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Drug use among HIV+ adults aged 50 and older: Findings from the GOLD II Study

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Abstract

Understanding the nexus of aging, HIV, and substance use is key to providing appropriate services and support for their aging, HIV seropositive patients. The proportion of PLWHA aged 50 and older is growing due to a variety of factors like decreases in mortality due to highly active retroviral therapy and non-negligible HIV incidence. We describe prevalence of alcohol, tobacco, and other drug use and participation in substance use treatment and 12-steps programs among 95 HIV-positive patients aged 50 and older engaged in care. Most (73.7%) smoked cigarettes in their lifetime and 46.3% were current smokers. Most were at medium (81.1%) or high risk (13.7%) for an alcohol use disorder. With respect to illicit drug use, 48.4% had used marijuana, cocaine, crack, methamphetamines, heroin, and/or prescription opiates without a prescription in the last 12 months; 23.2% met criteria for drug dependence. Marijuana was the most commonly reported illicit drug (32.6%) followed by cocaine and crack (10.5% each), heroin and prescription opiates (7.4% each), and methamphetamines (6.3%). Among those who had not used drugs in the past 12 months, 36.7% had been in a substance use treatment program and 26.5% had participated in a 12-step program in their lifetime; 8.2% were currently in treatment and 16.3% were currently participating in a 12-step program. Among those who had used an illicit drug in the past 12 months, 37.0% had never been in treatment, 34.8% had been in treatment in their lifetime, and 28.3% were currently in treatment. With respect to 12-step programs, 27.3% of those meeting dependence criteria had never participated, 45.5% had participated in their lifetimes, and 27.3% were currently participating. Our findings suggest that older adults in HIV care settings could benefit from Screening, Brief Intervention, and Referral to Treatment (SBIRT) interventions and/or integrated services for substance abuse and medical treatment.

As life expectancies increase, birth rates decrease, and the Baby Boomer generation ages, current population trends predict a growing number of older adults in the US (Institute of Medicine, 2008), a trend that is also observed among people living with HIV/AIDS (PLWHA). The proportion of PLWHA aged 50 and older (50+) is growing due to decreases in mortality due to antiretroviral treatment (ART) and non-negligible HIV incidence (Centers for Disease Control and Prevention, 2015; Paul, Martin, Lu, & Lin, 2007). In 2009, approximately 33.0% of the PLWHA in the US were aged 50+; by 2013 this had increased to approximately 42.4% (Centers for Disease Control and Prevention, 2015) and is projected to rise to nearly 50% by 2015 (Myers, 2009).

Baby boomers have high rates of illicit drug use over the life course (Han, Gfroerer, Colliver, & Penne, 2009; Wu & Blazer, 2011). In 2014, 16.7% of Americans aged 12 and older reported past year illicit drug; of whom an estimated 8.9 million (20.1%) were older adults aged 50+ (Center for Behavioral Health Statistics and Quality, 2015). The proportion of older adults aged 50+ reporting lifetime illicit drug use increased from 28.1% in 2003 to 35.8% in 2008, a trend that is predicted to continue as the baby boomer generation ages into the cohort of people aged 50+ (Purvis, 2010).

Research related to substance use among older PLWHA has progressed slowly (Green et al., 2010; Skalski, Sikkema, Heckman, & Meade, 2013). Prior research suggests that drug abuse among PLWHA people does not decline with age as it does in the general population (Justice et al., 2004; Rabkin, McElhiney, & Ferrando, 2004). Drug use is associated with non-adherence to ART (Arnsten et al., 2002; Wood et al., 2003), as well as disease progression (Baum et al., 2009; Doshi et al., 2012; Lucas et al., 2006; Wood et al., 2003) and is a factor for HIV transmission via injection (Centers for Disease Control and Prevention, 2015) and high risk sexual behavior (Benotsch, Martin, Koester, Cejka, & Luckman, 2011; Brewer, Zhao, Metsch, Coltes, & Zenilman, 2007; Carey et al., 2009).

For the clinician, understanding the nexus of aging, HIV, and substance use is key to providing appropriate services and support for their aging, HIV-positive patients. This study describes the prevalence of substance use and participation in substance use treatment and 12-steps programs among HIV-positive patients aged 50+ engaged in care.

