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Treatment Seeking for Smoking Cessation Among Young Adults

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Abstract

Young adult smokers (18-24 yr olds) do not seek treatment for smoking cessation as often as older smokers. Two commonly hypothesized reasons for this are that younger smokers are not aware of treatments or cannot afford them. The State of Vermont provides free smoking cessation treatment and most young smokers are aware of this; thus, we tested whether young adult smokers from VT would still underutilize treatment via a secondary analysis of the population-based 2005 VT Adult Tobacco Survey. Young adult VT smokers were less likely to have used medication (24% vs 58%; RR = .42) or psychosocial (28% vs 53%; RR = .54) treatment than middle-aged smokers (25-44 yr olds). We conclude that reasons other than awareness and cost cause young adult smokers to not seek treatment.

Keywords

nicotine dependence; smoking; smoking cessation; tobacco use disorder; treatment; young adults

1. Introduction

Although the prevalence of smoking has declined in recent years among older adults in the US, it has not changed among young adults (18-24 yr olds) mostly because the incidence of quitting has not changed in this group (Rock et al., 2007). Some have suggested a need to increase the attractiveness of treatments for smoking cessation and to tailor the contents of treatment to accommodate young adult smokers; however, whether such efforts should use tactics used with adolescent smokers or with adult smokers is unclear. Since most programs have well-established recruitment strategies and treatment programs for adult smokers, the purpose of the current analysis was to determine whether young adult smokers differ from older smokers in their attitudes toward and use of smoking cessation treatments.

Prior studies found that, compared to older smokers, young adult smokers begin smoking at an earlier age, smoke fewer cigs/day, are more likely to be occasional smokers and make more quit attempts (Curry, Sporer, Pugach, Campbell, & Emery, 2007; Messer, Trinidad, Al-

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Delaimy, & Pierce, 2008; Rabinus, Geiger, McAlister, Huang, & Todd, 2004; Solberg, Boyle, McCarty, Asche, & Thoele, 2007) but whether they have more or less difficulty quitting or are more dependent is unclear (Messer et al., 2008; Rabinus et al., 2004; Messer et al., 2007; Hoch, Muehlig, Hofler, Lieb, & Wittchen, 2004; Patterson, Lerman, & Kaufmann, 2004).

Fewer studies have examined interest in treatment. In these studies, young adult smokers are less likely to use medication and psychosocial treatments for smoking cessation (Curry et al., 2007; Messer et al., 2008; Rabinus et al., 2004; Solberg et al., 2007). Unfortunately, most of the above studies used samples of college students and compared young adults to all older smokers, rather than smokers near their age (i.e. 25-44 yr olds).

Two of the most commonly hypothesized reasons for the smaller use of treatment among young adults are lack of awareness of treatments or the cost of treatments (Curry et al., 2007; Messer et al., 2008; Solberg et al., 2007). The State of Vermont (VT, USA) funds free or almost free provision of medication, group, individual, phone and internet treatments and almost all Vermont smokers are aware of these free programs (http://healthvermont.gov/pubs/adult_tobacco2006.pdf). Thus, we examined past and planned use of treatments in young adult vs older adult smokers in VT to determine whether the lower rates of treatment use would still be present when young adults were aware of treatment and knew the treatment was free.

2. Materials and Methods

The VT Adult Tobacco Survey (VTATS) is a random-digit dial survey of VT adults (> 18) conducted annually and recruits 1000 never or former smokers and 1000 current smokers (every day or some day smokers) or recent quitters (in last year). It oversamples until 18-24 yr olds are represented similar to that in the VT population (http://healthvermont.gov/pubs/adult_tobacco2006.pdf). The survey does not include adults who are in institutions, do not have a phone, or do not speak English. The sample design used a list-assisted random-digit dial sample of phone numbers from 100- blocks of numbers in which the first 8 numbers were held constant and the last 2 digits ranged from 00 to 99. A dual-frame stratification drew from listed and unlisted numbers in a 1.5:1 ratio.

The 2005 ATS was conducted by ORC Macro (www.orcmacro.com) and the sections determining smoking status, demographics, the smoking practices of current smokers and risk perceptions could require answering up to 105 questions but usually required 10- 30 min to complete. No monetary incentives were used. The overall response rate for the 2005 ATS was 59% using the US Center for Disease Control definition of response rate (www.cdc.gov/nis/pdfs/estimation_weighting/EZZati1999.pdf); i.e., number of completed interviews divided by number of respondents with known eligibility (i.e. including refusals, call answered but eligible respondent not reached and respondent reached but unable to complete the interview). Questions about treatment were only asked of those who had tried to quit in the last year. Interviewers collected data from current smokers (smoked at least 100 cigs in lifetime and currently smoked every day or some days) who had tried to quit in the last year. We defined young adult smokers as those 18-24 yrs old (n=75) and compared them to middle-aged smokers defined as those 25-44 yrs old (n=317). Results with weighted data that reflect the VT population were essentially identical to those with unweighted data; thus, to simplify, the results used unweighted data.

