



Short communication

Prescription drug misuse and suicidal ideation: Findings from the National Survey on Drug Use and Health



Jason A. Ford*, Danielle Perna

Department of Sociology, University of Central Florida, Orlando, FL 32816, USA

ARTICLE INFO

Article history:

Received 20 July 2015

Received in revised form 1 October 2015

Accepted 4 October 2015

Available online 22 October 2015

Keywords:

Suicidal ideation

Prescription drug misuse

Opioids

ABSTRACT

Objective: Suicide is one of the leading causes of injury-related mortality in the United States and prior research has identified alcohol and other drug use as a major risk factor. In recent years, prescription drug misuse has become a serious public health issue; however, very little research examines the relationship between prescription drug misuse and suicide or suicidal ideation.

Methods: Using data from the National Survey on Drug Use and Health, the current research examines the relationship between prescription drug misuse and suicidal ideation among adults. Suicidal ideation was measured by asking respondents if they seriously thought about killing themselves in the past 12 months. Prescription drug misuse was defined as use without a prescription or solely for the feeling or experience caused by the drug in the past 12 months. Several multivariable logistic regression models were estimated.

Results: Findings show that respondents who report prescription drug misuse in the past year, specifically pain relievers, are more likely to report that they had seriously thought about killing themselves.

Conclusions: The current research fills an important gap in the literature by examining the relationship between prescription drug misuse and suicidal ideation. Consistent with the extant literature, prescription drug misuse is significantly associated with suicidal ideation among adults.

© 2015 Elsevier Ireland Ltd. All rights reserved.

1. Introduction

With nearly 40,000 deaths every year, suicide is one of the leading causes of injury-related mortality in the United States (Rockett et al., 2012). While suicide has always been a concern for adolescents and young adults, recent data indicate that suicide rates have begun to increase for middle-aged adults in the United States (Hempstead and Phillips, 2015). A number of risk factors associated with suicide have been identified, including mental health problems and the use of alcohol and other drugs (Borges et al., 2000; Han et al., 2015; Pelkonen and Marttunen, 2003; Wong et al., 2009).

In recent years, prescription drug misuse (PDM) has become a major public health issue in the United States (DuPont, 2010). Research on PDM has focused on prevalence and trends (Center for Behavioral Health Statistics and Quality, 2014; Johnston et al., 2015), demographic characteristics of users (Center for Behavioral Health Statistics and Quality, 2014; Johnston et al., 2015), risk and protective factors (Harrell and Broman, 2009; Kelly et al.,

2013; Schroeder and Ford, 2012), motivations (Brandt et al., 2014; McCabe et al., 2009; Rigg and Ibanez, 2010), sources of diversion (Ford and Lacerenza, 2011; Inciardi et al., 2009; Rigg et al., 2012), and routes of administration (McCabe et al., 2009; Young et al., 2010). As PDM has increased in popularity so to have the overall number of drug related deaths (Warner et al., 2011), visits to emergency departments related to prescription drugs (Substance Abuse and Mental Health Services Administration, 2012), and neonatal abstinence syndrome (Patrick et al., 2012).

Much of the academic research on suicide focuses on suicidal ideation, thinking about, considering, or planning suicide. While drug use is a known correlate of both suicide and suicidal ideation, there is a relative dearth of research on the relationship between PDM and suicidal ideation. A few cross-sectional studies that examine PDM with data from non-representative samples have shown that suicidal ideation increases the likelihood of PDM, specifically opioids (Hall et al., 2010; Murphy et al., 2015; Rhoades et al., 2014; Zullig and Divin, 2012). However, only one empirical study, based on a sample of students at one college, shows PDM increases the likelihood of suicidal ideation in a bivariate regression model (Vidourek et al., 2010). In addition, research has identified the use of prescription opioids as an important drug in suicide caused by intentional self-poisoning (Davis et al., 2014; Karch et al., 2006;

* Corresponding author. Tel.: +1 407 823 3744; fax: +1 407 823 3026.

E-mail addresses: Jason.Ford@ucf.edu (J.A. Ford), dperna14@Knights.ucf.edu (D. Perna).

Zosel et al., 2013). Given the abundance of research on suicidal ideation and the increasing popularity of PDM in substance use research, it is surprising that such little research examines the relationship between the two.

The goal of the current research is to examine the relationship between PDM and suicidal ideation among a sample of adults in the United States. We believe this research fills an important gap in the literature as substance use has been identified as a key risk factor for suicide and a number of negative health related outcomes associated with PDM have been documented. To address this gap in the literature we examine data from a national sample and estimate a multivariable logistic regression model.

2. Methods

2.1. Data

The data for the current study are the 2012 National Survey on Drug Use and Health (NSDUH). The primary focus of the NSDUH is prevalence and correlates of drug use in the United States. Using a 50-State design with an independent, multistage area probability sample, data were collected from a sample of 68,309 respondents that is generalizable to the non-institutionalized U.S. civilian population ages 12 and older. The interview was carried out using a combination of computer-assisted personal interviewing (CAPI) and audio computer-assisted self-interviewing (ACASI). The weighted interview response rate was 73.04%.

