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Tobacco Use Among Individuals With Intellectual or Developmental Disabilities: A Brief Review

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Abstract

Tobacco use is the leading preventable cause of death in the United States. Although few tobacco control efforts target individuals with intellectual and/or developmental disabilities, this population may be especially vulnerable to the deleterious effects of tobacco use and dependence. Individuals with intellectual and developmental disabilities suffer from the health, financial, and stigmatizing effects of tobacco use. The present review examined the current literature with respect to the prevalence and patterns of tobacco use in individuals with intellectual and developmental disabilities, the importance of addressing tobacco use in these smokers, and policies surrounding tobacco use in this population. Suggestions for additional avenues of inquiry as well as modifications to current cessation treatments are proposed.

Tobacco use is the leading preventable cause of death in the United States, responsible for 438,000 deaths annually in this country (U.S. Centers for Disease Control and Prevention [CDC], 2005) and more than 5 million deaths each year throughout the world (World Health Organization, 2008). Despite the devastating effects of tobacco use, approximately 21% of U.S. adults continue to smoke (CDC, 2007). Although U.S. adult smoking rates have remained relatively stable since 2004 (CDC, 2005), there has been a substantial reduction over the last 2 decades, when 28.8% of adults smoked cigarettes (CDC, 1989). Unfortunately, the tobacco control efforts that precipitated these declines in smoking prevalence are missing those with intellectual and developmental disabilities, as this group has not been targeted by tobacco control leaders. In this brief review, we include a discussion of the current state of research and make suggestions for additional avenues of inquiry with regards to tobacco use and dependence among individuals with intellectual and developmental disabilities.

Prevalence of Smoking Among Individuals With Intellectual and Developmental Disabilities

There are no large-scale, population-based surveys examining the physical health of individuals with intellectual and developmental disabilities, and, therefore, physical health estimates have been based on smaller community studies or studies of outpatient or residential programs. No matter how well designed, these small-scale studies are unlikely to be as accurate as data from large-scale, population-based surveys (Horwitz, Kerker, Owens, & Zigler, 2000). Similarly, there are no large-scale, population-based surveys of tobacco use among individuals with intellectual and developmental disabilities but only relatively small-scale surveys that often include individuals with heterogeneous levels of functioning who are likely to have heterogeneous tobacco use patterns. It is, therefore, difficult to confidently make conclusions regarding the overall prevalence of tobacco use in this population.

Despite the limited data on tobacco use among individuals with intellectual and developmental disabilities, several patterns have emerged. In the intellectual and developmental disabilities population, men are more likely to smoke cigarettes than are women (Rimmer, Braddock, & Fujiura, 1994; Rimmer, Braddock, & Marks, 1995; Robertson et al., 2000), a pattern similar to the general population of smokers, where 23.9% of men and 18.0% of women smoke cigarettes (CDC, 2007). In addition, individuals with mild to moderate intellectual disabilities appear to have higher smoking rates than those with more severe intellectual disabilities (Robertson et al., 2000). In fact, Tracy and Hosken (1997) reported higher smoking rates in individuals with mild intellectual disabilities (36%) than in the general population of Australia at the time (25% in 1997). When additional tobacco products (i.e., chewing tobacco, cigars, snuff) were included in a survey (Burtner, Wakham, McNeal, & Garvey, 1995), this pattern remained, with only 4.3% of individuals with severe or profound intellectual disability using tobacco products and those with mild or moderate intellectual disability using tobacco products at a rate similar to that of the general population at that time.

Available data also indicate that place of residence is highly predictive of smoking status. Residents living in settings where their activities are less restricted appear to smoke more cigarettes per day than individuals living in more restricted living arrangements (Hymowitz, Jaffe, Gupta, & Feuerman, 1997; Rimmer et al., 1994, 1995; Tracy & Hosken, 1997). Accordingly, as part of a larger study on the health characteristics of 329 adults with intellectual disabilities living in an institution ($n = 184$), group home ($n = 39$), or with family members ($n = 106$), Rimmer et al. (1995) found that whereas smokers living in group homes were smoking 30–40 cigarettes per day, those living in institutions or family settings smoked very few cigarettes per day. It is reasonable to speculate that cigarettes may have been unrestricted in the group homes, but concerned families and highly monitored smoke breaks at institutions may have limited the number of cigarettes per day for other groups.

