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Internalized stigma as an independent risk factor for substance use problems among primary care patients: Rationale and preliminary support

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Abstract

Background—Little is known about internalized stigma among primary care patients, and whether the presence of internalized stigma is related to the severity of substance use problems independent of substance use-related variables. We sought to examine the relationship between internalized stigma and substance use problems among primary care patients with opioid or alcohol use disorders (OAUDs).

Methods—We present baseline data from 393 primary care patients who were enrolled in a study of collaborative care for OAUDs. Regression analyses examined the relationship between internalized stigma and substance use problems, controlling for demographics, psychiatric comorbidity, and quantity/frequency of use.

Results—The majority of participants reported thinking, at least sometimes, that they “have permanently screwed up” their lives (60%), and felt “ashamed” (60%), and “out of place in the world” (51%) as a result of their opioid or alcohol use. Higher internalized stigma was significantly related to more substance use problems ($\beta = 2.68$, $p < 0.01$), even after the effects of covariates were accounted for. Stigma added 22%, out of 51% total variance explained, leading to a significant improvement in prediction of substance use problems.

Conclusions—Among this group of primary care patients with OAUDs, rates of internalized stigma were comparable to those reported in specialty substance use treatment settings. Consistent with extant specialty care literature, our results suggest that internalized stigma may be a unique contributor that is associated with treatment outcomes, such as substance use problems, among primary care patients with OAUDs.

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Contributors

MK contributed to the analytic plan and drafted the manuscript. KEW contributed to the design and implementation of the study, and contributed to drafting of the manuscript. AJO contributed to the design and implementation of the study, and contributed to drafting of the manuscript. KCO contributed to drafting of the manuscript. BE contributed to the analytic plan, carried out data analysis and provided input on the manuscript. All authors read and approved the final manuscript.

Conflict of Interest

No conflict declared.

Keywords

internalized stigma; substance use problems; opioids; alcohol; primary care treatment

1.0 Introduction

Substance use disorders affect 8.1% of the United States population aged 12 or older (Lipari et al., 2016), are highly comorbid, and associated with debilitating consequences (Grant et al., 2015, 2016), such as medical complications, financial difficulties (Allensworth-Davies et al., 2012; Blanchard et al., 2003), and stigma (Room, 2005; Earnshaw et al., 2013, 2015; Smith et al., 2016). While stigma towards substance use and people who use substances is well-documented (Kennedy-Hendricks et al., 2016, 2017; Kulesza et al., 2015; MacCoun, 2013; Pescosolido et al., 2010), its impact on stigmatized persons continues to be understudied and poorly understood (Corrigan et al., 2017; Kulesza et al., 2013; National Academies of Sciences, Engineering, and Medicine, 2016; Smith et al., 2016). We add to the literature by evaluating the relationship between internalized stigma and substance use problems (SUP), defined as negative consequences of substance use such as legal or financial problems (Blanchard et al., 2003).

Internalized stigma is conceptualized as a process whereby stigmatized individuals internalize (i.e., apply to themselves) negative stereotypes about the stigmatized group they belong to, which may lead to feelings of worthlessness and self-devaluation (Corrigan et al., 2006, 2009; Link and Phelan, 2001). In this paper, we specifically focused on the relationship between internalized stigma and SUP among primary care patients with opioid and/or alcohol use disorders (OAUDs) for the following reasons. First, there is preliminary evidence that internalized stigma is significantly related to more SUP and other treatment outcomes such as lower quality of life and greater engagement in HIV high-risk behaviors (Earnshaw et al., 2015; Kulesza et al., 2013, Smith et al., 2016). However, these findings are based predominantly on the data from specialty addiction treatment settings (i.e., hospitals, addiction rehabilitation centers, mental health clinics), which may not accurately reflect experiences of primary care patient population. Second, SUP is a promising predictor of addiction treatment outcome. Specifically, higher SUP at baseline is associated with lower specialty addiction treatment retention, after controlling for readiness to change and frequency of substance use (Kiluk et al., 2013). Third, internalized stigma has been shown to be modifiable through intervention (Luoma et al., 2008, 2012). At the same time, it would be more challenging to address other SUP-related risk factors, such as participant characteristics (Ali et al., 2015; Kiluk et al., 2013), higher quantity/frequency of use (Bennett et al., 2009; Blanchard et al., 2003), and greater psychiatric comorbidity (Ali et al., 2015; Buckner et al., 2007; Gorka et al., 2012).

