

Smoking and Cessation Behaviors in Patients at Federally Funded Health Centers Trapl, E.S.a, VanFrank, B.b, Kava, C.M.c, Trinh, V.a, Land, S.R.d, Williams, R.S.e, Frost, E.L.a, Koopman Gonzalez, S.a, & Babb, S.b



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Introduction

- Cigarette smoking is the leading cause of preventable death in the U.S.
- Patients at HRSA funded health centers have a high smoking prevalence.
- Few studies have examined patterns of smoking cessation among health center patients.
- This purpose of this study is to compare health characteristics and cessation patterns of adult patients at HRSA funded health centers.

Methods

- Secondary analysis of 2014
 Health Center Patient Survey
 (HCPS) data
- Chi-square and logistic regression
- Sample size = 5,583

Measures

- Smoking status
 - Current smoker vs. former smoker
- Sociodemographic characteristics
 - Urban/rural, employment, income, health insurance, gender, age, race, ethnicity
- Health characteristics
 - Self-reported health, hypertension, asthma, diabetes, cardiovascular disease, cancer, COPD
- Behavioral health
 - Mental health distress, general health, anxiety, panic disorder, schizophrenia or bipolar disorder, substance use
- Smoking cessation
 - Desire to quit, quit attempts, plans to quit, receipt of advice to quit from health provider, and cessation treatments used.

Results

Table 1. Health Center Patient Characteristics

Variable	All Adult Patients Weighted % (n)	Current Smokers Weighted % (n)	Former Smokers Weighted % (n)	Never Smokers Weighted % (n)
	n = 5583	28.1 (1735)	19.2 (976)	52.7 (2872)
Female	64.1 (3513)	62.5 (884)	49.4 (491)	70.2 (2138)
Age				
18-44	53.4 (2293)	51.5 (652)	31.7 (260)	62.2 (1381)
45-64	35.8 (2739)	45.1 (1010)	45.1 (537)	27.4 (1192)
65+	10.9 (551)	3.4 (73)	23.2 (179)	10.4 (299)
Race/ethnicity				
Non-Hispanic white	50.5 (1373)	68.0 (629)	60.9 (296)	37.5 (448)
Non-Hispanic black	19.2 (1301)	17.9 (544)	15.5 (194)	21.1 (563)
Hispanic	242 (1900)	9.7 (284)	18.9(307)	33.9 (1309)
Non-Hispanic other	6.1 (1009)	4.4 (278)	4.7 (179)	7.5 (552)
Education				
< HS diploma	34.4 (2439)	35.4 (712)	33.6 (391)	36.1 (1336)
HS diploma/GED	28.7 (1517)	35.6 (566)	29.8 (246)	25.3 (705)
> HS diploma	36.9 (1611)	29.0 (454)	36.6 (336)	38.6 (821)
Fair/poor health ¹	41.6 (2747)	48.2 (924)	41.2 (495)	38.1 (1328)
Current asthma	15.8 (914)	21.4 (393)	17.7 (192)	12.1 (329)
Diabetes	21.4 (1196)	16.9 (320)	33.4 (288)	19.4 (588)
Cardiovascular disease ²	14.9 (767)	17.7 (295)	22.4 (199)	10.6 (273)
COPD	7.5 (477)	13.8 (285)	12.8 (122)	2.1 (70)
Psychological distress ³				
Severe (K6 ≥ 13)	14.5 (902)	23.9 (420)	12.1 (147)	10.3 (335)
Moderate ($5 \le K6 < 13$)	39.9 (2133)	41.6 (744)	44.8 (395)	37.1 (994)
No/low (K6 < 5)	45.7 (2494)	34.5 (552)	43.1 (430)	52.6 (1512)
Mental health diagnoses ⁴				
None	52.4 (3015)	34.0 (645)	43.2 (496)	65.6 (1874)
1	18.2 (911)	19.7 (299)	23.3 (163)	15.5 (449)
≥ 2	29.4 (1657)	46.3 (791)	33.5 (317)	18.9 (549)
Sought mental health care in past year	21.9 (1233)	32.6 (615)	27.3 (232)	14.2 (386)
Use of illicit substances in past 3 months ⁵	4.0 (328)	8.7 (237)	3.1 (38)	1.7 (53)
Days drinking ≥5 alcoholic beverages in past 12 months				
No alcohol in past 12 months	44.6 (2681)	31.2 (547)	43.1 (461)	52.3 (1673)
0-12 days	50.0 (2428)	59.4 (879)	49.1 (445)	45.5 (1104)

1. Self-reported health status on a 5 point scale.

2. Self-report of health provider telling patient they had one or more of the following conditions: congestive heart failure, coronary heart disease, angina (angina pectoris), heart attack (myocardial infarction), or stroke.

3. Kessler Psychological Distress Scores ranging from severe psychological distress (>13) to no/low distress (<5).

4. Self-report of health provider telling patient they had any of the following diagnoses: general anxiety, panic disorder, schizophrenia, or bipolar disorder. 5. Includes cocaine, amphetamines, inhalants, sedatives, hallucinogens, opioids, or other substance used for non-medical purposes. Does not include tobacco, alcohol, or marijuana

Table 2. Use of Smoking Cessation Interventions by Former Smoking Health Center Patients

Cessation Treatment Used	All Former Smokers Weighted % (n)	Quit within Last Year Weighted % (n)	Quit 1 to <5 Years Ago Weighted % (n)	Quit ≥5 Years Ago Weighted % (n)
	N = 976	N = 140	N = 251	N = 500
Any cessation treatment	15.2 (150)	30.6 (44)	9.6 (50)	12.4 (56)
Pharmacotherapy ¹	11.6 (109)	27.5 (34)	6.7 (37)	8.4 (38)
Counseling ²	9.6 (89)	 *	*	*
Counseling and Pharmacotherapy	6.0 (48)	*	*	*

*Value suppressed due to cell count < 30.

- 1. Pharmacotherapy includes use of any of the following cessation medications: nicotine patch, gum, lozenge, nasal spray, or inhaler, bupropion, or Varenicline.
- 2. Counseling includes use of a telephone quit line, smoking cessation program, and/or one-on-one counseling.

Key Findings

- 28.1% of patients reported current cigarette smoking.
- Current (vs. never) smokers were:
 - Older
 - Male
 - Less educated
 - Lower SES
 - Experiencing higher burden of chronic disease, mental health distress, and substance use
- 79% of current smoking patients reported a desire to quit.
- 55.1% of patients who smoked reported a quit attempt in the last year.
- 78.7% of patients received advice to quit from a provider in the last year, and most reported receiving this advice at their health center.
- Despite desire and advice to quit, current smoking patients reported low utilization of evidence-based cessation treatment.
- Pharmacotherapy most common cessation treatment reported by former smokers (11.6%).

Conclusions

- Smoking cessation efforts should focus on strategies to (1) support FCHQ patients in their desire to quit and (2) increase access to and use of evidence-based cessation treatments.
- Increasing access and use of cessation treatments at HRSA funded health centers may help reduce smoking-related disparities and improve population health.

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