In terms of prevalence, Lewis, Lewis, Leake, King, and Lindemann (2002) found that although 20% of those with intellectual and developmental disabilities living fairly independently in their own home were smokers, only 3.1% of those with intellectual and developmental disabilities living with the assistance of family or friends and 5.2% of those

living in community care facilities were smokers. These findings underscore the influence that concerned family members, professional staff, and smoking policies may have on smoking rates with this population. Minihan (2005) noted that although there are many positive aspects to supportive living models that encourage individuals with intellectual and developmental disabilities to live more independently in the community, an unintended consequence may be increased exposure to substance abusing (and cigarette smoking) peers. It is important to note, however, that it is difficult to disentangle the effects of disability severity and place of residence, as they are unlikely to be independent in many cases.

Last, it is noteworthy that, like individuals with substance use disorders in the general population, individuals with comorbid intellectual and developmental disabilities and substance use disorders appear to smoke at very high rates. Westermeyer, Kemp, and Nugent (1996) reported that although those with intellectual and developmental disabilities and comorbid substance use disorders started smoking at a slightly older age (17 vs. 15 years old), they had lifetime tobacco use estimates of 83%, nearly as high as the estimated 87% for those with substance use disorders in the general population. Similarly, McGillicuddy and Blane (1999) found that among 122 individuals with mild to moderate intellectual disabilities, heavy alcohol users were more likely to smoke than lighter and nonalcohol users, consistent with smoking patterns of alcohol users versus nonusers in the general population (Dawson, 2000).

General Risks of Tobacco Use

As noted earlier, tobacco use is responsible for 438,000 U.S. deaths annually and is the leading preventable cause of death in the United States (CDC, 2005). Cigarette smoking causes cancers of the bladder, oral cavity, pharynx, larynx, esophagus, cervix, kidney, pancreas, stomach, and lung, in addition to acute myeloid leukemia (U.S. Department of Health and Human Services, 2004). Male smokers are 23 times more likely and female smokers are 13 times more likely to die of lung cancer than are their counterparts who have never smoked (U.S. Department of Health and Human Services, 2004). Smoking also causes abdominal aortic aneurysms (U.S. Department of Health and Human Services, 2004), approximately doubles the risk for stroke (Ockene & Miller, 1997; U.S. Department of Health and Human Services, 1998), and increases risk of peripheral vascular disease (Fielding, Husten, & Eriksen, 1998) and chronic obstructive pulmonary disease (U.S. Department of Health and Human Services//U.S. Centers for Disease Control and Prevention, 1998) by more than 10 times that of a nonsmoker.

The most common causes of death among individuals with intellectual and developmental disabilities are cardiovascular diseases, respiratory illness, and neoplastic conditions (Chaney & Eyman, 2000; Hayden, 1998; Robertson, et al., 2000; Strauss, Anderson, Shavelle, Sheridan, & Trenkle, 1998), all conditions that can be influenced or caused by smoking or environmental tobacco smoke exposure. Although the data do not support a conclusion that smoking is the prepotent explanation for these diseases among those with disabilities, it is clear that tobacco use is harmful to all populations of smokers, and individuals with intellectual and developmental disabilities may be especially vulnerable to its effects in several ways, as described below.

Financial Implications for Smokers With Intellectual and Developmental Disabilities

Adults with intellectual disabilities may be particularly vulnerable to the financial implications of tobacco use because they are three times more likely than those in the general population to live in poverty (U.S. Public Health Service, 2001). When living on a fixed income, the financial demands of tobacco dependence may compromise their ability to pay for simple entertainment expenses or, more seriously, adequate nutrition and safe housing. A study by Steinberg, Williams, and Ziedonis (2005) found that smokers with schizophrenia—an additional group often living on a fixed income—were spending 27% of their public assistance income on cigarettes. Although it is currently unknown how much smokers with intellectual and developmental disabilities are spending on cigarettes, it is important to recognize that this vulnerable population could easily spend high proportions of their income to support their dependence on tobacco products.

Policy Implications for Smokers With Disabilities Taking Psychotropic Medications

Many individuals with intellectual and developmental disabilities are prescribed psychotropic medications (Burd et al., 1997; Burtner et al., 1995; Deb & Unwin, 2007), with some researchers (e.g., Holden & Gitlesen, 2004) suggesting that individuals with intellectual and developmental disabilities as a group are overmedicated. Although this may seem irrelevant to a discussion about tobacco use, it is critical to consider that cigarette smoking significantly increases the metabolic clearance of many psychotropic medications (Desai, Seabolt, & Jann, 2001). Thus, tobacco use among individuals with intellectual and developmental disabilities may reduce the blood levels of some of the medications prescribed to this population relative to what their physicians expected, thus resulting in reduced efficacy of the medications. Physicians must, therefore, increase the dose to compensate for the increased metabolism (Goff, Henderson, & Amico, 1992; Hughes, 1993). Interestingly, it is not the nicotine itself that speeds up the metabolism of the medications but the polycyclic aromatic hydrocarbons present in cigarette smoke (Desai et al., 2001). Therefore, empirically supported nicotine replacement therapies (Fiore et al., 2008) can safely be used to treat nicotine dependence without having this deleterious effect on vital psychotropic medications.

