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Drug abuse staff and clients smoking together: A shared addiction

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ABSTRACT

Smoking is endemic in drug abuse treatment populations, and smoking prevalence in this population appears unresponsive to existing tobacco control strategies. Clinical and policy guidelines encourage programs to address smoking among clients, and research has identified key barriers to doing so. This report explores the practice of staff and clients smoking together in drug treatment programs, and how this practice is associated with other tobacco-related measures. Clients ($N = 1113$) were surveyed and program directors were interviewed in a national sample of 24 drug abuse treatment programs affiliated with the NIDA Clinical Trials Network. Clients were asked whether they observed staff and clients smoking together in their program and, using program as the unit of analysis, this measure was tested for its association with client-level and program-level tobacco-related outcomes. Higher rates of staff and client smoking together were associated with higher staff smoking prevalence ($p = 0.006$), lower rates of client thoughts about quitting in the next 30 days ($p = 0.027$), more negative client attitudes toward quitting smoking ($p = 0.004$), and with clients receiving fewer tobacco-related services ($p = 0.024$). These findings illuminate an actionable, low cost policy intervention to address smoking in drug abuse treatment, which is to prohibit the practice of staff smoking together with clients. In the interest of the health of clients whom they serve, counselors, program directors, state regulatory agencies, and federal funding agencies should act to end this practice.

1. Introduction

The association between cigarette smoking and lung cancer was known, if still debated, before 1964 (Proctor, 2011). The 1964 Surgeon General's Report on Smoking and Health (Department of Health Education and Welfare, 1964) was important for its symbolism, with the U.S. Government defining smoking as a health concern, and because it motivated decades of tobacco control efforts. In broad terms, tobacco control includes strategies to educate the public about the risks of smoking through advertisements and warning labels, economic policies focused on taxation and subsidies, and regulatory policies that prohibit smoking in public places, prohibit sales to minors, and include use and purchase laws (D. C. Walsh & Gordon, 1986). The 2009 Family Smoking Prevention and Tobacco Control Act (TCA) gave the Food and Drug Administration (FDA) authority to regulate tobacco products. The FDA used this authority to ban most cigarette flavorings (excluding menthol), ban tobacco advertising using misleading terms such as "low" or "light," and restrict sale of tobacco products to children and adolescents (National Institutes of Health, 2012). Most recently, the FDA has issued a final rule to regulate e-cigarettes starting from August 8, 2016 (FDA Deeming Tobacco Products, 2016). U.S. tobacco control efforts have achieved impressive results: adult smoking prevalence decreased from 43% in 1965 (U.S. Department of Health and Human Services, 2014) to 16.8% in 2014 (Jamal et al., 2015).

Despite reduced smoking in the general population, smoking prevalence remains high in some groups. Smoking is more prevalent among American Indians/Alaskan Natives, 18–24 year olds, people living in poverty, and those with less education (Centers for Disease Control and Prevention, 2002). Smoking prevalence is 25% for persons with anxiety disorders, 30% for those with depressive disorders (Grant, Hasin, Chou, Stinson, & Dawson, 2004), 50–80% for those with schizophrenia (Prochaska, Hall, & Bero, 2008; Schroeder, 2009), and about 70% among persons who receive treatment for other substance abuse problems (Guydish, Yu, Le, Pagano, & Delucchi, 2015). Lasser et al. (2000) estimated that 44% of all cigarettes smoked in the U.S. were consumed by persons with mental health or substance abuse diagnoses.

For the estimated 4 million persons who receive some substance abuse treatment each year (Substance Abuse and Mental Health Services Administration, 2009), smoking prevalence has changed little over time. One review identified papers reporting smoking prevalence among persons enrolled in U.S. substance abuse treatment programs,

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taking the mean of all reports found each year from 1987 to 2009. Annual drug abuse treatment client smoking prevalence summarized in the review ranged from a 65% to 87.2%, with a median of 76.3% (Guydish et al., 2011a). A study of smoking among all admissions to drug abuse treatment programs supported by the New York State Office of Alcoholism and Substance Abuse Services (OASAS) found annual smoking rates ranging from 69.5% in 2007 to 71.2% in 2012 (Guydish et al., 2015). Last, a 2014–15 survey of clients ($N = 1113$) enrolled in a national sample of 24 substance abuse treatment programs reported a smoking prevalence of 77.9% (Guydish et al., 2016b). These findings suggest that, from 1987 to 2015, there was no observable decrease in smoking prevalence among persons enrolled in substance abuse treatment.

The need to treat tobacco use among persons in substance abuse treatment appears in clinical practice guidelines (Fiore et al., 2008) and position statements of professional organizations (American Public Health Association, 2003; American Society of Addiction Medicine, 2008; NAADAC, n.d.). At least two reviews have shown that either smoking cessation while in drug treatment is associated with improved drug use outcomes (Prochaska, Delucchi, & Hall, 2004) or has no effect on other drug use outcomes (Thurgood, McNeill, Clark-Carter, & Brose, 2016). Research has explored the barriers to providing tobacco intervention in these settings (Guydish, Passalacqua, Tajima, & Manser, 2007; Pagano, Tajima, & Guydish, 2016), has commented on the need for change in drug treatment culture (Bowman & Walsh, 2003; Campbell, Wander, Stark, & Holbert, 1995; Stuyt, Order-Connors, & Ziedonis, 2003), and has called for development and enforcement of tobacco policies in state-level treatment systems (Krauth & Apollonio, 2015).

