outcomes.

This report will present the lifetime prevalence of trauma exposures among CHAIN participants, as well as correlations between traumatic exposures and demographic, socioeconomic, behavioral, and health-related factors.

Study Questions

For this report, we will address the following:

1) What proportion of CHAIN participants has experienced a traumatic event during their lifetime, and what types of traumatic events are reported most often?
2) Which subgroups of CHAIN participants are more or less likely to have experienced a traumatic event during their lifetime, and what types of traumatic events are reported most often by subgroup?
3) What is the relationship between current socioeconomic and behavioral situations and the type of traumatic events experienced by CHAIN participants?
4) What is the relationship between the exposure to traumatic events and health outcomes?

Key Findings

- Women were significantly more likely to report childhood sexual abuse, childhood physical abuse, adulthood physical assault, adulthood sexual assault, and adulthood loss (Table 2)

- A significantly smaller proportion of MSM reported exposure to any traumatic event (78%) than non-MSM (91%). However, a significantly larger proportion of MSM reported childhood and adulthood sexual assault (28% and 14%, respectively) than non-MSM did (12% and 1%, respectively) (Table 2)

- Overall, women (31% vs. 9% men) and MSM (16% vs. 6% non-MSM) more often experienced multiple violent traumatic events than non-MSM men (Table 5)

- The proportions of participants who reported childhood physical and sexual abuse and adulthood sexual assault were higher among those 41 to 50 years old who were born in 1960s, as well as those younger than 40 (Table 2)

- History of homelessness is correlated with almost all types of traumatic event exposures (Table 3)

- History of homelessness and problem substance use are independently correlated with childhood physical abuse, adulthood sexual assault, and exposure to 3 or more violent traumatic event types (Appendix)

- A greater proportion of past and current problem substance users reported childhood physical abuse and childhood loss of parents or guardian (Table 3). Past users reported experiencing childhood sexual abuse more often than those who never had problem substance use (PSU) or those who currently have PSU (Appendix)

- Past and current problem substance users reported more adulthood violent events and a higher proportion witnessed violent events (Table 3)

- Sexual abuse or assault in both childhood and adulthood were associated with low mental health functioning (Table 4)

- Having multiple missed appointments was associated with many types of traumatic events, such as childhood physical and sexual abuse, adulthood physical assault, adulthood loss, as well as natural disasters and accidents (Table 4)

Methodology

Sample: The data are from 545 interviews completed during the seventh round of interviews (2011-2013) in NYC. The majority of participants (58%; n=318) were recruited during the 2002-2004 recruitment period and the rest (42%; n=227) were recruited during the 2008-2010 recruitment period.

Measures: Trauma exposure is assessed by asking CHAIN participants whether they have experienced specific events that can produce lasting damage to the psycho-physiological state (SAMHSA, 2017). The CHAIN survey includes 14 categories of traumatic events, which are combined into 8 larger categories for analysis (Table 1). These 14 questions do not assess whether the event traumatized the person or not, but rather they assess the person's exposures to potentially traumatic events. Demographic variables include gender (men, women, transgender), race/ethnicity (Black, Latino, White, Other), and age (40 or less; 41-50; 51-60; 60 and over). The men category is further broken down by MSM status, which is defined based on reported lifetime experience of male-to-male sexual intercourse.

Situational factors include homelessness, PSU, poverty, and incarceration. Homelessness is categorized into never and ever categories, using questions that assess if respondents have ever experienced not having a regular place to live. Ever being homeless or ever not having a regular place to live is defined as any lifetime experience of having slept on the street or stayed in a shelter or an SRO or welfare hotel, with no supportive services. Current PSU is indicated by the use of heroin, cocaine, or crack five or more times in one's lifetime, and at least one use in the past six months, or problem drinking within the past six months. Problem drinking is defined by one or more "yes" responses to the CAGE questionnaire (Ewing, 1984) or drinking weekly or more and having five or more alcoholic

drinks when they drink during the past 6 months. Past PSU refers to whether a participant reported use of heroin, cocaine, or crack at least five times, at any point in their life, or reported problem drinking during any point in their life, but no use of those illicit substances or no problem drinking within the past six months.