Tobacco Use and Intellectual and Developmental Disabilities: A Double Stigma

In a society where individuals with intellectual and developmental disabilities are often marginalized (Finlay & Lyons, 2005; Jahoda & Markova, 2004), adding an increasingly stigmatizing behavior such as cigarette use is likely to make the life of the individual with intellectual and developmental disabilities more difficult. In a British study, Farrimond (2006) reported that smokers were often seen in a negative light (e.g., polluting, of low socioeconomic status), and Kim and Shanahan (2003) described a similar climate in the United States, where smoking has become progressively more socially unacceptable.

Tobacco dependence prevention and treatment initiatives for smokers with intellectual and developmental disabilities could reduce the incidence of tobacco use in this population and, by extension, reduce the amount of stigma to which these individuals are exposed.

Policy Issues Related to Competency and Tobacco Use in Smokers With Disabilities

A policy issue discussed in extant literature involves the competence of individuals with intellectual and developmental disabilities to make an informed decision to smoke cigarettes. Reudrich, Rossvanes, Dunn, and Delano (2003) suggested that individuals with intellectual and developmental disabilities be assessed for “consent capacity” (p. 105) before being allowed to smoke cigarettes. They described a 73-year-old man with severe intellectual disability, and a 36-year-old man with intellectual disability, as examples of smokers with developmental disabilities who do not appear to be rationally weighing the risks and benefits of smoking. The authors, however, failed to appreciate that this irrational decision is not very different from that of smokers in the general population who overwhelmingly begin smoking before the legal age of consent (Kessler et al., 1997; U.S. Department of Health and Human Services, 1994). Adolescents underestimate the addictiveness of cigarettes and the likelihood that they will still be smoking in the future (Schoenbaum, 2004; Slovik, 2000). After addicted, it is a philosophical question as to whether even adults without intellectual and developmental disabilities are making rational “decisions” to smoke. Minihan (1999) noted that there are many lifestyle choices (e.g., unhealthy diet, lack of exercise) that individuals with intellectual disabilities make without adequate information about the health risks they are assuming—like individuals without intellectual and developmental disabilities—without their competency being brought into question.

Despite the concerns regarding competency, tobacco use has traditionally been excused and cigarettes have even been offered as rewards in hospitals and institutions treating vulnerable populations such as individuals who are mentally ill (Resnick, 1993) and those with intellectual or developmental disabilities (Tyler & Bourguet, 1997). In fact, Minihan (2005) noted how ironic it was that, regardless of the constraints on so many areas of their lives, individuals with intellectual and developmental disabilities were often actually encouraged to smoke in state institutions; Minihan also observed that many smokers may have become addicted to cigarettes when they were given as behavioral reinforcers in such institutions (Minihan, 1999).

Surprisingly, Sturmey, Reyer, Lee, and Robek (2003) defended the use of cigarettes as a reinforcer for behavior modification and referred to proposals for a ban on such use as “over-simplistic” (p. 73). They argued that a ban “does not include an analysis of the real health costs of smoking versus the potential benefits of including a powerful reinforcer in the client’s program” (p. 73). They continued to say that the decision to use cigarettes as a behavioral reinforcer should be individualized after performing a cost–benefit analysis of the “intervention.” This analysis fails to take into consideration the plethora of research and best-practice alternatives in implementing alternate reinforcers in a behavior modification program. Furthermore, this cost–benefit analysis appears to devalue the health of individuals

with intellectual and developmental disabilities, suggesting that the success of the intervention outweighs the potential for the individual to develop a substance use disorder known to cause significant health issues (U.S. Department of Health and Human Services, 2004). A narrow cost–benefit analysis is often inappropriate when making decisions about the treatment of human beings.

