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Knowledge and Attitude of Students and Teachers who Smoke Towards the Electric Chanting Cigarette Lighter in Colleges of Pimpri-Chinchwad: A Questionnaire Study

Nikhil A Bomble[1*] Roshani M Chawla[2] Sahana Hegde Shetiya[3] Deepti R Agarwal[4] Pranjan Mitra[5] Jimmy Kishan Sangtani[6]

[1]Senior Lecturer, Department of Public Health Dentistry, Late Shri Yashwantrao Chavan Memorial Medical & Rural Development Foundation's Dental College & Hospital, Ahmednagar, India.
[2]Senior Lecturer, Department of Public Health Dentistry, Vidarbha Youth Welfare Society Dental College, Amravati, India.
[3]Professor and Head, Department of Public Health Dentistry, Dr. D. Y. Patil School of Dentistry & Hospital, Nerul, Mumbai, India.
[4]Former Reader, Department of Public Health Dentistry, Dr. D. Y. Patil School of Dentistry & Hospital, Nerul, Mumbai, India.
[5]Senior Lecturer, Department of Public Health Dentistry, Institute of Dental Education and Advance Studies, Gwalior, India.
[6]Senior Lecturer, Department of Orthodontics, Vidarbha Youth Welfare Society Dental College, Amravati, India.

ABSTRACT

Aim: India had a wave of mandatory pictorial warnings but it did not serve the desired purpose since they were not properly understood. Hence, there was a felt need for an effective strategy which could bring an implicit change in the attitude and practice of tobacco users. Electric chanting lighter is a lighter which chants a death phrase when users light up, to deter smokers from smoking, which is patented by Cancer Patient Aid Association (CPAA), Mumbai, India. However, the effectiveness of its use is unknown. Hence, to know the knowledge and attitude of college students and teaching staff (smokers) about the chanting lighter the study was conducted.

Materials and Methods: A total of 100 (25 teachers and 75 student) participants were part of the study, which was conducted from March – August 2014. Every participant was asked to listen to the lighter live and then immediately a self-administered questionnaire was provided to them which were answered.

Results: Overall, 100% of the participants were unaware about the chanting lighter but 100% staff and 95% students were aware that smoking causes cancer. 100% staff and 89% students agreed that they won't reuse and 80% staff and 70% students agreed that society will accept the chanting lighter. 80% staff and 66% students agreed that chanting lighter will be long lasting in giving up the habit.

Conclusion: Chanting lighter can be promoted as one of the first verbal warning aid for smoking cessation and it can bring about change in attitude of smokers.

Keywords: Cessation, Smoking, Chanting lighter.

INTRODUCTION

India is the second largest consumer of tobacco in the world with an estimated 274.9 million tobacco users. The rising trend of tobacco consumption especially in developing countries is a cause of concern.[1] The most common type of tobacco consumption is in the form of commercial cigarettes which is widely smoked all over the world.[2] Of the total tobacco consumed in the world,

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***Correspondence Dr. Nikhil A Bomble.**
Department of Public Health Dentistry, Late Shri Yashwantrao Chavan Memorial Medical & Rural Development Foundation's Dental College & Hospital, Ahmednagar, India.
Email: dentistnikhil@gmail.com

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more than half is consumed in Asia. In WHO's Western Pacific region 430 million smokers reside, whereas 250 million smokers and almost same number of smokeless tobacco users are seen in South- East Asia region.[3]

In India, the deaths attributed to tobacco, are expected to rise from 1.4% of all deaths in 1990 to 13.3% by 2020. The Global Youth Tobacco Study (GYTS) has reported that smoking is the predominant form of tobacco consumption among adolescents in developed countries while both smoking and smokeless tobacco consumption are prevalent in developing countries.[4]The WHO Framework Convention on Tobacco Control (WHO FCTC) aims at reducing the burden of disease and death caused by tobacco.[5] The FCTC provides a comprehensive direction for tobacco control at all levels covering more than 87.8% of the world's population with 168 countries as signatories. India was the seventh country in the world to ratify FCTC. In light of the fact that India is a major consumer and producer of tobacco, this stands as a major leap forward. India was also among the first countries to enact a strong national law for tobacco control in 2003, i.e. Cigarettes and Other Tobacco Products Act (COTPA), 2003 under the aegis of FCTC.[6]

The use of prominent pictorial health warning labels on cigarette packages is one of the provisions included in the Framework Convention on Tobacco Control. There is substantial evidence favoring the effectiveness of graphic health warnings on intentions to quit, thoughts about health risks and engaging in cessation behavior.[7] However studies specify that mandated pictorial warnings do not serve the desired purpose since they are not properly understood[8]. Therefore, a need was felt for an effective strategy which could bring an implicit change in the attitude and practice of tobacco users.

