

Awareness of tobacco-related health information among military community in Taikkyi Cantonment, 2008

**Myint Tun, **Le Le Win, *Win Ko Lwin & *Zay Yar Tun*

**Defence Services Medical Academy*

***Department of Medical Research (Lower Myanmar)*

The increased use of tobacco is one of the greatest public health threats for the 21st century. Studies on tobacco use in the military community were seldom done and the awareness of tobacco-related health information among military personnel is needed to be explored. To fulfil this gap, a cross-sectional study was carried out in Taikkyi Cantonment. The study was done during 2008. A total of 298 persons, military personnel and civilians working at No. (11) Defense Industry in Taikkyi Cantonment area, were interviewed with the pre-tested questionnaire. About one-third of the respondents were still using tobacco at the time of survey - smoking and/or betel chewing. The majority (99%) said they heard about health information relating to tobacco. Health talk was mentioned as the main source of information - either from TV (96.9%), anti-smoking talk (62%) or from radio (36.3%). About 71% reported that anti-smoking activities in Myanmar were not sufficient.

INTRODUCTION

The increased use of tobacco is one of the greatest public health threats for the 21st century. Tobacco is a silent epidemic and remains a major killer, particularly in developing countries. Tobacco kills 4.9 million people every year globally. By 2020, it is predicted that tobacco will become a leading cause of death and disability, killing 10 million people every year. About quarters of all regular smokers are killed prematurely by their smoking and smoking shortens a person's lifespan by 13 to 14.5 years [1].

It is well accepted that smoking is the avoidable cause of death and disability and World Health Organization (WHO) points out that tobacco is not only the major cause of death worldwide but also the fourth most common risk factor for various diseases [2]. Apart from the tragic health consequences, smoking encompasses several other economic and social costs.

Prevalence of smoking for Myanmar males ranged from 30% to nearly 50% and female

prevalence around 20% [3]. According to 2005 WHO report, overall prevalence of all ages use in Myanmar was 32.9%. Likewise, prevalence of tobacco consumption among military persons was apparently high - overall prevalence of smoking was nearly 50% and of betel chewing was 28% [4].

Use of smokeless tobacco is also common in Myanmar. According to 2001 sentinel prevalence study, prevalence of current smokeless tobacco use as 14.9% of population above 15 years of age, 23.8% of males and 8.0% of females [3].

Rapid changes in industrialization, urbanization, higher incomes and globalization in South East Asia Region including Myanmar contribute negatively on life-styles such as increased tobacco use, which in turn the rising trend of non communicable diseases.

Media takes place an important role in prevention of public health problems by competing against or complementing prevention messages. Hence, to increase the public awareness of relationship between the diseases and tobacco use, tobacco

control campaigns were implemented worldwide through various channels like media campaigns, counter-advertising and school-based programs. Since 2000, Myanmar Tobacco Free Initiative Project (TFIP) has been carrying out anti-tobacco campaigns to fight the tobacco epidemic and to reduce the morbidity and mortality related to the use of tobacco [5]. Consequently, information, education and communication (IEC) materials about danger of tobacco use - pamphlets, posters, stickers, wall posters, badges, video tapes, VCDs - had been distributed. 'Tobacco-free programmes' were introduced at all elementary schools during the academic year 2001-2003 by The School Health Project [6]. Also, work places were designated as 'tobacco free' by TFIP. In spite of these activities, the prevalence of tobacco use is still increasing in most of the developing countries [7].

It is time to find out whether information about the risks of smoking can influence consumers' use of tobacco: are they aware of either the addictive properties or the health consequences of tobacco? As the consumption of tobacco is highly prevalent among Myanmar community, the study aimed to explore the awareness of tobacco-related health information among military persons as a partial fulfilment in reducing the risk of tobacco uses.

Objective

The objective was to explore the awareness of smoking-related health information among military community in Taikkyi Cantonment Area, Yangon Division.

