Children's opinions about smoking

ANNE CHARLTON, BA, M.ED, PH.D
Cancer Research Campaign Fellow, Manchester Regional Committee for Cancer Education

SUMMARY. A survey of the smoking habits and opinions of over 15,000 children aged 8-19 years, in full- or part-time education, was carried out in northern England in December 1982. Highly significant differences were observed between the opinions of smokers and non-smokers on the reasons for and against smoking. There were dramatic variations with age: the youngest children, smokers and non-smokers, tended to support the visual aspects of smoking, while the older ones were largely in favour of the supposed psychological and physiological benefits to smokers themselves. Non-smokers showed less variation with age than smokers did. Compared with earlier surveys, the main changes were the increase in admission of the health risks and loss of the 'tough' image for the older children. In antismoking education it is important to know what beliefs children of different ages hold in order to make the message relevant to them. It is also important to counteract the forces that may be creating their concepts about smoking.

Introduction

SMOKING is generally accepted to be the greatest preventable cause of disease and premature death in this country at present. Many adults have taken the personal step of deciding not to smoke, or of giving up the habit. The proportion of smokers in the adult population dropped steadily between 1972 and 1982, from 52 per cent to 38 per cent of men and from 41 per cent to 33 per cent of women.[1] Nevertheless, over one third of the population still smoke.

Many smokers take up the habit when they are children.[2] A recent national survey[3] showed that 2 per cent of 12-year-old boys and 1 per cent of 12-year-old girls were already regular smokers. At the age of 16 years, the proportion of regular smokers was 26 per cent of the boys and 25 per cent of the girls. The problem is not simply that for many of them the habit has become firmly established by the time they leave school, but also that the earlier a person starts smoking the greater is his or her risk of lung cancer.[4]

© *Journal of the Royal College of General Practitioners*, 1984, **34**, 483-487.

Everyone concerned with the health, welfare and education of children is anxious to prevent them from taking up the smoking habit. Schools are trying a wide variety of approaches to combat the problem, and it is not surprising that they often call on a local general practitioner for assistance, either to provide information or to give a talk in school. In order to make this help relevant, it is necessary to know not only the smoking habits of the age group in question, but also their beliefs about smoking. Questions about beliefs and opinions were not included in the above-mentioned national survey of young people's smoking habits.[3] The Cancer Research Campaign therefore funded a large survey in the north of England which included questions not only on children's smoking habits, but also on beliefs, opinions and background to smoking.

The aim of this paper is to report the findings of this survey and to consider children's beliefs about smoking in relation to their age, sex and smoking habits. By comparing these factors with each other and with results of some earlier studies, it was hoped to shed more light on the reasons why children smoke.

Method

The area sampled was the whole of Cumbria and Tyne and Wear. State schools and independent primary and secondary schools and colleges of further education were proportionally represented in the random sample of 65 whole schools.[5] The survey, which took place during the first week of December 1982, was by means of short questionnaires administered to whole classes and completed in silence under the supervision of the class teachers. This method has been shown to elicit the highest self-reporting of smoking among adolescents.[6] Immediately on completion, each respondent sealed his or her own anonymous questionnaire into a plain envelope for return to the researcher. Over 15,000 valid questionnaires were received from children aged 8-19 years.

The results were analysed by the Statistical Package for the Social Sciences (SPSS). For the purposes of this paper, all respondents who failed to indicate their age, sex or smoking habits, or who did not respond to each question, were omitted from the analyses.

The questions on opinions were in the form of a series of comments about smoking. The respondents were asked to indicate, by means of a tick, whether they agreed or disagreed with each comment or if they did not know.

Results

The findings are shown in Tables 1 to 5, which are largely self-explanatory. It is, however, perhaps helpful to consider the main points.

As Table 1 shows, when age and sex were disregarded and the sample was analysed as a whole, there were highly significant differences between the opinions of smokers and non-smokers. Smokers gave most support to the view that smoking 'calms nerves', whereas most non-smokers favoured the view that people smoke 'to show off'. Least popular with smokers was the comment that smoking 'looks tough', and least popular with non-smokers was the suggestion that smoking is 'fun'.

