Understanding counselors' implementation of tobacco cessation services with patients

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ABSTRACT

This study aimed to understand substance use disorder counselors' implementation of evidence-based tobacco cessation services (TCS) with their patients who smoke. Drawing from an established adoption of innovations framework, we investigated the association between counselors' perceptions of the availability of TCS (both pharmacotherapies and behavioral treatments) in their treatment program and the implementation of TCS (both pharmacotherapies and behavioral treatments) with their patients who smoke and whether this association is moderated by the strength of an organization's climate for implementation and the fit of the innovation with users' values. Data were collected in 2010 from 682 counselors working in 239 treatment programs across the U.S. that offer evidence-based TCS. Mixed-effect models showed that perceived availability of TCS was related with greater TCS implementation. This relationship was moderated by several indicators of climate for implementation but not by the fit of the innovation with users' values.

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1. Introduction

Although perceptions exist that quitting tobacco use may hinder abstinence from alcohol and other drugs (Weinberger, Reutenauer, Vessicchio, & George, 2008), studies indicate that tobacco cessation (TC) raises the likelihood of sustaining sobriety (Baca & Yahne, 2009). Further, research suggests that nicotine has an effect on the brain such that it promotes nicotine cravings (D'Souza & Markou, 2011) and the chance of addiction to other drugs (Fagen, Mitchum, Vezina, & McGehee, 2007). Nicotine also decreases the recovery of brain structure and cognitive improvements after achieving sobriety in alcohol dependent individuals (Yeh, Gazdzinski, Durazzo, Sjostrand, & Meyerhoff, 2007).

With studies also illustrating tobacco use rates between 65 and 85% among individuals with substance use disorders (SUDs) (Guydish et al., 2011) but also interest in quitting smoking (Clarke, Stein, McGarry, & Gogineni, 2001), it is important to examine both the adoption of tobacco cessation services (TCS) in SUD treatment programs and factors that increase the implementation of these services by the frontline professionals (i.e., counselors) who deliver treatments. The purpose of the current study is to understand SUD counselors' implementation of evidence-based practices (EBPs) for TC with their patients who smoke when they work in treatment programs that offer TCS.

1.1. Importance of TC for patients in SUD treatment

Individuals seeking treatment for SUDs tend to smoke more cigarettes and are more nicotine dependent than individuals in the general population (Substance Abuse & Mental Health Services Administration [SAMHSA], 2011). The well-documented and serious public health consequences resulting from cigarette smoking led to the development of a variety of evidence-based TC treatments that are recommended for SUD patients. First, there is strong support for nine pharmacological treatments including nicotine replacement therapy (NRT) (patch, gum, lozenge, inhaler, and spray), buproprion, varenicline, nortriptyline, and clonidine (Abrams et al., 2003; Fiore et al., 2008). Second, behavioral treatments including individual and group counseling for TC also have a strong empirical basis (Abrams et al., 2003; Fiore et al., 2008). Like pharmacological treatments, "more counseling is better," both in terms of the type of behavioral intervention and the duration of the intervention (Fiore et al., 2008). Despite these efforts, availability and use of EBPs for TC in SUD treatment are not extensive (Eby & Laschober, 2013; Knudsen & Studts, 2011; Laschober & Eby, 2013).

1.2. Understanding counselors' implementation of TCS

Klein and Sorra's (1996) theoretical model of the innovation implementation process was used to guide the current study. According to Klein and Sorra (1996), when organizations adopt

innovations it is essential to gain members' committed use of the innovation in order for implementation to occur and be sustained. The mere adoption of an innovation does not automatically translate into implementation effectiveness although adoption has to occur prior to implementation. This is consistent with Rogers' (2003) work on the adoption of innovations and Fixsen, Naoom, Blasé, Friedman, and Wallace's (2005) comprehensive review of the implementation of EBPs.

Hypothesis 1. There will be a positive relationship between perceived availability of evidence-based TCS (pharmacotherapies and behavioral treatments) and counselor implementation of evidence-based TCS (pharmacotherapies and behavioral treatments).

Klein and Sorra's (1996) model identifies several factors that may increase the likelihood that counselors implement TCS when they are adopted by their organization. These factors include climate for implementation and fit of the innovation with users' values. Climate for implementation refers to the extent to which organizational policies, practices, and characteristics support innovation use. Fit of the innovation with users' values refers to the degree to which the use of the innovation is aligned with employees' personal values and beliefs (Klein & Sorra, 1996).

1.2.1. Climate for implementation

One reason that counselors may not implement available EBPs for TC is that they do not possess the necessary skills and training to treat patient smoking behavior (e.g., Guydish, Passalacqua, Tajima, & Manser, 2007). This is a real possibility in SUD treatment given the varied professional backgrounds of counselors, lack of national accreditation and licensing standards in the field, limited on-the-job training, and high turnover among counselors (Eby, Burk, & Maher, 2010; Eby & Rothrauff-Laschober, 2012; Kerwin, Walker-Smith, & Kirby, 2006; Laschober & Eby, 2013; McLellan, Carise, & Kleber, 2003).