3. Results

Among recent quit attempters, both younger and older groups were mostly female (67% and 68%) non-Hispanic whites (97% and 94%). As in earlier work, young adult smokers had less

education ($p=.01$) and income ($p=.06$) than older smokers. Young adult smokers appeared to be more likely to have made a quit attempt in the last year than older smokers (61% vs 49%, $p=.10$). The ATS did not collect information on employment status or enrollment in college. They were not less likely to have health insurance.

Young adults started smoking earlier (15 years vs 17 years, $p<.001$), appeared to smoke slightly fewer cigs/day (13 vs 15, $p = .NS$) and had lower Fagerstrom nicotine dependence scores (Fagerstrom & Furberg, 2008) (2.5 vs 3.2, $p = .04$) than 25-44 yr old smokers (nb - typically scores of > 4 are considered to indicate dependence)(Fagerstrom et al., 2008). Surprisingly, younger smokers were not more likely to be non-daily smokers. They were less likely to be seriously thinking of quitting in the next 30 days (15% vs 30%, $p = .01$). Their confidence in quitting did not differ from older smokers. They did not rate their most recent quit attempt as more difficult, nor were they more likely to quit due to social pressure, concern for their own health or concern for other's health. Young adult smokers were not less likely to visit a physician in the last year and did not report being less likely to be asked about their smoking by their physician nor did they not rate their physician as less concerned about their smoking. Across three questions about social norms (e.g. whether the community feels adults should not smoke), younger smokers perceived less stigma attached to smoking ($p = .001$); however, they did not appear to perceive less health risk from smoking.

Among recent quit attempters over 80% of young adults were aware of the various free treatment services and were not less aware than middle-aged smokers. Despite this, young adult smokers were half as likely to have used a medication (24% vs 58%, risk ratio = 0.42, 95% CI = 0.24-0.71; $p <.001$) or psychosocial treatment (28% vs 53%, risk ratio = .054, 95% CI = 0.33-0.87, $p=.004$) to help stop smoking. In contrast, among those planning to quit in the next 30 days, young adult smoker were not less likely to plan to use medications or a talking therapy.

4. Discussion

Before discussing our results, readers should be aware that the validity of our conclusions may be limited by the moderate response rate and small sample size. The generalizability is limited by the geographic specificity of our sample and Vermont's limited racial diversity. In addition, although most of the cessation services used had been available for 4 yrs prior to the survey (i.e., the quitline, group and individual counseling), others had been available only for 2 yrs (i.e., free or subsidized medications).

Our major finding is that the lower prevalence of use of smoking cessation treatments in young adults persisted despite awareness of treatments and free or nearly free treatment. One explanation of the lower rate of treatment use in young adult smokers is that smokers take a stepped-care approach in which they try to stop without medications on the first quit attempts, then try written self-help materials and only on later when older use formal treatments (Hughes, 2008). However, there are no empirical tests that this stepped care approach actually occurs. Although a stepped-care approach prevents using a treatment unnecessarily, it can delay receiving adequate treatment for several years or decades.

Our results also indicate that young adult smokers plan to use treatment in the future as much as older smokers but for some reason do not do so. One possible explanation for this is that the intentions of younger smokers are less valid. Another possible explanation is that some treatment entry aspects (e.g. location, personnel, or screening) especially discourage younger smokers from following through with treatment intentions. This latter possibility deserves study.

The lower use of treatment among younger smokers or their delaying obtaining adequate treatment is especially problematic because age of cessation is the major predictor of the reversibility of smoking risks; e.g., the risk of mortality from smoking is almost completely eliminated in smokers who quit prior to age 35 (Doll, Peto, Boreham, & Sutherland, 2004). Given the low cost and high cost-efficacy of smoking cessation treatments (Warner, 1997), urging young smokers to seek treatment even with early attempts is indicated. Since lack of awareness and cost do not appear to be the only reasons for nonuse of treatment, a better understanding of other reasons young smokers do not access treatment is sorely needed (Orleans, 2007).

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