We sought to examine the relationship between internalized stigma and SUP among a sample of primary care patients diagnosed with OAUDs. We hypothesized that higher internalized stigma would be significantly related to more SUP. To our knowledge, internalized stigma has not yet been evaluated among this patient population. Assessing the relationship between internalized stigma and SUP will help to determine what, if any,

additional interventions are needed to adequately address this important clinical target (Donovan et al., 2012; Miller and Miller, 2009).

2.0 Methods

2.1 Participants and Procedures

Participants were 393 adults diagnosed with OAUDs presenting to a large urban, federally qualified health center (FQHC) in Los Angeles for medical care, who completed a baseline assessment as a part of a randomized controlled trial (NCT01810159). Eligible individuals were: 18 or older, screened positive for moderate to severe alcohol or opioid problem (assessed by the Alcohol, Smoking and Substance Involvement Screening Test-3.1; Humeniuk et al., 2008), did not have marked functional mental health impairment (Sheehan Disability Scale; Sheehan, 1986), and were not currently in treatment for OAUDs. Out of 453 eligible participants, 397 consented to the study, and of those 393 completed baseline measures presented in this manuscript. For more information about study procedures, see Ober et al. 2015. This study was approved by the RAND Corporation's Institutional Review Board.

2.2 Measures

SUP was assessed with the Short Inventory of Problems-Alcohol and Drugs (SIP-AD; Blanchard et al., 2003). Participants rated each of the 15 items (1= yes or 0= no), inquiring about physical, social, intrapersonal, and interpersonal problems related to OAUDs in the past 90 days. The sum of the items provided a total score. Higher scores correspond to more severe SUP, which has been validated among primary care patients (Allensworth-Davies et al., 2012). Cronbach's alpha in the current sample was 0.92.

Internalized stigma was measured by the Self-Devaluation Subscale, of the Substance Abuse Stigma Scale (Luoma et al., 2013). Participants rated each of the 8 items, inquiring about the frequency of self-devaluating thoughts and feelings during the past 90 days, on a five-point scale (1= never to 5= very often). Higher scores correspond to greater internalized stigma. Cronbach's alpha in the current sample was 0.90.

The Timeline Follow-back Method (Sobell et al., 1979) was used to measure alcohol/opioid use quantity/frequency over the past 30 days. The TLFB has been used extensively in both clinical and research settings and has been shown to have good psychometric properties across a wide variety of substances and diverse populations.

The Comprehensive International Diagnostic Interview (Haro et al., 2006) Version 3.0, sections 11 and 12 was used to diagnose OAUDs.

Psychiatric comorbidity was measured by the Patient Health Questionnaire-4 (PHQ-4; Kroenke et al., 2009), which consists of combined depression (Kroenke et al., 2003) and anxiety screeners (Kroenke et al., 2007). Participants rated each of the 4 items on a 4-point scale (0= not at all to 3= nearly every day). Higher scores correspond to greater depression and anxiety symptom severity, with established validity in primary care settings (Kroenke et al., 2003, 2007, 2009). Cronbach's alpha in the current sample was 0.86.

2.3 Analytic Plan

Potential covariates, including demographics, OAUD diagnosis, quantity/frequency of use, and psychiatric comorbidity were examined for associations with SUP. Covariates with significant associations ($p < 0.05$) were entered into the first step of a stepwise multiple linear regression model to examine the association between internalized stigma and SUP. Internalized stigma was entered in the second step to evaluate if it accounted for significant variance in SUP, after adjusting for covariates. Goodness of fit tests of all models were assessed using an F-test for the linear model that tests the omnibus impact of all the covariates (including the confounders) on the SUP outcome. All analyses were conducted using SAS version 9.3.

