

## Prevalence, Knowledge and Attitude of Tobacco Use Among Health Professionals In Mangalore City, Karnataka

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### ABSTRACT

As members of health profession, medical practitioners and dentists have a duty to promote oral and general health and healthy lifestyles among their patients, by raising their awareness about the harmful effects of tobacco on health and guiding them in conquering tobacco addiction.

A significant barrier to anti-tobacco counseling by health professionals has been found to be as a result of **self-use** of tobacco. The study was conducted to assess the knowledge, attitude and prevalence of tobacco use among medical and dental health professionals of Mangalore, Karnataka, India.

Ever consumers were 37% and 19% were current consumers of tobacco in the present study.

Cigarette is major product consumed. Majority of the current consumers (56.92%) had attempted to quit but more than half (60%) had again restarted the habit of tobacco consumption.

Addiction was the cause for not quitting the habit among 15.38% of current consumers. 38.9% stated that they had participated in anti-tobacco programmes.

Majority of the health professionals (72.91%) have expressed that tobacco use has to be banned. Effective cessation programs to reduce tobacco use among health professionals should be promoted..

**Key-words:** Cigarette, tobacco, smoking, health professionals.

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**T**obacco is the second major cause of death in the world (1). The death toll from tobacco consumption is now 4.9 million people a year. If the present consumption pattern continues, the number of deaths will increase to 10 million by the year 2020, 70% of which will occur in the developing countries (2).

Oral health is strongly related to tobacco smoking and chewing practices. South and Southeast Asia have some of the highest age-adjusted incidence rates of oral cancers and cancers of

upper aero digestive sites in the world and the highest numbers of persons affected.

As members of health profession, medical practitioners and dentists have a duty to promote oral and general health and healthy lifestyles among their patients, by raising their awareness about the harmful effects of tobacco on health and guiding them in conquering tobacco addiction. Health professionals, therefore, ought to be **role model** for their patients. Health professionals can also use their influence in

society to encourage governments to put in place tobacco control measures.

Significant *barriers to anti-tobacco counseling by* health professionals has been found to be as a result of *self-use* of tobacco, lack of training in counseling patients about quitting tobacco use, etc (3).

This provoked our efforts to determine the knowledge, attitude and prevalence of tobacco use among the health professionals.

**OBJECTIVES**

- To determine the prevalence of and attitude towards tobacco consumption among the health professionals.
- To determine the knowledge regarding the effects of tobacco consumption on oral and general health by the health professionals.
- To assess the participation of the health professionals in tobacco counselling and cessation programmes.

**MATERIALS AND METHODS**

The study was carried out by the department of Pedodontics and Preventive Dentistry, Yenepoya Dental College, Mangalore, among health professionals with a minimum qualification of BDS or MBBS which included the post-graduate students and the staff of different health institutions of Mangalore, Karnataka, India during the period from

December 2006 – July 2007. The study was carried out among 4 randomly selected health institutions of Mangalore which included 1 medical college and 3 dental colleges.

Ethical clearance was obtained from the ethical committee of Yenepoya Dental College and Hospital before the start of the study. A written permission was obtained from the Heads of the institutions selected for the study and informed oral consent was obtained from all the participants. The study included only those health professionals who were present on the days the investigator visited the institutions.

All participants were assured of confidentiality before the start of the study. All the participants were given a self-administered questionnaire by the investigator to assess the knowledge, attitude and prevalence of tobacco use in any form among them. The questionnaire was prepared by the investigator, a copy of which has been included in Annexure I. A time limit of 1-2 hours was given for the participants to fill the questionnaire and the investigator clarified all doubts the respondents had during data collection. The response sheets were personally collected by the investigator.

Tobacco users were classified as:

- Ever Tobacco Users - those who had used any tobacco in any form in his/her life time even once.
- Current Tobacco Users - those who used any tobacco product any time in the last 30 days.
- Never Tobacco Users - those who had never used any form of tobacco (4).