The majority of all groups paid at least lip-service to the health risks. Although the health risks now appear to be relatively well-known, smokers were least likely to mention heart disease and most likely to mention shortness of breath as consequences of smoking. Overall, bronchitis appears to be the least-known health hazard. As might be expected, the regular smokers were least likely to admit that smoking makes one 'smelly', whereas the triers and ex-smokers were most likely to agree with this statement.

In the primary school age group the visual aspects of smoking were the most favoured reasons for smoking: 'to show off', 'looks grown up', 'looks tough' were popular with never-smokers, triers and smokers alike. Even at this age, the majority of respondents expressed belief in the health risks of smoking, although whether or not they understood their real implications is open to doubt.[7]

At early secondary school age, the visual aspects of smoking were still prominent. At this stage, however, 'looks tough' was not one of the top three reasons, except among the non-smokers; its place had been taken by 'calms nerves'.

Table 1. Percentage of the whole sample agreeing with reasons for and against smoking, analysed by smoking habits.

	Never smoked ($n=7056$)	Tried once ($n=3361$)	Used to smoke ($n=2228$)	Occasional smoker <1 per week ($n=606$)	Regular smoker 1-6 per week ($n=509$)	Regular smoker >6 per week ($n=1506$)	Association between opinion and smoking (for 10 degrees of freedom)	
Reasons for smoking								
Calms nerves	29	41	49	62	62	75	$\chi^2=1415.5$	$P<0.0001$
Keeps weight down	17	23	27	30	31	42	$\chi^2=541.0$	$P<0.0001$
Gives confidence	10	15	19	30	33	37	$\chi^2=1039.0$	$P<0.0001$
To show off	76	78	73	64	49	32	$\chi^2=2085.3$	$P<0.0001$
Fun	1	4	9	23	26	31	$\chi^2=2161.5$	$P<0.0001$
Looks grown up	24	30	38	38	29	22	$\chi^2=908.6$	$P<0.0001$
Looks tough	20	22	26	23	17	10	$\chi^2=280.2$	$P<0.0001$
Reasons against smoking								
Causes cough	89	90	88	85	83	83	$\chi^2=176.3$	$P<0.0001$
Causes breathlessness	66	71	76	73	75	80	$\chi^2=311.2$	$P<0.0001$
Waste of money	95	94	93	85	76	75	$\chi^2=938.3$	$P<0.0001$
Causes bronchitis	63	66	65	65	64	68	$\chi^2=48.7$	$P<0.0001$
Causes heart disease	79	74	72	69	63	66	$\chi^2=218.4$	$P<0.0001$
Smelly	77	82	80	76	64	63	$\chi^2=740.5$	$P<0.0001$

Table 2. Percentages of never-smokers agreeing with statements about smoking.

	Boys				Girls			
	Under 11 yr ($n=871$)	11-13 yr ($n=1657$)	14-16 yr ($n=908$)	17+ yr ($n=188$)	Under 11 yr ($n=880$)	11-13 yr ($n=1507$)	14-16 yr ($n=858$)	17+ yr ($n=187$)
Reasons for smoking								
To show off	63	81	82	57	63	82	85	70
Looks tough	23	21	17	14	20	22	18	14
Looks grown up	27	23	21	24	25	24	24	25
Calms nerves	21	29	39	49	19	25	35	41
Fun	1	1	2	3	1	1	1	2
Keeps weight down	12	15	20	25	13	15	24	28
Gives confidence	9	9	11	17	8	7	13	20
Reasons against smoking								
Causes cough	86	87	93	93	87	89	93	93
Causes breathlessness	81	65	85	89	49	57	80	91
Causes bronchitis	65	57	74	82	61	54	73	84
Causes heart disease	85	81	75	77	84	80	73	71
Smelly	69	76	83	86	70	76	87	93
Waste of money	94	96	95	93	93	96	97	97

Table 3. Percentage of 'triers' and ex smokers agreeing with statements about smoking.