To protect the confidentiality of respondents, the complete version on the NSDUH is not available to the public. Rather, a public use version of the data ($N = 55,268$) were created by applying a statistical disclosure limitation method to the full analytic file. The focus of the current research is adult respondents and there are 37,869 respondents' ages 18 and older in the public use data file.

2.2. Measures

The dependent variable for the current research is suicidal ideation, coded 0 = No and 1 = Yes. Respondents were coded 1 if they seriously thought about killing themselves in the past 12 months. PDM was defined as use without a prescription or solely for the feeling or experience caused by the drug, coded 0 = No and 1 = Yes. We look at the misuse of any prescription drug in the past 12 months as well as the misuse of pain relievers, tranquilizers, stimulants, and sedatives separately.

In our multivariable logistic regression models we include a number of dichotomous covariates for demographic characteristics and risk factors for suicidal ideation (Kessler et al., 1999). These covariates include: age (0 = 26 years and older, 1 = 18–25 years old), gender (0 = female, 1 = male), race (0 = nonwhite, 1 = white), SES (0 = receive no government assistance, 1 = receive any government assistance), place of residence (0 = urban or suburban, 1 = rural), education (0 = at least a high school degree, 1 = high school dropout), marital status (0 = currently single, widowed or divorced, 1 = currently married), employment status (0 = employed, student or not in labor force, 1 = unemployed), and church attendance (0 = attend services less than once a week, 1 = attend services at least once a week). We also include measures of overall health (0 = excellent, very good, or good, 1 = fair or poor) and serious psychological distress in the past 12 months (0 = no, 1 = yes). The measure of psychological distress in the NSDUH is based on the K6 (range of 0 to 24) instrument and a respondent with a score of 13 or higher is viewed as reporting serious psychological distress. Finally we include measures of heavy drinking (0 = No, 1 = yes) in the past 30 days and also marijuana use (0 = No, 1 = yes) and other illicit drug use (0 = No, 1 = yes) in the past 12 months.

Table 1
Sample characteristics.

Suicidal ideation		Age	
No	96.1%	26 and older	85.7%
Yes	3.9%	18 to 25	14.3%
Any PDM		Gender	
No	93.5%	Female	52.0%
Yes	6.5%	Male	48.0%
Pain reliever misuse		Race	
No	95.2%	Nonwhite	33.6%
Yes	4.8%	White	66.4%
Tranquilizer misuse		SES	
No	97.4%	No gov. assistance	84.2%
Yes	2.6%	Gov. assistance	15.8%
Stimulant misuse		Residence	
No	98.7%	Suburban or urban	93.8%
Yes	1.3%	Rural	6.2%
Sedative misuse		Education	
No	99.8%	High school grad.	85.5%
Yes	0.2%	High school dropout	14.5%
		Marital Status	
		Single/divorced/widowed	47.2%
		Married	52.8%
		Employment Status	
		Employed/student/other	94.3%
		Unemployed	5.7%
		Church Attendance	
		Less than once a week	86.5%
		At least once a week	13.5%
		Overall Health	
		Excellent/very good/good	86.4%
		Fair or poor	13.6%
		Serious Psychological Distress	
		No	89.2%
		Yes	10.8%
		Heavy Drinker	
		No	92.9%
		Yes	7.1%
		Marijuana Use	
		No	88.0%
		Yes	12.0%
		Other Illicit Drug Use	
		No	96.5%
		Yes	3.5%

2.3. Analytic strategy

In order to examine the relationship between PDM and suicidal ideation we estimated both bivariate and multivariable logistic regression models. We also estimated models for any PDM and then separately for prescription pain relievers, stimulants, sedatives, and tranquilizers. In order to take into account the complex multistage sampling design of the NSDUH, analyses were conducted using the SVYSET and SVY commands in STATA. These commands allowed STATA to consider survey design effects, including stratification and weight variables and the primary sampling unit, when estimating test statistics.

3. Results

Sample characteristics for all measures are shown in Table 1. Nearly 4% of the sample reported that they seriously thought about killing themselves in the past year. Additionally, about 6.5% of the sample reported the misuse of any prescription drugs in the past year, while 4.8% reported misuse of pain relievers, 2.6% reported misuse of tranquilizers, 1.3% reported misuse of stimulants, and less than one percent reported misuse of sedatives.

We first estimated bivariate regression models to examine the relationship between PDM and suicidal ideation, results not shown. We found significant relationships between suicidal ideation and the misuse of any prescription drug ($OR = 4.29$; 95% $CI = 3.40, 5.41$), pain relievers ($OR = 4.11$; 95% $CI = 3.06, 5.52$), tranquilizers

Download English Version:

<https://daneshyari.com/en/article/7504515>

Download Persian Version:

<https://daneshyari.com/article/7504515>

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