Hypothesis 2. The positive relationship between perceived availability of evidence-based TCS (pharmacotherapies and behavioral treatments) and counselor implementation of evidence-based TCS (pharmacotherapies and behavioral treatments) with patients who smoke will be stronger among counselors reporting higher TC-related skills.

Climate for implementation is also related to the incentives that are available to support innovation use (Klein & Sorra, 1996). Such incentives are reinforcing to employees and send signals as to what is supported, valued, and expected within the organization. One important incentive for SUD counselors to implement TCS with their patients may be their perceptions of management support for and openness to the use of EBPs. This speculation is supported by research demonstrating that supervisor support is positively related to employee implementation of organizational change (e.g., Eby, George, & Brown, 2013; Klein, Conn, & Sorra, 2001).

Hypothesis 3. The positive relationship between perceived availability of evidence-based TCS (pharmacotherapies and behavioral treatments) and counselor implementation of evidence-based TCS (pharmacotherapies and behavioral treatments) with patients who smoke will be stronger among counselors reporting greater perceived management support for using EBPs.

Finally, Klein and Sorra (1996) point out that in order for innovations to be implemented, employee workplace obstacles to innovation use must be removed. One of the primary obstacles to implementation that counselors are likely to experience is inadequate time due to high caseloads, heavy paperwork requirements, and limited personnel (Broome, Knight, Edwards, & Flynn, 2009; McLellan et al., 2003). This is likely to be a particular challenge with TCS because patients enter treatment not to quit tobacco but to deal with addictions to alcohol and other drugs.

Hypothesis 4. The positive relationship between perceived availability of evidence-based TCS (pharmacotherapies and behavioral treatments) and counselor implementation of evidence-based TCS (pharmacotherapies and behavioral treatments) with patients who smoke will be stronger among counselors perceiving fewer obstacles to implementation.

1.2.2. Fit of the innovation with users' values

Motivation to use an organizational innovation is likely to be related to employees' personal values regarding the innovation and its use (Klein & Sorra, 1996). Previous research finds that counselors vary in their attitudes toward innovations, the use of EBPs in general (Ball et al., 2002; Forman, Bovasso, & Woody, 2001), and TC EBPs more specifically (Fuller et al., 2007; Guydish et al., 2007). This may be linked to erroneous beliefs that patients are not interested in TC (Richter & Arnsten, 2006) or that TC can compromise the successful treatment of other SUDs (Prochaska, Delucchi, & Hall, 2004).

Hypothesis 5. The positive relationship between perceived availability of evidence-based TCS (pharmacotherapies and behavioral treatments) and counselor implementation of evidence-based TCS (pharmacotherapies and behavioral treatments) with patients who smoke will be stronger among counselors reporting a stronger fit of the innovation with their own values.

2. Materials and methods

2.1. Study design and sample

The data for this study came from counselors working in randomly sampled SUD treatment programs that participated in the Managing Effective Relationships in Treatment Services (MERITS III) project in 2010. MERITS III is a National Institute on Drug Abuse (NIDA) funded project that examines the effect that SUD treatment program processes and management practices have on the adoption, implementation, and sustainability of TCS in SUD treatment programs. All procedures were approved by the University of Georgia Institutional Review Board. Detailed information on the sampling frame has been published previously (Muilenburg, Laschober, & Eby, 2014).

The 2010 Substance Abuse and Mental Health Services Administration (SAMHSA) National Directory provided the sampling frame for selecting treatment programs and included 11,153 SUD treatment programs. SAMHSA requires programs to be licensed, certified, or otherwise approved for inclusion in the Directory by their State Substance Abuse Agencies. Treatment programs were located across the U.S. and included Federal, State, local government, and private facilities. To be eligible for participation in MERITS III, treatment programs had to provide SUD counseling services in a community setting. Programs that offered only methadone maintenance, Veterans Administration (VA) programs, DUI educational programs, those listed as Halfway Houses, and only offered detoxification were not eligible for participation.

A random number generator was used to randomly select treatment programs for potential participation. A brief screening phone call identified eligible treatment programs. Research assistants called eligible treatment programs to obtain a sample of programs where the program administrator agreed to participate in the study. Of the 1599 eligible treatment programs that could be contacted, 1006 program administrators completed a survey (62.91% basic response rate). If program administrators indicated that they offered TCS ($n = 267$), they were asked to provide a list of all counselors who worked in their program.

Counselors were contacted via e-mail and invited to either participate in an online survey or complete a paper-and-pencil survey through the mail. Of the 2005 eligible counselors identified by the program administrators, 1044 completed a survey ($n = 880$ online,