	Boys				Girls			
	Under 11 yr ($n=241$)	11-13 yr ($n=1231$)	14-16 yr ($n=1284$)	17+ yr ($n=273$)	Under 11 yr ($n=149$)	11-13 yr ($n=884$)	14-16 yr ($n=1189$)	17+ yr ($n=338$)
Reasons for smoking								
To show off	72	82	76	46	78	83	80	54
Looks tough	36	29	21	10	30	32	20	12
Looks grown up	46	37	30	19	49	38	32	21
Calms nerves	34	42	49	59	30	33	48	53
Fun	10	7	7	3	8	7	4	2
Keeps weight down	21	21	26	29	16	18	25	30
Gives confidence	23	16	18	19	9	13	17	19
Reasons against smoking								
Causes cough	82	86	90	93	88	87	93	91
Causes breathlessness	64	71	84	89	44	55	83	90
Causes bronchitis	61	56	69	79	59	58	73	80
Causes heart disease	83	75	73	72	86	75	68	69
Smelly	68	77	85	86	70	77	85	91
Waste of money	89	94	94	92	91	94	96	92

Table 4. Percentages of occasional smokers agreeing with statements about smoking.

	Boys				Girls			
	Under 11 yr ($n=9$)	11-13 yr ($n=84$)	14-16 yr ($n=152$)	17+ yr ($n=41$)	Under 11 yr ($n=10$)	11-13 yr ($n=89$)	14-16 yr ($n=169$)	17+ yr ($n=52$)
Reasons for smoking								
To show off	67	64	57	46	90	76	72	51
Looks tough	11	26	22	20	30	35	21	10
Looks grown up	46	33	36	22	40	50	40	30
Calms nerves	56	60	66	61	20	50	64	78
Fun	38	19	28	20	50	16	22	22
Keeps weight down	0	26	30	34	10	24	32	40
Gives confidence	33	26	33	24	40	21	36	39
Reasons against smoking								
Causes cough	89	78	81	88	90	83	87	96
Causes breathlessness	71	54	82	85	40	52	79	94
Causes bronchitis	67	43	68	73	50	55	70	83
Causes heart disease	56	72	67	66	80	74	66	75
Smelly	89	65	78	78	50	75	75	90
Waste of money	100	80	79	78	100	91	88	90

Table 5. Percentages of regular smokers agreeing with statements about smoking.

	Boys				Girls			
	Under 11 yr ($n=9$)	11-13 yr ($n=170$)	14-16 yr ($n=650$)	17+ yr ($n=202$)	Under 11 yr ($n=5$)	11-13 yr ($n=150$)	14-16 yr ($n=638$)	17+ yr ($n=191$)
Reasons for smoking								
To show off	56	50	35	15	100	56	39	21
Looks tough	67	23	13	6	80	20	10	3
Looks grown up	63	40	23	12	60	35	26	8
Calms nerves	67	53	72	77	60	55	76	78
Fun	67	36	34	45	60	34	23	18
Keeps weight down	0	30	36	38	20	38	45	41
Gives confidence	67	36	31	33	20	31	38	35
Reasons against smoking								
Causes cough	78	77	81	82	40	84	86	85
Causes breathlessness	50	57	77	81	20	65	83	91
Causes bronchitis	25	46	65	78	60	64	70	82
Causes heart disease	56	64	65	73	40	60	62	75
Smelly	67	56	56	61	60	68	67	74
Waste of money	63	74	72	76	60	77	70	75

In the upper secondary-school (14-16 years of age), the never-smokers, triers and occasional smokers were little different. Their views still mainly tended towards the idea that people smoke for the sake of appearance. The regular smokers gave little credence to these views, but strongly supported the concepts that smoking calms the nerves and keeps the weight down. At this age, smokers in general were least likely to agree with the negative views about smoking, including the health risks.

Above the official school-leaving age, 'to show off' was still the most popular reason for smoking among the never-smokers, but even they now gave increased support to other reasons. Few regular smokers gave their support to any of the visual aspects which were so popular with the youngest children. 'Calms nerves', 'fun', 'keeps weight down' and 'gives confidence' were now the most popular reasons with regular smokers. Almost all the respondents in this age group, whatever their smoking habits, admitted to the health risks of smoking, but the smokers were least likely to agree about the social disadvantages such as wasting money and being smelly.

Discussion

Children appear now to be aware of the health risks of smoking, and other recent research has also shown this awareness.[2] Some marked differences can be seen when the results are compared with a survey in January 1959 of children from ages 11 to 17-plus years in corporation schools in Edinburgh.[8] In the Edinburgh survey, only 4 per cent of the boys and 10 per cent of the girls mentioned coughs, and 6 per cent and 2 per cent respectively mentioned breathlessness, as consequences of smoking; a difference in format could be partly responsible for the variation, as the questions in that survey were open-ended. Even as early as 1959, children showed considerable awareness of the connection between lung cancer and smoking, 55 per cent of the boys and 60 per cent of the girls mentioning it. Recent research has shown that almost every child is likely to say that smoking causes cancer,[9,10] which is the reason why this question was omitted from our questionnaire.

