Public Health Briefs

Cigarette Smoking by Rhode Island Physicians, 1963–1973: Comparison with Lawyers and other Adult Males

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The smoking habits of physicians have been a popular subject for study in this country and abroad for the last couple of decades largely because of the presumed potential influence of the doctor's precept and example on patient behavior. Nearly all studies have shown a tendency for the physician to smoke less than the general population and, despite a frequent lack of comparability of method, the rate of cigarette use among doctors is found to be falling and the fall is sustained.

This communication reports the cigarette smoking status of the physicians of Rhode Island, exploring the changes since 1963[1] and 1968[2], using questions designed for comparability with these two earlier reports.

Surveys have tended to show strong relationships of socioeconomic status and education to cigarette smoking.[3] Professionals, persons with post-graduate university education, and members of high-income families have all tended to show rates of smoking substantially below those for the population as a whole, at least among males. Because of such reports we considered it possible that physicians' smoking habits were those of the educational and socioeconomic group to which they belong rather than those of health professionals. Lacking any better comparison group, we elected to survey lawyers, feeling that this group reproduces many of the non-medical characteristics of the physician. Independently, Kunze and his co-workers in Vienna[4] surveyed physicians, lawyers, and the general population finding smoking rates of 26.3 per cent, 33.3 per cent and 45.0 per cent respectively.

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Method

In the summer and fall of 1973 a total of 1,384 licensed physicians were recorded as resident in the State of Rhode Island, and the American Bar Association listed 1,368 Rhode Island lawyers. With co-sponsorship by the local Medical Society and the Bar Association, short questionnaires designed for comparability with those used in our 1963 and 1968 physician surveys were mailed to listed numbers of each profession. For the purposes of this report, the key questions were, "Do you smoke cigarettes?"; "Were you ever a regular cigarette smoker?"; and, for former smokers, "Why did you stop?" Physicians were asked their field of practice, and members of both groups were asked to give their age.

Follow-up mailings were carried out at about four weeks for both professions.

Individuals found to have died or left the state were not used in calculating response rates, which are included in Table 1 below. We have emphasized elsewhere[5] the tendency of mail surveys with low response rates to underestimate the proportion of cigarette smokers, since smokers respond less willingly and promptly than nonsmokers; other authors have concurred[6, 7]

The results refer only to cigarette smoking, without reference to the use of tobacco in other forms.

Results

Table 1 includes the result of the 1973 survey of Rhode Island physicians and lawyers with the results of our previous surveys five and ten years earlier,[1, 2] the findings of the National Health Survey for males aged 25 years and over at the available time periods,[3] and the results of a 1975 health interview survey of the Rhode Island population performed by Rhode Island Health Services Research.[8] Several things are apparent:

TABLE 1—Cigarette Smoking among Rhode Island Physicians, Lawyers and U.S. and R.I. Males Aged 25 and Over

		Current Cigarette Smokers	Former Cigarette Smokers	Never Smoked Cigarettes	"Quit Rate"	Sample Size	Response Rate
		%	%	%	%		%
Physicians (R.I.)	1963[1]	33.0	35.8	31.2	52.0	752	70.0
U.S. Males 25 and Over	1965[3]	51.5	21.9	26.5	30.0		
Physicians (R.I.)	1968[2]	22.6	37.3	40.1	62.3	1,026	86.7
U.S. Males 25 and Over	1970[3]	43.8	29.3	26.5	40.1		
Physicians (R.I.)	1973	19.0	35.4	45.6	65.1	1,234	89.2
(Male Physicians (R.I.)	1973)*	(19.1)	(37.3)	(46.0)	(64.7)	(1,173)	
Lawyers (R.I.)	1973	25.0	35.8	39.0	59.0	1,064	77.5
R.I. Males 25 and Over	1975[8]	44.3	30.5	25.3	40.8	1,453	

* Omitting 62 female respondents 10 of whom were cigarette smokers (16.3%)

Like their colleagues elsewhere, fewer physicians in Rhode Island smoke cigarettes than the male population of similar age. (Ninety-three per cent of Rhode Island physicians are male, and eliminating female physicians shows a minimal effect on the rates.) Furthermore, the rate is falling although apparently not as rapidly as in the 1960s.

There has been a rather marked increase in the proportion of physicians who state that they have never smoked, now approaching one-half of the group, and at the same time, based on the "quit rate"* calculation, almost two-thirds of those who have ever smoked have stopped.

Comparison with the lawyers shows that one-third more lawyers than physicians smoked cigarettes,‡ but the rate for lawyers was still only 57 per cent of that for U.S. males in 1970 and 56 per cent of that for Rhode Island males in 1975.