Publicly funded drug abuse treatment programs represent about 2/3 of the current national drug treatment infrastructure (Mark et al., 2007; Mechanic, Schlesinger, & McAlpine, 1995). In this treatment system, there is a tradition of hiring staff who are also in recovery from substance abuse. This practice offers employers a dedicated workforce available at lower cost, offers recovering persons a way to re-enter the workforce and use their own recovery skills on the job, and reflects values of peer based intervention in the recovery community. As smoking prevalence among drug treatment clients is higher than that in the general population, smoking prevalence among drug treatment staff may also exceed that in the general population (Cookson et al., 2014; Guydish et al., 2007). Staff smoking has been reported as one barrier to provision of smoking cessation services to clients (Guydish et al., 2007), although one study reported that staff smoking was not associated with adoption of smoking cessation services (Knudsen, Studts, Boyd, & Roman, 2010). Although the practice of staff and clients smoking together is noted in commentaries (Substance Abuse and Mental Health Services Administration, 2011; Ziedonis, Guydish, Williams, Steinberg, & Foulds, 2006), we found no data-based reports on this issue. For example, among 42 papers exploring different aspects of smoking among persons enrolled in drug abuse treatment (Guydish et al., 2011a), none measured the practice of staff and clients smoking together. The current paper reports on the practice of staff and clients smoking together in a national sample of 24 publicly-funded substance abuse treatment programs, and examines associations of staff and clients smoking together with both client-level and program-level tobacco-related outcomes.

2. Methods

2.1. Sampling design

In a study of tobacco use among persons enrolled in substance abuse treatment, we developed a random sample of treatment programs involved in the National Institute on Drug Abuse (NIDA) Clinical Trials Network (CTN) in 2013. Eligible for inclusion were 48 CTN-affiliated programs that a) were publicly-funded, b) had at least 60 active clients, and c) had a program director willing to assign a staff liaison to coordinate data collection with our research team. From these, 33 programs were randomly selected and contacted by the research team. The final sample included 24 programs (7 outpatient, 10 residential, 7 methadone) located in 14 states (CA, CT, FL, HI, NC, NY, OH, OR, PA, SC, SD, TX, WV, VA). Details of sampling design, and program selection and recruitment, are reported elsewhere (Guydish et al., 2016b).

2.2. Participants and procedures

Each participating program was visited by the research team between May 2014 and February 2015. Clients were eligible to complete the survey if that were in the treatment program on the day of the site visit, and if they had been in treatment at the program for at least 10 days. In each program, one staff member was identified to coordinate all site visit logistics and activities with visiting research team. In residential programs, participants were recruited into multiple time slots during the day; in methadone programs, clients were recruited during morning dosing hours; and in outpatient programs, clients were recruited either at the beginning or end of group counseling sessions. For those clients who were interested in participating, the research staff explained the study and completed consent procedures, and participants then completed the surveys using iPads. Because residential program clients live in their program, and methadone clients generally visit their program once a day, data collection site visits in these programs usually lasted only one day. Site visits lasted 2–3 days in outpatient clinics, because most clients visit the clinic on weekly basis, and recruitment of up to 50 participants took more than one day. The number of participants recruited per clinic ranged from 28 to 53, with a median of 50. Each client completing the survey received a $20 gift card, and each program participating in the study received a $2000 incentive. Each program director was interviewed by phone, following the site visit, to assess tobacco-related policies and services in the program. Details of client recruitment and data collection are reported in Guydish et al. (2016b), and details of the program director interviews are reported in Pagano et al. (2016). All study procedures were approved by the University of California, San Francisco, Institutional Review Board.

2.3. Measures

2.3.1. Client demographic characteristics and use of tobacco products

Participants reported their age, gender, education level, race/ethnicity, and the type of treatment where they were recruited (outpatient, residential, methadone). Smoking status was reported by each client, and current smokers were those who reported having smoked > 100 cigarettes in their lifetime and also self-identified as current smokers. Only current smokers reported number of cigarettes smoked per day (CPD), and readiness to quit smoking, which was assessed using the item: "Are you seriously thinking of quitting smoking?" with possible responses categorizing stage of change as: pre-contemplation (not thinking of quitting in the next 6 months), contemplation (thinking of quitting in the next 6 months), and preparation (thinking of quitting within the next 30 days) (DiClemente, Prochaska, Fairhurst, & Velicer, 1991).

All participants were asked "Do staff and clients ever smoke together," with response codes of "yes" or "no." The proportion of respondents reporting "yes" was used as a single measure for each clinic, with values ranging from 2.6% to 90.5%.

2.3.2. Client smoking knowledge, attitudes, and services

All participants reported attitudes toward quitting smoking as measured by the Smoking Knowledge Attitudes and Services (S-KAS) survey (Guydish, Tajima, Chan, Delucchi, & Ziedonis, 2011b). In this analysis we used the S-KAS Attitude subscale and the Program Service subscale, each comprised of 8 items. Attitude scale items ask, for example, whether clients in the program want to quit smoking, whether counseling for quitting smoking is an important part of the program's mission, and

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