The visual aspects of smoking were the most favoured reasons for smoking among primary school children. In a survey in 1971 of children aged between 10.0 and 12.5 years and in the last year of primary school, 'to show off' was the most popular reason for smoking.[11] As in our survey, 'to show off' received more support from the non-smokers than from the smokers. A further comparison was the low proportion in this age group, even among the smokers, who agreed that smoking is enjoyable or fun. In the lower and upper secondary school the visual aspects were still important with the never-smokers, triers and occasional smokers, but not with the regular smokers. The idea of anticipating adulthood, so popular with boys aged 11 to 15 years in the 1966 survey,[12] had little support among boy smokers in this age group in the present survey. Above the official school-leaving age smokers gave most support to the reasons that smoking 'calms nerves', is 'fun', 'keeps weight down'[13] and 'gives confidence', and recent research[14] has shown similar opinions in this age group. This differs from the national survey of 16- to 19-year-olds which was carried out by interviews in 1964,[15] where 46 per cent of the smokers and 61 per cent of the non-smokers agreed that young people smoke because it makes them feel grown up.

The onset and continuation of smoking in children are both clearly multifactorial in origin. Parental smoking, peer group smoking, availability of cigarettes, curiosity and many other factors are influential, and their influence relative to each other will vary according to the developmental age of the child.[16] Equally clearly, the child's decision to smoke, or to continue to smoke, must depend in some measure on what he or she hopes to gain from it. These expectations are derived from a number of sources, but two important ones are observation and experience. The young child who has not yet had time to gain experience must place more emphasis on what he or she observes: smoking is visually impressive to children at this stage. Later impressions are based on less visible attributes, which might be gained from personal experience of smoking or from more developed observation.

One of the most obvious changes in children's attitudes observed in this survey, both with increasing age and when compared with surveys carried out in the mid 1960s, is the disappearance of the 'tough' image in relation to smoking; in the national survey of boys aged 11 to 15 years in early 1966 'toughness' emerged as a prime reason for smoking.[12] It would be rash to suggest that this change is due to a single factor, but several important changes in cigarette advertising have taken place during these years which might have been influential. In 1965, television advertising of cigarettes ended,[17] and a stricter code of advertising was adopted in 1976.[18] At that stage, the 'tough' images were banned from advertisements. The children in the 1960s, now the generation of parents, were constantly subjected to cigarette advertising on television and elsewhere, often depicting the 'tough' image. Nowadays children receive their impressions from a more subtle form of advertising—that of sports sponsorship. To see an excellent and justifiably admired snooker player, for example, relaxing between frames with a cigarette cannot help but convey the impression of calming the nerves and giving confidence. Our teaching needs to take this into account.

Conclusions

The majority of children are non-smokers. Our aim is to keep them so. Antismoking programmes based on health risks alone have not been successful.[19-21] Most children in our study knew about the health risks. The youngest children placed great emphasis on the appearance of smoking. The older children, especially the smokers, supported the calming, confidence-giving and weight-controlling aspects. In planning antismoking education it is vital not only to make it relevant to particular age groups, but also to counteract the subliminal advertising.

Acknowledgements

The author's most grateful thanks are due to the Cancer Research Campaign for financing the research; to Mr R.L. Davison and the staff of the Manchester Regional Committee for Cancer Education for their practical help; to Dr M.K. Palmer of the Christie Hospital, Manchester, for his help with the computing; and to all the headteachers, staff and pupils who so kindly took part in the survey.

Address for correspondence

Dr Anne Charlton, Manchester Regional Committee for Cancer Education, Kinnaird Road, Manchester M20 9QL.

