HABITS AND ATTITUDES OF MALAYSIAN MILITARY DOCTORS TOWARDS SMOKING

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INTRODUCTION

TOBACCO smoking is rapidly growing in third world countries (The Malay Mail, 1979) including Malaysia as evidenced by the increase in the volume of cigarette sales of 26 million pounds valued at 551 million ringgit in 1977 (Information Malaysia, 1978/79) compared to 16.25 million pounds valued at 249 million ringgit in 1970 (Information Malaysia, 1975/76). The military population is also presumed to be involved in this disturbing epidemic even without the free cigarette ration or duty-free cigarettes. This survey was carried out to determine the prevalence of smoking among military doctors* and their attitudes towards smoking.

MATERIALS AND METHODS

A postal questionnaire survey was carried out from June to August 1979 among all doctors in the Armed Forces as of 1st June 1979. The questionnaire used was the U.S. National Health Interview Survey on Smoking Habits (1975) modified to suit this study.

RESULTS

A response rate of 86.6% (103 of 119) was obtained. Rose and Barker (1978) mention that this is a good response rate. The analysis is, however, confined to only male doctors as smoking habits of females are different (Benjamin, 1979).

Definitions

A never-smoker is defined as one who has never smoked or smoked less than 100 cigarettes during his lifetime. A current smoker is one who

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* Doctors here refer to medical officers only.

smoked more than 100 cigarettes and who is smoking at the time of the survey and who had smoked more than this number. A heavy smoker is one who smokes 20 or more cigarettes per day, a moderate smoker 10-19 per day and a light smoker less than 10 per day.

Age and marital status

The age ranges from 26 to 55 years for the respondents. 27% of current smokers are below 30 years and 65% in their thirties. For never and ex-smokers, 32.5% and 27% respectively are below 30 years and 65% and 46% respectively in their thirties. 31% of the medical officers are married. Marital status is not related to the medical officers never or ever-smoking (current and ex-smokers) status (p < 0.1).

Smoking status

39% of doctors have never smoked, 50% are current smokers and 11% are ex-smokers. All 52 current smokers smoke cigarettes except three who are pipe smokers. 52% of the smokers use king size cigarettes with filters, 46% regular size with filters (except one doctor) and only 2% use extra long cigarettes with filter. 45% of medical officers are heavy smokers, 31% moderate and the rest light smokers.

University graduated and medical speciality

28% of the medical officers are from Universities in Malaysia and Singapore, and 64% from Universities in the Indian subcontinent and the rest from other places. There is no significant difference between the smoking habits of medical officers from the Indian subcontinent and those from Malaysia/Singapore ($p \leq 0.1$).

It is of interest to note that of the 14 medical officers in public health, 64% are smokers. This is, however, not significantly different from other medical officers with regard to their smoking habit (p <0.2).

TABLE I

AGE GROUP	NEVER SMOKER		CURRENT SMOKER		EX-SMOKER	
AGE GROUP	SINGLE	MARRIED	SINGLE	MARRIED	SINGLE	MARRIED
30	10	3	9	5	1	. 2
30 — 34	6	16	5	22	0	0
35 — 39	0	4	1	6	0	5
40	0	1	0	4	0	3
TOTAL	16.	24	15	37	1	10
	40 (38.8%)		52 (50.5%)		11 (10.7%)	

AGE, MARITAL AND SMOKING STATUS OF DOCTORS WHO REPLIED THE QUESTIONNAIRE

TABLE II

UNDERGRADUATE UNIVERSITY AND SPECIALITY OF THE DOCTORS

UNIVERSITY/SPECIALIALITY		NEVER SMOKER	CURRENT SMOKER	EX-SMOKER	
Malaysia/ Singapore	General Duty	12	8	2	
	Community Medicine	0	2	1	
	Others	2	1	1	
India/Pakistan/ Bangladesh	General Duty	18	29	3	
Dangiadesh	Community Medicine	2	7	2	
	Others	. 2 ¹	1	2	
Other Countries	General Duty	4	3	0	
	Community Medicine	0	0	0	
	Others	0	1	0	

Age started smoking

None started smoking below age 15 or 35 and above. Only 18% of medical officers started in their teens (age 15-19) and the majority, 59% in their early twenties. By the thirties, 98% of the smokers have launched their smoking career. Teenage starters (68%) appear to become heavy smokers while those starting in the early twenties are moderate (38%) and heavy (45%) smokers. Those starting later are found equally in all 3 groups.

Smoking duration

51% of medical officers have completed more than 10 years smoking cigarettes. Only four medical officers have completed more than 20 years, smoking an average of 20 cigarettes per day, which works out to 14600 cigarettes, calculated for 20 years. Smokers who had completed 10 or more years smoking cigarettes are significantly more likely to be heavy smokers than smokers who have less than 10 years smoking credit (p ≤ 0.01).

