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Assessment Of Awareness And Practices Of Tobacco Free School Program Among Schoolchildren In A Tribal District Of Maharashtra: A Cross-Sectional Study

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Abstract

The Global Youth Tobacco Survey-4 (GYTS) reported a decline in the age of tobacco use initiation among Indian adolescents [1]. The Tobacco Free Educational Institutions (ToFEI) program of the Indian government aims for control and prevention of tobacco use among schoolchildren through early education [2]. Maharashtra has the highest tobacco use in rural and tribal areas [3], and is the third state with the highest numbers of schools and schoolchildren making it essential to assess the awareness and practices of the Tobacco Free School (TFS) program among schoolchildren. MATERIALS AND METHODS: An institution-based cross-sectional study was conducted in a purposefully selected tribal district of Maharashtra. A sample size of 50% of the trained schools under ToFEI in the year 2018-19 i.e., N=30 schools were selected using stratified random sampling. Necessary permissions were obtained from the concerned authorities. RESULTS: All 106 (100%) participants were aware of tobacco prohibition in school, and 81 (76.4%) knew the school health-related tobacco control policy. A total of 104 (98.1%) participants agreed teaching about tobacco harms in school prevents tobacco use among students. All the participants said they would act against tobacco use in the school in the future. None of the participants see anyone using tobacco in the school, 51 (48.1%) reported tobacco control activities in the school. All the 106 (100%) participants reported teaching about tobacco in the class. CONCLUSION: The sub-optimal implementation of the TFS program indicates a need to strengthen tobacco control activities right from the primary school level.

Keywords: Maharashtra, Schoolchildren, Tobacco Control Committee Members (TCCM), Tobacco Free School (TFS) program, Tribal

Introduction

Globally 38 million adolescents are current users of some form of tobacco and 18 million live in lower-middle-income countries [4]. India is the second producer and consumer of tobacco globally. Both smoking and smokeless tobacco are consumed in the country. It is more common among the rural and especially in tribal areas. India being the most populous nation holds the largest number of adolescents in it [5]. Even though there is a decline in tobacco use among Indian adolescents the decline in the age of tobacco use initiation is still a major concern [1].

Maharashtra the second most populous state in the country has the highest tobacco use, especially in rural and tribal areas [3]. According to the GYTS -4 of Maharashtra state, (5.1%) of students are using tobacco in any form, including (4%) tobacco smokers and (2.4%) smokeless tobacco users. Over (31.5%) of children were exposed to passive smoking at home and in public. Despite the ban on selling tobacco to minors, (63%) of cigarette smokers and (70%) of bidi smokers reported buying tobacco products [6].

The Indian Government took steps against tobacco prevalence by forming and passing the Cigarette and Other Tobacco Products (Prohibition on Advertisement and Regulation of Trades and Commerce, production, supply, and distribution) Act (COTPA), in 2003. The act prohibits tobacco sales to minors and around educational institutes [7]. In 2004, India ratified the WHO Framework Convention on Tobacco Control (FCTC), and the National Tobacco Control Program (NTCP) was introduced by the Indian Ministry of Health and Family Welfare (MoHFW) in 2007–2008 [8].

Despite the legislation and laws tobacco control is still a major challenge in the country. In India, tobacco is a reliable source of income for 36 million individuals, including 6 million farmers, 20 million farmworkers, and 10 million workers in tobacco processing, manufacturing, and exports [9]. Other factors such as tobacco being a socially accepted addiction by some communities, especially among rural and tribal areas, low literacy, tobacco use and exposure at home, indirect promotions, peer pressure, etc. are causes for tobacco exposure at an early age.

The presence of such contributing factors indicated the need for behavioural changes through education at an early age. India has the biggest school education system in the world. With such a large portion of the population congregated in one location and easily accessible, schools offer a platform for the implementation of any health strategy, including one aimed at reducing tobacco use. The Indian Ministry of Health and Family Welfare produced "Guidelines for Tobacco Free Schools (TFS)/Educational Institutions (EI)" in 2008 after considering the role of education in behavioural change towards tobacco use among schoolchildren since the early years of age of life.

The "Step by Step Guidelines for implementation of the Act and Regulations" were used to create the 11 criteria, which were revised to 9 on May 31, 2019, in order to accomplish TFS and EI. The goals of these recommendations are to raise awareness among students about the negative effects of tobacco use, and the involvement of students in tobacco control activities in school and community. It emphasizes the allocation of students as Tobacco Control Monitors (TCM) and Tobacco Control Committee Members (TCCM) [2].