**RESULTS**

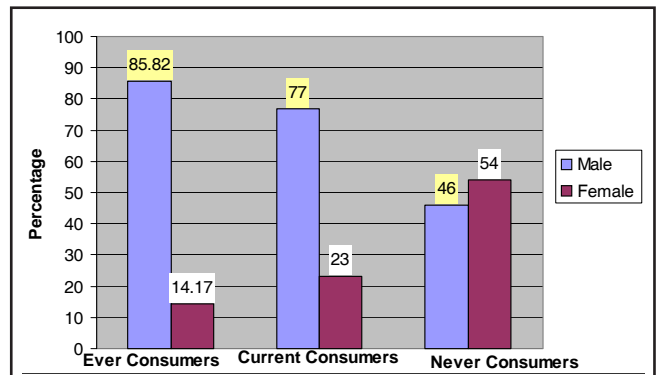
A total of 450 questionnaires were administered to the health professionals of 4 different health institutions of Mangalore city, Karnataka, India, of which 405 answered questionnaires were obtained back (response rate being 90%). Out of the 405 questionnaires that were obtained, 58 questionnaires were excluded from the study due to incomplete response.

**Table 1: Representation of the health professionals By Age and Gender**

Variable	Number	Percentage
<b>Age group</b>		
20-30 years	277	79.8
31-40 years	57	16.4
41-50 years	7	2
>50 years	6	1.7
<b>Total</b>	<b>347</b>	<b>100</b>
<b>Sex</b>		
Male	210	60.5
Female	137	39.5
<b>Total</b>	<b>347</b>	<b>100</b>

**Table 2: Representation of Tobacco use in the study population**

Age group	EVER CONSUMERS		CURRENT CONSUMERS	
	Number	%	Number	%
20-30 years	87	68.5	47	72.3
31-40 years	30	23.6	13	20
41-50 years	4	3.14	3	4.61
>50 years	6	4.72	2	3.07
<b>Total</b>	<b>127</b>	<b>36.6%</b>	<b>65</b>	<b>18.65%</b>



**Graph 1: Distribution of Tobacco Consumers by Gender**

## ANNEXURE I

### INSTRUCTIONS

- Confidentiality will be maintained.
- Sincere answers requested
- Please answer all questions.

Age:

Sex: Male / Female

Qualification:

Designation: PG student / Staff

1. Have you ever consumed tobacco in any form? YES/ NO
2. Do you presently consume tobacco? (Within the last 30 days) YES / NO
3. If “yes” which of the following do you consume/ have consumed?
  - ◆ Cigarette
  - ◆ Bidi
  - ◆ Gutkha
  - ◆ Pan
  - ◆ Pan zarda
  - ◆ Khaini
  - ◆ Cigar
  - ◆ Multiple form
    - ◆ Any other (please specify)
4. Age of initiation of the habit?
5. Reason for tobacco consumption?
  - ◆ As a habit
  - ◆ Social events
  - ◆ Friends company
  - ◆ Boredom
  - ◆ Work load
  - ◆ As a means to relieve tension
  - ◆ Influenced by media, movies
  - ◆ Any other (please specify.....)
6. How frequently do you consume tobacco or used to consume?
  - ◆ Occasionally
  - ◆ Once in 2-3 wks
  - ◆ Once in a week
  - ◆ Once in 2-3days
  - ◆ Every day
7. Which form of tobacco do you consume? Smoke/ Smokeless/ Both
8. If you are a smokeless tobacco consumer, how long do you chew it?
9. Which part of the mouth do you keep it after chewing?
  - ◆ Buccal mucosa
  - ◆ Labial mucosa
  - ◆ Below the tongue
  - ◆ Any other (please specify).
10. For how long do you keep it in your mouth after chewing?
11. If you consume tobacco in smoke form, then how many cigarette/beedi do you smoke/ used to smoke per day?
  - ◆ Upto 5
  - ◆ > 5
  - ◆ Depends
12. Are of aware of the effects of tobacco on your oral and general health?  
YES / NO / NOT SURE
13. Do you feel tobacco consumption is a habit worth continuing?  
YES / NO / NO COMMENTS
14. Did you ever make an attempt to quit the habit?  
YES / NO / NOT REALLY
15. Were you successful in quitting the habit?  
YES / NO / NOT SURE
16. If “yes” then what is the reason for quitting the habit?
  - ◆ Encountered health hazards
  - ◆ Realised the harmful effects
  - ◆ Inspired by any anti-tobacco program
  - ◆ For the sake of family members
  - ◆ Nothing specific
17. If “no” then what is the reason for not quitting the habit?
  - ◆ Addiction
  - ◆ Dont feel it is necessary to quit the habit
  - ◆ Any other
  - ◆ Nothing specific
18. Did you quit and restart the habit?  
YES / NO / NOT APPLICABLE
19. Have you ever advised any one not to consume tobacco?  
YES / NO
20. Have you ever participated in any anti-tobacco program?  
YES / NO
21. Do you think tobacco consumption should be banned?  
YES / NO / NO COMMENTS

