



Demographic and Mental Health Characteristics of Individuals Who Present to Community Health Clinics With Substance Misuse

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Abstract

Introduction: Community health clinics (CHCs) are an opportune setting to identify and treat substance misuse. This study assessed the characteristics of patients who presented to a CHC with substance misuse.

Methods: Personnel at a large CHC administered a 5-question screener to patients between June 3, 2014, and January 15, 2016, to assess past 3-month alcohol use, prescription opioid misuse, or illicit drug use. We stratified screen-positive patients into 4 diagnostic groups: (1) probable alcohol use disorder (AUD) and no comorbid opioid use disorder (OUD); (2) probable heroin use disorder; (3) probable prescription OUD, with or without comorbid AUD; and (4) no probable substance use disorder. We describe substance use and mental health characteristics of screen-positive patients and compare the characteristics of patients in the diagnostic groups.

Results: Compared to the clinic population, screen-positive patients (N = 733) included more males ($P < .0001$) and had a higher prevalence of probable bipolar disorder ($P < .0001$) and schizophrenia ($P < .0001$). Eighty-seven percent of screen-positive patients had probable AUD or OUD; only 7% were currently receiving substance use treatment. The prescription opioid and heroin groups had higher rates of past bipolar disorder and consequences of mental health conditions than the alcohol only or no diagnosis groups ($P < .0001$).

Conclusions: Patients presenting to CHCs who screen positive for alcohol or opioid misuse have a high likelihood of having an AUD or OUD, with or without a comorbid serious mental illness. Community health clinics offering substance use treatment may be an important resource for addressing unmet need for substance use treatment and comorbid mental illness.

Keywords

community health centers, primary care, substance misuse, screening, alcohol, opioid

Introduction

Substance use disorders (SUDs) are underidentified and undertreated.¹ Primary care practices—community health clinics (CHCs) in particular—are opportune settings in which to provide SUD treatment. Most individuals in the United States visit a primary care provider at least annually.² As SUDs are frequently comorbid with other medical conditions, the prevalence of alcohol and illicit drug use is higher among primary care patients than the general population.^{3,4} With regard to CHCs, expanded health insurance coverage under the Patient Protection and Affordable Care Act has substantially increased the number of individuals seeking medical care in

these settings.^{5,6} Increased identification and treatment of SUDs in CHCs could address the unmet need among millions of individuals who never receive treatment.¹ Screening is particularly important, as identification of substance misuse is

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Submitted August 22, 2017. Accepted August 22, 2017.

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often the first step to obtaining treatment. However, little is known about the prevalence and characteristics of patients who screen positive for substance misuse in CHCs. Such information can inform health-care providers and policy makers about the characteristics of individuals who may need SUD care in CHCs to prepare to deliver appropriate levels of care and to establish criteria for determining which patients may need higher levels of care in specialty care settings.

This study compares the characteristics of individuals identified with opioid or alcohol misuse (or both) in a large urban federally qualified health center (FQHC). We focus on opioids and alcohol in this study because there are Food and Drug Administration (FDA)-approved medications appropriate for treating patients with opioid or alcohol use disorders (OAUDs) in primary care settings.⁷

Methods

Research Procedures

This study was part of a larger study of integration of medication-assisted and behavioral treatment for OAUDs into a CHC.⁷ The study was conducted at a multisite FQHC in Los Angeles County between June 3, 2014, and January 15, 2016, and was approved by the RAND Human Subjects Protection Committee. Medical assistants screened all adult patients for substance misuse with a modified version of the National Institute on Drug Abuse (NIDA) quick screen.⁸ Patients were considered to have substance misuse if they reported (1) having ≥ 5 drinks/day (men) or ≥ 4 drinks/day (women) at least once a month in the past 3 months, (2) taking prescription opioid medication differently than directed by a doctor at least once per month in the past 3 months, or (3) using street drugs, such as heroin, powder cocaine, crack cocaine, methamphetamine, or ecstasy at least once a month in the past 3 months. Patients who screened positive were invited to participate in a more detailed assessment administered by research staff.