Table 1. Categories of Traumatic Events

Original Category	Combined Category
Physical assault or abuse as a child	Childhood Physical[1]
Sexual assault or rape as a child or teenager	Childhood Sexual[1]
Loss of a parent or guardian before age 18	Childhood Loss
Physical assault by partner as an adult	Adulthood Physical[1]
Physical assault by non-partner as an adult	Adulthood Physical[1]
Sexual assault or rape as an adult	Adulthood Sexual[1]
Direct combat in a war	Witnessed Violence
Seeing violence in family when growing up	Witnessed Violence
Seeing someone physically assaulted or abused	Witnessed Violence
Seeing someone seriously injured or violently killed	Witnessed Violence
Losing a child through death	Adult Loss
Loss of a spouse, partner or loved on as an adult	Adult Loss
A serious accident or fire	Other
A natural disaster	Other

[1] Violent traumatic event (see below) includes these categories

Whether the CHAIN participants are living above or below the United States Census Poverty Threshold for the year is conservatively measured based on the upper bound of the reported income range, adjusted for the number of children and adults living in the household. For example, the poverty threshold of 2011 indicates that a three-person household, with two children under 18 years lives in poverty if the annual income is less than $19,337. Applying this rule, CHAIN participants whose household income is less than $15,000 are categorized as living in poverty, and participants whose household income is in the next range ($15,000 and $24,999), or any higher range are categorized as not living in poverty. History of incarceration is defined as having ever been held in a correctional facility.

Health and medical service utilization variables include physical health functioning, mental health functioning, HIV viral suppression, antiretroviral therapy (ART) adherence, dropping out of HIV primary care, missed appointments, and emergency department visits. Physical health functioning was measured using the Medical Outcomes Study (MOS) SF-12v2 Physical Component Summary (PCS)(Ware, 2005). Since the Medical Outcomes Trust guidelines do not specify a cut-off for physical health functioning and no study was found indicating a standard cut-off to define poor health among people living with HIV (PLWH),

this study uses the U.S. general population mean score of 50 as a cut-off (below 50, on or above 50). Individuals are considered as having low mental health functioning when they score below 42 on the Mental Component Summary (MCS) on the MOS SF-12v2 (Ware, 2005). The score of 42 as a cut-off for low mental health functioning is in accordance with the Medical Outcomes Trust guidelines.

HIV viral suppression is created based on a self-reported variable coded either as an actual numerical value or categorized by the participant as "undetectable," "good," or "bad." A viral load of <400 copies, or labeled as "undetectable," and "good" were coded as "suppressed viral load," and a viral load >400 copies or labeled as "bad" were categorized as "unsuppressed viral load." The ART adherence variable is created in two steps. First, whether the respondent is on an accepted ART regimen is determined by comparing the medications a respondent is taking at the time of the interview, to the DHHS's ART guidelines[1] effective at the time of the interview. Those who are not taking any antiretroviral medication and those taking medications listed under "not recommended" or "should be changed" regimens in the DHHS's guidelines are classified as "not on ART." An individual is considered to be "adherent" to ART when reporting they "take medications exactly as prescribed, almost never missing a dose" and reporting not missing any medications in the two days preceding the interview. Respondents who are not taking any antiretroviral medication or who are not taking an acceptable ART regimen are categorized as not adherent to ART.

An individual is classified as a "dropout" of HIV medical care when he or she answers that he or she "stopped going to the doctor or just didn't have any appointments for six months or more" since the last interview (for follow-up interviews), or since the last year (for baseline interviews). Interviewers are instructed not to include participants as dropouts if they report their bi-annual appointments were scheduled slightly late due to schedule conflicts or availability of appointment slots. When respondents report that they had an episode of dropping out of care, a subsequent question is asked to clarify whether or not the respondent intended to drop out of care. An individual is classified as having missed appointments if they missed two or more medical appointments, including appointments for tests or checkups, in the past six months. The emergency department (ED) visits variable counts any visit during the past 6 months.

In addition to the types of traumatic event, measures for the number of different types of any traumatic events and the number of different types of violent events are created. The number of different types of any traumatic events is the number of reported traumatic events . The number of different types of violent events is the number of reported violent events, including childhood sexual abuse, childhood physical abuse, adulthood physical assault, and adulthood sexual assault.

