



## Short communication

## Factors related to cigarette smoking and intent to quit among adolescent inpatients with psychiatric and substance use disorders

Haruka Minami<sup>a,\*</sup>, Erika Litvin Bloom<sup>b</sup>, Hannah R. Brinkman<sup>a,c</sup>, Ana M. Abrantes<sup>d</sup>, Cara C. Young<sup>e</sup>, Richard A. Brown<sup>e</sup><sup>a</sup> Department of Psychology, Fordham University, 441 E. Fordham Road, Bronx, NY, 10458, USA<sup>b</sup> Department of Psychiatry and Human Behavior and Medicine, Division of General Internal Medicine at Rhode Island Hospital, Brown University, Providence, RI, 02912, USA<sup>c</sup> Department of Psychiatry, Icahn School of Medicine at Mount Sinai, 1425 Madison Ave., New York, NY, 10029, USA<sup>d</sup> Department of Psychiatry and Human Behavior, Brown University, 700 Butler Dr., Providence, RI, 02906, USA<sup>e</sup> School of Nursing, The University of Texas at Austin, 1710 Red River Street, Austin, TX, 78712, USA

## ARTICLE INFO

## Keywords:

Psychiatric inpatient  
Adolescent  
Smoking  
Intent to quit  
Substance use  
Psychiatric disorder  
Comorbidity

## ABSTRACT

**Purpose:** Smoking behaviors and intent to quit have not been well studied among adolescent psychiatric patients. The current study examined the relationships between smoking-related variables (smoking status/heaviness and intent to quit), psychiatric diagnoses and symptomatology, and substance use among adolescents receiving psychiatric inpatient care.

**Methods:** Baseline data from a randomized controlled trial, testing the effect of a brief intervention on substance use, with 151 psychiatrically hospitalized adolescents with comorbid psychiatric and substance use disorders (diagnosed using semi-structured interviews) were examined for this study.

**Results:** Of 151 inpatients aged 13–17 years, 112 (74.2%) were smokers (self-report), of whom 59 (52.7%) expressed intent to quit within 3 months and 36 (32.1%) within 30 days. There were no differences in psychiatric diagnoses or alcohol, marijuana, or any drug use among smokers and nonsmokers. On the other hand, smokers reported significantly greater occurrences of negative consequences from alcohol use, drug use, and total substance use than nonsmokers. Separate analyses also revealed that heavier smokers reported greater negative consequences from alcohol/drug/total use. Similarly, while no difference in externalizing or internalizing symptoms was observed across smokers vs. nonsmokers, heavier smokers reported significantly more severe externalizing symptoms, but not internalizing symptoms, than lighter smokers. Intention to quit smoking did not vary as a function of psychiatric symptomatology or substance use.

**Conclusions:** Smoking was related to several psychiatric and substance use problems. Notably, adolescent psychiatric inpatient smokers reported intention to quit smoking regardless of psychiatric disorders, psychiatric symptom severity, or other substance use.

## 1. Introduction

Only 8.0% of U.S. high school students reported past month cigarette smoking in 2016 compared to 16% in 2011 (Jamal et al., 2017). However, consistent with data on adults, adolescents with psychiatric and substance use disorders (SUDs), especially those who are engaged in treatment for these disorders, have much higher smoking rates than the general population (DeHay et al., 2012; Ramsey et al., 2002). Some studies have examined psychological, peer, and family predictors of smoking behavior in this population (Grana et al., 2012; Nargiso et al., 2012; Picotte et al., 2006; Ramo et al., 2010). Ramo et al. (2010)

included adolescent smokers recruited from both inpatient and outpatient SUD treatment settings. They found that SUD severity was not related to intention to quit smoking or smoking cessation self-efficacy. Grana et al. (2012) recruited adolescents from outpatient mental health settings and found that psychiatric treatment and symptomatology measures were not related to the severity of nicotine dependence or desire to quit. Rates of SUD diagnosis was not reported, but about half had used alcohol and/or marijuana and 22% reported illicit drug use in the past month.

SUDs in adolescents are associated with high rates of psychiatric comorbidity (Kandel et al., 1999; Lewinsohn et al., 1995; Roberts et al.,

\* Corresponding author.

E-mail address: [hminami@fordham.edu](mailto:hminami@fordham.edu) (H. Minami).

2007) and suicidality (D'Eramo et al., 2004; Nock et al., 2013; Ramchand et al., 2008). When adolescents with SUDs present for treatment, especially those with comorbid psychiatric disorders, they typically present in mental health rather than in SUD treatment settings (Merikangas et al., 2011; SAMHSA, 2012). To date, smoking behavior among adolescents with comorbid psychiatric and substance use disorders who are receiving inpatient psychiatric treatment has not been well studied. We conducted a study within an inpatient setting (Ramsey et al., 2003) which indicated that compared to non-smokers, smokers had a greater number of lifetime psychiatric diagnoses, were more likely to have SUDs and disruptive behavior diagnoses, and were also more likely to have engaged in binge drinking and smoking marijuana. A greater understanding of smoking behavior and intent to quit and their associations with substance use and psychiatric symptomatology may help develop appropriate smoking cessation interventions that can be integrated into inpatient care. The current study used baseline data from a clinical trial (Brown et al., 2015) to extend the previous findings above by examining the relationships between smoking behavior, intent to quit smoking, psychiatric diagnoses, substance use, and psychiatric symptomatology.

