



A retrospective analysis of the association between providing nicotine replacement therapy at admission and motivation to quit and nicotine withdrawal symptoms during an inpatient psychiatric hospitalization

Chizimuzo T.C. Okoli^{a,*}, Yazan D. Al-Mrayat^a, Charles I. Shelton Jr^c, Milan Khara^b

^a University of Kentucky College of Nursing, Lexington, KY 40536, USA

^b Vancouver General Hospital, Smoking Cessation Clinic, Vancouver, BC V5Z 1M9, Canada

^c University of Kentucky College of Medicine, Lexington, KY, USA

HIGHLIGHTS

- Psychiatric patients experience nicotine withdrawal in a tobacco-free hospitalization.
- Reporting of the withdrawal symptom of anxiety varies by psychiatric diagnosis.
- Nicotine replacement at admission is associated with nicotine withdrawal severity.
- Nicotine replacement at admission is not associated with motivation to quit.

ARTICLE INFO

Keywords:

Nicotine replacement therapy
Nicotine withdrawal
Tobacco treatment
Psychiatric hospital

ABSTRACT

Background: Psychiatric patients have high tobacco use prevalence, dependence, and withdrawal severity. A tobacco-free psychiatric hospitalization necessitates the management of nicotine withdrawal (NW) for tobacco using patients. NW management often requires the provision of approved nicotine replacement therapy (NRT) to patients, which may also motivate tobacco users towards cessation. However, few studies have examined the associations between providing NRT, motivation to quit, and NW among psychiatric patients.

Objective(s): To examine the associations between providing NRT at admission and motivation to quit smoking and severity of NW symptoms.

Design: A retrospective review of the medical records of 255 tobacco using patients on whom NW was assessed during their hospital stay. The time when NRT was provided (i.e., at admission vs. not provided vs. on the unit), motivation to quit smoking, and 8-item Minnesota Nicotine Withdrawal Scale were assessed.

Results: The primary NW symptom was ‘craving’ (65.1%); reporting of ‘anxiety’ varied by psychiatric diagnosis. Providing NRT at admission was not associated with motivation to quit. Patients receiving NRT on the unit (i.e., delayed receipt) had significantly higher NW than those who received NRT at admission. In multivariate analyses, receiving NRT on the unit was significantly associated with greater NW severity ($\beta = .19, p = .002$).

Conclusions: Among psychiatric patients, providing NRT at admission is associated with greater severity of NW. The provision of NRT for NW management may be considered as standard practice during tobacco-free psychiatric stays. Future studies may consider the effect of other tobacco treatment medications (such as varenicline, bupropion) on managing NW.

1. Introduction

Tackling tobacco use among people with mental illnesses (MI) remains critical to public health.(Prochaska, Das, & Young-Wolff, 2017) About 36%–75% of adults receiving mental healthcare services currently use tobacco.(Chandra et al., 2005; Diaz et al., 2009; FCRd et al.,

2014; Kalman, Morissette, & George, 2005; Michopoulos et al., 2015) This alarming prevalence persists(Centers for Disease Control and Prevention, 2013; Lê Cook et al., 2014) despite declining tobacco use rates in the U.S.(Jamal et al., 2016; U.S. Department of Health and Human Services, 2014); resulting in disproportionate morbidity and mortality among people with MI.(Bandiera, Anteneh, Le, Delucchi, &

* Corresponding author at: University of Kentucky College of Nursing, 315 College of Nursing Building Lexington, KY 40536-0232, USA.

E-mail addresses: ctokol1@uky.edu (C.T.C. Okoli), ydal222@uky.edu (Y.D. Al-Mrayat), charles.shelton1@uky.edu (C.I. Shelton), Milan.Khara@vch.ca (M. Khara).

<https://doi.org/10.1016/j.addbeh.2018.06.005>

Received 13 December 2017; Received in revised form 5 June 2018; Accepted 6 June 2018

Available online 07 June 2018

0306-4603/ © 2018 Elsevier Ltd. All rights reserved.

Guydish, 2015; Williams, Steinberg, Griffiths, & Cooperman, 2013) Despite a pervasive culture of tobacco use, (Prochaska, 2011; Thomas & Richmond, 2017) people with MI are willing (Siru, Hulse, & Tait, 2009) and able (Anthenelli, Benowitz, West, et al., 2016; Prochaska et al., 2017; Roberts, Eden Evins, McNeill, & Robson, 2016) to quit when provided tobacco treatment (TT). Quitting reduces risks for several diseases (U.S. Department of Health and Human Services, 2014) and is associated with improvement in some psychiatric symptoms. (Taylor et al., 2014) Engaging providers, policymakers and mental health advocates to increase access to TT must be addressed in psychiatric inpatient settings. (Prochaska, 2011)

The U.S. Clinical Practice Guideline for TT urges systematic processes for TT delivery during healthcare encounters. (U.S. Preventive Services Task Force, 2015) In addition, the U.S. Center of Medicare and Medicaid Services implemented TT measures as a part of Inpatient Psychiatric Facility Quality Report requirements. (CMS, 2016) These measures require psychiatric institutions to report the tobacco use status of patients, provide practical cessation counseling and Food and Drug Administration approved medication, and refer patients for further treatment at discharge. (CMS, 2016) These and similar government-led requirements can enhance TT provision in psychiatric facilities. (Carrillo, Nazir, Howser, et al., 2017; Rigotti, Tindle, Regan, et al., 2016)