Analysis: The proportion of participants who experienced different types of events are reported in Tables 2 through 4. Associations between exposure to traumatic events and characteristics of CHAIN participants are analyzed using chi-squared test. In addition to the

[1] https://aidsinfo.nih.gov/guidelines/html/1/adult-and-adolescent-arv/0

types of traumatic event, the number of different types of any traumatic events and the number of different types of violent events are assessed in relationship to socio-demographic, behavioral, and health characteristics. A series of multiple logistic regression analyses were applied to more precisely assess the relationships between trauma exposures and the predictor variables. The results are presented in the appendix to this report. The transgender category and "Other" race/ethnicity category were excluded from the chi-squared test due to the small sample size (n=9 and n=12, respectively). These categories are included in the regression models.

Results

Types of Traumatic Events: Overall, 87% of NYC CHAIN participants reported experiencing at least one traumatic event during their lifetime (mean number of types of traumatic events =4) as presented in Table 2. One in three (38%) respondents experienced childhood physical (32%) or sexual abuse (26%), and 30% reported losing a parent or a guardian before the age of 18. During adulthood, 40% experienced physical (36%), or sexual assault (17%), and 68% experienced the loss of a child or a loved one through death. Two-thirds (68%) reported witnessed violent events during their lifetime and a third (31%) reported experiencing other traumatic events, such as a serious accident or fire, or a natural disaster such as hurricane, major earthquake, or flood.

Table 2. Traumatic Event Exposures and Demographics

	Any Trauma	Childhood Event			Adulthood Event			Witnessed Violence	Other
		Physical	Sexual	Loss	Physical	Sexual	Loss		
Total (n=545)	87%	32%	26%	30%	36%	17%	68%	68%	35%
Gender									
Transgender	100%	56%	56%	33%	78%	44%	67%	89%	33%
Women	87%	37%*	37%*	28%	48%*	30%*	74%*	67%	35%
Men	87%	28%	17%	31%	25%	5%	63%	69%	35%
MSM	*78%**	*34%*	*28%**	*27%*	*27%*	*14%**	*56%*	*63%*	*32%*
Non-MSM	*91%*	*26%*	*12%*	*33%*	*24%*	*1%*	*66%*	*71%*	*36%*
Race/Ethnicity									
Black	86%	30%	26%	32%	34%	17%	61%*	70%	26%*
Latino	91%	37%	29%	29%	41%	17%	77%	68%	47%
White	83%	26%	15%	24%	30%	13%	67%	59%	41%
Other	83%	36%	45%	18%	18%	18%	82%	73%	36%
Age									
40 and under	75%†	33%*	28%*	26%	33%	15%†	36%*	49%*	23%†
41 to 50	86%	40%	35%	29%	37%	22%	65%	71%	31%
51 to 60	89%	29%	21%	33%	36%	15%	74%	71%	37%
Above 60	91%	23%	18%	28%	33%	11%	73%	66%	44%