Maharashtra state has the highest numbers of schools and schoolchildren making it essential to assess the awareness and practices of tobacco use and its control among schoolchildren [10]. There are few kinds of literature available on the knowledge regarding TFS programs among students and students designated as TCM and TCCMs and that too in tribal areas. This study was conducted to assess the awareness and practices of the TFS program among both schoolchildren and TCCMs in the schools implementing the TFS program and make suitable recommendations.

Material And Methods

An institution-based observational cross-sectional study was conducted in a purposefully selected tribal district of Maharashtra, where the Rural Health Training Centre of a medical college is located. A list of trained schools for ToFEI program implementation by the District Tobacco Control Cell in randomly selected year 2018-19 was obtained after obtaining necessary permissions from concerned authorities. A sample size of 50% trained schools i.e., N=30 schools were selected using stratified random sampling. The selected schools were approached and the purpose of the study was explained to the school principals and the study was conducted after obtaining permission. After explaining the study one male and one female TCCMs and students from the same class were selected using the lottery method. Assent was obtained and was a face-to-face interview with the help of a predesigned, pretested questionnaire. Strict confidentiality was maintained data was entered in an Excel sheet and frequency percentage was calculated. A test of significance was applied and p-value <0.05 was considered significant.

Results

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In the present study out of 30 schools, 7 (23%) schools including 4 primary and 3 secondary schools did not have TCCMs during the period of the data collection. Therefore, in the present study, there were 60 (56.6%) students and 46 (43.3%) TCCMs. The present study consisted total of 106 participants including 60 (56.6%) students and 46 (44.4%) TCCMs. The distribution of the study participants is given in **Table 1**.

Knowledge of Tobacco Free School policy:

All participants 106 (100%) were aware of tobacco use prohibition in their school to everyone coming to the school. Total of 81 (76.4%) participants including 41 (50.6%) students and 40 (49.4%) TCCMs knew about school health-related tobacco control policy. Only 3 (3.7%) participants including 1 (33.3%) student and 2 (66.7%) TCCMs knew the correct name of the policy. The mean knowledge of TFS among the students was 3.08+0.82 and among TCCMs was 3.86+0.45. Fisher's exact test was applied no significant difference was found among the knowledge of students and TCCMs (p=0.322). Among the students, 23 (38.3%) knew about the existence of TCCMs in the school. All 46 (100%) TCCMs knew at least one duty of TCCM.

Attitude towards TFS policy:

All the study participants 106 (100%) agreed teaching about tobacco harms in school will help to prevent tobacco use among students. Of all the study participants 106 (100%) said they would act against tobacco use in the school and help someone to quit tobacco in the future.

Practices of TFS policy:

None of the participants (0%) saw anyone using tobacco in the school during the past 7 days. Total of 20 (18.9%) participants including 9 (45%) students and 11 (55%) TCCMS helped someone to quit tobacco. Out of the total 8 (40%), participants including 2 (25%) students and 6 (75%) TCCMs succeeded in helping. A total of 18 (17%) participants including 8 (44.4%) students and 10 (55.6%) TCCMs reported having tobacco control messages over textbook covers. A total of 51 (48.1%) participants including 26 (51%) students and 25 (49%) TCCMs reported tobacco control activities in the school during the past 6 months. The most reported activity was drawing competition by 30 (58.8%) participants, followed by pledge by 8 (15.7%) participants, street play and essay writing by 4 (7.8%) participants each.

All the participants 106 (100%) reported teaching about tobacco and tobacco-containing products, the harms of tobacco use and second-hand smoke, harmful effects of tobacco use and SHS, tobacco use prohibition in school, tobacco sale prohibition in and around school; in the class during the past year. A total of 73 (68.9%) participants including 31 (42.5%) TCCMs and 42 (57.5%) students reported teaching how to help some to quit tobacco. A total of 54 (50.9%) participants including 30 (55.6%) TCCMs and 24 (45.4%) students reported teaching about how to say no to tobacco. Only 23 (21.7%) participants including 13 (56.5%) TCCMs and 10 (43.5%) students reported teachings on how to quit tobacco in the class during the past year. Overall, 90 (84.9%) participants including 47 (52.2%) students and 43 (47.8%) TCCMs were satisfied. A total of 16 (15.1%) participants including 13 (81.3%) students and 3 (18.7%) TCCMs were neutral with the TFS implementation in the school.

Discussion:

In the 30 schools that were chosen, the current study evaluated the knowledge and usage of tobacco control measures among students and students designated as TCCMs. During the data collection period, 23 (76.7%) schools had TCCMs designated. Therefore, 60 (56.6%) students and 46 (43.4%) TCCMs participated in the current study. The study included students of both genders in equal numbers, with a mean age of 13 years. Forty-three (71.7%) students and 40 TCCMs (86.9%) were primarily in the 13–15 age range. The majority of the 30 students (70%) and 26 TCCMs (56,5%) were in grades 8–10. Forty-two (70%) students and 34 (73.9%) TCCMs, who made up the majority of the participants, attended government schools.