Study Design & Sample

These data are from a cross-sectional pilot study of neurocognitive and psychiatric outcomes among older, HIV-positive adults called the GOLD II Study. From April to August 2014, individuals seeking HIV-related care at the Spencer Cox Center for Health, part of the St. Luke's-Roosevelt Hospital Center (SLRHC), were recruited to participate in a study via flyers posted at the health center. Interested patients were screened for eligibility by phone or on-site in a private office. All interactions with participants were guided by age-friendly principles (e.g., large fonts for print materials, screen reading software, etc.).[70] All participants were remunerated for time and effort. This study was reviewed and approved by New York University's Committee on Activities Involving Human Subjects.

Eligibility criteria included being HIV-positive, 50–69 years of age, and no prior traumatic brain injury. Eligible participants were asked to provide proof of age (i.e. passport, driver's license) prior to providing written, informed consent. A total of 209 participants were screened for this study and 100 met all three eligibility criteria.

Data Collection

Eligible participants completed a computer-administered assessment which collected data on sociodemographic characteristics, substance use, and substance use treatment. Ninety-five participants had complete data and were included in this analysis.

Alcohol use and abuse were measured using the 10-item Alcohol Use Disorders Identification Test (AUDIT; Babor, Higgins-Biddle, Saunders, & Monteiro, 2001). Responses for all items were totaled to create a sum score and categorized as a medium (AUDIT score 8–15) or high level of alcohol problems (AUDIT score ≥16). Participants were asked about lifetime and current cigarette smoking. If they were current smokers, participants also indicated the average number of cigarettes smoked per day: less than 5, 6–10, 10–20 or 20 or more.

Substance use outcomes were assessed with the MINI International Neuropsychiatric Interview (M.I.N.I.) (Sheehan et al., 2006). The scale differentiates between substance use, current dependence and current abuse. Use was characterized as “having taken the drug more than once for the purpose of getting high, feeling better or changing one's mood” in the past 12 months. Criteria for current dependence and current abuse were based on the DSM-IV. Participants were also asked if they had ever been and/or were currently engaged in substance use treatment or a 12-step program.

Results

The sample was 27.4% female; 27.4% were Hispanic, 50.5% were Black, 15.8% were White and 6.3% were multiracial or other race. The mean age was 55.8 (SD=4.6). In terms of sexual orientation, 45.3% identified as gay, 10.5% as bisexual, 2.1% as lesbian, 41.1% as heterosexual, and 1.1% as other. The majority (73.7%) had at least a high school education; 21.2% had at least a Bachelor's degree. Only 20% had an annual income at or above $20,000 and 13.7% were currently employed.

Most (73.7%) had ever smoked cigarettes; 46.3% were current smokers (Table 1). Most participants were at medium (81.1%) or high risk (13.7%) for an alcohol use disorder. With respect to illicit drug use, 48.4% had used marijuana, cocaine, crack, methamphetamines, heroin, and/or prescription opiates without a prescription in the last 12 months; 23.2% were drug dependent. Marijuana was the most commonly reported illicit drug (32.6%) followed by cocaine and crack (10.5% each), heroin and prescription opiates (7.4% each), methamphetamines (6.3%), and poppers (2.3%). No one reported the use of ecstasy, LSD, PCP, or mushrooms.

Among those who had not used drugs in the past 12 months, 36.7% had ever been in a substance use treatment program and 26.5% ever been in a 12-step program; 8.2% were

currently in treatment and 16.3% were currently in a 12-step program (Table 2). Among those who had used an illicit drug in the past 12 months, 37.0% had never been in treatment, 34.8% had ever been in treatment, and 28.3% were currently in treatment. Among those who were drug dependent (n=22), 18.2% were not in treatment, 36.4% had ever been in treatment, and 45.5% were currently in treatment. With respect to 12-step programs, 27.3% of those who were dependent had never participated, 45.5% had participated in their lifetimes, and 27.3% were currently participating.