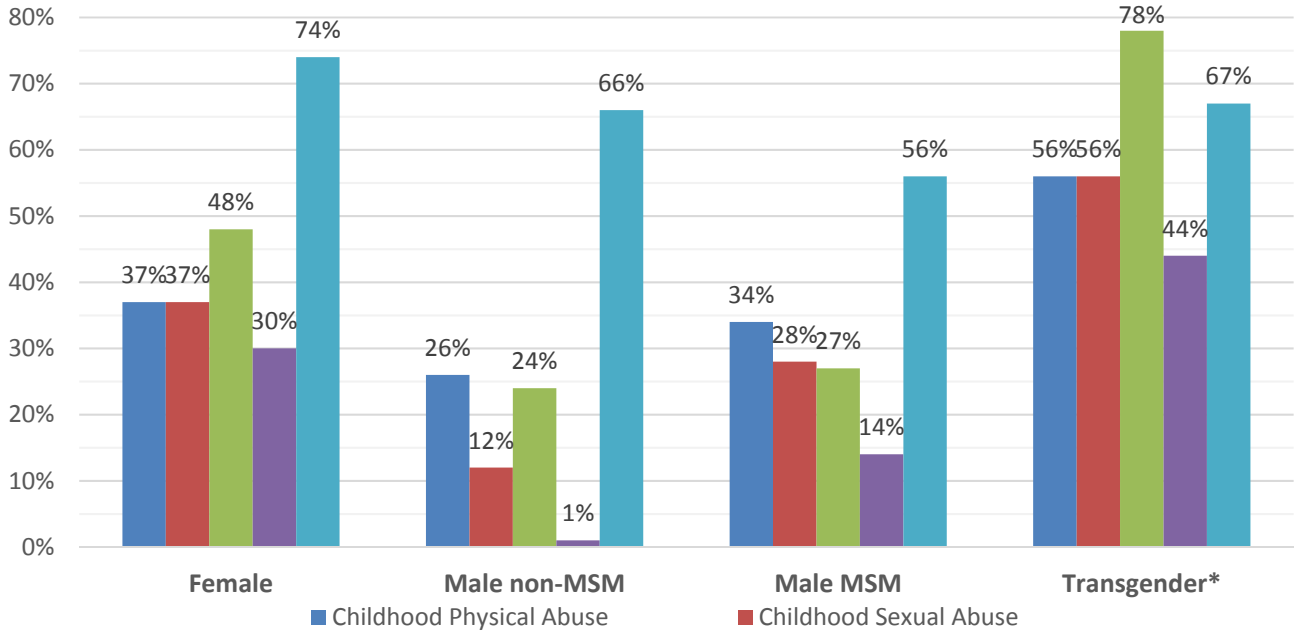
Gray shading indicates small sample size for transgender category (n=9) and "other" race/ethnicity category (n=12). These categories were not included in the chi-square tests.

* p<.05, † p<.10

Although there was no gender difference in overall exposure to a traumatic event, women had a higher prevalence of traumatic event exposures than men in five of the eight traumatic event categories. There were statistically significant differences between men and women in childhood physical abuse (28% and 37%) and sexual abuse (17% and 37%), adulthood physical assault (25% and 48%) and sexual assault (5% and 20%), as well as adulthood loss (63% and 74%). Although the sample size is too small for reliable generalization, all transgender respondents (n=9) reported experiencing some type of traumatic event. Higher percentages of transgender individuals reported childhood physical (56%) and sexual abuse (56%), adulthood physical (78%) and sexual assault (44%), as well as witnessed violence (89%) in their lifetime. Significantly smaller proportions of MSM reported exposure to any traumatic event (78%) than non-MSM (91%). However, a significantly larger proportion of MSM reported childhood and adulthood sexual assault (28% and 14%, respectively) than non-MSM did (12% and 1%, respectively).

There were few racial/ethnic differences in experiencing a traumatic event. Respondents of Hispanic origin reported more adulthood loss (77%), and a smaller percentage of Black respondents (26%) reported experiencing a disaster, accident or a fire. With respect to age, individuals under 40 had less exposure to overall traumatic event than older respondents, most likely due to having a shorter length of time to encounter traumatic events. Of particular note, respondents 41-50 years of age reported greater exposures to childhood physical abuse (40%) and childhood sexual abuse (35%) compared to all other age groups. Similarly, this age group had the greatest exposure to adulthood sexual assault (22%).

Figure 1. Directly Experienced Traumatic Events by Gender and MSM/non-MSM Status



*Transgender N=9

In terms of behavioral and situational factors, experiencing homelessness is correlated with almost all types of traumatic event exposures. CHAIN participants who have been homeless reported childhood physical (37%) and sexual abuse (30%), childhood loss (36%), adulthood violence (40%) and sexual assaults (21%), witnessed violence (73%), and other types of traumatic events (68%) more often than participants who have never been homeless (See Table 3).

Table 3. Traumatic Event Exposures and Situational Factors

	Any Trauma	Childhood Event			Adulthood Event			Witnessed Violence	Other
		Physical	Sexual	Loss	Physical	Sexual	Loss		
Homelessness									
Ever homeless	89%	37%	30%	36%	40%	21%	68%	73%	41%
Never homeless	84%	24%*	22%*	20%*	31%*	12%*	67%	60%*	25%*
Problem Substance Use									
Current	88%	38%	24%	32%	41%	18%	68%	75%	32%
Past	90%	36%	30%	32%	38%	19%	67%	74%	36%
Never	82%*	23%*	21%†	25%	29%†	14%	68%	55%*	34%
Living in Poverty									
Yes	87%	34%	28%	31%	38%	19%*	67%	69%	32%†
No	89%	28%	22%	29%	33%	11%	68%	67%	40%
Ever Incarcerated									
Yes	90%	37%*	27%	31%	37%	16%	66%	77%*	36%
No	86%	28%	26%	29%	36%	18%	69%	63%	34%