MATERIALS AND METHODS

Military community-based cross-sectional study was carried out in No. (11) Defense Industry (DI) in Taikkyi Cantonment Area, Yangon Division. The area was chosen purposively due to the nature of sedentary unit and consists the largest and heterogeneous population among military units in Taikkyi, i.e., military person and

families of military person from other military units within Taikkyi Cantonment Area. With the estimated proportion of people who were aware of tobacco-related health information in Myanmar, i.e., 25% (Personal communication with Dr. Nyo Nyo Kyaing, Project manager of tobacco control) and precision of 5%, at 95% confidence interval, the study involved 300 respondents. They were chosen by systematic sampling. Of which, only 2 respondents were not able to participate.

Face-to-face interview with the selected persons were carried out by trained medical officers by pre-tested questionnaire. Prior to interviewing, informed consent was obtained from each interviewee and the purpose of study and nature of interviewing was explained. At the night of every interviewing day, discussion was done among team members about difficulties they had faced during interview, the questions and answers were checked and then reconsidered and managed to create the better condition. The study was conducted from July to October 2008.

RESULTS

Socio-demographic characteristics of the respondents

Out of 300 respondents, 298 persons were interviewed with a response rate of 99.3%. The majority (82.9%) of the respondents were in the age group of 21-50 years, which is the working age group (Table 1). Males and married respondents were the dominant groups (61.7% and 70.1% respectively). About 95% had attained at least middle level education. In the occupation group, staff from production section like section relating to explosive materials was the largest (59.7%).

Among 298 respondents, current-, ex- and non-smokers were 30.2%, 11.1% and 58.7%. And current-, ex- and non-betel chewers were 41.9%, 3% and 55% respectively.

Table 1. Socio-demographic characteristics of subjects (n = 298)

Characteristics	No.	%
Age group (in years)		
18 - 20	19	6.4
21 - 30	109	36.6
31 - 40	76	25.5
41 - 50	62	20.8
51 - 60	32	10.7
Sex		
Male	184	61.7
Female	114	38.3
Marital status		
Single	84	28.2
Married	209	70.1
Divorced	2	0.7
Widow	3	1
Education		
Lower level	15	5
Middle level	96	32.2
Higher level	135	45.3
Graduated	52	17.4
Occupation		
Administration section	28	9.4
Inspection section	32	10.7
Head quarter	60	20.1
Production section	178	59.7

Situation of getting information

Majority (99%) said they heard about health information relating to tobacco from more than one source. Three respondents, who were neither smokers nor betel chewers, said they were not interested in it. Health talk was the main source of information - either from TV (96.9%), anti-smoking talk (62%) or from radio (36.3%) (Table 2).

Table 2. Sources of information (n = 295)

Sources *	No.	%
Health talk on TV	286	96.9
Poster and notice board	221	74.9
Health talk in group	183	62
Pamphlets and books	173	58.6
Radio health talk	107	36.3
From other people	37	12.5
Newspaper	20	6.8
From health worker	4	1.4
Others	18	6.4

*Multiple responses

Printed materials came next in the form of poster and notice boards (74.9%), pamphlets

and books (58.6%) and newspaper (6.8%). Only 1.4% received it from health workers.

Type of messages obtained

All of them said they obtained messages on health effects and illness due to tobacco uses (90.9% of smokers and 100% of betel users), followed by messages about avoidance of smoking in public area (13.6% of smokers and 33.3% of betel users). A few respondents also mentioned about health risk associated with tobacco for a child and pregnant woman and bad consequences of smoking.

Utilization of health messages obtained

Nearly all respondents said they applied these messages more for themselves regarding quitting, avoiding smoking near the pregnant woman, a child and family. Some also said they used it for encouraging other people to quit smoking and betel chewing, not to smoke near the pregnant woman and child. A very few explained to other people about the messages they acquired.

Inconsistencies between practices and their statements about utilization were found. Most current- and ex-smokers reported that they utilized such messages, yet, nearly all of them said they smoked in public areas. However, some avoided smoking near their family, stopped other people to smoke near the pregnant woman and child. Only a few of ex-smokers and non-smokers used none of these messages. The same pattern was reported by the betel chewers.