A 1975 statewide health interview survey of Rhode Island's noninstitutionalized population by Rhode Island Health Services Research, produced the figures shown for males age 25 and over. Among those with poverty-level income 50.7 per cent were cigarette smokers, among those with middle-level incomes 44.1 per cent, and among those with high-level incomes 35.5 per cent, findings similar to those in national studies.

Table 2 reports cigarette smoking by professional specialty which ranged in 1973 from 28.1 per cent for OB-GYN specialists down to 9.2 per cent for internists. It appears that there is a tendency for those who smoke less than the average 19 per cent for all physicians to belong to specialties that are more commonly exposed to pathological states related to smoking. The OB-GYN group actually contains a higher proportion of smokers than the lawyers. No pulmonary physicians or thoracic surgeons smoked but their small numbers are included with the internists and general surgeons in the table. All specialty groups showed a decline in smoking over the 10-year period, but to differing degrees.

The main reasons for stopping smoking by both professions frequently showed conviction of a health issue on the one hand, or the occurrence of symptoms or smoking-related disease on the other.

Age (and thus indirectly the duration of smoking) tended to increase the frequency with which symptoms and disease-related reasons were cited. These age gradients were more striking for lawyers than for physicians. Overall, however,

*This "quit rate" introduced by Caplan, Cobb and French[9] takes into account the obvious fact that only those who have been smokers can stop smoking, and is calculated as the per cent of those who have ever smoked (present and former smokers) who report that they have quit.

‡The observed difference is highly significant statistically ($P < .001$) and the difference is diminished only one-half a percentage point by age-adjustment.

TABLE 2—Cigarette Smoking, and "Quit Rate In" Selected Specialties

	Per Cent Cigarette Smokers			10-Year Change	"Quit Rate" 1973	N 1973
	1963	1968	1973			
	%	%	%	%	%	
Internal Medicine and Subspecialties	27.4	15.2	9.2	−66.4	77.9	229
General and family medicine	34.5	21.5	17.2	−50.1	72.0	215
General Surgery	32.0	25.4	25.3	−21.0	56.3	150
Pediatrics	23.3	16.7	20.7	−11.2	66.2	92
Psychiatry	35.7	25.9	20.7	−42.0	63.5	92
Obstetrics and Gynecology	45.6	32.3	28.1	−38.4	54.9	82
Radiology	22.2	23.3	16.1	−27.5	66.7	62
Orthopedic Surgery	40.7	29.0	19.0	−53.3	64.5	58
Anesthesiology	35.5	31.8	14.0	−60.6	69.6	50
Pathology	25.0	20.7	18.0	−28.0	69.6	39
Oto-laryngology	25.0	25.0	16.7	−33.2	85.7	24

both professions showed almost an identical distribution of reasons.

Discussion

Clearly, medical education is not the principal reason why physicians have a low rate of cigarette smoking, since it cannot explain the high proportion who have never smoked. If the answers are reliable, some earlier influences have acted upon the potential physicians as early as their teens.

The second nonsmoking group—those who have stopped—have clearly done so by reason of health knowledge in many instances, but the large proportion of lawyers who have quit suggests that something far less than full medical education has been influential. Differences among specialties suggest that physicians draw further conclusions from their experience with patients having conditions considered smoking-related.

In view of the strength of counter-educational influences in advertising media and elsewhere, one can expect slow change at best, but developments in the high socioeconomic status individual may eventually produce a behavioral model productive of gradual change in other groups.

Difficult as it is for the confirmed smoker to quit, the physician retains the key position to advise and to exemplify optimum health behavior in this as in other matters. We are particularly unhappy that the rate of cigarette smoking is so high among OB-GYN specialists who see young parents at a time when they might be persuaded to make changes for the future benefit of their children.

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Evaluation of the Localization Auditory Screening Test In Children 6-18 Months of Age

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Introduction

During World War II, Sir Alex and Lady Ewing of the Department of Education of the Deaf, University of Manchester, England developed a technique for auditorily screening infants and pre-school children.[1] The technique has been referred to as the distraction technique, wherein the mother holds the infant on her lap while an observer sits in front of the baby and attracts the infant's attention visually. The tester, standing behind the infant, presents stimuli to the right or left side of the infant and notes whether or not the baby turns his head toward the source of the sound.

The Ohio Department of Health has used the Ewing test as modified by Hardy, et al.,[2] for testing children eight to 14 months of age. The procedure was used with some success. However, training of nurses to administer the test required at least one week, and changing personnel made the testing program difficult to maintain. Other shortcomings of the procedure were the number of personnel needed and the lack of stimulus control, such as training testers to speak at 30dB levels (a difficult task).

There is need for measures to screen very young children which are predictive of a developing communication deficit. The considerations which govern the selection of such measures are: 1) the cost of the procedure, 2) the time it takes to obtain individual measures, 3) the number of personnel, and 4) whether the procedure can be administered by non-professionals.

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