References

1. Office of Population Censuses and Surveys. *Cigarette smoking 1972 to 1982. General Household Survey.* OPCS Monitor ref. GHS83/3 London: OPCS, 1983.
2. O'Rourke AH, O'Byrne DJ, Wilson-Davis K. Smoking among schoolchildren. *J R Coll Gen Pract 1983;* **33:** 569-572.
3. Dobbs J, Marsh A. *Smoking among secondary school children. An OPCS enquiry.* London: HMSO, 1983.
4. Doll R, Peto R. *The causes of cancer.* Oxford University Press, 1981.
5. Butcher HJ. *Sampling in educational research.* Manchester: Manchester University Press, 1973.
6. McKennell AC. Bias in the reported incidence of smoking by children. *Int J Epidemiol* 1980; **9:** 167-177.
7. Bland JM, Bewley BR, Banks, MH, *et al.* Schoolchildren's beliefs about smoking and diseases. *Health Educ J* 1975; **34:** 71-78.
8. Cartwright A, Thompson JG, *et al.* Young smokers. An attitude study among schoolchildren touching also on parental influence.
Br J Prev Soc Med 1960; **14:** 28-34.
9. Charlton A. Cancer: opinions of some secondary school pupils in northern England. *Int J Health Educ* 1977; **20:** 112-119.
10. Charlton A. Assegai: teaching about cancer in general studies. *Int J Health Educ* 1983; **1:** 67-73.
11. Bewley BR, Bland JM. Academic performance and social factors related to cigarette smoking by schoolchildren. *Br J Prev Soc Med* 1977; **31:** 18-24.
12. Bynner JM. *The young smoker.* London: HMSO, 1969.
13. Charlton A. Smoking and weight control in teenagers. *Public Health* 1984; **98:** (in press).
14. Shor RE, Williams DC, Canon LK, *et al.* Beliefs of smokers and never smokers about the motives that underlie tobacco smoking. *Addict Behav* 1981; **6:** 317-324.
15. McKennell AC, Thomas RK. *Adults' and adolescents' smoking habits and attitudes.* London: HMSO, 1967.
16. Wake R, McAlister A, Nostbakken D (Eds). *A manual on smoking and children.* Geneva: International Union Against Cancer, 1982.
17. Royal College of Physicians. *Smoking or health.* Tunbridge Wells Pitman Medical, 1977.
18. Tobacco Advisory Committee. *Code of Advertisements for Cigarettes and Hand-Rolling Tobacco in the UK.* London: Tobacco Advisory Committee, 1964.
19. Thompson EL. Smoking education programs 1960-1976. *Am J Public Health* 1978; **68:** 250-257.
20. Jeffreys M, Westaway WR. Catch them before they start. A report on an attempt to influence children's smoking habits. *Health Educ J* 1961; **19:** 3-17.
21. Martens JV, Weidenman B. The theoretical concepts on an anti-smoking program. *Int J Health Educ* 1974; **15:** 83-93.

Geriatric day hospitals

One of the factors which may have influenced day hospital expansion is that day hospital treatment was earlier found to be cheaper than inpatient treatment, as some of the 'hotel' costs were avoided. The increasing price of ambulance transport has reduced this advantage. Further reduction occurs if the expenses of keeping a patient at home (community services, share of housing, etc.) are set against inpatients costs. Using such detailed comparison, treatment up to twice weekly at a day hospital provides good value for money, but more frequent treatments can prove costlier than inpatient or residential care.

Realistic attempts are now being made to cost a complete course of treatment, for example three months' visits to a day hospital. Depending on whether this is regarded as equivalent to 15 or 10 weeks as an inpatient, the relative cost of day hospital treatment is 32-90 per cent of inpatient costs. 'Throughput' is as vital to day hospitals as to wards, and the average number of visits for day hospital treatment has decreased over the years from 40 to 20, and the recommended size from 50 to 30 places.

Critics of comparisons between inpatient and day patient treatment emphasize that we are not comparing like with like. Day hospital treatment relates more closely to independence and accords with the preferred wishes of most patients and families.

Costing involves not only money but staffing and here the day hospital continues to show advantage. Not only can day hospitals attract nurses and (scarce) therapists, but a nurse can maintain ten times as many patients in the day hospital as she can in the wards. Over four fifths of day hospital patients have help at home from a chief carer (member of family, neighbour, friend, home help, etc). These helpers increase greatly the number available to care for the old at home and this is the most vital factor in the comparison of costs between day hospital and inpatient care.

Source: Hildick-Smith M. Geriatric day hospitals—changing emphasis in costs. *Age and Ageing* 1984; **13:** 95-100.