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The Older Smoker

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Smoking prevalence in the United States is lower among older adults (≥ 65 years of age; 8.3%) compared with younger adults (≤ 64 years; 22.2%); however, older adults are half as likely to try to quit as smokers aged 18 to 24 years (25.3% vs 53.1%)¹. Smoking rates between 1965 and 1994 declined less for individuals 65 or older (5.9% reduction) than for younger adults (≤ 64 years; 18.4% reduction)². Regardless of age, quitting smoking can increase life expectancy and improve health and quality of life³. Accordingly, the Clinical Practice Guideline for the Treatment of Tobacco Use and Dependence highlights older smokers as a subpopulation for which treatments might require tailoring because of unique age-related characteristics⁴. Clinicians should consider that older smokers will be an increasing proportion of the patient population and that these smokers might require modification of treatment for smoking cessation.

Increasing Population

The number of persons in the US aged 65 or older is projected to more than double between the years 2010 and 2050, increasing from 40.2 million to an estimated 88.5 million⁵. These projections suggest that even if the proportion of smokers remains the same, the absolute number of older smokers could increase substantially. Accordingly, smoking among elderly individuals was deemed a critical “geriatric health issue” over 10 years ago³. An analysis of use of alcohol and illicit drugs suggests that the number of adults age 50 or older with a substance abuse disorder is projected to double by the year 2020⁶; a similar analysis has not been conducted with smokers. The number of older adult smokers might also increase as medical therapies more effectively treat tobacco-attributable disease, such as cardiovascular disease and cancer.

Healthcare coverage

Healthcare coverage for smoking cessation treatments has increased considerably in recent years. For example, Medicare coverage of treatment for individuals diagnosed with tobacco-related illness (Part D of prescription drug program) was expanded under the Affordable Care Act (effective 1 January 2011), allowing individuals not diagnosed with a tobacco-related disease to receive tobacco-cessation counseling. Although Medicaid does not currently cover pharmacological treatments for smoking cessation, one objective of the Healthy People 2020 initiative aims to increase comprehensive Medicaid insurance coverage of evidence-based treatment for tobacco dependence. Increases in medical coverage provide a unique opportunity for clinicians to intervene with older smokers; however, research is needed to determine whether the treatments effective in younger smokers are also effective for older smokers.

Age-related differences

Certain biological changes are more likely to occur in older vs younger adults, and these differences could influence tobacco dependence treatment. For example, age-related cognitive changes might contribute to additional challenges in quitting smoking. Age-related deficits in executive function were associated with a decreased likelihood of a successful quit attempt among older smokers, (> 60 years) possibly by disrupting behaviors essential for treatment success⁷. Physiological changes that occur with age (e.g., increases in body fat; decreases in lean body tissue, liver size, and liver blood flow) could affect medication metabolism or adverse effects. For example, nicotine clearance and volume of distribution following intravenous nicotine administration were reduced among 65 to 75 year old individuals compared to younger persons⁸. Gum, lozenges, inhalers, and patches might have different efficacy. On the other hand, in older adults age may bring new opportunities for smoking cessation support. For example, it is possible that senior centers or assisted living facilities could provide behavioral counseling and support groups in a cost-effective and convenient way.

Future research

Understanding how these age-related differences relate to smoking-related outcomes (e.g., tobacco withdrawal, acute effects of smoking, treatment efficacy) is limited because research examining older smokers is lacking. In a systematic review of tobacco withdrawal symptoms, the mean age of participants across 15 studies, chosen for their scientific rigor, was 37.8 years (SD = 8.1)⁹. Thus, current knowledge of tobacco withdrawal is based on individuals who are at least 30 years younger than older smokers. Moreover, no placebo-controlled studies have been conducted to determine the efficacy of smoking cessation medications in older smokers on outcomes such as withdrawal severity or tobacco abstinence. Thus, there is a need for research involving treatment of older smokers. The benefits of smoking cessation among older smokers was highlighted in a recent report showing that older smokers (68 years and older) who stopped smoking during the two-year study experienced less cognitive decline and brain atrophy relative to a group of older smokers who were unsuccessful in stopping smoking¹⁰.

As noted in the clinical practice guideline⁴, older smokers are a population for whom additional research is needed to inform treatment. Reasons that this subset of smokers should be a research priority include population shifts in age, changing healthcare coverage, and developmental differences between older and younger adults that could affect treatment. Laboratory studies and clinical research need to focus on older smokers to provide evidence that will help them overcome tobacco dependence and consequently live longer and healthier lives.

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