* p<.05, † p<.10

Respondents with no history of PSU reported fewer traumatic event exposures (82%) compared to those with past PSU (90%) or current PSU (88%). There were statistically significant differences between those who never had PSU and those with past or current PSU, in terms of the proportions exposed to childhood physical abuse (23%, 36%, 38%, respectively), childhood sexual abuse (21%, 30%, and 24%), adulthood physical assault (29%, 38%, and 41%), and witnessed violence (55%, 74%, and 75%). Those living below the poverty threshold more often reported experiences of adulthood sexual abuse (19%) than those living above the poverty threshold (11%).

There was also a statistically significant difference between those living below the poverty threshold (32%) and those living above the poverty threshold (40%) in other traumatic events. Compared to participants with no history of incarceration (28%), a statistically significant higher percentage of participants with a history of incarceration, reported experiencing childhood physical assault (37%). Participants with a history of incarceration also reported witnessed violence (77%) more than their counterparts (63%). The logistic regression results showed that a history of homelessness and PSU are independently correlated with childhood physical abuse, adulthood sexual assault, and exposure to 3 or more violent event types. A history of homelessness was also significantly correlated with childhood loss of parent or parent-like person, as well as exposures to

natural disasters or accidents and fire. Finally, participants with PSU were more likely to have experienced childhood sexual abuse or physical abuse compared to participants who never had PSU (See Appendix).

Respondents with lower physical functioning more commonly reported exposure to adulthood physical assault (39%) than those with higher physical functioning scores (30%). There was also a statistically significant difference between respondents with lower physical functioning (38%) and those with higher physical functioning (30%) in exposure to natural disasters and accidents. In terms of mental health functioning, there were statistically significant differences between respondents with low mental health functioning and higher mental health functioning scores in reports of childhood sexual abuse (30% and 24%) and adult sexual abuse (21% and 13%; See Table 4).

Table 4. Traumatic Event Exposures and Health and Medical Service Utilization

	Any Trauma	Childhood Event			Adulthood Event			Witnessed Violence	Other
		Physical	Sexual	Loss	Physical	Sexual	Loss		
Physical Health Functioning									
PCS<50	86%	34%	28%	32%	39%*	18%	70%	70%	38%†
PCS>=50	89%	30%	22%	26%	30%	15%	64%	64%	30%
Mental Health Functioning									
MCS<42	88%	36%	30%†	28%	37%	21%*	69%	66%	35%
MCS>=42	87%	29%	24%	31%	34%	13%	67%	70%	34%
Viral Suppression									
Unsuppressed	85%	40%	32%	43%	40%	15%	65%	74%	42%
Suppressed	88%	31%	26%	29%*	36%	17%	68%	68%	33%
ART Adherence									
Not Adherent	85%	37%	24%	33%	39%	16%	70%	76%*	43%*
Adherent	88%	31%	28%	29%	35%	18%	67%	66%	33%
Dropped out of Care									
Yes	94%	56%*	39%	28%	44%	22%	72%	72%	56%*
No	87%	32%	26%	30%	36%	17%	68%	68%	34%
Missed Appointments									
2+ appointments	92%†	45%*	35%*	34%	44%†	22%	77%*	75%	46%*
1 or 0 appointments	86%	30%	25%	29%	34%	16%	65%	67%	32%
ED Visits									
Visited ER	88%	36%	28%	32%	38%	22%*	69%	71%	39%
Did not visit ER	87%	31%	26%	29%	35%	15%	67%	67%	34%

Participants who are not on ART were classified as not adherent to ART

* p<.05, † p<.10

Respondents with HIV viral suppression were less likely than respondents without HIV viral suppression to be exposed to childhood loss (29% vs. 43%). Three-quarters (76%) of respondents not adherent to ART reported witnessed violence, compared to 66% of adherent respondents. There was also a statistically significant difference in exposure to natural disasters and accidents, with 43% of non-adherent respondents reporting such exposures, compared to 33% of adherent respondents. Among respondent who recently

dropped out of care, 56% reported childhood physical abuse, compared to 32% among those who did not drop out of care. Similar results were found for exposures to natural disasters or accidents (56% vs. 34%).