3.0 Results

The majority of the sample was male (79%), on average 42 years old ($SD = 11.97$), and predominantly (61%) self-identified as racial/ethnic minority (31% Hispanic/Latino/a, 13% African-American, 17% multi-racial/other). Most participants obtained at least high school education (72%), half of them reported living in unstable housing/homeless, and over half (56%) received either AUD (53%) or OUD (3%) diagnosis while 44% were diagnosed with comorbid AUD and OUD disorder. Lastly, sample mean SIP-AD score was 9.34 ($SD = 4.83$) and mean PHQ-4 score was 5.93 ($SD = 3.91$).

3.1 Descriptive Stigma Results

When examining overall internalized stigma, participants reported an average of 2.57 ($SD = 1.09$) across the items, which corresponds to a “rarely” on the scale (see Table 1). Participants were most likely to report that they “feel ashamed” and think that they “have permanently screwed up” their lives as a result of their opioid or alcohol use. Participants were least likely to report that they “can’t be trusted” or “feel inferior” to others without a history of substance use.

Internalized stigma was significantly higher among participants with comorbid OUD and AUD ($M = 2.84$, $SD = 1.10$) than those with either disorder alone ($M = 2.29$, $SD = 1.07$), $p < 0.0001$. Also, African-American participants endorsed significantly lower levels of internalized stigma ($M = 2.21$, $SD = .06$) than any other racial/ethnic group: White ($M = 2.50$, $SD = .04$), Latino/a ($M = 2.62$, $SD = .02$) and multi-racial/other ($M = 2.64$, $SD = .06$), $p < 0.05$.

3.2 Relationship Between Internalized Stigma and SUP

All covariates were significantly correlated with SUP ($p < .05$) and were therefore included in the multivariate models, along with age and race/ethnicity. As displayed in Table 2, covariates entered in Step 1 (i.e., demographics, OAUD diagnosis, quantity/frequency of use, and psychiatric comorbidity) accounted for 28.5% of the variance in SUP, $F(7,377) = 21.42$, $p < 0.0001$. While all covariates were significantly related to SUP at the univariate level ($p < 0.05$), race/ethnicity was no longer significantly related to SUP at the multivariate level. In Step 2 we added internalized stigma, and the regression accounted for 51% of the variance in SUP, leading to significantly improved model fit, $F(8,376) = 48.68$, $p < 0.0001$. Higher internalized stigma was significantly related to more SUP, and accounted

for 22.4% of variance, after controlling for the effects of other variables. Two covariates (psychiatric comorbidity and opioid use frequency) were no longer significant after internalized stigma was entered, and the magnitude of all other covariates declined in step 2.

4.0 Discussion

The current study is the first to evaluate the relationship between internalized stigma and SUP among primary care patients with OAUDs. We found that internalized stigma was common among participants in this sample and at similar rates to previous specialty care studies (Kulesza et al., 2014; Luoma et al., 2013). That is, study participants reported internalizing some of the negative stereotypes about persons with a history of substance use. We also found that internalized stigma was significantly associated with greater SUP, even after controlling for known covariates (i.e., psychiatric comorbidity, OAUD-related variables, and demographics). Internalized stigma was the strongest predictor of SUP, adding a significant amount of predicted variance (i.e., 22%) to the combined 51% of predicted SUP variance. The study also provides preliminary information about the association between internalized stigma and important treatment outcome (i.e., SUP) for primary care patients with OAUDs.

Future research may examine whether internalized stigma could be a significant mediator of treatment outcome. Corrigan and colleagues' (2006, 2009) posit that once negative stereotypes are internalized, individual's sense of self-worth, self-esteem, and self-efficacy are likely to diminish. This, in turn, may be related to successful accomplishment of goal oriented behavior, pursuit of goals and activities consistent with one's values, life-satisfaction and wellbeing. Corrigan and colleagues (2006) named this the "why try?" effect: "Why try to get help for my drinking problem, someone like me will surely fail." Or "Why bother looking for a job, none will hire a loser like me anyway."

Likewise, our results suggest that internalized stigma might be related to negative outcomes for primary care patient population coping with OAUDs. It is plausible that strong self-identification with negative stereotypes, among some individuals representing this stigmatized population, might hinder their ability to cope with negative consequences of substance use. More studies are needed to improve our understanding about internalized stigma among primary care patients with OAUDs. Lastly, there is an opportunity for future research to evaluate whether efficacious stigma interventions would be associated with secondary benefits such as lower SUP, greater emotional well-being and higher quality of life.