**SIGNATURE**

A total of 347 male and female health professionals of Mangalore city, Karnataka, India participated in the study.

Distribution of the participants by age and gender are given in Table 1. Tobacco use in the study population by age group is given in Table 2. Tobacco use in the study population by gender is given in the Graph 1. Age of initiation of the habit by the ever and current consumers are given in the Graph 2. Distribution of ever and current users by type of tobacco product is given in Graph 3 and 4 respectively. Reasons for consumption of tobacco by the ever and current consumers are given in Graph 5 [sum total of the percentages are more than 100 due to multiple response by some of the respondents]. Reasons for not quitting the habit by the current consumers are given in Graph 6 [sum total of the percentages are more than 100 due to multiple response by some of the respondents]. Frequency of consumption of tobacco products by the current consumers is given in Graph 7.

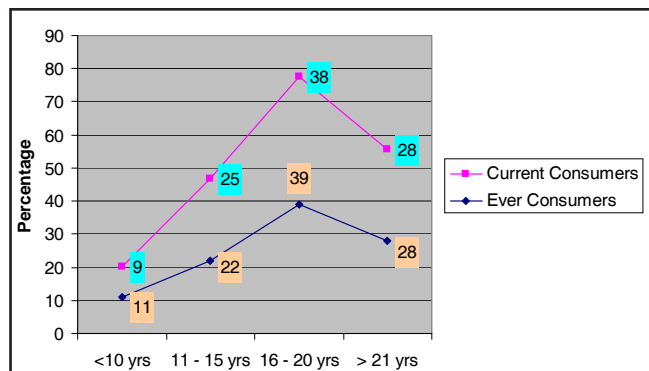
Among the health professionals who consumed smokeless tobacco, majority of them (63.15%) chewed the tobacco product for upto 10minutes, 21% for more than 20 minutes and 16% for 11-20 min.

More than half of them kept the chewed product in buccal

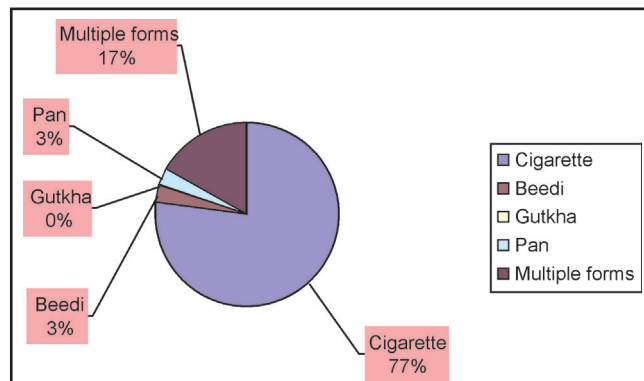
mucosa (57.89%) followed by labial mucosa and below the tongue (21% each), majority of them (73.68%) for upto 10 min.

More than half of the ever consumers (59.84%), had made an attempt to quit the habit of tobacco consumption and 42.51% of them were successful in quitting the habit.