The Cancer Patients Aid Association (CPAA) is a registered charitable non-governmental organisation (NGO), established in the year 1969, working towards the total management of cancer as a disease. CPAA has a tradition of untiring service to needy cancer patients from all over India, and even neighbouring Bangladesh, Bhutan, Nepal and Pakistan.

CPAA is an empathetic, reassuring, non-medical presence that has supported the treatment and overall needs of more than 3, 00,000 cancer patients. In India, it has grown from a tiny Mumbai based organization surviving on small donations to one with branches in Delhi, Bangalore and Pune. A campaign was conducted by CPAA for smoking cessation in which the target was neither the person nor the cigarette, it was all about the electric chanting lighter. An innovation by the CPAA in the form of chanting lighter which chants a Death phrase, "Ram NaamSatyaHai", which is usually sung during the Hindu funeral in India.

In India, cigarettes are sold loose and almost all pan shops have electric lighters fitted for smokers. As part of the new quit smoking campaign by CPAA the electric lighter was replaced by the chanting lighter. The smoker when lit up the cigarette hears the death chant. During the campaigning CPAA observed that, smokers decided to walk away rather than light their cigarette after hearing the words 'RaamNaamSatyaHai'. Some smokers were so shocked by the chant that they threw their cigarettes away.[9]

Electric chanting lighter can be an effective smoking cessation tool and one of the first verbal warnings for the Indian smokers to quit finally. Electric chanting lighter is patented by cancer patient aid association, Mumbai, India. However, the effectiveness of its use is unknown. Hence, the present study was conducted to assess the knowledge and attitude of students and teachers who smoke, towards the electric chanting cigarette lighter

MATERIALS AND METHODS

A Questionnaire study was conducted amongst the students (18-25 years) and teachers (30- 45) of arts, science and commerce colleges in Pimpri-Chinchwad, about the knowledge and attitude of students and teachers having habit of smoking towards the electric chanting cigarette lighter.

A total of 100 (25 teachers and 75 students) male participants aged above 18 years and having the habit of smoking were part of the study. Every participant was asked to listen to the electric chanting lighter and then immediately a self-

administered questionnaire was provided to them which was answered by the participant.

Inclusion criteria:

The subjects who were willing to participate and who were present on the day when questionnaire was administered.

Exclusion: -Participants who do not smoke and are not willing to participate in the study.

Sample size calculation: Assuming 50% of prevalence of smoking and 10% standard error, sample size was calculated to be 100**.**

Formula of sample size calculation:

$n = Z_{\alpha}^2 * p*q/d^2$

Z= standard normal deviate

p = Prevalence

q = 100-p

d= expected precision/ standard error

Sampling technique:

Convenience sampling technique was adopted.

SCIENTIFIC AND ETHICAL APPROVAL

Before commencing the study, scientific and ethical approval was taken from the Scientific and Ethical Committee of Dr. D.Y. Patil Dental College and Hospital, Pimpri, Pune. An informed consent was taken prior to start of the study.

Questionnaire:

Validation of the questionnaire was done and steps of questionnaire development were followed. A pilot survey was carried out to see the feasibility of using the electric chanting lighter among the local population in Pimpri, Pune. The local pan vendors were approached for installing the electric chanting lighter but none of the pan vendors agreed as they felt that it might hamper their business. Hence, it was decided to demonstrate the working of the electric chanting lighter to the smokers. After that immediately the questionnaire was given to the smoker.

A structured, semi-close ended, self-administered questionnaire was given to the survey subjects. The questionnaire consisted of 14 items. There were four questions based on knowledge and ten questions were based on attitude.

Questionnaire consisted of multiple choice questions. Question no 1 to 4 had dichotomous answers, question no 5 and 9 had semi close questions, and question no 6-8, 10- 13 had the responses to be ticked on a Likert scale. The answer of choice was to be marked by participants.

Appropriate instructions were given to the survey participants at the time when they were handed over the questionnaire regarding the correct method of completing the questionnaire. Every participant took around 15 minutes for completing the questionnaire.

Study setting/location:

The present study was conducted in two private institutional campus of arts, commerce and science colleges in Pimpri-Chinchwad. The questionnaire was designed and framed on the basis of knowledge and attitude questions towards electric chanting lighter which was self-administered by the participants of the study. The questionnaire was administered in the students' common room and staff room. Demographic details such as age, education and profession was recorded. The duration of the study was from April 2014 to September 2014.

Outcome measure of study participants:

The outcome of the study was based on the assessment of knowledge and attitude question which were self-administered by the study participants.

