

Tobacco Use among 13-15 Year Old Students in the Philippines, 2000-2003

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Introduction

Tobacco use is one of the major preventable causes of premature death and disease in the world. A disproportionate share of the global tobacco burden falls on developing countries where 84% of the 1.3 billion current smokers live (1). The Global Youth Tobacco Survey (GYTS), part of the Global Tobacco Surveillance System (GTSS) initiated by WHO and CDC, was developed to monitor youth tobacco use, attitudes, and exposure to tobacco smoke and has been completed by over 1.4 million students in 133 countries (2). A key goal of GTSS is for countries to repeat the GYTS every 4 years. This report presents findings from GYTS conducted in the Philippines in 2000 and 2003 that indicate significant reductions in the proportion of students who currently smoke cigarettes, who currently use other tobacco products, are likely to start smoking in the next year, and are exposed to environmental tobacco smoke. The findings also indicate a significant increase in the proportion of students who support bans on smoking in public places, have learned about dangers of tobacco use in school, and have seen anti-tobacco messages in media and advertising.

Data and Methods

The GYTS is a school-based survey that collects data from students aged 13-15 years using a standardized methodology for constructing the sample frame, selecting schools and classes, and processing data. The GYTS uses a two-stage cluster sample design that produces representative samples of students in grades associated with ages 13-15 years (2). In the Philippines, this age range is covered by the Second, Third, and Fourth Years of Secondary School and the GYTS sampling frame included all Secondary Schools containing these grades. At the first sampling stage, the probability of schools' selection was proportional to the number of students enrolled in the specified grades. At the second stage, classes within the selected schools were randomly selected. All students attending school in the selected classes on the day the survey was administered were eligible to participate. In 2000, 11,630 students completed the GYTS and 7,478 completed the survey in 2003. The school response rate was 90.0% in 2000 and 99.3% in 2003; the student response rate was 88.7% and 85.4%, respectively; and the overall response rate was 79.7% and 84.8%, respectively.

This report describes changes in several important tobacco indicators between 2000 and 2003, including lifetime tobacco use, age of initiation of tobacco use, current tobacco use, use of other tobacco products, susceptibility of never smokers to initiation, exposure to second hand smoke, tobacco education, exposure to tobacco in media and advertising, cessation efforts, and access to tobacco. All differences noted are statistically significant at the $p < 0.05$ level determined by non-overlapping 95% confidence intervals.

Results

Lifetime cigarette use (i.e. ever smoked cigarettes, even one or two puffs) among students in the Philippines was common. In 2000 and 2003, about 4 in 10 students reported ever smoking cigarettes. In 2000 and 2003, boys were significantly more likely than girls to have ever smoked. About 1 in 7 students who had smoked cigarettes reported smoking

their first cigarette before age 10 in 2000 and 2003 with no significant difference by gender.

Current tobacco use and likely initiation of smoking among students have significantly declined between 2000 and 2003. The percentage of students who reported being a current cigarette smoker and currently using other tobacco products fell dramatically. Among boys, the percentage of current smokers fell by a third from 32.6% in 2000 to 21.8% in 2003. Among girls, the magnitude of change in current smoking was similar, from 12.9% in 2000 to 8.8% in 2003. Current use of other tobacco products fell by nearly half for both boys and girls over the period (18.3% in 2000 vs. 10.9% in 2003 for boys, 9.5% in 2000 vs. 5.7% in 2003 for girls). The percentage of students who had never smoked, but were “likely to initiate smoking in the next 12 months” fell by nearly 50% between 2000 and 2003 (overall, 26.5% in 2000 to 13.8% in 2003).

Changes observed in current tobacco use were supported by reduction in exposure to tobacco smoke. Although the percentage of students who reported that their parents smoke did not change (about 56% in 2000 and 2003), there was a large reduction in the exposure to tobacco smoke in public places. The percentage of students reporting exposure to smoke in public places fell from 74.6% in 2000 to 59.0% in 2003. Furthermore, support for bans on smoking in public places rose from just 39.2% of students in 2000 to 88.7% in 2003.