Respondents who missed two or more medical appointments reported exposures to traumatic events (92%) more often than respondents who missed one or fewer appointments (86%). There were also statistically significant differences in childhood physical (45% and 30%) and childhood sexual abuse (35% and 25%), adulthood physical assault (44% and 34%), as well as adulthood loss (77% and 65%) and natural disasters and accidents (46% and 32%). Among all healthcare utilization variables used in this study, having 2 or more missed appointments stands out as the most robust correlate of traumatic events. Among those who missed 2 or more appointments, the odds of trauma exposure were increased by at least 20% for all outcomes evaluated (See Appendix). Respondents who visited the emergency department reported adulthood sexual abuse (22%) more often than those who did not visit the ER (15%).

Figure 2. Multiple Exposures & Homelessness and Problem Substance Use

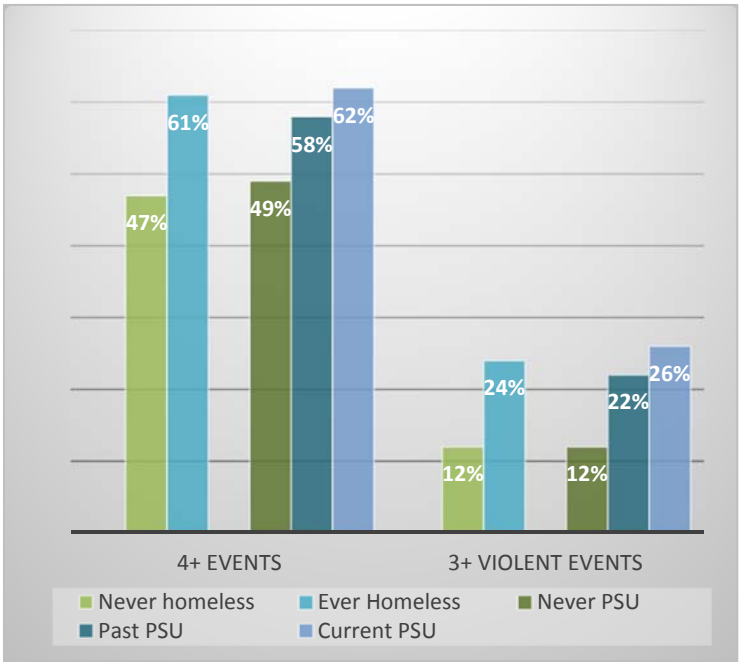
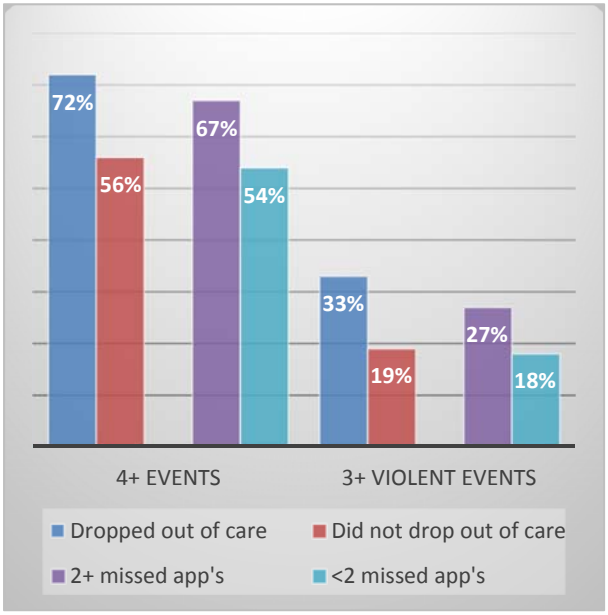


Figure 3. Multiple Exposures & HIV Care



Number of Types of Traumatic Events:
Overall, women (31% vs. 9% among men) and MSM (16% vs. 6% among non-MSM men) more often experienced multiple violent traumatic events than non-MSM men (Table 5). Among CHAIN participants with a history of homelessness, 61% reported 4 or more types of any traumatic event exposures and 24% reported 3 or more types of violent event exposures. This is a significantly larger proportion than that of CHAIN participants without history of homelessness (47% with 4 or more types of any traumatic events and 12% with 3 or more types of violent traumatic events). A larger proportion of current and past problem substance users reported 3 or

more types of violent traumatic events (26% and 22%, respectively) than participants who never had PSU (12%). A greater proportion of individuals who reported missing 2 or more medical appointments in the past 6 months reported multiple episodes of any type of traumatic events (67%) and multiple violent traumatic events (27%) than those with fewer than 2 missed appointments (54% and 18%, respectively).