AGE STARTED	<10	10-19	≥20		TOTAL	
SMOKING	<10	10-17		NO	PERCENTAGE	
20	2	1	6	9	18.4	
20 — 24	5	11	13	29	59.2	
25 29	4	3	3	10	20.4	
30	1	0	0	1	2.0	
TOTAL	12	15	22	49	100%	

	TABLE III					
AGE	CURRENT	CIGARETTE	SMOKERS	STARTED	SMOKING	

TABLE IV

CURRENT CIGARETTE SMOKERS SMOKING DURATION

	AVERAGE NO (OF CIGARET	TES SMOKED
NO OF YEARS COMPLETED SMOKING	<10	10-19	≥20
<1	1	2	0
1 — 4	1	3	1
5 — 9	1	7	4
10 — 14	1 .	5	8
15 — 19	0	0	3
≥20	0	0	4
Never smoked regularly	7	0	1
TOTAL	11 (22%)	17 (35%)	21 (43%)

Attitudes to smoking

58% of medical officers recommended no smoking at conferences and meetings. However, 81% of never smoking medical officers were in favour of a ban on smoking at conferences compared to 36% of smokers. This difference is statistically significant (p 0.01).

50.5% of medical officers advice their patients to stop smoking irrespective of the condition or illness of the patient whereas 47.5% of medical officers advice only if it is smoking-related. 2% of medical officers do not advice patients to stop smoking irrespective of the condition of their "smoking" patient. There is no significant difference between current and never smokers on smoking advice to patients. 80% of doctors would not recommend a ban on the sale of cigarettes or cigars in messes and canteens. All three groups are of one voice. A ban on cigarette advertisements in the Medical and Dental Journal was recommended by 60% of medical officers. There was however no significant difference between never smokers and current smokers on this recommendation. All ex-smokers except one recommend a ban on cigarette advertisements.

Influence of service life

There is no significant difference to the smoking habits of doctors after entry into the Armed Forces. One took up smoking, 13 smoked more and 6 smoked less and there was no change in 29.

TABLE V

MILITARY DOCTORS ATTITUDES TO ANTI- SMOKING MEASURES

RECOMMENDATIONS	NEVER SMOKER	CURRENT SMOKER	EX— SMOKER
(1) Stop smoking to "smoking" patients:			
a. Smoking-related conditions	20	22	6
b. Irrespective of conditionc. No	19 0	27 2	5 0
(2) No smoking at conferences:			
a. Yes	30	16	7
b. No	7	28	4
c. Undecided	2	7	0
(3) Ban sale of cigarettes, etc at Armed Forces messes and canteens:			
a. Yes	10	6	3
b. No	24	43	8
c. Undecided	5	2	0
(4) Ban cigarette advertise- ments in the Medical and Dental Journal:			
a. Yes	24	25	10
b. No	14	24	1
c. Undecided	1	2	0

NOTE: Two medical officers did not complete it.

Suggestions to discourage smoking

To the open-ended question on ways to discourage smoking, there were 115 suggestions made by 84 doctors with the rest leaving it unanswered. 56 suggestions were for health education with special emphasis on its health hazards, 11 suggested no smoking in hospitals and clinics for medical/dental personnel and patients, 7 suggestions for doctors to set an example by not smoking, and a few suggesting an increase to tax on cigarettes, stopping subsidies to tabacco growers, banning smoking in public places and even outlawing the manufacture and sale of cigarettes.

Ex-smokers

Of the 11 ex-smokers, only nine completed the section on ex-smokers. These nine range in age from 27 to 47. They all started in their twenties. They gave up smoking after 1 to 14 years, four of them after 10 or more years at it. Four of the nine who gave a reason for giving up the habit was because it was hazardous to health.

DISCUSSION

The health hazards of cigarette smoking to smokers (U.S. Surgeon General's Advisory Committee on Smoking and Health, 1974) the deleterious effect on a growing foetus of a smoking mother (Herriot et al; 1962 and Kelsey et al; 1978) to children in a family of a smoker(s) (Tager et al; 1979), to exposed non-smokers (Schimettz et al; 1975), and the occasional danger to property and life as the recent Vienna hotel fire due to a burning cigarette butt (The New Sunday Times, 1979), have been well documented and are well known to most doctors. Yet, many continue to smoke. The high prevalence of smoking in this group of military medical officers (50%) is cause for concern. A 1970 smoking survey among medical officers by the Public Health Society of the Malaysian Medical Association showed a prevalence of 33% current smokers (Arumuganayagam, 1972). Two other surveys by Patrick (1967) and Pathmanathan (1975) in 1967 and 1972 among University of Malaya students showed that 30% and 20% respectively were current smokers. The rate among military doctors is therefore significantly greater. In developed countries, doctors as a group show an increasingly downward trend for smoking but in third world countries it appears to be the opposite (Rankin *et al*, 1975, Burgess *et al*, 1978 and Aar *et al*, 1977). A mental revolution is clearly indicated in doctors to change their habits before mounting an antismoking campaign in the Forces.

