The question of how nicotine dependence should or should not be addressed within the context of addiction treatment has been a controversial issue from the inception of addiction treatment in the United States. Many nineteenth century inebriate asylums and private addiction cure institutes demanded cessation of smoking as a condition of treatment for other drug dependencies; bottled and boxed miracle cures for the “tobacco habit” were promulgated along side cures for alcoholism and morphine addiction, the first textbooks on addiction (then referred to as inebriety) included chapters on “tobaccoism,” and intense debate raged in the first addiction medicine journal—the Journal of Inebriety, 1875-1914—on the relationship between nicotine addiction and other addictions and how and when it could be best treated (White, 1998). The debate continues more than a century later, but accumulating scientific findings, shifts in cultural attitudes toward smoking and growing clinical experience within addiction treatment are tipping the scales of this debate.

Current Context

Cigarette smoking remains one of the largest causes of premature death in the United States (Centers for Disease Control and Prevention, 2008). Individuals seeking addiction treatment are far more likely to smoke than the general adult population. About 21% of American adults smoke, but rates of smoking for clients in treatment range from 70-80% (McCarthy, Collins, & Hser, 2002; Richter, Ahluwalia, Mosier, Nazir, & Ahluwalia, 2002; Teater & Hammond, 2010; Williams & Ziedonis, 2004). Furthermore, people with substance use disorders (SUDs) consume more cigarettes per day, which further increases the risks to their health (Sussman, 2002). Long-term studies have shown that cigarette smoking is more likely to result in premature death for individuals with SUDs than their alcohol or drug use (Hser, McCarthy, & Anglin, 1994; Hurt, et al., 1996).

There is a growing body of research examining how smoking impacts recovery after treatment as well as the effectiveness of smoking cessation interventions for people with SUDs. Quitting smoking in the first year of SUD treatment increases clients’
likelihood of achieving recovery, even 9 years after treatment (Tsoh, Chi, Mertens, & Weisner, 2011). Continuing to smoke after treatment is actually a risk factor for relapse (Kohn, Tsoh, & Weisner, 2003; Satre, Kohn, & Weisner, 2007). Strengthening the case for the importance of smoking cessation interventions is a meta-analysis by Prochaska and colleagues (2004). They reviewed the existing research and concluded that these interventions increase the likelihood of short-term smoking cessation and improve the chances of long-term SUD recovery. Other recent reviews have also concluded that smoking cessation is an important clinical goal for SUD treatment (Baca & Yahne, 2009; Prochaska, 2010; Schroeder & Morris, 2010).

Clinical practice guidelines also call for the integration of smoking cessation services into SUD treatment. Most notably, the US Public Health Service has published the clinical practice guideline, *Treating Tobacco Use and Dependence: 2008 Update*, which recommends that all health care providers counsel their patients about tobacco use and provide interventions—ranging from counseling to medications—to help patients quit smoking (Fiore, et al., 2008). The guideline specifically addresses SUD treatment providers, recommending that they deliver smoking cessation interventions to their clients. These interventions are also recommended in the National Institute on Drug Abuse guideline, *Principles of Drug Addiction Treatment: A Research-Based Guide* (NIDA, 2009).

**New Scientific Findings**

In 2006, a study began at the University of Georgia that sought to increase knowledge about the adoption and implementation of smoking cessation interventions in SUD treatment programs. Our interests were twofold. First, we wanted to learn about how many treatment organizations offered counseling programs and medications for smoking cessation, while identifying the types of organizations more likely to offer these services. Second, we hoped to collect innovative data from counselors about implementation, meaning how routinely counselors delivered smoking cessation interventions as part of their everyday work. By gathering information from both administrators and counselors, we sought to conduct one of the most comprehensive studies about smoking cessation services in addiction treatment centers throughout the US.

Our research methodology built upon the National Treatment Center Study (NTCS), which is a large-scale health services research project that recruited administrators from more than 1,100 treatment organizations to participate in face-to-face interviews between 2002-2004. [More information about the larger NTCS can be found in publications by Dr. Paul Roman and colleagues; see Roman, Ducharme & Knudsen (2006) and Dye et al. (2009).] The NTCS included nationally representative samples of publicly funded treatment agencies, privately funded treatment organizations, and therapeutic communities, which were re-contacted by telephone in 2006-2008. About 86% of these programs participated in telephone interviews about smoking cessation services. After the interview, we invited administrators to provide lists of counselors working at their treatment programs. Counselors were mailed surveys, and we received more than 2,100 surveys from counselors across the US.

**The Adoption of Smoking Cessation Services in SUD Treatment**

One goal of the study was to document the extent to which treatment organizations had adopted smoking cessation services (Knudsen, Studts, Boyd, & Roman, 2010). Adoption refers to the availability of these services. We focused on three types of services: brief interventions delivered during intake, counseling-based smoking cessation programs, and medications to treat nicotine dependence. The brief intervention of asking new clients if they currently smoked had been adopted by nearly all programs (86%), but far fewer programs (35%) helped motivated clients to...
develop a quit plan.

The three samples of treatment organizations differed in their rates of offering smoking cessation programs and medications. About 71% of publicly funded treatment programs and 65% of therapeutic communities did not offer a counseling-based smoking cessation program or any medications, such as over-the-counter nicotine replacement therapy (NRT) or prescription medications (e.g., varenicline, sustained-release bupropion). Programs that relied on private sources of funding, like insurance and self-paying clients, were more likely to offer services, but the predominant approach offered by 41% of private programs was smoking cessation medications without a formal counseling program.