Table 5. Number of Event Types by Participant Characteristics

	Any Type of Traumatic Event		Violent Traumatic Event	
	4+	**<4**	**3+**	**<3**
Total (n=545)	56%	44%	19%	81%
Gender				
Transgender	78%	22%	56%	44%
Women	60%	40%	31%	69%
Men	52%	48%†	9%	91%*
MSM	48%	52%	16%	84%
Non-MSM	54%	46%	6%	94%*
Race/Ethnicity				
Black	54%	46%	18%	82%
Latino	63%	38%	23%	77%
White	43%	57%*	15%	85%
Other	55%	45%	9%	91%
Age				
40 and under	40%	60%	23%	78%
41 to 50	59%	41%	24%	76%
51 to 60	57%	43%	16%	84%
Above 60	56%	44%	15%	85%
Homelessness				
Ever Homeless	61%	39%*	24%	76%*
Never Homeless	47%	53%	12%	88%
Problem Substance Use				
Current	62%	38%†	26%	74%*
Past	58%	42%	22%	78%
Never	49%	51%	12%	88%
Living Under Poverty Threshold				
Yes	56%	44%	22%	78%
No	54%	46%	14%	86%*
Ever Incarcerated				
Yes	52%	48%	18%	82%
No	62%	38%*	23%	77%

Table 5. Number of Event Types by Participant Characteristics – Cont.

	4+ any traumatic event types	<4 any traumatic event types	3+ violent traumatic event types	<3 violent traumatic event types
Total (n=545)	56%	44%	19%	81%
Physical Health Functioning				
PCS<=50	61%	39%	21%	79%
PCS>50	47%	53%*	16%	84%
Mental Health Functioning				
MCS<=42	57%	43%	23%	77%
MCS>42	55%	45%	17%	83%†
Viral Suppression				
Unsuppressed	62%	38%	24%	76%
Suppressed	56%	44%	19%	81%
ART Adherence				
Not Adherent	62%	38%	22%	78%
Adherent	54%	46%	19%	81%
Recently Dropped out of Care				
Yes	72%	28%	33%	81%
No	56%	44%	19%	67%
Missed Appointments				
2+ appointments	67%	33%	27%	73%
1 or 0 appointments	54%	46%*	18%	82%*
ED Visits				
Visited ER	63%	37%	26%	74%
Did not visit ER	54%	46%†	17%	83%*

Discussion

The vast majority of CHAIN participants reported experiencing some type of traumatic event in their lifetime. Women were significantly more likely to report childhood sexual abuse, childhood physical abuse, adulthood physical and sexual assault, and adulthood loss. Even though a significantly smaller proportion of MSM reported exposure to overall traumatic exposure than non-MSM, a significantly larger proportion of MSM reported childhood and adulthood sexual assault, as well as multiple types of violent events than non-MSM did. In short, women and MSM were more likely than men to have been victims of violence.

In general, older participants reported experiencing more traumatic events than younger ones. However, the proportions of participants who reported childhood physical and sexual abuse and adulthood sexual assault were higher among those 41 to 50 years old who were born in 1960s, as well as those younger than 40. This may be due to the identification and recognition of child abuse led by the publication of "the Battered-Child Syndrome" in 1962 (Kemper, Silverman, Steele, Droegemueller, & Silver), and the subsequent series of laws protecting minors from abuse.

Traumatic events were associated with PSU in various ways. First, a greater proportion of past and current users reported childhood physical abuse and childhood loss of parents or guardian (not statistically significant). Past users reported experiencing childhood sexual abuse more often than those who never had PSU or those who currently had PSU. Second, past and current problem substance users had more adulthood violent events, both first-hand and witnessed. It is beyond the scope of this analysis to assess whether the excess exposures to violence can be attributed to PSU.