Anti-tobacco public health efforts reached more school-aged children in 2003 than in 2000. The percentage of children who reported learning about the dangers of tobacco use in school increased from 58.6% in 2000 to 68.0% in 2003. A higher percentage of children saw an anti-tobacco message in the media in 2003 (83.4% in 2000 vs. 90.3% in 2003). There was no significant change in the percentage of children who saw pro-tobacco messages (i.e., advertisements in newspapers - about 81% in 2000 and 2003) nor a decrease in the percentage of children who owned an item with a tobacco logo on it (about 17% in 2000 and 2003).

The desire to quit smoking among current smokers was high in 2000 and remained high in 2003, more than 80%. The percentage of students reporting a severe dependence on tobacco decreased from 7.2% in 2000 to 3.8% in 2003.

An important element of a comprehensive tobacco control program is the enforcement of laws intended to restrict tobacco access to minors. The percentage of students who reported not being refused when trying to purchase tobacco products rose from 46.6% in 2000 to 62.8% in 2003. The percentage of students who reported receiving free tobacco products or marketing objects decreased from 17.6% in 2000 to 13.9% in 2003. Also, there was a small but significant increase in the percentage of students who reported seeing tobacco advertising on billboards (84.4% in 2000 vs. 87.6% in 2003).

Summary and Context

The findings in this report suggest dramatic changes occurred in tobacco use and exposure to environmental tobacco smoke among students in the Philippines over a period of four years. Students are less likely to currently use tobacco, more likely to support bans on smoking in public areas, and more likely to have learned about the dangers of tobacco use in school and through public health media campaigns. Finally, students reported receiving fewer free handouts of tobacco products in 2003 than they did in 2000.

The Philippines experienced significant changes in tobacco control policy that may have contributed to these changes during the same period. For example, prior to 1999, there were no restrictions on tobacco advertising and promotion, few smoke-free policies, a lower level of taxation on tobacco products, few education efforts, and low enforcement of age restrictions for tobacco sales. The Philippine Clear Air Act of 1999 (3) identified cigarette smoke among the country's pollutants, and instituted smoke-free indoor air laws. The national law still allows designated smoking areas in restaurants and other indoor areas, but some cities have gone farther and declared all indoor areas completely smoke-free. The government is also seeking increased taxes on cigarettes. In 2003, the Smoking Cessation Program (4) declared smoke-free campuses, improved training for students and teachers, and levied penalties for smoking. The Tobacco Regulatory Act (5) is now being implemented and seeks to increase public education measures, ban all tobacco advertisement, strengthen warning labels on tobacco products, and prohibit sales to minors. There has been extensive national and local media coverage of the Tobacco Regulating Act and the smoke-free policy issues.

Conclusion

The findings in this report are subject to at least three limitations. First, because the sample surveyed was limited to youths attending school, they may not be representative of all 13-15 year olds in the Philippines. Second, these data apply only to youths who were in school the day the survey was administered and completed the survey. Student response was quite high, 89% in 2000 and 85% in 2003, suggesting bias due to absence or non-response is small. Third, data are based on self reports of students, who may under- or over-report their use of tobacco. The extent of this bias can not be determined in the Philippines data; however responses to tobacco questions on surveys similar to GYTS have shown good test-retest reliability (6).

The decline in tobacco use between 2000 and 2003 among Secondary School students in the Philippines is encouraging, but prevention efforts must be sustained and expanded. In 2003, 13.8% of never smokers indicated they will likely initiate smoking in the next year, with no difference between boys and girls. Further, over 8 in 10 students see pro-tobacco messages on billboards and in newspapers and magazines. Students report little difficulty purchasing cigarettes in stores. To reduce tobacco use among Secondary School students in the Philippines, continued efforts are needed to monitor these behaviors and to develop, evaluate, and disseminate effective prevention strategies.

