Depiction of Tobacco Use in Popular Children's Picture Books

Children are exposed to smoking scenes usually depicted positively in the media, like TV programs and films,[1] which may encourage adolescents to initiate a smoking habit.[2] We should also consider their earlier exposure; we recently recognized that well-known classic picture books, repeatedly read to children, depict smoking. Nevertheless, how often these scenes appear in children's books is unknown. We examined such depictions in popular classic picture books in comparison with contemporary books.

We selected book titles from the best-seller guide at Amazon.com, *The New York Times Parent's Guide to the Best Books for Children*, third edition. Our selection was not based on sales or random sampling from a library because parents often buy and borrow books with the help of critics' recommendations, not randomly. From the 3 categories for younger children in the guide, "Wordless Books," with 16 titles; "Picture Books," with 254 titles; and "Story Books," with 314 titles, we selected all of the 44 classic books published before 1960. For contemporary books, 20 were randomly selected from 179 titles published in 1980 through 1989 and 20 from 249 published in 1990 through 1999 for a total of 40. We selected only the first volume for a series.

One author (S.N.) and a research assistant independently assessed illustrated pages, identified smoking scenes, and classified the traits of smoking characters and type of tobacco products. Disagreements were decided in discussions with another author (M.I.). There was 99.3% agreement on smoking scenes and 90.9% on the character traits. Odds ratios and 95% confidence intervals were calculated.

Smoking was seen in 18 of 44 classic and 4 of 40 contemporary books (odds ratio, 6.2; 95% confidence interval, 1.70-24.88). Smoking was depicted 46 times in 1927 pages (2.4%) in classic and 6 in 1358 pages (0.44%) in contemporary books (odds ratio, 5.5; 95% confidence interval, 2.25-14.37). Of 43 smokers, 6 were lead characters; 15, support; and 22, less important; 2 were women. Pipes were smoked by 24 smokers, cigarettes by 12, and cigars by 7.

Depiction of smoking in picture books might have reflected societal changes. Research and public awareness of the adverse health effects of smoking began in the 1960s. Consequently, contemporary society has an antismoking attitude and the smoking rate has declined in most industrialized countries.[3]

The predominance of male smokers in children's books may be sex stereotyping, reflecting the higher smoking prevalence among adult men. Pipe smoking, the most common type in picture books, may stereotype male characters as older and wise. A study in the United States showed that in the 1960s pipe smokers tended to be older white men with a higher education, which is not true today.[4]

The effect of these scenes exceeds the scope of the present study; however, picture books have a potential to reinforce sex stereotyping.[5,6] Seeing male characters, including fathers and caregivers, smoking in books, boys may assume smoking is a favorable behavior for adult men. Thus, parents should at least be aware of the presence of smoking scenes in children's books.

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Prevalence of Narcotic Analgesic Abuse Among Students: Individual or Polydrug Abuse?

Recent national surveys indicate significant levels of nonmedical use of prescription narcotic analgesics by American youth. Data from the 2002 National Survey on Drug Use and Health[1] indicate that 7.6% of 12- to 17-year-olds and 11.4% of 18- to 25-year-olds abused prescription pain relievers in the past year, with a more than 4-fold increase in the number of new users of these drugs since 1990. The 2002 Monitoring the Future Survey[2] indicated that 1.3% of 8th graders, 3% of 10th graders, and 4% of 12th graders used Oxy-

Past-Year Abuse of Selected Drugs by Past-Year Abusers and Nonabusers of Painkillers Among 2002 Delaware 8th and 11th Graders*

	8th Graders		11th Graders	
	Abusers	Nonabusers	Abusers	Nonabusers
Alcohol	71.1	41.3	91.7	65.6
Marijuana	53.4	20.2	77.4	36.2
Cigarettes	49.8	18.8	65.1	25.7
Inhalants	29.8	7.7	23.9	3.9
Uppers	20.0	1.6	26.1	1.7
Downers	17.1	1.1	36.1	2.2
Other prescription	19.2	1.5	29.2	3.1
Any drug	94.0	49.9	99.2	70.7

*Values are expressed as percentages.

Contin during the past year, and even larger proportions (2.5%, 6.9%, and 9.6%, respectively) used Vicodin during the past year.

Questions on painkiller use were included for the first time in 2002 in annual surveys of alcohol, tobacco, and other drug abuse conducted anonymously in Delaware public school 8th and 11th grade classrooms. The final samples included 6753 8th graders and 4880 11th graders. Sampling, demographic characteristics, and analysis techniques are available in the study annual report.[3] Abuse of "narcotic painkillers" is defined in the survey as any use of OxyContin, Percocet, Tylenol 3, and/or codeine "to get high." Painkillers were the most abused drugs in the past year by 11th graders after cigarettes, alcohol, and marijuana and the most abused drugs in the past year by 8th graders after cigarettes, alcohol, marijuana, and inhalants.

Analyses conducted of other drug abuse by 8th and 11th graders illustrated statistically significant differences between users and nonusers of painkillers in every drug category, especially abuse of other prescription drugs (see **Table**). Almost all (94.0%) of the 8th grade and virtually all (99.2%) of the 11th grade painkiller abusers reported abuse of one or more other drugs during the past year, compared with just under half (49.9%) of 8th grade and 70.7% of 11th grade nonabusers of painkillers.

Media reports on the abuse of OxyContin have raised concerns over whether this and other narcotic analgesics are creating new drug abusers in youthful populations.[4,5] Data from the 2002 Delaware Youth Survey indicate that those reporting painkiller abuse are far more involved in the concurrent abuse of alcohol, tobacco, and other drugs than those who do not use painkillers illegally. This suggests that: (1) painkiller abusers may be further along in their drug careers than nonabusers of painkillers and (2) the abuse of a wide variety of other prescription drugs is part of a pattern more characteristic of the painkiller abusers.

This analysis is restricted to one small but demographically diverse state with urban, suburban, and rural areas; upper, middle, and working-class communities; banking and manufacturing in the north of the state; and agricultural and resort communities in the south, making it more representative than its size belies. Delaware also had the dubious distinction of having the highest reported rate of youth drug abuse in the nation.[6] Since the abuse of painkillers was quite visible among 8th graders and at levels not far from the 11th grade estimates, it raises the question of where youth get access. Future Delaware surveys have added questions on access to help direct prevention efforts targeting the problems associated with the abuse of prescription painkillers.

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