Similar studies on schoolchildren have previously been undertaken in Viet Nam and Myanmar [11,12]. Numerous studies on schoolchildren have been conducted in India [13,14,15,16,17]. Most of the available literature is about the awareness of the harms of tobacco use, very few assessed the control measures.

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Knowledge of TFS policy among students and TCCMs.

In the current poll, 40 (86.9%) TCCM students and 41 (68.3%) other students were aware of their school's tobacco control policy. Only 2 TCCMs (4.3%) and 1 female student (3.3%) were able to name the policy. All participants 106 (100%) were aware of tobacco use prohibition in their school to everyone coming to the school. Of the students, 23 (50%) admitted that TCCMs existed in their schools. For all 60 students (100%) and 46 (100%) TCCMs the information came from school. As there is not enough evidence of other research using a similar questionnaire, which makes this study unique, these findings could not be compared to and supported by those studies

Attitude students and TCCMs towards TFS policy.

In our study, all the participants 106 (100%) agreed that educating students about the dangers of tobacco use in the classroom will aid in reducing tobacco use among schoolchildren. All the participants 106 (100%) agreed to take action in the future to prevent tobacco use in schools. The findings could not be compared to the existing literature due to the lack of similar studies.

Practices of TFS policy among students and TCCMs.

In the current study, all the participants 106 (100%) reported not seeing anyone smoking on school grounds in the past seven days. Comparatively, in Beijing, almost (90%) of respondents reported SHS exposure on campus, (37%) of nonsmokers and (61%) of smokers reported seeing a teacher smoking, and the majority of students reported seeing a classmate smoking in campus buildings [18]. A study conducted in Canada found that 50% of respondents reported SHS exposure on school property [19]. In Myanmar, 155 (51.6%) students witnessed others smoking within the school, 103 (34.3%) saw male professors smoking, and 45 (15%) saw the headmaster smoking [12]. According to the GYTS-4 Maharashtra (35.5%) saw someone smoking inside the school. This demonstrates the higher level of compliance with the tobacco use prohibition in the study's schools [6].

In our study, 11 students (18.33%) and 11 TCCMs (23.9%%) assisted a tobacco user in quitting within the previous six months. In the last six months, six (10%) students and two (4.3%) TCCMs reported engaging in non-classroom tobacco control activities in the school.

Practices of tobacco control teachings in the class among students and TCCMs.

All the participants 106 (100%) claimed teaching about tobacco and products containing tobacco, the harms of tobacco use and SHS, diseases caused by tobacco use and SHS, and the prohibition on tobacco use in public places and schools. Less than half of students and TCCMs reported receiving instruction on how to quit tobacco, the negative effects tobacco has on economy and social life, how to respond to infractions, or how to say "no" to cigarettes.

In our study, there was a greater emphasis on tobacco harm education than in studies done in Viet Nam (58.7%), Myanmar (40.3%), Delhi (74.6%), and in accordance with the GYTS-4 Maharashtra (38%) [11,12,17,6]. As there is not enough evidence of other research using a similar questionnaire, which makes this study unique, these findings could not be compared to and supported by those studies.

Conclusions:

1. A significant number of schools did not have TCCMs during the period of data collection even it is mandatory as per the ToFEI program.

2. All the participants were aware of tobacco use prohibition in their school to everyone coming to the school.

3. Even the majority of them were aware about the existence of the tobacco prohibiting policy in the school but awareness about the name of the policy was lacking.

4. All the participants were willing to act against the violations of tobacco use in the school in the future and agreed teaching about it in school will be helpful in tobacco use prevention in future.

5. The tobacco control teachings and activities in the schools are insufficient for the students for the implementation in their tobacco control practices

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Table 1. Sociodemographic profile of participants (N=106)					
Sr. No	Indicators		Students	TCCM	Total

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1	**Gender**	Male	**30**	**23**	**53**
		Female	**30**	**23**	**53**
2	**Age**	10-12 years	**12**	**2**	**14**
		13-15 years	**43**	**40**	**83**
		>16 years	**5**	**4**	**9**
3	**Class**	1^{st}-4^{th}	**4**	**0**	**4**
		5^{th}-7^{th}	**26**	**20**	**46**
		8^{th}-10^{th}	**30**	**26**	**56**
4	**School type**	Government schools	**42**	**34**	**76**
		Government aided school	**8**	**4**	**12**
		Private school	**6**	**4**	**10**
		Ashram school	**4**	**4**	**8**

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