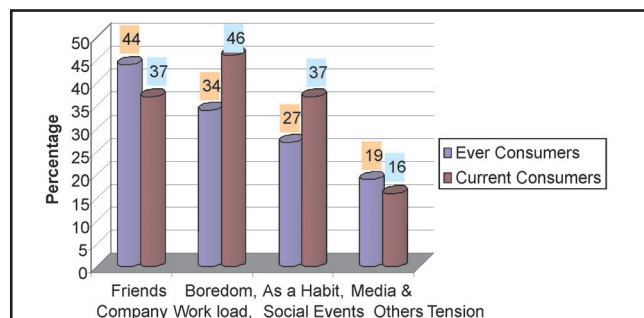
More than half of the current consumers (56.92%) made an attempt to quit the habit but , more than half (60%) of them restarted the habit.



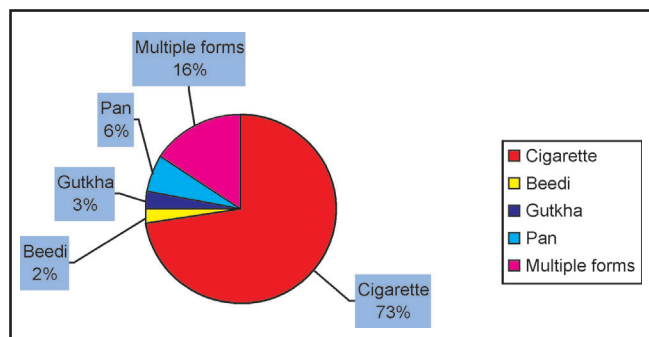
Graph 2: Age of initiation of Tobacco Use



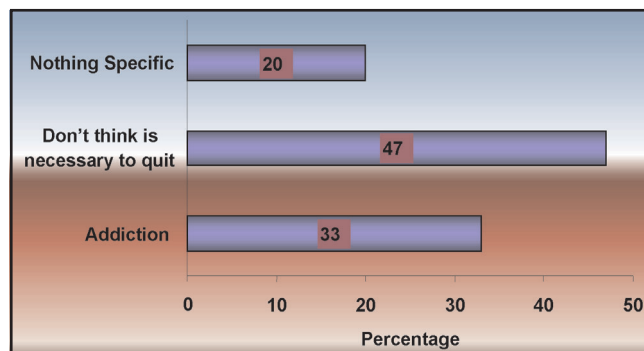
Graph 4: Distribution of Current Consumers by the type of Tobacco Product



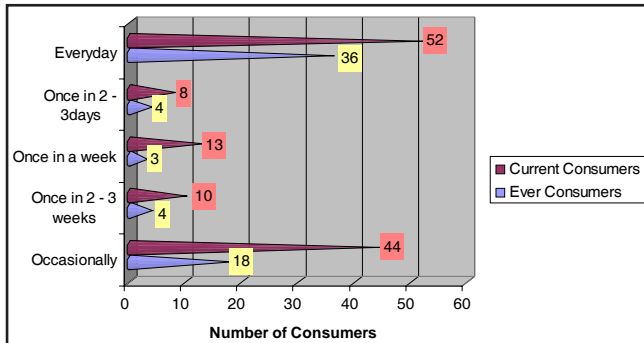
Graph 5: Reason for Consumption of Tobacco



Graph 3: Distribution of Ever Consumers by the type of Tobacco Products



Graph 6: Reasons for "NOT" quiting the Habit among Ever Users



**Graph 7: Frequency of consumption of Tobacco Products by Current Consumers**

One-fourth (24.40%) of the ever consumers stated that realization of the harmful effects of tobacco on health was the reason for quitting the habit.

More than half (61%) of the health professionals stated that they had not participated in any anti-tobacco program.

Majority (72.91%) of the health professionals felt that tobacco consumption be banned from the society.

## DISCUSSION

To the best of our knowledge, there are very few or no studies regarding tobacco use among qualified health professionals in Karnataka or other parts of India.

The Global Health Professional Survey supported by the WHO and Centres for Disease Control and Prevention, conducted in 2005 in India, is the first survey that provides state wise data about tobacco use among third year students of health professions [medical, dental and nursing] using a standardized methodology (3).

In a survey conducted by Sinha et al in 2001 among 67 dental students in Bihar, India 81% prevalence of tobacco use and/or areca nut use was seen (5).