Preparation for Analysis:

Coding system was used to convert the responses of the participants for ease of analysis and also to reduce the risk of errors. Coding in the form of numbers was used, which had been decided during development of questionnaire.

Data Analysis:

The data was entered in Statistical Package for Social Sciences (SPSS) Version 17 software package and were analysed in the form of frequencies and percentages.

RESULTS

A Questionnaire study was conducted amongst the students and teachers of arts, science and commerce collegesin Pimpri-Chinchwad, Pune.

Questions on Knowledge amongst Staff and Students (Q-1 to 4):

100% of the study participants (staff) had knowledge that smoking is injurious to health, smoking causes cancer, smoking can have ill effects on health of family members. But, they were unaware about electric chanting lighter.

100% of study participants (student) had knowledge about smoking is injurious to health, 95% knew that smoking causes cancer, 51% knew that smoking can have ill effects on health of family members and 100% were unaware about electric chanting lighter**[Table 1]**.

Questions on Attitude amongst Staff and Students (Q-5 to 14):

100% of the study participants (staff) liked the electric chanting lighter, 80% of the study participants felt that society will accept electric chanting lighter, 95% of the study participants agreed that government should install electric chanting lighter at every pan vendor compulsorily, 83% of study participants felt that electric chanting lighter is a good tool for quitting the cigarette use, 100% of study participants felt that electric chanting lighter is scary, 80% of study participants felt that electric chanting lighter effect will be long lasting for quitting, 90% of the study participants felt that electric chanting lighter can be an effective health warning, 88% of the study participants felt that electric chanting lighter can motivate to stop smoking, 95% of the study participants felt that electric chanting lighter will help to educate people and 100% of study participants agreed that once used electric chanting lighter will not be used again by them.

75% of the study participants (students) liked the electric chanting lighter, 70% of the study participants felt that society will accept electric chanting lighter, 80% of the study participants agreed that government should install electric chanting lighter at every pan vendor compulsorily, 67% of study participants felt that electric chanting lighter is a good tool for quitting the cigarette use, 91% of study participants felt that electric chanting lighter is scary, 66% of study participants felt that electric chanting lighter effect will be long lasting for quitting, 59% of the study participants felt that electric chanting lighter can be an effective health warning, 63% of the study participants felt that electric chanting lighter can motivate to stop smoking, 56% of the study participants felt that electric chanting lighter will help to educate people and 89% of study participants agreed that once used electric chanting lighter will not be used again by them.**[Table 2]**.

Table 1: Knowledge of Staff and students about electric chanting lighter

Question no	Questions	Staff Percentage (%) (n= 25)	Students Percentage (%) (n= 75)
1	Smoking was injurious to health.	100	100
2	Smoking causes cancer	100	95
3	Smoking can have ill effects on health of family members	100	51
4	Unheard about ECL	100	100

Table 2: Attitude of staff and students towards electric chanting lighter

Question no	Questions	Staff Percentage(%) (n= 25)	Students Percentage (%) (n= 75)
5	Liked electric chanting lighter	100	75
6	Society will accept electric chanting lighter	80	70
7	Govt. should install electric chanting lighter at every pan vendor compulsorily	95	80
8	Electric chanting lighter is a good tool for quitting the cigarette use.	83	67
9	Electric chanting lighter is scary	100	91
10	Electric chanting lighter effect will be long lasting for quitting	80	66
11	Electric chanting lighter can be an effective health warning.	90	59
12	Electric chanting lighter can motivate to stop smoking.	88	63
13	Electric chanting lighter will help to educate people	95	56
14	Once used electric chanting lighter, won't use it again	100	89

DISCUSSION

In India, the legal smoking age is considered to be 18 years. Smoking begins just for fun, pleasure and as a coping mechanism against stress[10]. Tobacco use and especially cigarette smoking is a public health issue among students not only in developed countries but also among developing countries.

The period from school to college is considered to be critical period in students' life in adopting healthy habits and lifestyle. Students have to go through this transition phase. It has been observed that majority of the smokers get into the habit of smoking during their adolescence.[11] Hence, college students were selected for this study. Staff members of the college can be considered one of the role models for students which could influence the lifestyle of the students hence staff were selected for this study. While going through the results of the study it is striking to know that the knowledge among staff is better than amongst the students and the attitude towards the lighter is also better.

