Tobacco Use Behaviors Among People Living with HIV in Nairobi, Kenya

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NAIROBI CITY COUNTY

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Background

- Tobacco use is the most important preventable cause of mortality worldwide, with >1 billion smoking related deaths projected in the 21st century
- The largest predicted regional increase in tobacco use is occurring in Africa, the region that has 67% of the global HIV burden.
- People living with HIV (PLWH) smoke at an estimated 2-3 times that of the general population.
- Despite this, smoking cessation strategies have not been well-integrated into existing HIV treatment infrastructure.
- Kenya has an estimated 1.6 million PLWH; the smoking prevalence among this population varies from 16% to 100% in PLWH who inject drugs.
- There is little understanding of tobacco use behaviors in Kenyan PLWH that could guide development of smoking cessation services.

Method

- The goal of the study is to culturally tailor a tobacco treatment intervention for Kenyan PLWH in an upcoming trial
- In 2019 the program trained staff administered structured interviews about tobacco use to PLWH smokers recruited from 4 HIV Care clinics and 2 methadone maintenance facilities in Nairobi.
- Interview responses were keyed into a Redcap database.
- Categorical variables were presented as proportions and continuous variables as means and standard deviations.
- For comparisons of ordinal variables, such as behavioral scales, we employed The Wilcoxon Rank-Sum Test.
- All statistical analyses were completed using the SPSS V26.0 software

Discussion

- In this sample of Kenyan PLWH smokers, cigarettes were always purchased individually, never in packs
- There were high levels of nicotine dependence but also high motivation to quit.
- Almost all prior quit attempts were unassisted with virtually no usage of counseling or pharmacotherapy.

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Results

- 50 PLWH completed interviews. Mean age=38.5±9.6 (range: 20-57); 68% Male
- 48% were married, while only 8% had some post-secondary education
- **EMPLOYMENT:** 62% fulltime; **HOUSING:** 94% stable
- **SUBSTANCE USE** (in past 30 days): 34% alcohol, 44% marijuana, 0% cocaine, 8% heroin, 72% methadone
- **TOBACCO USE:** 100% were cigarette smokers, 74% started smoking at age≤20
- Mean cigarettes per/day=14.9±12.4; 40% lived with another smoker
- A majority, 31 (62%) had attempted to quite without any assistance
- Details on tobacco use behaviour are described in Table 1 below

Table 1: Tobacco Use Behaviour

Tobacco Use Behaviour		N(50)
Cigarettes smoked per day (mean ± SD; [range])		14.9±12.4; [1-60]
Age at cigarette smoking initiation (mean ± SD; [range])		17.5±4.8 [9-30]
Smoking frequency	Daily	41 (82.0%)
	Non-daily	9 (18.0%)
Type of cigarette most frequently smoked	Regular	47 (94.0%)
	Menthol	3 (6.0%)
Usual unit of cigarette purchase	Singles ("sticks")	50 (100.0%)
	Pack	0 (0.0%)
Current use of other tobacco products	Chewing tobacco	2 (4.0%)
	Nasal snuff	2 (4.0%)
	Cigars, pipe, hookah, bidis	0 (0.0%)
Nicotine dependence*	Low	8 (16.0%)
	Low-Moderate	5 (10.0%)
	High	30 (60.0%)
Number of lifetime quit attempts (mean ± SD; [range])		1.2±1.1 [0-30]
Quitting strategies or aids used in the past	Unassisted ("cold-turkey"	31 (62.0%)
	Behavioral counseling	1 (2.0%)
	Nicotine replacement therapy	4 (8.0%)
	Varenicline or bupropion	0 (0.0%)
Motivation to quit (stage of change)**	Pre-contemplation	5 (10.0%)
	Contemplation	19 (38.0%)
	Preparation	22 (44.0%)
	Action	4 (8.0%)

*Measured with the Fagerstrom Test for Nicotine Dependence
**Measured with the Abrams-Biener Readiness to Quit Ladder