Preferred health education media and channels

Among 298 respondents, 295 (98.9%) mentioned about their type of preferred media (Table 3). The majority chose TV the highest (93.6%), while most selected printed materials such as posters (64.7%) and pamphlets (52.9%), only a few selected person-to-person - from other people and from health worker.

Table 3. Preferred media (n = 295)

Preferred media*	No.	%
Television channels	276	93.6
Posters and notice boards	191	64.7
Health talk and discussions	173	58.6
Pamphlets and books	156	52.9
Radio	95	32.2
From other people	3	1
From health workers	2	0.7
Others	3	1

*Multiple responses

Most preferred health education media and channels

Among these media types, the most preferred media was TV (54.9%), followed by health talk (25.8%), posters and boards (8.1%), pamphlets and books (6.8%), radio (2.4%) and individual talk (2.03%). TV was chosen as the most preferred method because of TV spot and the movie casts and it was easy to watch and understand. They liked the talk in group or individually, as they could discuss with the professional presenter at the talk. Likewise, it was easy to understand and read even for the illiterates, they chose posters and the pamphlets as their preference. Though only seven respondents chose radio, their prime reason was it could easy to hear the topics given by the professionals and could reach everywhere.

Least preferred health education media and channels

On the other hand, 261 respondents selected their least preferred media, which were different from the most preferred media: pamphlets and books (32.9%), posters and boards (22.9%), TV (19.2%), radio (14.2%) and health talk (10.7%) respectively. Unable to reach every corner, having no time and less precision about the facts were given as the reasons for the least preference to pamphlets and posters. While about 9% said pamphlets could not be appropriate for the illiterate person, only 1.7% claimed for the posters. Majority did not like radio as it could not be watched. About 22% did not like health talk as they thought it lacked precision.

The effective health education media and channels

Among the various media, TV and health talk were ranked as the most effective media (47.5% and 31.1% respectively) because of easily accessible in terms of watching, discussion and reaching a wider target. On the other hand, radio and individual talk were selected as the least effective one (1.01% and 0.7% respectively) though these could be listened at any time.

Generally, TV, health talk, posters and pamphlets were chosen as the most preferable and the effective media. Easily accessible was the common reason for their choosing the effective media in terms of watching, discussion and reaching a wider target. On the contrary, inconsistent choices were reported concerning with the effective media vs. their least preferred media, for instance, TV was selected as the effective media, and however, it was chosen as their least preferred method.

Opinion on the sufficiency of anti-smoking activities

Out of 298 respondents, 295 (98.9%) gave their opinion on the sufficiency of anti-smoking activities of Myanmar. Among 295 respondents, 208 (70.5%) reported that such activities were not sufficient. Most (51.9%) argued that there were still smokers and betel chewers (Table 4). About 36% said the information was still in need where some people did not know about it very well and sometimes the activities did not reach to rural areas. A few (8.2%) pointed out that it was because of the tobacco production.

Table 4. Reasons for not sufficiency of anti-smoking activities (n = 208)

Reason	No.	%
Presence of smokers	109	51.9
Need more information	75	36.1
Presence of tobacco production	17	8.2
Not knowing about quitting method	3	1.4
Need tobacco law	1	0.5
Others	3	1.4

Forty-six respondents said it was enough because the necessary messages were already well distributed through various media and channels over the country. Only a few did not reveal their opinions.

All types of smokers and betel chewers had negative opinion that the anti-smoking activities were not enough, particularly males (69.7%).

DISCUSSION

Smoking is regarded as one of the threats to the study area for the fire safety and health hazards for the employees, accordingly, some anti-smoking activities had already implemented within the jurisdiction of No. (11) DI. Pamphlets and posters distributed by Tobacco Control Programme were displayed at assembly hall, dining hall, family line, unit hospital and health centre. There were also signboards of "Don't smoke while walking" within the industry compound. Health talks given by medical officer, health assistant and midwife were also seldom done.

