

Smoking Prevalence Amongst People Living with HIV in Western Jamaica

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Socio-demographic characteristics of PLWH

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Background

Smoking and HIV

- With the use of antiretroviral therapy (ART), HIV infection has become a treatable chronic disease. However, modifiable risk factors such as tobacco smoking have continued to impact the morbidity and mortality of PLWH patients. (1)
- Jamaica has an HIV prevalence estimated at 1.3%.
- Modeled estimates and case-based surveillance data estimate that there are 29,000 persons living with HIV in Jamaica, of whom, 16% are unaware of their HIV status. (2)
- In the Western Region of Jamaica, the largest parish, St James, is reported to have the highest prevalence of current use of tobacco (21%) and Hanover the lowest (5%). (3)
- Although the general smoking prevalence in Jamaica is 9.4%, there is limited data available on smoking prevalence and risk factors among people living with HIV (PLWH) in this country. (4)

Objectives

To assess the smoking prevalence and associated risk factors of cigarette smoking and cessation among a sample of PLWH seeking care at Western Regional Health Authority (WRHA) clinics in Jamaica.

Methods

- Study Design: Cross-sectional study
- **Study Population:** PLWH ≥ 18 years seeking care at 5 HIV treatment sites under WRHA
- **Data Collection:** Interviewer-administered questionnaire
- **Treatment Site Locations**
 - Pilot test- Catherine Hall Health Centre
 - Type V Health Centre, St. James
 - CRH- Cornwall Regional Hospital, St. James
 - Lucea Health Centre, Hanover
 - Duncan Health Centre, Trelawny
 - SPGH- Savanna La Mar Public General Hospital &
 - SAVHC- Savanna La Mar Health Centre, Westmoreland
- **Timeframe:** May to August 2022
- Main Outcome: Current smoking status
 - Multivariate Analysis: Association between smoking, smoking-related factors, and socio-demographics among PLWH were assessed using logistic regression
- All analyses were based on p-value of 0.05

Type V Health Centre



CRH- Cornwall Regional Hospital



Results

8		
(N=392)		
Age (Years)	44 (±13.1)	
Gender	Male, 167 (42.5%) Female, 222 (57%) Transgender, 2 (0.5%)	
Marital Status	Married, 107 (27%)	
	Not Married, 285 (73%)	
Years since HIV Diagnosis	10 (±6.5)	
Currently receiving ART	Yes, 383 (98%)	
	No, 9 (2%)	
Current prevalence of smoking among PWH: 18%		

Smoking-related characteristics of PWH smokers (N=91)		
FTND	Low, 38 (63%)	
	Moderate, 16 (26%)	
	High 10%, 6 (10%)	
Motivation to quit	Low, 6 (9%)	
	Moderate, 16 (25%)	
	High, 43 (66%)	
Considering quitting	Yes, 60 (88%)	
	No, 8 (12%)	
Intention to quit	Within the next month,	
	25 (42%)	
	Within the next 3 months,	
	5 /Q%\	

Intention to quit	Within the next month, 25 (42%) Within the next 3 months, 5 (8%) Within the next 6 months, 5 (8%) Do not know, 25 (42%)
Attempt to quit in the last year	Yes, 50 (74%) No, 17 (26%)
Use of Nicotine Replacement Therapy (NRT)	Never used NRT, 42 (85%) Chewing gum, 7 (13%) Others, 2 (3.9%)



Multivariate logistic regression			
Independent variable	OR (95% CI)	Pvalue	
Gender, Male vs Female (Ref)	3.02 (1.64 - 5.57)	<0.05	
Religion, Non-Christian vs Christian (Ref)	2.14 (1.18 - 3.88)	<0.05	
Marital Status , Not Married vs Married (Ref)	1.81 (0.88 - 3.71)	0.12	
Smoking status asked by healthcare professional, No vs Yes (Ref)	1.73 (1.11 - 3.07)	<0.05	
PHQ-9 Depression Score, Moderate to Severe, None- Minimal (Ref)	3.60 (1.19 -10.88)	<0.05	
Alcohol Abuse (CAGE Score), Abuse vs No Abuse (Ref)	3.35 (1.05 - 10.68)	<0.05	

Conclusion

- People Living With HIV(PLWH) showed a higher rate of current smokers, than the general population in Jamaica.
- Current smoking among the PLWH was significantly associated with being male, non-Christian, moderately to severely depressed, and clinically significant alcohol abuse.
- Our study provided baseline information for designing and implementing a comprehensive smoking cessation program that considers the needs of PLWH in Jamaica, with the potential of becoming a replicable model for other HIV-specialized healthcare settings in the

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***Authors declare no conflict of interest