We sought to identify the types of treatment organizations that were more likely to offer comprehensive smoking cessation services, meaning both a counseling-based program and medications. This type of comprehensive approach is highly consistent with current clinical practice guidelines, although it was only adopted by 11% of programs. Statistical models compared programs offering comprehensive services to those that offered neither a counseling program nor medications. Comprehensive services were more likely to be found in hospital-based programs, larger treatment organizations, and those offering only inpatient/residential levels of care. There were three cultural barriers to comprehensive services. Programs reporting that smoking was not important in treating SUDs, that there was no time to integrate smoking cessation into their existing treatment protocols, and that they lacked staff with smoking cessation counseling skills were less likely to offer comprehensive smoking cessation services.

The larger NTCS had previously collected information about adoption of nicotine replacement therapy (NRT), so we compared rates of NRT adoption between 2002-2004 and 2006-2008 (Knudsen & Studts, in press). There was a small decrease over time, from 38% to 34% of programs offering NRT. While that seems like a very modest change, it actually does not fully capture the changes that occurred within these programs over time. About 16% of programs discontinued using NRT between the two time-points, while 12% of the sample started using NRT by 2006-2008. We found that 21% of programs used NRT at both time-points, indicating sustained adoption within these programs.

Implementation of Smoking Cessation Interventions

While adoption reflects organizational decisions about offering a given service, counselors play a central role in the actual delivery of psychosocial interventions, such as smoking cessation counseling. In other words, counselors are the drivers of implementation. They can influence whether smoking cessation counseling becomes a routine part of addiction treatment. Survey from more than 2,100 counselors measured the extent to which they were delivering brief interventions and counseling sessions dedicated to smoking cessation.

Many counselors are making a concerted effort to ask new clients about whether they use tobacco products, but counselors less frequently implement other brief interventions such as advising smokers to quit, assessing willingness to quit, and trying to increase motivation to quit (Knudsen & Studts, 2010). Delivery of counseling sessions that are dedicated to smoking cessation are rare (Knudsen, Studts, & Studts, in press), which is not surprising given the small number of organizations offering a counseling-based smoking cessation program.

We sought to better understand the factors related to higher levels of implementation for both brief interventions and counseling sessions (Knudsen & Studts, 2010; Knudsen, et al., in press). Three key factors were identified. First, counselors who reported that program managers were supportive of smoking cessation services more frequently delivered brief interventions and counseling sessions dedicated to smoking cessation. Second, counselors who reported greater knowledge about the PHS
guideline, *Treating Tobacco Use and Dependence*, engaged in greater implementation. Finally, counselors who believed that smoking cessation would improve clients’ chances of recovery reported greater implementation of both brief interventions and counseling sessions focused on smoking cessation.

One issue that has been discussed in the literature is the role of counselors’ personal tobacco use as a factor in their implementation of smoking cessation counseling (Guydish, Passalacqua, Tajima, & Manser, 2007). In our sample, about 20% of counselors were current tobacco users. Our findings about the implications of counselor tobacco use were mixed. On the one hand, current tobacco users implemented brief interventions less frequently than counselors with no history of tobacco use (Knudsen & Studts, 2010). However, there was no difference in the implementation of counseling sessions between current tobacco users and counselors who had never been tobacco users (Knudsen, et al., in press).

**Future Trends**

Having been involved in documenting the history and evolution of smoking-related practices within the field, we would offer the following six predictions regarding the future of this issue within the field.

1. **Smoking as a Recovery Advocacy Issue:** Given the high smoking-related death toll of people in recovery, recovery advocacy organizations will increasingly address nicotine addiction at a national policy level and in their advocacy of changes in local addiction treatment practices.

2. **Challenging Myths and Misconceptions about Nicotine Addiction, Addiction Treatment and Recovery:** A massive educational effort will extend over the next decade and fundamentally alter how the addiction treatment field has historically addressed (or failed to address) the issue of nicotine dependence among its service providers and service recipients.

3. **Institutional Smoking Policies:** Funding, regulatory and accreditation bodies will demand ever-increasing rigor in how addiction treatment programs address the issue of smoking as a public health issue (e.g., non-smoking policies on treatment campuses) and a clinical issue (e.g., standards for assessment, treatment and post-treatment recovery support services related to nicotine dependence).

4. **Smoking Cessation Support Services:** Assessing nicotine dependence at intake, incorporating nicotine cessation into treatment and recovery plans, providing counseling-based nicotine addiction treatment, providing medications to support cessation of nicotine dependence, and providing peer-based support services to aid recovery from nicotine dependence will become standards of practice in all addiction treatment programs.

5. **Mobilizing Experiential Knowledge:** Efforts will be made to formally integrate the experiential knowledge of the 48% of addiction counselors who are former smokers to support fellow staff and patients to achieve stable long-term recovery from nicotine dependence.

6. **Counselor Training Programs:** Smoking will be increasingly defined as an ethical and professional practice issue for addiction professionals (See White, 2008), and addiction counselor training programs will increasingly integrate additional knowledge and skills training related to the counseling and medical treatment of nicotine dependence.

Addiction counselors are speeding the advent of these changes through their personal advocacy, refinement of their counseling practices and, in increasing numbers, severing their own relationship with nicotine.

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