Majority of respondents (99%) said they heard about health information relating to tobacco from one way or the other. Only three subjects were unaware of such information as they had no interest in it and all of them were non-smokers and non-betel chewers. They received more about health risk due to tobacco uses and avoidance of smoking in public areas.

In spite of these circumstances, about one-third of the respondents were still persisting using tobacco at the time of survey. This could be due to nature of working environment, which is associated with isolation, stress and strains of the assigned job. Additionally, some admitted that they could not avoid smoking at the public areas, near the pregnant women and the children, but most followed what they had known from the health messages. It was found that they applied all the messages not only for

themselves, but also for other people as much as they could for quitting, avoiding and helping other people. However, they could not resist smoking at public areas.

This revealed that, most of the study respondents were aware of tobacco-related health information and practised accordingly. Health talk was identified as the main source of information - either from TV, anti-smoking talk or from radio. It was followed by the printed materials such as poster and notice boards, pamphlets and books and newspaper. Only a very few respondents received it through person-to-person - from health worker or other person. This indicated the need to enhance the health workers as the health educators in tobacco control programme.

TV and health talk - in group or individual were placed at the top list for their most preferred and effective media. Posters and boards, pamphlets and books came next. It is interesting to note that although some claimed health talk as their most preference and effective media some selected it as the least option. Those who had positive view on talk explained that they could have opportunities to discuss during the talk, and it was easily understandable. Those with negative view on talk argued that the facts and information were lacked of precision. The findings revealed that easily accessible was the common reason to choose the effective media in terms of watching, discussion and reaching a wider target.

Since the messages relating to tobacco risks had already disseminated through various media and channels over the country, some had opinion that the activities were enough. On the other hand, the majority thought anti-smoking activities were still in need as long as there were smokers and betel chewers and everybody was not well informed about the activities. Above all, though the percentage was small, they pointed out that tobacco production was one of the factors for the insufficiency of the activities.

In conclusion, the findings could not be generalized to the whole country; however, the findings indicated that to some extent, anti-smoking activities had achieved its goal among the study subjects.

ACKNOWLEDGEMENTS

We would like to express our gratitude to Professor Lt-Col. Khin Mg Aye, Professor and Head of Department of Preventive and Social Medicine, Defence Services Medical Academy, for his kind guidance and supervision We would like to express our gratitude to Professor Dr. Than Tun Sein, Department of Medical Research, (Lower Myanmar) Yangon for his valuable technical advice. Thanks also go to Lt-Col. Kyaw Kyaw, Commander of No. (11) Defence Industry (DI), for warm and kind support in data collection. Finally, our appreciation goes to all the medical officers of No. (14) Medical Battalion, for their kind supports throughout the study.

REFERENCES

1. Centers for Disease Control and Prevention. *Cigarette Smoking Among Adults United States*. Morbidity and Mortality Weekly Report 2005; 54(44):1121-1124.
2. World Health Organization. *Tobacco or Health: A global status report*. Geneva: World Health Organization 1997.
3. Aung Naing Oo. *A Study on Tobacco Consumption among the Military Personnel in Hmawbe Cantonment 2006*. 2006.
4. Nyo Nyo Kyaing. Tobacco Control and Poverty. (HNP Discussion paper no. 34). The New Light of Myanmar, Sunday, 30th May, 2004.
5. Nyo Nyo Kyaing. *Types and Constituents of Tobacco Products Used in Myanmar*. A Collaboration of World Health Organization and Tobacco Free Initiative Project. Department of Health, Myanmar: Yangon. 2005.
6. World Health Organization. *Country profiles on tobacco or health*. New Delhi: World Health Organization, Regional Office for South-East Asia. 2002.
7. Jarvis MJ, Wardle J, Waller J & Owen L. Prevalence of hard core smoking in England, and associated attitudes and beliefs: cross-sectional study. *British Medical Journal* 2003; 326:1061-1065.