

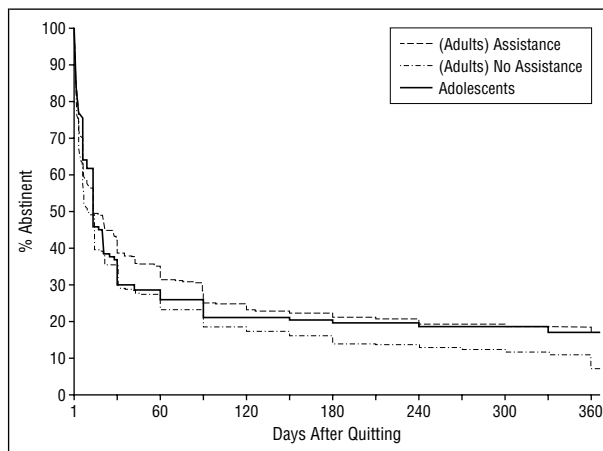
Adolescent Smoking Cessation: Implications for Relapse-Sensitive Interventions

Nicotine addiction develops in the first years of tobacco use.¹ Despite health education efforts to prevent adolescents from experimenting with tobacco, more than 3000 youth become regular smokers each day.² A recent study showed that half of all adolescents who become addicted to cigarettes will smoke for at least 20 years before they quit.³ Many adolescents who smoke regularly want to quit and between 55% to 65% of adolescent smokers report having tried to quit.⁴ The need to develop successful tobacco cessation interventions for adolescents is clear. However, few adolescent cessation programs have been developed, let alone adequately evaluated.⁵

In this report, we describe the smoking relapse curve for adolescent smokers compared with adult smokers from a population sample. We used population-based data for adolescents and adults to compare naturally occurring smoking cessation rates. The adolescent data were part of a longitudinal survey, with the baseline conducted in 1989 and the follow-up in 1993. We examined all adolescents in 1993 and obtained information on the length of their longest quit attempt. The analyses conducted in this study analyzed only the cross-sectional data from 1993 so they were treated as independent subjects (Teenage Attitudes and Practices Survey⁶). The adult data were obtained from a population sample from California as part of the evaluation of the state tobacco control programs (California Tobacco Survey⁷). In the adult sample, we obtained information on whether they used any form of assistance during their quit attempt or no assistance. In both datasets, all information was self-reported using recall of the most recent quit attempt to construct the relapse curves. We used the Kaplan-Meier method to construct the survival curves for both groups.

The **Figure** shows the relapse curve for adolescents compared with adults. The relapse curve for adolescents resembles that of the adults who received no assistance during the initial period after quitting; the latter half of the curve resembles that of adults who used assistance to quit. There were no statistically significant differences by sex or ethnicity with respect to the smoking relapse curve for adolescents.

A recent summary of adolescent smoking cessation studies reported weaknesses in the theory and design of these studies.⁸ Some of the weaknesses reported included weak study design, lack of major theoretical camps, and vagueness about the comparative cessation rates between individuals in cessation programs and those not



Smoking relapse curve for adolescents and adults. Data are taken from the Teenage Attitudes and Practices Survey⁶ and the California Tobacco Survey.⁷

in programs. Our results show that the highest period of risk for relapse occurs within the first week for adults and adolescents. Interventions aimed at preventing adolescent smokers from relapsing should be relapse-sensitive and incorporate major cessation components during the first week after the quit date.

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Preventing Unnecessary Emergency Department Visits for "Albuterol Nebs"

The article by Tien et al¹ reminds us that delivering albuterol with a metered-dose inhaler with a valved spacer (MDI) for acute asthma attacks has several advantages over using a nebulizer. They carefully document equivalent or improved efficacy, more rapid delivery, and lower cost. I would add that using an MDI in the emergency department (ED) provides an opportunity to reteach the parent how to properly administer bronchodilators by MDI at home. That may eliminate the need for unnecessary return visits to the ED for another "neb bail-out." The good advice in this article also applies to clinic and office treatment of asthma attacks.

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In reply

We thank Dr Schmitt for his comments and certainly agree that the use of MDIs for acute asthma attacks in the ED would present an opportunity to educate parents and patients about the proper use. It also would allow for reinforcement of the benefits of MDI use at home, including improved portability, lower cost, and reductions in the total time required to administer treatment. There continue to be, however, barriers to translating this knowledge into a change in physician behavior. As we have previously described, medical decisions in which the physician has more discretion are often greatly influenced by the physician's perception of patient preference.¹ This study demonstrated that 24% of pediatric ED physicians are under the impression that patients and parents prefer nebulizers over MDIs when they come to the ED for acute asthma. However, in studies comparing patient and parent satisfaction with MDIs vs nebulizers for the treatment of acute asthma in the ED, MDIs were preferred.^{2,3} Until the medical community embraces the benefits of MDI use for acute asthma in children, parents will continue to receive inconsistent messages about their use in the home.

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Correction

Error in Byline. In the special feature titled "Pathological Case of the Month: Celiac Disease With Acanthocytosis," published in the March issue of the ARCHIVES (2002;156:291-292), on page 291, the byline should have read, "Ahmet Karadağ, MD; E. Esra Önal, MD; Füsün K. Uysal, MD; İ. Safa Kaya, MD; Uğur Dilmen, MD."