References

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Table 1: Prevalence – Philippines 2000 and 2003

Prevalence	2000			2003		
	Total	Boy	Girl	Total	Boy	Girl
Ever smoked cigarettes	42.8 (± 3.2)	57.0 (± 4.0)	32.0 (± 2.9)	41.9 (± 3.2)	54.2 (± 3.9)	32.0 (± 3.8)
First smoked cigarettes before age 10	12.9 (± 2.5)	11.0 (± 2.4)	15.4 (± 3.1)	12.7 (± 2.0)	12.3 (± 2.6)	12.7 (± 2.6)
Current cigarette smoker	21.6 (± 2.5)	32.6 (± 3.6)	12.9 (± 1.7)	15.0 (± 2.9)	21.8 (± 4.5)	8.8 (± 2.2)
Current user of other tobacco products	13.6 (± 1.2)	18.3 (± 1.6)	9.5 (± 1.4)	8.2 (± 1.2)	10.9 (± 2.0)	5.7 (± 1.0)
Never smokers likely to initiate smoking in the next year	26.5 (± 2.3)	32.2 (± 3.5)	23.7 (± 2.5)	13.8 (± 1.7)	14.4 (± 2.5)	13.2 (± 2.0)

Table 2: Factors influencing tobacco use – Philippines 2000 and 2003

Factors	2000			2003		
	Total	Boy	Girl	Total	Boy	Girl
EXPOSURE TO SMOKE 1 or more parents smoke	56.3 (± 1.6)	55.0 (± 2.1)	57.0 (± 2.0)	55.7 (± 1.9)	53.4 (± 2.5)	57.2 (± 2.4)
Best friend smokes	10.6 (± 1.7)	15.1 (± 2.2)	6.5 (± 1.5)	12.2 (± 1.9)	19.0 (± 2.7)	6.7 (± 1.7)
Exposed to smoke in public places	74.6 (± 1.8)	74.5 (± 2.0)	75.2 (± 2.4)	59.0 (± 2.1)	59.0 (± 3.0)	58.9 (± 2.9)
Want “ban”	39.2 (± 4.2)	43.4 (± 4.1)	36.8 (± 4.6)	88.7 (± 1.6)	87.0 (± 2.1)	90.6 (± 1.7)
SCHOOL Taught dangers of smoking	58.6 (± 2.7)	56.9 (± 3.2)	61.2 (± 3.2)	68.0 (± 2.8)	66.7 (± 3.7)	69.8 (± 3.3)
MEDIA/ADVERTISING Saw Anti Message	83.4 (± 1.9)	81.1 (± 2.2)	86.0 (± 2.0)	90.3 (± 1.0)	87.9 (± 1.9)	92.2 (± 0.9)
Saw pro message on billboards	84.4 (± 1.8)	83.9 (± 2.1)	85.6 (± 2.1)	87.6 (± 1.3)	86.3 (± 2.0)	89.1 (± 1.6)
Saw pro message in newspapers or magazines	80.4 (± 2.0)	79.8 (± 2.4)	81.7 (± 2.3)	81.7 (± 1.6)	81.5 (± 2.3)	81.7 (± 2.1)
Have object with “logo”	17.8 (± 1.4)	22.2 (± 2.1)	14.1 (± 1.4)	16.4 (± 2.9)	22.1 (± 3.6)	11.7 (± 2.6)
CESSATION Desire to Stop	84.8 (± 3.0)	85.1 (± 3.1)	83.7 (± 4.7)	88.2 (± 3.4)	88.3 (± 3.6)	87.9 (± 7.5)
Dependency	7.2 (± 1.6)	7.2 (± 1.7)	5.1 (± 2.4)	3.8 (± 1.5)	4.1 (± 2.2)	1.9 (± 2.1)
ACCESS Not refused purchase	46.6 (± 5.3)	47.4 (± 5.2)	43.9 (± 9.1)	62.8 (± 7.4)	60.2 (± 8.7)	66.3 (± 12.4)
Received “free”	17.6 (± 1.3)	22.7 (± 1.8)	13.2 (± 1.3)	13.9 (± 2.3)	20.3 (± 3.4)	8.6 (± 1.8)