In terms of exposure to traumatic events and health outcomes, sexual abuse or assault in both childhood and adulthood were associated with low mental health functioning. Having multiple missed appointments was associated with many types of traumatic events, such as childhood physical and sexual abuse, adulthood physical assault, adulthood loss, and natural disasters and accidents.

According to the SAMHSA, a trauma-informed approach starts with realization of "the widespread impact of trauma" and a recognition of "the signs and symptoms of trauma in clients, families, staff, and others involved with the system."[2] Based upon the experiences of the CHAIN cohort, this report shows the widespread nature of trauma exposure among PLWH in NYC and the potential signs and symptoms associated with traumatic exposures. Increased prevalence of multiple missed appointments among PLWH with traumatic event experiences is of particular concern, as missing appointments can indicate or lead to disruption in HIV care.

[2] https://www.samhsa.gov/nctic/trauma-interventions

Appendix.

Table 6. Adjusted Odds Ratio from Logistic Regression

		Any Event	Childhood Events			Adulthood Events			Witnessed Violence	Other	4+ types of events	3+ types of violent events
			Physical	Sexual	Loss	Physical	Sexual	Loss				
Gender	Women	0.896	2.226 **	5.405 ***	0.849	4.276 ***	31.772 ***	1.689 *	0.968	1.049	1.514 #	13.019 ***
	Transgender	--	4.383 *	12.775 ***	1.341	22.583 **	61.127 ***	0.728	--	0.485	5.525	32.069 ***
Race/Ethnicity	Black	1.586	0.847	1.533	0.936	1.065	1.141	0.778	1.238	0.359 *	1.373	0.827
	Latino	2.863 #	1.459	2.503 #	0.800	1.573	1.483	2.150 #	1.158	1.039	1.924	1.513
	Other	1.769	0.910	4.536 #	0.193	0.444	2.147	5.466	1.018	0.841	1.064	0.424
Age	41-50	2.102	1.202	1.208	1.078	1.336	2.171	4.581 ***	2.664 *	1.494	2.441 *	1.013
	51-60	2.724 #	0.858	0.686	1.221	1.378	1.819	6.982 ***	2.489 *	2.201 #	2.181 *	0.754
	60+	4.719 *	0.708	0.761	1.022	1.384	1.686	7.363 ***	2.537 *	2.877 *	2.657 *	0.921
MSM		0.308 **	1.594	3.145 **	0.761	1.333	8.448 **	0.748	0.717	0.928	0.757	3.837 **
In Poverty		0.652	1.002	0.881	1.111	1.062	1.207	0.905	1.192	0.659 #	0.881	1.015
Ever Homeless		1.316	1.848 *	1.367	2.016 **	1.411	2.051 *	1.063	1.557 #	2.208 ***	1.670 *	2.151 *
Problem Substance Use	Past	1.188	1.799 *	1.899 *	0.989	1.391	2.126 *	1.064	1.559	1.220	1.064	2.247 *
	Current	1.564	1.810	1.489	1.041	1.779	1.609	1.393	1.966 #	0.923	1.416	3.244 *
Ever Incarcerated		1.033	1.213	0.982	0.993	1.118	1.079	0.838	1.260	0.963	1.279	1.392
Poor Physical Health Functioning		0.432 *	1.024	1.432	1.227	1.275	0.835	0.820	1.002	1.112	1.223	0.997
Poor Mental Health Functioning		1.095	1.371	1.467	0.826	1.097	2.239 **	1.123	0.851	0.943	1.067	1.375
Unsuppressed Viral Load		0.642	0.897	1.450	1.578	0.778	0.692	0.677	0.670	1.107	0.837	0.884
Not Adherent to ART		0.642	0.891	0.421 **	1.061	0.976	0.671	0.962	1.558	1.158	1.076	0.720
ER visits		1.354	1.252	0.926	1.034	0.889	1.495	1.100	1.288	1.456	1.444	1.475
2+ Missed Appointments		3.374 *	2.391 **	2.268 **	1.233	1.705 *	1.483	2.445 **	1.616	1.596	1.973 *	2.099 *
Dropped Out of HIV Care		--	2.051	1.995	0.995	1.548	1.706	2.794	--	1.047	3.382	2.122

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