Discussion

This pilot study among older HIV-positive men and women provides evidence for a high burden of substance use in this urban patient population. Our findings are consistent with previous research (Justice et al., 2004; Rabkin et al., 2004) demonstrating that HIV-positive older adults who are engaged in HIV care experience substantial substance use problems that do not appear to resolve as they age (Edelman, Tetrault, & Fiellin, 2014). The majority of drug-using patients in this sample used marijuana, cocaine/crack, and stimulants, which is also consistent with previous research (Edelman et al., 2014; Mimiaga et al., 2013; Prentiss, Power, Balmas, Tzuang, & Israelski, 2004; Skeer et al., 2012).

Of those who had used drugs in the past year, 52.2% dependent. Among those who were dependent, only 45.5% were currently in a substance use treatment and 27.3% were in a 12-step program. These findings suggest that HIV care providers for older adults may have missed opportunities for addressing substance use problems among their patients. Those interested in substance use treatment may have limited options, as few substance abuse treatment facilities that have programs specific to older populations (Han et al., 2009; Skalski et al., 2013) and cocaine and stimulant treatment is limited (Shorter & Kosten, 2011). Older adults often have co-morbid conditions and substance abuse treatment programs need to be integrated with primary care to achieve the most optimal results (Friedmann, Zhang, Hendrickson, Stein, & Gerstein, 2003; Kim et al., 2007; Weisner, Mertens, Parthasarathy, Moore, & Lu, 2001). Screening, Brief Intervention, and Referral to Treatment (SBIRT) interventions may be helpful for addressing these issues in busy primary care practices (Madras et al., 2009).

The study's limitations include a small sample size and selected population. All participants in this study were aged 50 and older and recruited through a comprehensive HIV care clinic, and thus are not generalizable to all HIV patients. The survey was limited, and as a result data on lifetime substance use nor duration of substance use are unavailable.

These findings suggest that older adults in HIV care settings could benefit from SBIRT interventions and/or integrated services for substance abuse, mental health, and medical treatment. Future research should focus on substance use among older adults, as individuals of the baby boomer generation are more likely to have used drugs in their lifetime. While some studies suggest that older adults age out of drug use, HIV and concomitant stress related to the disease and stigma associated with the disease may make HIV-positive older adults particularly vulnerable to substance use problems.

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Table 1

Tobacco, alcohol, and illicit drug use and dependence among 95 HIV+ adults aged 50 and older, New York City, 2014

	N (%)
Cigarette smoking	
Never	25 (26.3)
Former	26 (27.4)
Current	44 (46.3)
Alcohol use disorder	
Low risk	0 (0.0)
Medium risk	77 (81.1)
High risk	13 (13.7)
Missing	5 (5.3)
Illicit drug use in the past 12 months	
Any drug use	46 (48.4)
Any drug dependence	22 (23.2)
Marijuana use	31 (32.6)
Marijuana dependence	4 (4.2)
Cocaine use	10 (10.5)
Cocaine dependence	9 (9.5)
Crack use	10 (10.5)
Crack dependence	10 (10.5)
Methamphetamine use	6 (6.3)
Methamphetamine dependence	4 (4.2)
Heroin use	7 (7.4)
Heroin dependence	6 (6.3)
Prescription opiates use	7 (7.4)
Prescription opiates dependence	2 (2.1)

Table 2

Substance use treatment and 12-step program participation among 95 HIV+ adults aged 50 and older, New York City, 2014

	Use in the past 12 months			Dependence in the past 12 months		
	No	Yes	p-value	No	Yes	p-value
	N=49	N=46		N=73	N=22	
Substance use treatment			0.030			<0.001
No	27 (55.1)	17 (37.0)		40 (54.8)	4 (18.2)	
Yes, lifetime	18 (36.7)	16 (34.8)		26 (35.6)	8 (36.4)	
Yes, currently	4 (8.2)	13 (28.3)		7 (9.4)	10 (45.5)	
12-step program			0.626			0.024
No	28 (57.1)	22 (47.8)		44 (60.3)	6 (27.3)	
Yes, lifetime	13 (26.5)	16 (34.8)		19 (26.0)	10 (45.5)	
Yes, currently	8 (16.3)	8 (17.4)		10 (13.7)	6 (27.3)	