Environmental Tobacco Smoke and Smoke-Free Indoor Air Policies

Last, a key tobacco policy initiative for individuals with intellectual and developmental disabilities concerns smoke-free living environments. Environmental tobacco smoke (ETS; also called secondhand smoke or passive smoke) contains at least 250 chemicals known to be toxic, including more than 50 known to cause cancer (National Toxicology Program, 2000). Most important, ETS is responsible for an estimated 50,000 U.S. deaths annually (U.S. Department of Health and Human Services, 2006).

In an effort to evaluate the smoking policies in the Massachusetts residential system for people with intellectual and developmental disabilities, Minihan (1999) surveyed residential supervisors and found that the overwhelming majority (96.5%) agreed that nonsmoking residents had a right to a smoke-free home. Paradoxically, in the same survey, almost half agreed that “any restriction placed on smoking by a resident in his/her home is a human rights violation.” Nevertheless, almost half of residential supervisors reported that smoking was restricted to designated areas, though only 25% of these areas could be physically separated from the residence by a door and, therefore, did nothing to protect nonsmoking residents from the dangers of ETS (U.S. Department of Health and Human Services, 2006). Others reported using filters—“smoke eaters,” or upgraded ventilation systems, although it is clear that air-filtration systems are inadequate for protecting nonsmokers from the harms of environmental tobacco smoke (Leavell, Muggli, Hurt, & Repace, 2006). None of the residences operated by the state and only 24% operated by private vendors prohibited smoking inside residences (Minihan, 1999).

It is especially important to protect individuals with intellectual and developmental disabilities from the dangers of environmental tobacco smoke because many of these individuals may have difficulty in advocating for themselves (Wehmeyer, 2004; Wehmeyer & Metzler, 1995) and, so, may have difficulty reducing their exposure to others’ smoke. The U.S. Surgeon General has concluded that the only truly effective way to protect someone from environmental tobacco smoke is to create a completely smoke-free environment (U.S. Department of Health and Human Services, 2006). Because smoke-free indoor regulations often precipitate motivation to quit and/or reduce smoking (Fichtenberg & Glantz 2002), empirically supported tobacco dependence treatments should be offered for those living in smoke-free residences and wishing to quit.

Smoking Cessation and Individuals With Disabilities

Because individuals with intellectual and developmental disabilities now live well into adulthood, they have to be concerned with many of the same health issues as adults in the general population (Horwitz et al., 2000). Although adults with intellectual disabilities are more likely to have seen a health care professional in the past year than are those without an

intellectual disability, anecdotal evidence indicates that they are not getting their basic health care needs met (U.S. Public Health Service, 2001). Appropriate access to the health care system remains difficult, and, once accessed, many programs, particularly substance abuse treatment programs, may be unprepared to meet the needs of this population (Minihan, 2005). This barrier to effective treatment is equally applicable to providing effective prevention programs to individuals with intellectual and developmental disabilities.

Many programs may not be prepared to disseminate health information in a manner that is fully understandable to individuals with intellectual and developmental disabilities if they do not have the resources to present information via multiple media (e.g., visual and auditory), and/or educational material written in language appropriate for effective communication with this population. In addition, program staff may feel time pressures that reduce the likelihood that they will make simple modifications, such as using repetition or setting aside extra time in group therapy sessions, to reinforce important health topics. Reudrich et al. (2003) correctly concluded that developmentally appropriate educational and smoking cessation interventions will be needed for this population.

It is unfortunate that few smokers with intellectual and developmental disabilities have reported being given advice to quit smoking from their physicians (Tracy & Hosken, 1997) and few individuals with disabilities are even screened for tobacco use (U.S. Public Health Service, 2001). Therefore, many physicians may not be aware that their patients with intellectual and developmental disabilities are smokers. After these smokers are identified, it is unknown if they are receiving appropriate treatments. Individuals with mild intellectual disabilities may have particular difficulties and “fall through the cracks” because they appear “normal” but may have difficulty understanding the health information that is provided to them without taking into account any limitations secondary to their intellectual disability (U.S. Public Health Service, 2001). Modifications to standard presentations of health information may be important because individuals with intellectual and developmental disabilities may require extra support to understand the effects of behavior on health, the risks and benefits of medical treatment, and the process of accessing appropriate and necessary health services (Barr, Gilgunn, Kane, & Moore, 1999; President’s Committee on Mental Retardation, 1999). Given that many individuals in the general population without intellectual and developmental disabilities have misconceptions regarding tobacco dependence treatment (Kozłowski et al., 2007), the cognitive limitations associated with intellectual and developmental disabilities are only likely to exacerbate these misconceptions. Sturmey et al. (2003) concluded that these individuals have only limited knowledge of what can be done to quit smoking, to deal with cravings, and to avoid relapses.