Measures

Information was collected on gender, age, race, ethnicity, and current participation in substance use treatment. The presence of serious mental illness was assessed via self-reported diagnosis and/or hospitalization for bipolar, schizophrenia, or schizoaffective disorder with current marked functional impairment. Marked impairment was defined as a score of 7 to 10 on the Sheehan Disability Scale.⁹ Diagnosis and severity of substance use disorder were assessed with the NIDA-modified version of the World Health Organization's Alcohol, Smoking and Substance Involvement Screening Test version 3.1.^{8,10} Separate severity scores were calculated for alcohol, prescription opioids, and heroin. For alcohol, patients with scores between 11 and 26 were considered to have moderate use or abuse; for prescription opioids and heroin, patients with scores between 4 and 26 were considered to have moderate use or abuse. Patients with a score of 27 or higher for any substance

were considered to have substance dependence.¹⁰ In this article, we refer to abuse or dependence as a disorder.¹¹ Because FDA-approved medications are only available for OAUDs, which can be delivered in a CHC, only patients with an OAUD were included in these analyses. Select demographic characteristics (age, gender, and ethnicity) and medical history (diagnoses of bipolar, schizophrenia, and SUDs) of adult patients during the study period were obtained from the clinic's administrative database.

Statistical Analyses

We use χ^2 tests to compare the characteristics of those who screened positive for alcohol, heroin, or prescription opioid misuse to those of all adult patients who visited the FQHC during the study period. Next, we stratified screen-positive individuals into 4 mutually exclusive groups: (1) probable alcohol use disorder (AUD) without opioid use disorder (OUD; heroin or prescription opioid) comorbidity, (2) probable heroin use disorder, (3) probable prescription (Rx) OUD with or without a comorbid AUD, and (4) no probable OAUD diagnosis. We separated these groups because of potentially different care needs and comorbidities of each. Most (85%) individuals with a probable Rx OUD also had an AUD, so we combined them into 1 group. We compared the characteristics of the 4 groups using χ^2 tests. All analyses were conducted using SAS version 9.3.

Results

During the study period, 15 723 adults visited the FQHC. Based on a sample of weekly screening audits, 94% to 98% of the visits were screened ($N = 15\ 000$) by the medical assistants, 4% to 6% of patients screened were eligible for referral, and 745 had substance misuse and were referred for an additional assessment. Fewer than 2% of those eligible for referral refused. Seven hundred thirty-three patients completed the additional assessment.

As shown in Table 1, compared to the clinic population, individuals with a positive screen were more likely to be male (77% vs 44%; $P < .0001$), younger, less likely to be of Hispanic origin (29% vs 48%; $P < .0001$), and more likely to have ever been diagnosed with bipolar disorder (32% vs 10%; $P < .0001$) or schizophrenia (13% vs 1%; $P < .0001$). Note that while we report race data for both the clinic and the study population, we did not perform a statistical comparison due to the lack of clinic data on individuals identifying with multiple races, a category endorsed by 12.7% of study participants.

Eighty-seven percent of patients with a positive screen for alcohol or opioid misuse had an abuse or dependence diagnosis for either alcohol or opioids; 31% were comorbid for 2 or more substances; and 15% were comorbid for all 3 substances. Twenty-seven percent of the sample reported a past diagnosis of bipolar disorder or schizophrenia along with marked disruption in functioning. Over 90% were not currently receiving SUD treatment.

Table 1. Patient Demographic, Substance Use, and Mental Health Characteristics (N = 733) for the Study Sample, as well as All Patients Aged 18 Years and Over With a Daytime Primary Care Visit to the Clinic Between June 3, 2014, and January 1, 2016.