Health education to medical students in the University of Malaya (Pathmanathan, 1975) has had not much effect as nearly 50% are currently smokers. Doctors from Universities in the Indian subcontinent where health education on smoking is not given have a similar prevalence. The approach to the problem requires a restudy to make it more effective and Universities in the Indian subcontinent should start an effective programme to combat beginning or continuing the smoking habit.

Doctors who start smoking early in life become heavy smokers. Anti-smoking programmes must therefore begin in schools and universities to prevent picking up the habit. All smokers in this study except one use filter which is believed to lower the risk of cigarette-related diseases (Hunter, 1978) though no scientific evidence is available as yet (Holland, 1978).

The attitude of doctors to smoking is unfortunately not sufficiently progressive. The best advice that a doctor can give a patient is "Do not smoke" (Editorial JAMA, 1978) but nearly 50% of our military doctors are unwilling to give freely of this advice unless the disease is smokingrelated. Studies show that programmes showing most promise are individual counselling (Thompson, 1978) and smoking withdrawal clinics using effective methods (Paxton, 1979). 58% agreed that smoking should be banned at conferences but many pay lip-service to this as it is not matched with action. The current attitudes indicate a reluctance on the part of many doctors to view smoking as a serious public health problem and to mount measures against it.

Current measures to combat smoking in the Armed Forces by the Medical and Dental Services is non-existent except by a small percentage of doctors on an individual basis. Community-wide measures are needed to effectively control this widespread epidemic. Measures suggested vary. Studies are indicated to find the most suitable ones for our military population.

SUMMARY

A postal questionnaire survey was carried out among military doctors during June to August 1979 on habits and attitudes to smoking. An 87% response rate was obtained. Smoking prevalence was found to be 50%. 45% of medical officers are heavy smokers. Age at starting influence the amount smoked. Service life had no influence on smoking habits. Attitudes to smoking vary between the different categories of doctors. The habits and attitudes indicate a mental revolution on the part of doctors is required prior to any anti-smoking programme as they have to be sufficiently motivated to lead the fight.

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REFERENCES

- Aar, L.E., Bjartveit, K., Vellar, O.D. and Berglund, E-L. et al. (1977) Smoking habits among Norwegian doctors 1974, Scand. J. Soc. Med., 5, 127-135.
- Arumaganayagam, P. (1972) The epidemiological aspects associated with smoking, Bull. Pub. Hlth. Soc., 6, 40-43.
- Benjamin, B. (1979) Tobacco smoking in the world, WHO Chronicle, 33, 94-97.
- Burguess, A.M., Jr., et al. (1978) Cigarette smoking by Rhode Island physicians, 1963-1973: comparisons with lawyers and other adult males, Am. J. Public Health, 68, 63-65.

Editorial (1978) Smoke screens, JAMA, 240, 1271.

- Herriot, A., et al. (1962) Cigarette smoking in pregnancy, Lancet 1, 771-773.
- Holland, W. (1978) Scientific Meeting on Prevention and Health - The Community's Business, Faculty of Community Medicine Newsletter, 5, 30-36.
- Hunter, R. (1978) Scientific Meeting on Prevention and Health - The Community's Business, Faculty of Community Medicine Newsletter 5, 30-36.
- Information Malaysia Incorporating Malaysia Year Book 75/76. Kuala Lumpur, Berita Publishing Sdn. Bhd. p 181.
- Information Malaysia Incorporating Malaysia Year Book 78/79. Kuala Lumpur, Berita Publishing Sdn. Bhd. p 384.

Kelsey, J.L., et al. (1978) Maternal smoking and congenital

malformations: an epidemiological study, J. Epidemiol. Comm. Hlth., 32, 102-107.

- Pathmanathan, I. (1975) Smoking habits among medical students in the University of Malaya, Med. J. Malaysia, 30, 88-92.
- Patrick, E. (1967) A survey of smoking habits among students in University of Malaya, Kuala Lumpur, Med. J. of Malaya, 21, 99-103.
- Paxton, R. (1979) Do methods matter in smoking clinics, Hlth. Bull., 37, 164-167.
- Rankin, D.W., et al. (1975) Attitudes and smoking habits of Australian doctors, Med. J. Austr., 2, 822-824.
- Rose, G. and Barker, D.J.B. (1978) Epidemiology for the uninitiated. Conduct of surveys, Br. Med. J., 2, 1201-1202.
- Schimettz, I., et al. (1975) The influence of tobacco smoke on indoor atmospheres. I. An overview, Prev. Med., 4, 66-82.
- Tager, I.B., et al. (1979) Effect of parental cigarette smoking on the pulmonary function of children, Am. J. Epidemiol., 110, 15-26.

The Malay Mail, 9 October, 1979.

The New Sunday Times, 30 September, 1979.

- The Surgeon General's Advisory Committee on Smoking and Health (1974), USA, Norstrand Company.
- Thompson, E.L. (1978) Smoking education programs 1960-1976, Am. J. Public Health, 68, 250-257.
- US Public Health Service (1975) Health Interview Survey Procedure 1957-1974. Washington. D.C. DHEW. Pp. 70-71.