Impact of Over-the-Counter Sales on Effectiveness of Pharmaceutical Aids for Smoking Cessation

John P. Pierce, PhD; Elizabeth A. Gilpin, MS. JAMA. 2002;288:1260-1264.

Context Successful smoking cessation is a major public health goal. In controlled clinical trials, nicotine replacement therapy (NRT) and the antidepressant bupropion have been shown to significantly increase cessation rates only for moderate to heavy smokers (≥15 cigarettes/d). Nicotine replacement therapy is heavily promoted to the general population by both the pharmaceutical industry and tobacco control advocates.

Objective To examine trends in smoking cessation, pharmaceutical cessation aid use, and success in cessation in the general California population.

Design, Setting, and Participants The large population-based California Tobacco Surveys of 1992, 1996, and 1999, including 5247 (71.3% response rate), 9725 (72.9% response rate), and 6412 (68.4% response rate) respondents, respectively.

Main Outcome Measures Rates of cessation attempts (≥1 day) among smokers in the last year, use of pharmaceutical aids (mostly over-the-counter products since 1996), and cessation success.

Results Between 1992 and 1999, cessation attempts among California smokers increased 61.4% (from 38.1% to 61.5%), and NRT use among quitters increased 50.5% (from 9.3% to 14.0%). A total of 17.2% of quitters used NRT, an antidepressant, or both as an aid to cessation in 1999. In 1996 and 1999, the median duration of aid use (14 days) was much less than recommended, and only about 20% of users had adjuvant one-on-one or group behavioral counseling. Use of NRT increased short-term cessation success in moderate to heavy smokers in each survey year. However, a long-term cessation advantage was only observed before NRT became widely available over-the-counter (August 1996). In 1999, no advantage for pharmaceutical aid users was observed in either the short or long term for the nearly 60% of California smokers classified as light smokers (<15 cigarettes/d).

Conclusion Since becoming available over the counter, NRT appears no longer effective in increasing long-term successful cessation in California smokers.

Author Affiliation: Cancer Prevention and Control Program, Cancer Center, University of California, San Diego, La Jolla.