Characteristic	Clinic Population		Study Sample		P
	n	Percent	n	Percent	
All	15723	100	733	100	
Identify as male	6834	43.5	564	76.9	<.0001
Age, years					<.0001
18-39	5649	35.9	290	39.6	
40-59	7418	47.2	398	54.3	
60 and older	2656	16.9	45	6.1	
Hispanic	7589	48.3	213	29.1	<.0001
Race ^a					
White	13021	82.8	326	44.5	
African American	1836	11.7	97	13.2	
American Indian/Alaska Native	41	0.3	12	1.6	
Native Hawaiian/Pacific Islander	0	0.0	3	0.4	
Asian	621	3.9	5	0.7	
Other race	204	1.3	196	26.7	
Multiple races	0	0.0	93	12.7	
Ever been diagnosed with					
Bipolar disorder	1504	9.6	234	31.9	<.0001
Schizophrenic or schizoaffective disorder	205	1.3	97	13.2	<.0001
Has an OAUD (abuse or dependence)					
Any-alcohol, prescription opioids, or heroin ^b	617	3.9	636	86.8	
Alcohol	521	3.3	576	78.6	
Prescription opioids	104	0.7	228	31.1	
Heroin	c	c	173	23.6	
Two substances	c	c	230	31.4	
All 3 substances	c	c	111	15.1	
Currently receiving treatment for a substance use disorder ^d	c	c	47	7.4	
Has mental health diagnosis that markedly disrupts					
Work or other daily activities	c	c	163	22.2	
Social activities	c	c	152	20.7	
Ability to care for house, family, or self	c	c	134	18.3	
At least 1 area of life: work, social activities, self-care	c	c	194	26.5	
All 3 areas	c	c	103	14.1	

Abbreviation: OAUD, opioid or alcohol use disorders.

^aA comparison of race is not possible because of limits to the reporting software at the clinic.

^bClinic numbers only contain information on alcohol and prescription opioid use; information on heroin use disorder unavailable.

^cClinic-wide data unavailable.

^dn = 636, limited to those with any alcohol or opioid misuse based on screener.

As shown in Table 2, all diagnostic groups were predominantly male, with the any heroin group having the highest proportion of males (86%). The any heroin group had the greatest proportion of patients in the 18 to 39 age range. Patients in the prescription opioid and heroin groups had higher rates of past bipolar disorder and consequences of mental health conditions than those in the alcohol only or no diagnosis groups ($P < .0001$).

Discussion

Despite a growing emphasis on integrating behavioral health and SUD services into medical settings,¹² little data exist on the characteristics of individuals who screen positive for SUD in primary care. In the present study, 87% of patients who screened positive for alcohol or opioid misuse in a CHC using the NIDA quick screen had a probable OAUD; of these, only 7% were in treatment for an SUD at the time of the screening. Although this study took place at a single multisite FQHC, our findings suggest that substance misuse screening in CHCs and other primary care settings can tap into a large, unmet need for treatment among primary care patients and that most of the patients who screen positive using this method have a probable disorder. Integrating screening for SUDs into primary care settings is crucial to identifying individuals in need of treatment. The high proportion with a probable disorder as well as those with mental health comorbidities suggest the need for well-defined protocols to ensure referral to an appropriate level of care, either within or outside of the primary care setting, as recommended by the American Society for Addiction Medicine.¹³ Screening, Brief Intervention, and Referral to Treatment (SBIRT) is one model for identifying and addressing substance misuse, and there is evidence for its effectiveness in reducing risky alcohol consumption.¹⁴ However, further research needs to be done to determine whether SBIRT, or other models, is effective for other SUDs.

Patients who screened positive for substance misuse in this study were disproportionately male. National data show men have higher rates of alcohol misuse than women,^{15,16} and our results align with literature suggesting more men than women screen positive for alcohol misuse in medical settings.^{17,18} Substance misuse in women is less likely to be identified in health-care settings and more often identified via contact with child protective services.¹⁶ It is possible that the women presenting to primary care in our study were less likely to endorse substance use because of stigma or because doing so might put them at risk of child custody problems. It is also possible that in this population, fewer women had substance misuse. Compared to the clinic overall, individuals identified by screening were less likely to identify as Hispanic (29% vs 48%), so it is also possible that the low proportion of women identified with misuse may be related to a lower number of Hispanic women willing to discuss their substance use due to cultural norms and stigma.¹⁹ Further study is needed to understand the role of cultural issues, including social norms and stigma around

Table 2. Patient Demographics, Substance Use, and Mental Health Characteristics by Diagnosis Group.^a