A major challenge for the tobacco control community is to learn how to best help tobacco users to successfully address this major public health issue. Although the U.S. Federal Drug Administration has approved seven medications for smoking cessation (see Table 1) and the U.S. Public Health Service (Fiore et al., 2008) has identified psychosocial treatments that are effective for smoking cessation (see Table 2), it is unlikely that the psychosocial treatments should be delivered to individuals with intellectual and developmental disabilities without being modified to properly meet their needs. Regrettably, there have been no randomized

clinical trials describing smoking cessation treatments targeted for individuals with intellectual and developmental disabilities. Nevertheless, in the absence of targeted treatments, the starting point for treating this population of smokers should be with the treatments that have been empirically supported in the general population. Table 3 describes suggested modifications to the Public Health Service guidelines (Fiore et al., 2008) to make them more amenable to smokers with disabilities. It should be noted, however, that the suggested modifications listed in Table 3 are not yet empirically tested and will need to be tested in clinical trials in the future.

Unfortunately, neither of the two cessation efforts described in the literature for individuals with intellectual and developmental disabilities used empirically supported treatments. Peine, Darvish, Blakelock, Osborne, and Jenson (1998) described a contingency management program designed for 2 men attending a residential program for individuals with intellectual disabilities, whereby consumers were rewarded with the possibility of cigarettes if they refrained from “maladaptive behaviors” for an hour. At the end of every hour without undesirable behaviors, the 2 residents described in the report would earn the privilege of spinning a wheel where they could earn various reinforcers, including cigarettes. Over time, the possibility of earning a cigarette was reduced, thereby reducing their cigarette use during the contingency management program. Although follow-up data were not reported, it is reasonable to assume that a side effect of this program was likely to have created a higher perceived reward value for cigarettes. It is also likely that after the contingency was removed, these smokers would want to smoke even more than they did before the program.

Sturmey et al. (2003) described a case study of a treatment team’s attempt to help a 48-year-old man with mild intellectual disability who had been smoking 15–20 cigarettes per day for many years to quit smoking. The team’s first approach was to provide education about the dangers of smoking. This approach was unsuccessful and the treatment team considered using the nicotine patch. Unfortunately, common, but unnecessary fears of using safe nicotine replacement therapies (Kozlowski et al., 2007) prevented the team from using a nicotine patch. The treatment team was afraid that the nicotine patch could not be used without a guarantee of successful cessation. The team thus settled on self-monitoring of cigarette use. Self-monitoring has good support as a behavioral strategy, but does not address nicotine withdrawal. Using this strategy also uncovered the unfortunate fact that much of his smoking occurred while spending time with staff members who smoked and who borrowed cigarettes from him. The next strategy was an approach called “brand fading” (Brown, Lichtenstein, McIntyre, & Harrington-Kostur, 1984; Foxx & Brown, 1979), whereby a smoker gradually switches to cigarettes with successively lower Federal Trade Commission tar and nicotine ratings. This strategy has little empirical support due to the tendency of smokers to regulate the amount of nicotine and tar they inhale regardless of the type of cigarette they smoke (Benowitz et al., 1983, 2005; Zacny & Stitzer, 1988). Last, the treatment team encouraged distraction techniques, whereby smoking was replaced by activities that were otherwise reinforcing. This final strategy is consistent with sound behavioral principals but, again, would benefit from pairing with empirically supported nicotine replacement therapy to address nicotine withdrawal (Fiore et al., 2008). Despite straying from empirically supported treatments, the outcome was a smoking reduction of

over 50%, which although still not a safe level of smoking, may have been a step toward subsequent cigarette abstinence.

It is extremely important to note that individuals with intellectual and developmental disabilities can, in fact, quit smoking. Tracy and Hosken (1997) surveyed a small group of individuals with intellectual and developmental disabilities living independently in Australia and found a higher smoking prevalence in their sample of individuals with intellectual and developmental disabilities than in the general Australian population (36% vs. 25%). They also found that 25% of their sample actually constituted ex-smokers. Although this finding was based on a small sample, it is still significant that such a large proportion were ex-smokers because this is the only published data describing smoking cessation (though it is unknown if it was aided or unaided quitting) in the intellectual and developmental disabilities literature to date. Unfortunately, only 55% of the smokers in this sample recalled being advised to quit smoking—and only 18% of those received that advice from a doctor; the others who advised quitting were family or friends. These data underscore the tendency of the medical community to ignore tobacco use among individuals with intellectual and developmental disabilities and of the need to educate physicians about this inequity of services. It is also noteworthy that, of those who were advised to quit, 75% expressed a desire to do so. It is unknown if the advice was followed by additional offers of help or if only simple advice was offered. It is also unknown how many followed through with a quit attempt.