Smoking among health professionals has been shown to affect their professional life. Doctors who are consumers of tobacco are less likely than doctors who are non-consumers to raise the issue of tobacco consumption with their patients and although there are insufficient data available on the issue, it seems likely that health professionals who are current consumers will lack credibility on tobacco cessation (6).

Therefore it seems reasonable that health professionals who are *non-consumers of tobacco* themselves to be role models for their patients.

The current study shows a prevalence rate of 18.65%. Majority of the consumers are males (76.92%). The current study shows

a prevalence rate of 23.07% among females. Gender gap between in tobacco use is narrowing globally.

Majority of the health professionals who are current consumers (46%) stated that the major reason for tobacco consumption are work load, boredom and as a means to relieve tension.

Majority of the ever consumers (38.58%) and current consumers (38.46%) initiated the habit when they were between 16 to 20 years of age. Also, the current study shows that even though majority of the health professionals (73.48%) were aware of the harmful effects of tobacco on oral and general health, it is disturbing to realize that 26.52% of them were still not completely aware of the harmful effects of tobacco. Education about tobacco and health should be strengthened in the training of members in health care specialties.

Cigarette was most extensively consumed among both ever consumers (73%) as well as current consumers (77%) compared to other tobacco products.

Nearly three-fourth (70.76%) of the current users in the present study consumed upto 5 cigarettes per day and 15.38% of them consume more than 5 cigarettes per day.

It is disturbing to realize that even though majority of the current consumers (56.92%) had attempted to quit the habit of tobacco consumption, more than half 60% of them had again restarted the habit and 15.38% of them have stated *addiction* as reason for not quitting the habit.

Less than half of the health professionals who participated in the present study (38.9%) stated that they had participated in anti-tobacco programmes. Therefore, it seems necessary to actively involve more health professionals in tobacco use cessation programmes and also strengthen the knowledge regarding the effects of tobacco on health.

Majority of the health professionals (72.91%) had expressed that tobacco use be banned from the society.

## CONCLUSION

Health professionals play a major role in tobacco use control and cessation and it becomes their duty to promote oral and general health and healthy life styles among their patients.

- About 37% of the health professionals in the present study had consumed some form of tobacco and 19% turned were current consumers of tobacco.
- Cigarette is major tobacco product consumed.
- Majority of the current consumers (56.92%) had attempted to quit but more than half (60%) had again restarted the habit of tobacco consumption.
- Addiction was the cause for not quitting the habit among 15.38% of current consumers.

- Majority of the health professionals (72.91%) have expressed that tobacco use be banned.

## Recommendations

- Promote effective cessation programs to reduce tobacco use among health professionals.
- Improve curriculum and introduce health institution based training programmes on tobacco use cessation approaches.
- Strengthen knowledge of harmful effects of tobacco and also cessation aids among health professionals which will help them to effectively guide their patients to be tobacco free.

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## REFERENCES

1. WHO: The World Health Report: Shaping the Future. Geneva: WHO, 2003: <http://www.who.int/whr/2003/en/> (accessed April 2005).
2. WHO: The World Health Report: Reducing Risks, Promoting Healthy Life. Geneva: WHO, 2002: <http://www.who.int/whr/2002/en/> (accessed April 2005).
3. WHO and CDC: Dental students and Tobacco Use in India. A pilot study for the Global Health Professional Survey (GHPS), 2005. Accessed from <http://www.who.int/tobacco/surveillance/ghps/en/index.html>
4. Singh GD, Sinha DN, Sarma, *et al.* Prevalence and correlates of Tobacco use among 10-12 year old school students in Patna district, Bihar, India. *Indian Pediatrics* 2005;**(42)**:805-810.
5. Sinha DN, Gupta PC, Pednekar MS, Singh JP. Tobacco use among students of Patna Dental College- Bihar. *Lifeline* 2001;**(6)**:11-12.
6. Raw M, McNeill A. Tobacco dependence treatment in England (WHO/NMH/TFI/FTC/03.3). In: "Tools for Advancing Tobacco Control in the XX1st century: Success stories and lessons learned." Geneva, World Health Organization, 2003.