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Smoking behaviors of adults with developmental disabilities and their direct support professional providers

Kendall A. Leser [a, *], Phyllis L. Pirie [b], Amy K. Ferketich [b], Susan M. Havercamp [c], Mary Ellen Wewers [b]

[a] Old Dominion University School of Community and Environmental Health, 1014 W. 46th Street, Norfolk, VA 23529, United States
[b] The Ohio State University College of Public Health, 1841 Neil Ave., Cunz Hall, Columbus, OH 43210, United States
[c] The Nisonger Center at The Ohio State University, 1581 Dodd Drive, Columbus, OH 43210, United States

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ABSTRACT

Background: People with developmental disabilities are not immune from the addictive effects and poor health outcomes associated with cigarette use. Direct support professionals often play a large role in the social environments of people with developmental disabilities and the literature suggests that one's environment can influence behavior.

Objectives: To examine the relationship between the smoking behaviors of people with developmental disabilities and their direct support professional providers. Two exploratory aims of the study were to assess how direct support professionals facilitate smoking behaviors and to describe the use of home smoking policies.

Methods: The Ohio Department of Disabilities' online provider search database was used to randomly select participants. A total of 398 direct support professionals completed an online survey about smoking. Direct support professionals served as proxy reporters for the smoking behaviors of those with developmental disabilities. Descriptive statistics were calculated and Chi−Square tests were used.

Results: Findings suggest that there was no significant relationship ($\chi^2_1 = 0.300$, $p = 0.584$) between the current smoking behaviors of people with developmental disabilities and their direct support providers. Direct support professionals were most likely to facilitate smoking behaviors by allowing people with developmental disabilities to smoke in front of them and waiting for them to finish smoking before moving on to a new activity. Approximately 46% of people with developmental disabilities were reported to have some type of home smoking policy.

Conclusions: Future research is needed to better understand the reasons why people with developmental disabilities initially start smoking and continue to smoke.

Introduction

Cigarette use is responsible for approximately 480,000 deaths each year and secondhand smoke exposure increases one's risk of heart disease by up to 30%.[1] One study reviewed the literature on the topic of smoking among adults with developmental disabilities (DD) and noted those who smoke may spend a large portion of their government subsided incomes to purchase cigarettes and that they experience the same addictive effects of cigarette smoking as anyone else.[2] Very little is known about the reasons why people with DD initially start smoking; however, it can be inferred that they may be influenced by their environments and members of their social networks. Peer smoking status has been consistently reported in the literature as being a key predictor of one's smoking behavior and is thought to be a stronger influence than family when it comes to smoking initiation and quit attempts.[3–5] Direct support professionals (DSPs) are paid workers who provide care to people with DD and often make up a large part of their social networks; research suggests that people with DD often form strong emotional attachments to their DSPs and may view them as role-models/peers.[6,7] Because of the large social role that DSPs play in the lives of adults with DD, it is worth exploring the relationship

* Corresponding author. School of Community and Environmental Health, Old Dominion University, 1014 W. 46th Street, Room 1014, Norfolk, VA 23529, United States.
E-mail address: kleser@odu.edu (K.A. Leser).

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between their smoking behaviors. Social cognitive theory posits that one's environment shapes behavior and individuals can be influenced by members of their social networks through constructs such as role-modeling (e.g., observing others perform certain health behaviors), incentive motivation (e.g., using rewards/punishments to modify behavior), and facilitation (e.g., providing tools or resources that make behaviors easier to perform).[8,9] The overall purpose of this study was to assess the relationship between the current smoking behaviors of adults with DD and their DSPs. Two exploratory aims of this study were to assess how DSPs facilitate the smoking behaviors of people with DD and to examine the use of home smoking policies in this population (as policy can shape one's environment).

Methods

Participants

The sampling frame consisted of DSPs (n = 5283) who were listed in the Ohio Department of Developmental Disabilities online provider search database. In order to be eligible to participate in the study, participants had to have: 1) been 18 years or older; 2) worked with at least one adult with DD in the State of Ohio; 3) worked at least 10 h a week with the person identified in #2; 4) worked as a DSP for the person in #2 for at least three months; 5) not been the parent of the person identified in #2; 6) received payment from either the Ohio Individual Options waiver or the Level One waiver (both waivers allow people with DD to receive home-based care services from DSPs); and 7) have worked as an independent provider of services (not for a provider agency).