The response rate in this questionnaire study was 100% as the study participants were contacted in their free hours and the questionnaire was participant friendly. Tobacco control measures in Asian countries began in 1970s and 1980s. It began with health education in schools or text message health warnings on cigarette packs.[12] Pictorial warnings on the cigarette pack was considered to be an effective strategy by the government but questions are raised about its effectiveness among the Indian population as these mandated pictorial warnings do not serve the desired purpose since they are not properly understood.[8]

Various pharmacological approaches like Nicotine replacement therapy, Bupropion, Nortriptyline, Clonidine, Anxiolytics, Varenicline e.t.c. do exist for tobacco cessation, but are

associated with some or the other side effects.[13]Behavioural counseling also aid in smoking cessation but it also requires multiple sessions with trained therapist.[14]

It is always said that prevention is better than cure. Health promotion is based upon medical, behavioural, educational, empowerment and social change. Electric chanting lighter could aid in health promotion and impact positively on the society.As the famous Chinese proverb says that I hear and I forget, I see and I remember, I do and I understand, the same can be attributed to the use of electric chanting lighter as every time the smoker tries to light his/her cigarette the chant alerts him that he is on the path of dying.

Tobacco smoking is like drug dependence. Addiction to smoking is one of the major barrier in smoking cessation. It has been said that it takes around four cigarettes in risk of becoming an addict.[13]The results of this study depicts that both the staff and students were aware about ill effects of smoking but were still continuing with the practice. Unawareness regarding electric chanting lighter among the participants was not surprising as it was neither seen fitted at pan vendors nor it was available in local market as it was patented by CPAA.

The staff and students liked the innovative idea of electric chanting lighter, as it was one of its first kind of verbal warning which indicates that cigarette smoking will take life on the path of dying. India is the second most populous country in the world, its largest democracy and home to vast diversity in geography, climate, culture, language and ethnicity. The acceptance of electric chanting lighter by the society needed to be checked. In this study 70-80% of the study participants felt that it will be accepted by the society.

Regulations and control efforts of tobacco in India had been done from time to time by the Indian government. It began with the cigarette act of 1975(15) to change the statutory warnings on the cigarette packs. Taking one more step ahead, the government should install electric chanting lighter at every pan vendor compulsorily was felt by 80-95% of the study participants and this may probably help in giving up the habit.

The options for quitting the habit of tobacco use are available in the market in the form of pharmacological and non pharmacological mode.[16] Electric chanting lighter can be treated as a good tool for quitting smoking was felt more by the staff (83%) as compared to students (67%). Results depict that age related differences among the students and staff regarding smoking cessation does exist. The elders have more desire to quit and hence the attitude of the staff was not found alarming in regard to electric chanting lighter. Quitting depends on the willingness of the person and followed by the options available to aid in quitting. The electric chanting lighter will be economically sound for the smokers to quit as every time they think of lighting their cigarette at pan vendor their conscious might restrict them in lighting the cigarette.

Electric chanting lighter no doubt is scary as it chants the death phrase which is usually sung during Hindu funerals. Almost all the study participants agreed to it. The effect of electric chanting lighter will be long lasting in cessation of habit was felt more by the staff (80%) as compared to students (66%). The smoking desire is curbed by the chant of the electric chanting lighter which could be the reason for more positive attitude of staff compared to students.

The promotion and support of smoking cessation in adolescent is critical. Adolescence is a time of sensitive susceptibility for both the initiation of tobacco use and the development of nicotine dependence.[11] The students (59%) felt that electric chanting lighter will be an effective health warning, can motivate to stop smoking and will help to educate people but it was less as compared to staff (90%). Attitude of students regarding cessation are associated with the difficulty in cessation. The major concern for smoker during quitting is achieving and maintenance of abstinence. Various factors influence the smoking cessation like stress, mood alterations e.t.c. and one of the most commonly reported relationships with adolescent smoking is the one with negative effect or depressive symptom.

The problem in India is that one need not always look at a cigarette pack to smoke, because cigarettes are sold loose.[17]It is the direct response of electric chanting lighter to the smoker that the

death is nearer. It is effective (90% & 59%), motivating (88% & 63%) as well as educating (95% & 56%) smokers that each and every cigarette smoked, finally drags to death.

The ironical fact is that, when asked whether, once used the electric chanting lighter will be used again, 100% staff and 89% students said no. Will this lighter really help in smoking cessation is the question. As far as my views our concerned, I am sure it may influence some, if not all to quit smoking. For this a longitudinal study need to be undertaken.

Every coin has two sides. Similarly, the innovative electric chanting lighter though designed for smoking cessation has its own limitations. Its use cannot be generalized to non Hindu population in India as the chant which it has is related to Hindu funerals and has no relevance to non Hindu community. Its use cannot be generalized overseas as it won't be understood by the overseas population. Every single person does not smoke at pan vendors and hence the electric chanting lighter won't come in use for all smokers.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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