## 2. Methods

### 2.1. Participants

Participants were 151 adolescents with comorbid psychiatric and substance use disorders enrolled in a randomized trial examining the effects of a brief motivational interviewing (MI) intervention for substance use provided during inpatient psychiatric treatment on substance use outcomes after hospital discharge (Brown et al., 2015). They were recruited from the psychiatric inpatient units at Butler Hospital and Bradley Hospital in Rhode Island. Inclusion criteria were 1) being 13–17 years of age, 2) meeting DSM-IV criteria for a non-nicotine SUD and one or more current Axis I disorders (other than a SUD), and 3) having phone access. Exclusion criteria included a current DSM-IV diagnosis of psychotic disorder, mental retardation, or pervasive developmental disorder.

## 3. Procedure

After the consent process, all participants completed a baseline assessment during their psychiatric hospitalization, for which they received a \$50 gift certificate. Participants were then randomly assigned to MI or treatment as usual. All data in this study were from the baseline assessment (pre-intervention) that were administered to the adolescent participants. Detailed study procedures are described elsewhere (Brown et al., 2015). The original study was approved by Butler Hospital Institutional Review Board.

## 4. Measures

### 4.1. Psychiatric and substance use disorder diagnoses

The Kiddie Schedule for Affective Disorders and Schizophrenia-Present and Lifetime (K-SADS-PL) (Kaufman et al., 1997) was administered to the adolescent participants to obtain clinical information about the participants and onset of SUD.

### 4.2. Smoking status, smoking heaviness, and intent to quit

Those who verbally reported current cigarette smoking (smoker vs. non-smoker) were asked to select a smoking heaviness category: 1 = less than 1 a day, 2 = about 1–15 cigarettes a day, 3 = about 16–25 cigarettes a day, or 4 = over 26 cigarettes a day. Intent to quit smoking (i.e., plan to stop smoking in the next 30 days or within the next 3 months) was assessed with 2 separate questions (Yes/No).

### 4.3. Other substance use

Daily non-nicotine substance use during the 3 months prior to hospitalization was assessed using the Timeline Followback (TLFB) (Sobell and Sobell, 1996). An average number of days of substance use per month was calculated for alcohol, marijuana, other drugs, and any substance use.

### 4.4. Negative consequences of substance use

The Adolescent Problem Use Scale (APUS) (Chassin et al., 1991) was used to assess the occurrence of negative (social, health, and legal) consequences of alcohol, drug, and total substance (alcohol and drugs) use.

### 4.5. Psychiatric symptomatology

The Youth Self Report (YSR) (Achenbach, 1991) that comprises two main scales (internalizing and externalizing symptoms) was used to assess psychiatric symptomatology.

## 5. Data analyses

Differences in demographics, rates of psychiatric and SUDs, and onset/duration of SUDs by smoking status were tested using chi-square or *t*-tests. We also tested whether intent to quit differed by smoking heaviness using regression. Next, smoking heaviness and intent to quit were regressed onto each disorder (presence or absence), controlling for gender, to examine differences across smokers with and without a psychiatric or substance use disorder. A series of linear regressions were conducted where smoking status, smoking heaviness, and intent to quit were predictors of substance use, negative consequences of substance use, and psychiatric symptomatology in separate models, controlling for race (i.e., white vs. non-white) and gender. For smoking heaviness and intent to quit models, only smokers were included. The potential moderating role of gender was also explored; however, no significant interaction effects were observed.

## 6. Results

### 6.1. Participant characteristics

Thirty-nine participants (25.8%) were nonsmokers, and 112 (74.2%) were smokers (Table 1). Of smokers, 59 (52.7%) intended to quit within 3 months and 36 (32.1%) within 30 days. Male smokers (vs. female) smoked significantly more cigarettes per day ( $b = 0.33$ ,  $SE = 0.15$ ,  $p = 0.027$ ) and heavier smokers were significantly less likely to intend to quit in the next 30 days ( $b = -0.324$ ,  $SE = 0.146$ ,  $p = 0.029$ ), but not in the next 3 months ( $p = 0.130$ ). No differences in the onset or duration of SUDs across smoking status were found (Table 2). Approximately two-thirds of smokers with SUDs started smoking after the onset of their SUD.

### 6.2. Psychiatric and substance use disorder diagnoses

No differences in rates of any psychiatric disorders across smoking status were observed. Smokers were more likely to have alcohol and other substance abuse/dependence, but not marijuana abuse/dependence (Table 1). Separate regression analyses showed that smokers with post-traumatic stress disorder (PTSD), but not other disorders, were heavier smokers ( $b = 0.29$ ,  $SD = 0.14$ ,  $p = 0.042$ ),<sup>1</sup> compared to smokers without PTSD, controlling for gender. Smokers with marijuana abuse/dependence, but not alcohol or other substance abuse/

<sup>1</sup> These differences did not reach statistical significance ( $ps = 0.064/.071$ ) without gender in the model.

Download English Version:

<https://daneshyari.com/en/article/7503207>

Download Persian Version:

<https://daneshyari.com/article/7503207>

[Daneshyari.com](https://daneshyari.com)