Characteristic	No Probable OAUD Diag- nosis, n = 97		Probable AUD Only, n = 363		Probable Heroin Use Disorder, With or Without AUD or Rx OUD, n = 173		Probable Rx OUD (With or Without AUD), n = 100		χ^2 , P Value
	n	Percent	n	Percent	n	Percent	n	Percent	
Identify as male	66	68.0	267	73.6	149	86.1	82	82.0	.0013
Age, years									.0003
18-39	46	47.4	119	32.8	91	52.6	34	34.0	
40-59	43	44.3	220	60.6	74	42.8	61	61.0	
60 and older	8	8.2	24	6.6	8	4.6	5	5.0	
Hispanic	33	34.0	117	32.2	43	24.9	20	20.0	.0360
Race									.1178
White	34	35.1	159	43.8	92	53.2	41	41.0	
African American	15	15.5	53	14.6	12	6.9	17	17.0	
American Indian/Alaska									
Native	1	1.0	7	1.9	1	0.6	3	3.0	
Native Hawaiian/Pacific Islander	1	1.0	1	0.3	1	0.6	0	0.0	
Asian	0	0.0	2	0.6	1	0.6	2	2.0	
Other race	32	33.0	97	26.7	47	27.2	20	20.0	
Multiple races	14	14.4	44	12.1	19	11.0	17	17.0	
Ever been diagnosed with									
Bipolar disorder	17	17.5	99	27.3	70	40.5	48	48.0	<.0001
Schizophrenic or schizoaffective disorder	12	12.4	32	8.8	30	17.3	23	23.0	.0007
Has a substance use disorder (abuse or dependence)									
Alcohol			363	100.0	130	75.1	83	83.0	
Prescription opioids			0	0.0	128	74.0	100	100.0	
Heroin			0	0.0	173	100.0	0	0.0	
Two substances			0	0.0	147	85.0	83	83.0	
Currently receiving treatment for an SUD ^b	5	5.2	12	3.3	19	11.0	11	11.0	.0014
Has a mental health diagnosis that markedly disrupts									
Work or other daily activities	10	10.3	63	17.4	55	31.8	35	35.0	<.0001
Social activities	11	11.3	58	16.0	48	27.7	35	35.0	<.0001
Ability to care for house, family, or self	7	7.2	55	15.2	45	26.0	27	27.0	<.0001
At least 1 area of life	13	13.4	80	22.0	60	34.7	42	42.0	<.0001
All 3 areas	6	6.2	37	10.2	40	23.1	20	20.0	<.0001

Abbreviations: AUD, alcohol use disorder; OUD, opioid use disorder; OAUD, opioid or alcohol use disorder; SUD, substance use disorder.

^aN = 733.

^bIndividuals in the "no OAUD diagnosis" group may be receiving treatment for other drugs, such as methamphetamine and cocaine.

substance use, and low rates of reporting among Hispanic women in primary care settings.

We also found a high prevalence of comorbid mental health disorders among those with substance misuse. Nearly half of those who screened positive reported a diagnosis for bipolar disorder or schizophrenia, and approximately one-quarter of the sample reported that mental health issues currently impede their quality of life. These findings correspond with other studies that show high rates of substance use and mental health comorbidities.^{20,21} Our results emphasize the importance of CHCs that screen for SUDs being prepared to understand and address both disorders, either through appropriate referral or on-site care.

This study has some limitations. Patients are from a single FQHC, limiting generalizability. The screening and assessment were conducted via face-to-face interviews, which may have led to underreporting of substance use compared with self-

administered questionnaires.^{22,23} Additionally, self-reported mental health diagnosis information was used instead of administrative data because administrative data were only available for those included in the larger study, not for all of those who screened positive for substance misuse. Further, due to limitations in the clinic's administrative database, we were unable to compare the fully clinic population to the study sample on certain patient characteristics.

Nevertheless, findings from this study provide a snapshot of the demographic and mental health characteristics of individuals who present to an urban FQHC with substance misuse. Given the high levels of unmet need for treatment found in epidemiologic studies, our findings suggest that primary care could be an important and underutilized resource for addressing unmet need. Further research is needed to determine how to integrate OAUD screening and treatment into primary care.

Acknowledgments

We acknowledge all providers and staff at the Venice Family Clinic for their contributions to and participation in the study. We thank the SUMMIT team, including the RAND Survey Research Group, David de Vries, Scot Hickey and Tiffany Hruby for their contributions to carrying out the study.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was funded by National Institute on Drug Abuse (NIDA) R01DA034266 (PI: Watkins). The funders of the study had no role in design and conduct of the study; collection, management, analysis, and interpretation of the data; and preparation, review, or approval of the manuscript or the decision to submit for publication.

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