INTRODUCTION

Smoking is now well established as a major preventable cause of death and disablement (Fielding, 1989). Most studies found that adult smokers started smoking as children (75% of them before they were 18) and 80% of those who started smoking will continue to smoke for the rest of their lives (Ernster, 1988). A study on smoking among doctors and medical students also found that the smokers had started smoking, as they were school children (Ismail and Zainal, 1993). Prevention of smoking in children would thus be the most effective strategy in curbing the smoking in the community.

School teachers’ influence smoking decisions by their students (Chen and Rakip, 1975); smoking teachers stimulate their students to start smoking (Higgins et al, 1983). Teachers’ attitudes toward smoking and smoking education are likely to influence the effectiveness of both smoking education and school policies towards student smoking. Teachers are on the front line of antismoking action. Convincing students to avoid and stop smoking is thus an obvious priority. From this aspect, this study was aimed to explore the factors related to smoking habits among secondary school male teachers and trainee teachers and their perception of hazards of smoking on health.

MATERIALS AND METHODS

A cross-sectional study was conducted between January and December 1999. By using cluster sampling, a total of 180 male secondary school teachers from four secondary schools and trainee teachers from a Teachers’ Training College, Kelantan State, Malaysia were included in the study. A structured questionnaire was applied to interview persons individually to get their responses. The reason to include both teachers and trainee teachers was to look into the smoking habits related to their current status of work. Since Kelantan state is 90% Islamic, all study participants
were Muslim Malay school teachers. The validity and reliability of the questionnaire was tested earlier based on pre-test results. The verification of the smoking status was not done by any biochemical measures. Pearson chi-square test was applied to determine the statistical significance to determine the statistical significance of association at 5% level of significance. The data was analyzed by using SPSS software version 9.0.

**Definition of terms used**

Tried/smoked before  
- One who only tried but not a smoker now/smoked before but currently not a smoker.
Never tried  
- One who had never tried smoking in his/her life.
Current smoker  
- One who smokes currently regardless of frequency and amount smoked.
Mean initiation age (MIA)  
- average age at which smoking was first attempted.

**RESULTS**

Current smokers represented 40.56% of the teachers and trainee teachers surveyed (Fig 1). A total of 38 teachers had smoked at some time in their lives. Mean duration of smoking was 6.8 years. Mean initiation age (MIA) of smoking was found to be 16.5 years. Around 64% of the smokers started the smoking habit before the age of 14. Forty-six percent of the smokers smoked daily for more than five years. A significant proportion of the smokers (58.9%) smoked for more than five years. A significant association between smoking status of teachers and their fathers’ (p<0.05). The perception of the hazards of smoking on health was significantly different between smokers and non-smokers (p<0.05) (Table 1). Religious belief and care for health attitude prevented non-smokers from smoking (Fig 3). About 58.90% of the smokers thought of quitting smoking and of these 27.39% had tried at least once. There was no significant difference of proportion of those who wished to stop smoking between regular and occasional smokers (p>0.05) but there was a significant difference in the proportion of attempted quitting between them (p=0.03) (Table 2).
Most of the teachers felt that smoking is one of the major problems in the schools and it is important to reduce this habit in schoolchildren. About 78% of the teachers thought that there should be sessions which give school children the knowledge about hazards of smoking. Mass media were the best source of information on knowledge about smoking. The impact of smoking habit can be captured by the World Bank’s predicted statement that unless smoking behavior changes it is important to reduce this habit in schoolchildren. About 78% of the teachers thought that there should be sessions which give school children the knowledge about hazards of smoking. Mass media were the best source of information on knowledge about smoking hazards followed by medical personnel (Fig 4).

DISCUSSION

The impact of smoking habit can be captured by the World Bank’s predicted statement that unless smoking behavior changes...
three decades from today, premature deaths caused by tobacco in the developing world will exceed the expected deaths from AIDS, tuberculosis and childbirth complications combined (Anuar and Abdullah, 1996).

National prevalence of current smokers among adults in Malaysia was 24.8%. In other words, one out of every four Malaysian adults smoked (Anuar and Abdullah, 1996). In this study, from 180 teachers surveyed, 40.56% were current smokers. This prevalence is even higher than the national statistics, the reasons being Kelantan has the highest prevalence of current smokers which is 31.7% and the population of Kelantan is comprised of more than 90% Malay ethnic group. Malays have the highest prevalence of smoking among all ethnic groups with 27.9% (Anuar and Abdullah, 1996). It is similar to studies in the West which reported smoking prevalence of between 25% and 37% (Chen and Rakip, 1975; Newman, 1971; Serraino et al., 1987). Mean initiation age of smoking was 16.5 years by this study. It is also higher than the national MIA which was 19.9 years. However MIA has variation among states, ethnic groups, religions and location (urban and rural) (Anuar and Abdullah, 1996).