Interestingly, Tracy and Hosken (1997) chose to create a smoking education course, rather than a smoking cessation treatment for individuals with intellectual and developmental disabilities and found that after engaged, most wanted to quit smoking. All 11 participants quit smoking for at least 1 day during the educational course, 3 of the 11 participants quit smoking by the end of the course, and 9 of the 11 expressed a desire to quit. These data indicate that individuals with intellectual and developmental disabilities can quit smoking.

Conclusions

Although this review cannot make firm conclusions as to the proportion of individuals with intellectual and developmental disabilities who are smokers because of the incomplete and preliminary nature of the current literature, it is clear that this population is not immune from tobacco use and dependence. The existing data clearly indicate that individuals with disabilities do smoke cigarettes and are more likely to do so if they are higher functioning, live in less restrictive environments, are male, or have co-occurring substance use disorders. There is a tremendous need for researchers to design studies that would collect population-level data on tobacco use patterns in this population so we can be more certain of prevalence rates of smoking and quitting behaviors.

As with smokers in the general population, smokers with intellectual and developmental disabilities will get sick from tobacco-related diseases and are deserving of appropriate and empirically supported tobacco dependence treatments. Future research should focus on how to best encourage the health care community to appropriately address tobacco use in this vulnerable population. Although we have made recommendations here on how to modify

empirically supported tobacco dependence treatment for these individuals (see Table 3), these modifications have not been empirically tested. It is surprising how little attention this issue has received given the severity of the consequences of ignoring tobacco use in this, or any, population. We support the call for best-practice recommendations for prevention, treatment, recovery, and smoking cessation by Minihan (2005). Randomized, clinical trials of targeted tobacco-dependence treatment programs, including an examination of issues such as acceptability and feasibility of such programs for this population, are very needed.

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Table 1

Medications Approved by the U.S. FDA for Tobacco-Dependence Treatment

Medication	Availability	Ultimate dose	Notes
Nicotine patch	OTC	Apply once daily	
Nicotine gum	OTC	9–20 times/day	Should be used regularly, but also a “rescue” medication.
Nicotine lozenge	OTC	9–20 times/day	Should be used regularly, but also a “rescue” medication.
Nicotine inhaler	Prescription only	6–16 cartridges/day	Should be used regularly, but also a “rescue” medication.
Nicotine nasal spray	Prescription only	9–40 doses/day	Should be used regularly, but also a “rescue” medication.
Bupropion	Prescription only	1 pill, 23/day	Should be taken as prescribed by physician.
Varenicline	Prescription only	1 pill, 23/day	Should be taken as prescribed by physician.

Note. OTC= over the counter; × = times.

Table 2

Broad Categories of Psychosocial Interventions Recommended in U.S. Public Health Service Guidelines on Treating Tobacco Dependence (Fiore et al., 2008)

Category	Brief description
Intratreatment support	<ul style="list-style-type: none">• Communicate caring and concern• Discuss the patient's fears about quitting• Communicate commitment to help in efforts to quit• Express encouragement and confidence in the patient's ability to succeed
Practical counseling	<ul style="list-style-type: none">• Provide basic information about smoking and tips for quitting• Help smoker pick a "quit date" that makes sense for him/her• Identify and troubleshoot cues and triggers for smoking• Teach and practice coping skills

Table 3

Suggested Modifications to Psychosocial Treatments for Tobacco-Dependence Treatment (Fiore et al., 2008) for Smokers With Intellectual and Developmental Disabilities

Category	Suggested modification
Intratreatment support	<ul style="list-style-type: none"> • Enlist significant others (and treatment team if applicable) to express concerns about smoking and to listen to fears about quitting • Identify roles for significant others to assist in efforts to quit if smoker were to make quit attempt
Practical counseling	<ul style="list-style-type: none"> • Be certain that any educational materials are understandable to smoker; use repetition to reinforce skills • Clearly define terms such as <i>urge</i> or <i>craving</i> to smoke • Be aware of length of counseling time smoker can tolerate • Additional counseling sessions may be necessary • Extra counseling sessions around “quit date” • Allow time at end of counseling session to reinforce key concepts.

Note. Adapted from U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (1998).