There are several limitations to our data. First, the study's cross-sectional design limits our ability to establish causal links between internalized stigma and SUP. Future work should utilize a longitudinal design and consider how internalized stigma might intersect with other important constructs such as race/ethnicity, gender, and HIV/AIDS stigma. Second, we did not include covariates such as low distress tolerance and substance use severity shown to be significantly related to SUP in past research (Allensworth-Davies et al., 2012; Ali et al., 2015). Hence, more comprehensive evaluations of the relationship between internalized stigma and SUP are warranted. Third, generalizability of our findings to other primary care

populations is limited, as our participants were recruited from clinics serving underprivileged, racially and ethnically diverse communities. Last, we encourage future studies to examine the relationship between stigma and SUP with greater specificity. As the study utilized a composite measure of SUP, we do not answer important questions regarding the specific subtypes of SUP as a function of internalized stigma. Future studies are encouraged that help delineate what specific consequences are most likely to occur among individuals reporting high levels of internalized stigma.

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Highlights

- Assessed internalized stigma and substance use problems among primary care patients
- Internalized stigma rates similar to extant literature from specialty care samples
- Higher internalized stigma was significantly related to more substance use problems
- Internalized stigma significantly added to understanding of substance use problems

Table 1

Percent of participants (N=393) endorsing each of the internalized stigma items

Internalized Stigma Questions ¹	Never		Rarely		Sometimes		Often		Very Often	
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
I have the thought that a major reason for my problems with substances is my own poor character.	126	(32)	71	(18)	98	(25)	59	(15)	39	(10)
I have the thought that I should be ashamed of myself.	94	(24)	67	(17)	114	(29)	67	(17)	51	(13)
I have the thought that I deserve the bad things that have happened to me.	126	(32)	79	(20)	90	(23)	63	(16)	35	(9)
I have the thought that I can't be trusted.	185	(47)	86	(22)	63	(16)	43	(11)	16	(4)
I feel inferior to people who have never had a problem with substances.	173	(44)	67	(17)	75	(19)	35	(9)	43	(11)
I feel out of place in the world because of my problems with substances.	126	(32)	63	(16)	102	(26)	63	(16)	39	(10)
I have the thought that I've permanently screwed up my life by using substances.	110	(28)	51	(13)	102	(26)	63	(16)	67	(17)
I feel ashamed of myself.	110	(28)	51	(13)	106	(27)	67	(17)	59	(15)

Note:

¹ Measured by the Substance Abuse Stigma Scale (Luoma et al., 2013).

Table 2

Prediction of substance use problems by internalized stigma (n=393)

Predictor	Standardized <i>B</i>	SE <i>B</i>	Adjusted <i>R</i> ²	<i>R</i> ²
Step 1: Covariates			0.29	
Age	−0.05 *	0.02		
Race/ethnicity ¹	−0.19	0.19		
OAUD diagnosis ²	2.02 ***	0.48		
Psychiatric comorbidity ³	0.46 ***	0.06		
Alcohol use ⁴	0.11 **	0.04		
Opioid use ⁴	0.07 *	0.03		
Step 2: Internalized Stigma ⁵			0.51	0.22 **
Age	−0.03 *	0.01		
Race/ethnicity	−0.12	0.16		
OAUD diagnosis	1.24 **	0.41		
Psychiatric comorbidity	0.09	0.06		
Alcohol use	0.07 *	0.03		
Opioid use	0.04	0.02		
Internalized stigma	2.68 ***	0.21		

Note:

¹ Race/ethnicity was coded: 1=Hispanic/Latino/a, 2=African-American, 3=multi-racial/other;² OAUD diagnosis was coded: 1= comorbid AUD and OUD diagnosis, 0= single diagnosis AUD or OUD;³ Psychiatric comorbidity= Patient Health Questionnaire-4 (PHQ-4; Kroenke et al., 2009);⁴ Alcohol and Opioid use= alcohol quantity/occasion and opioid use frequency, measured by the Timeline Follow-back Method (TLFB; Sobell et al., 1979);⁵ Internalized Stigma= Substance Abuse Stigma Scale (SASS; Luoma et al., 2013);*
p<0.05,**
p<0.01,***
p<0.0001