### RESEARCH REPORT

## Tobacco use in a cohort of children in Sri Lanka

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## Abstract

This study designed to examine the smoking behaviour and attitude of children were carried out on 3447, 11 to 18 year old Sri Lankan School children. The prevalence of smoking in urban and rural children are 7.2% and 4.3% respectively. 0.5% of children chew tobacco or use tobacco snuff. Friends smoking behaviour and attitude are the best predictors of smoking in children. The knowledge of health hazards of smoking is poor and is related to smoking behaviour.

### Introduction

Tobacco use in adults in third world countries like Srilanka shows a rapidly rising trend. It is vital to monitor the smoking habits of children in these populations. Such information for children in Sri Lanka are not available.

# Methods

Ten secondary schools in the Central Province of Sri Lanka were randomly selected to provide five from an urban setting and five from a rural setting. Under the supervision of trained health assistants, 3447, 11-18 year old children completed self administered confidential, questionnaires (WHO/SMO/83.4/NO4), during school time. The survey was conducted in 1986/1987. The participation rate was 85%.

### Results

The prevalence of current smoking in relation to age is shown in Table 1. Smoking prevalence is positively associated with age; the prevalence steadily increasing during adolescence (Table 1). There are higher proportions of smokers ('smokers' here and elsewhere refer to current smokers; last three

categories in Table 2) in schools in urban areas. In keeping with the social and cultural norms, smoking in female children is very uncommon (Table 2). Tobacco snuff is used by 0.5% of children and 0.5% of children chew tobacco with betel.

Table 1. Prevalence of smoking by age and locality in boys

	Percentage prevalence			
Age	(Rural, $n=931$ )	(Urban, n=1122)		
11	1.9			
12	0.8	1.3		
13	1.9	1.2		
14	4.2	3.5		
15	3.6	6.5		
16	4.0	9.2		
17	10.8	13.1		
18	11.3	12.0		
	4.3	7.2		

 $\chi^2$  10.65, d.f.=1, p<0.01.

Ten items in the questionnaire measured children's knowledge of the effects of smoking on health. Less than 50% of smokers as well as non-smokers gave correct responses to the following statements; (a) Nicotine from smoking contracts the blood vessels, (b) There are some cigarettes which

Table	2.	Smoking	behaviour	of	11-18	year	old	school
			childre	777				

	Boys (n=2053)	Girls (n=1394)		
Never smoked	77.2%	98.9%		
Used to smoke	70.3%	0.0%		
Tried smoking once	16.6%	0.8%		
Smokes<1/week	3.6%	0.3%		
Smokes<1-6/week	1.7%	0.0%		
Smokes>6/week	0.6%	0.0%		

are not dangerous, (c) Smoking is bad for you only if you smoke for many years, (d) Smoking decreases heart rate. More non-smokers than smokers (p < 0.001), provided correct responses to four of the ten items that tested knowledge of health hazards of smoking. (These items were; (a) Smoking is only bad for you if you smoke a lot every day, (b) Smokers usually die younger than non-smokers, (c) Just about everyone who gets lung cancer has been a regular smoker, (d) If you smoke you are more likely to cough. There was no significant difference in the response of smokers and nonsmokers to the remaining two items; these being (a) Breathing air harms babies and young children, (b) A women who is going to have a baby would harm the baby if she smokes. Smokers therefore had less knowledge of the harmful effects of smoking on health. Rejection of short-term health hazards emerged as an important risk factor influencing smoking behaviour ( $\chi^2 = 24.8$ , d.f. = 1, p < 0.001).

Children who smoked intended to continue smoking while non-smokers, did not intend to smoke in the future ( $\chi^2 = 111.3$ , d.f. = 1, p < 0.001). The most important reason given for smoking is the need to smoke in the company of friends. Childrens smoking behaviour is strongly associated with their friends smoking behaviour ( $\chi^2 = 105.3$ , d.f. = 1, p < 0.001) and approval of smoking ( $\chi^2 = 59$ , d.f. = 1, p < 0.001). The effect of parent and sibling smoking behaviour and attitude did not assume importance.

Banning teachers from smoking in schools, smoking in public places and advertising are supported by 77%, 28% and 44% of children respectively. Sur-

prisingly there is no significant difference in these attitudes in smokers and non-smokers.

#### Discussion

Although the prevalence of smoking in Sri Lankan children is less than in some other third world countries,<sup>2</sup> in view of the rapidly rising trends of smoking in adults children are at high risk of adopting the habit in the future. At present there are no anti-smoking activities of any kind in schools. Health education should be made an integral part of the school curriculum in order to make children aware of health hazards. Awareness of health hazards is likely to be of value as a means of resisting peer pressure to smoke. School teachers should be trained and utilized in anti-smoking activities and motivated to set an example to students by refraining from smoking in school.

Overall the findings of this study suggest that school and social environment may be more important than home background in determining smoking behaviour. Friends smoking behaviour and attitude to smoking, appears to be the best predictor of smoking in children. This influence comprising friends in school may be easier to penetrate if children rather than adults are used as health educators in anti-smoking programmes aimed at children in Sri Lanka.

Furthermore since available resources for antismoking programmes are limited these should be aimed at high risk groups; i.e. adolescent male school children in urban areas.

## Acknowledgements

Financial assistance from the World Health Organization is gratefully acknowledged.

#### References

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