When hospitalized, TT often requires managing nicotine withdrawal (NW) for tobacco users that experiencing withdrawal symptoms. NW symptoms may occur around 4–24 h following stopping tobacco- or nicotine-containing products (McLaughlin et al., n.d); and may include anxiety, difficulty concentrating, restlessness, increased appetite, insomnia, depressed mood, and irritability, frustration, or anger. (American Psychiatric Association, 2013) As compared to those without MI, those with MI have greater NW severity. (Breslau, Kilbey, & Andreski, 1992; Smith, Homish, Giovino, & Kozlowski, 2014) Among hospitalized psychiatric patients, higher NW severity is further associated with being female, African American, having greater tobacco dependence and psychiatric symptom severity, and co-occurring substance use disorders. (Soyster, Anzai, Fromont, & Prochaska, 2016)

As enhancing motivation for quitting smoking is a strong predictor of engagement and success in TT, (Lindson-Hawley, Thompson, & Begh, 2015; Vangeli, Stapleton, Smit, Borland, & West, 2011) understanding its relationship with NW is important to enhance cessation in psychiatric patients. Studies have shown that both the occurrence of specific NW symptoms (for example, insomnia (Zhou et al., 2009)) and the severity of symptoms (West, Hajek, & Belcher, 1989) are predictive of cessation success in non-psychiatric patients. In addition, intolerance to NW discomfort is negatively correlated with motivation to quit smoking. (Rohsenow et al., 2015) Tobacco users with MI report high frequency or occurrence of particular symptoms (e.g., agitation and irritation) resulting from NW. (Prochaska, Gill, & Hall, 2004) Population based studies have also found that individuals with depressive and anxiety disorders report higher frequency of individual NW symptoms and severity of symptoms as compared to those without those disorders. (Breslau et al., 1992) However, there is a dearth of studies that have examined the severity of NW in hospitalized psychiatric patients or its association with motivation for quitting.

With increasing numbers of tobacco-free psychiatric hospitals, (Ortiz & Schacht, 2015; Stockings, Bowman, Prochaska, et al., 2014) there are concerns that inadequate management of NW can have adverse behavioral outcomes during hospitalization. For example, Lawn and colleagues (Lawn & Pols, 2003) found that staff at a smoke-free psychiatric hospital were often unable to recognize NW symptoms in patients. This misidentification of NW was a potential risk for increased patient agitation and acting out behaviors. (Lawn & Pols, 2003) Indeed, not addressing NW among psychiatric patients may further hinder opportunities for providing TT. This is because greater severity of NW symptoms during cessation attempts may predict failure and subsequent relapse. (Allen, Bade, Hatsukami, & Center, 2008; Zhou et al.,

2009)

Furthermore, personalized management of tobacco use for patients during psychiatric hospitalizations requires clarification. On the one hand, 21–79% of tobacco users want cessation, (Siru et al., 2009) and tobacco-free psychiatric hospitalizations are an opportunity for TT engagement. Conversely, some tobacco users are unprepared to quit, and thus, tobacco-free hospitalizations necessitate managing of potential NW. Current TT approaches were developed for *tobacco use cessation*, (Bader, McDonald, & Selby, 2009; Hughes, 2008) and not, necessarily, *NW management*. Thus, evidence remains equivocal on NW management during hospitalization and how this process may inform TT. For instance, protocols have been developed to ease transitioning to a non-smoking status during long-term tobacco-free hospitalization, but such practices do not necessarily address NW management for short-term hospitalizations. (Bittoun, Nynycz, Ross, Foley, & Ross, 2013) Studies are required to bridge this gap, particularly in psychiatric settings.

With a scarcity of NW management research among patients with MI, the purpose of this study was to examine the associations between providing tobacco cessation pharmacotherapy on motivation to quit smoking and NW in a state psychiatric facility. Specifically, we examined the associations between providing nicotine replacement therapy (NRT) at admission and:

1. Motivation to quit,
2. Severity of NW symptoms

2. Methods

2.1. Setting

The sample was obtained from a 239-bed inpatient psychiatric facility in Kentucky, a state with the second highest adult tobacco use prevalence in the U.S. (Nguyen, 2016) Approximately 87–90% of patients were admitted involuntarily due to psychological distress. Patients were mostly admitted without or with unknown insurance status (53.9%) or Medicaid/Medicare (40.1%). Admission criteria included being > 18 years and being evaluated by a qualified mental health professional. Once admitted, a patient received care under an attending psychiatrist/physician in consort with a multidisciplinary team of nurses, social workers, psychologists, and other specialized health professionals.

2.2. Procedure

This retrospective analysis was based on medical records of patients hospitalized between January 1st to December 31st 2016. In adhering to the brief intervention model, (U.S. Preventive Services Task Force, 2015) after admission, a trained TT nurse assessed patients for NW, asked more details about their tobacco use, advised them to quit, assessed for their readiness to quit, and assisted them in quitting by providing practical cessation counseling and resources. Tobacco using patients were engaged in TT only if willing. Several attempts were made to engage patients until the patient either refused, or assented, or was discharged.

2.3. Ethical considerations

The retrospective analysis was approved by the ethical review board of the University of Kentucky (Exemption Certification for Protocol No. 17-0064-X2B). A waiver of the documentation for informed consent was obtained.

2.4. Measures

The study measures were as follows:

Download English Version:

<https://daneshyari.com/en/article/7258931>

Download Persian Version:

<https://daneshyari.com/article/7258931>

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