Procedures

Participants were recruited via e-mail between March 2015 and July 2015 to complete an online survey about general health behaviors on SurveyMonkey.com. A total of 4682 survey invitations were sent and interested participants completed a brief screener to determine eligibility. Of the 4682 invitations sent, 168 were undeliverable and 410 did not meet eligibility criteria and were removed from the denominator. Surveys were completed by 398 participants yielding a response rate of 9.7% (398/4104) (Fig. 1). Surveys took approximately 25 min to complete. Participants were given a $20 electronic gift card as an incentive. The Ohio State University Institutional Review Board approved this study.

Measures

The smoking items described below were included as part of a larger survey about the health behaviors of DSPs and people with DD. Participants were asked to report on the demographic characteristics and smoking behaviors of themselves and the people with DD that they served. In addition, participants reported on the ways they facilitate the smoking behaviors of people with DD and on the use of home smoking policies. All survey items were pretested and were found to have acceptable test-retest reliability according to criteria set forth by Landis and Koch.[10]

Smoking behaviors

Participants were asked, “Have you/has your client smoked 100 cigarettes in your/your client's lifetime?” and “Do you/does your client currently smoke cigarettes every day, some days or not at all?” Participants were classified as “never/former smokers” if they had never smoked 100 cigarettes or if they reported having had smoked 100 cigarettes in their lifetime but currently not smoking cigarettes; while participants were classified as “current smokers” if they currently reported smoking cigarettes some days/every day.

Role-modeling

Participants were asked the following questions about role-modeling smoking: 1) Thinking about the past month, how often did you smoke cigarettes during your work shift? Response options were dichotomized into “more frequently” (several times a week, most days, or every day) and “less frequently” (never, seldom, or several times a month); 2) During your work shift, where do you usually smoke cigarettes? Response options were: inside the client's house, outside of the client's house, I do not smoke while at work, or other; and 3) Does anyone living in your client's home smoke cigarettes? (Yes/No).

Facilitation

Participants were asked the following questions about facilitating the smoking behaviors of the person with DD that they

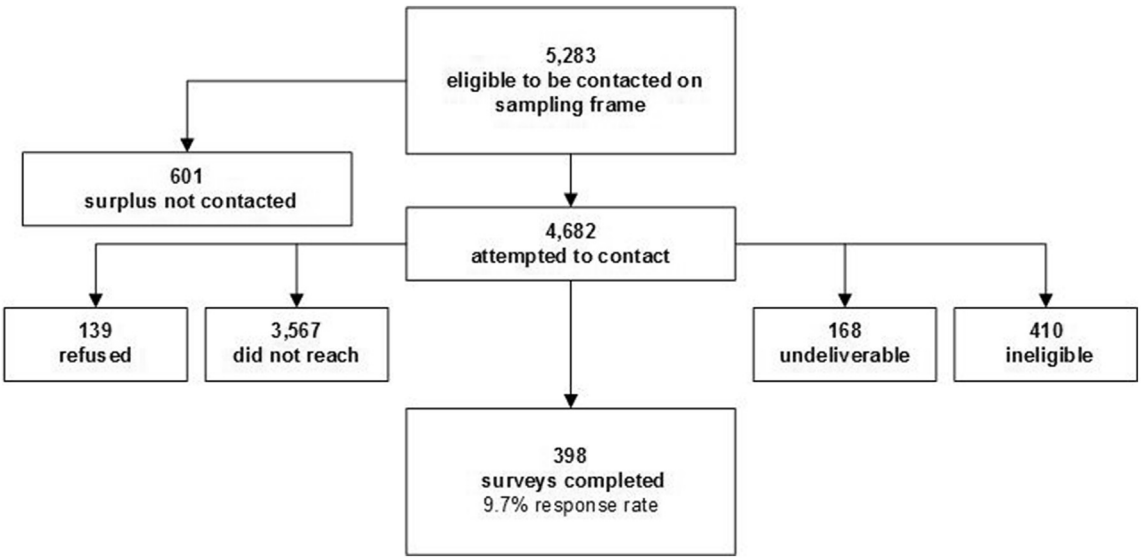

Fig. 1. Response rate throughout the recruitment and survey process.

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