This study reported that peer influence was found to be the main factor, which induced the teachers to smoke (29.5%). It was similar to the finding reported in a previous study which was as high as 36.0% (Ismail and Hishamuddin, 1994). Parental influence was reported as one of the factors influencing smokers to smoke. There was a statistically significant higher proportion of smokers whose fathers were known to be smokers. It supports previous studies which reported that parental influence is one of the strongest influences on smoking (Vlajjinac et al., 1989; Gliksman et al., 1989). Therefore campaigns against smoking should advise parents and teachers not to smoke in front of children. Parents should regularly advise their children on healthy habits, as instilling good moral values is extremely important. The home environment should complement the school to discipline the students. Role models should be set both at home and the school. Teachers who are smokers may find it difficult to take disciplinary action on smoking students.

A total of 31% of the teachers never tried smoking shown by this study, the main reasons being against religion, parents do not smoke and care of health. Since the religion of the majority of the population in Malaysia is Islam, Islamic religious teaching should be an integral part of anti-smoking programs. Talks and lectures about the negative aspects of smoking from the religious point of view in schools by the authorities from religious departments may help teachers and students to realize about the forbidden issue of smoking habit in Islam. Increasing emphasis in this aspect in religious teaching may reduce smoking among the Muslims.

There was a significant difference of perception of hazards of smoking on health between smokers and non-smokers. Non-smoking teachers had a better attitude towards the danger of the smoking habit. Ignorance and self-denial of the hazards of the smoking could be major reasons why smokers responded unsatisfactorily to the questions on the health hazards of smoking. These differences in attitudes about the health hazards of smoking between smokers and non-smokers were consistent with previous reports (Ismail and Zainal, 1993; Chen and Rakip, 1975). Information about the deleterious effects of smoking should be included in the curricula as part of health education against smoking.

In this study, nearly 28.0% of smokers has tried at least once to stop smoking but failed. Physical and psychological dependency may play a role since current smokers smoked more cigarettes per day compared to ex-smokers. Many smokers realized the hazards of smoking and the benefits of cessation but this is made difficult as all tobacco products contain nicotine making it an addictive pastime. Smoking is a serious public health
problem warranting serious attention. Smoking control policies should contain strategies to strengthen smokers’ motivation to quit such as health education, public information and behavioral programs. Where appropriate, pharmacological treatment by properly trained professionals can help many smokers to quit (Anuar and Abdullah, 1996).

The study participants identified mass media as the best source for obtaining knowledge about the danger of smoking. A similar finding was reported by a study done in Saudi Arabia (Al-Faris, 1995). However, it might be more effective if the person is given health education by medical personnel, religious department authorities, teachers, parents and even friends. None can replace effective two-way communication discussion.

There was a significant difference in the proportion of smokers between teachers and trainee teachers. There were more smokers among trainee teachers. This finding is the reverse of what was reported by a previous study (Ismail and Hishamuddin, 1994) which had more smokers among teachers. That same study informed that the majority of the teachers admitted that their smoking had increased partly due to greater opportunity (including increased income) compared to while in training.

This study was focused on smoking behavior on male teachers and females were not included in the study, the reasons being that smoking is considered primarily a problem of males and there were some logistic problems in interviewing female teachers. Low prevalence of smoking among females was also found among Malaysian doctors (Ismail and Zainal, 1993). However, the National Health Morbidity Survey conducted in 1996 had also reported that the prevalence of female adolescents smoking was as high as 7.0% (Anuar and Abdullah, 1996). A study is recommended to explore the smoking behavior among the Malaysian females.

Smoking habits of school teachers influence the students to start smoking. Teachers should stop smoking since it is difficult for them to take disciplinary action on the students, if themselves are smokers. Anti-smoking campaigns should start as early as possible in schools. Lectures and talks on smoking should be included in the curriculum of teachers training courses. Teachers who smoke are likely to exert a negative influence on smoking related discipline which attempts to discourage students from smoking through prohibitive policies, thus undermining the effectiveness of school-based smoking education. Therefore, if any anti-smoking campaign is to succeed, the cooperation of teachers in view of their role model to school-going children is essential (Ismail and Hishamuddin, 1994). Smoke-free environment should be declared in all schools and heavy penalties should be set up if the teachers and students are found smoking in the school environment.

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REFERENCES


Fielding JE. Smoking: health effects and control. N
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