

# Tobacco-free School Policy in Maharashtra, India: A Qualitative Exploration of Implementation Facilitators and Barriers

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**Objective:** Tobacco-free school (TFS) policy is critical for preventing tobacco use among adolescents. In this study, we explored the facilitators and barriers in implementing the TFS policy in rural India. **Methods:** Qualitative interviews were conducted with school and community stakeholders in 6 districts in Maharashtra state. **Results:** Facilitating factors are a motivated teacher, supportive principal, student advocates, and engaged community stakeholders. Barriers include disinterested teachers, lack of ownership by school management, community norms surrounding tobacco use, and economic factors related to tobacco sales. **Conclusions:** Currently, TFS implementation relies on motivated individual teachers and organizational ownership is lacking. Successful implementation will require a conducive organizational culture in schools, connecting TFS to overall school development, and synergy between education and health departments.

**Key words:** tobacco-free schools; adolescent health; rural India; school health policy  
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With 267 million adults using some form of tobacco, India has the second largest number of tobacco users in the world after China.<sup>1,2</sup> Around 35% of rural Indians consume tobacco, mostly in smokeless form.<sup>2</sup> Every year, tobacco consumption causes nearly one million deaths in India and costs the national health system \$23 billion.<sup>3,4</sup>

Four in 10 tobacco users in the country start before the age of 18 years.<sup>5</sup> Whereas national data place the overall prevalence of tobacco use among adolescents aged 13 to 15 years at 15%,<sup>6</sup> several studies conducted in Indian schools report prevalence ranging from 11% to 46%.<sup>7-11</sup> Because the teenage years are a vulnerable time for nicotine addiction, prevention efforts for adolescents are critical in national tobacco prevention programs.<sup>12</sup> Comprehensive,

enforced tobacco-free school policies at the national and state level can lead to significant decrease in tobacco use among adolescents and youth.<sup>12,13</sup>

In 2003, the Government of India passed the Cigarettes and Other Tobacco Products Act (COTPA) and 2 of the 33 provisions of this law focus on tobacco control among adolescents.<sup>14</sup> These provisions prohibit the sale of tobacco products to and by minors – persons below 18 years, and sale of tobacco products within 100 yards of all educational institutions. In 2009, the Indian Ministry of Health and Family Welfare released comprehensive guidelines for tobacco-free schools and educational institutions; and the Central Board of Secondary Education (CBSE) issued a set of 11 points or criteria to identify a tobacco-free school (Table 1).<sup>15,16</sup>

Maharashtra is one of the 5 major tobacco pro-

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**Table 1**  
**The 11-point Criteria for Tobacco-Free Schools (TFS)**

No	Description of Tobacco-free School Criteria
1	Posters in school that state smoking in and around this area is not allowed
2	Posters that state the ill effects of tobacco and tobacco control law inside the premises
3	Principal has a copy of directives/circular based on the 2003 law
4	Presence of a banner or poster near the entrance of the school which states that this is a tobacco free education space or tobacco free school
5	Tobacco selling is completely banned inside the premises and within the radius of 100 yards from school / educational institutions
6	No tobacco use inside the school
7	Tobacco control committee is in place and quarterly meetings are conducted of the same
8	Tobacco control is a part of (the usual) regular school health activities
9	School stationary has tobacco related messages
10	School, principal or staff or students are awarded for tobacco control activities
11	Availed any advice, consultation from the state appointed state tobacco advisor

ducing states in western India,<sup>17</sup> with one in 3 adults and 13% of adolescents aged 13 to 15 years being tobacco users.<sup>2,6</sup> In 2009, government-supported schools in Maharashtra received a circular from the State Education Department about the COTPA and the tobacco-free school (TFS) policy; however, the memo with CBSE's 11-point TFS criteria was circulated much later, in 2013. Whereas the government mandated tobacco-free schools, many schools lacked proper understanding or skills required for implementing this policy. Salaam Mumbai Foundation (SMF), a non-governmental organization (NGO) that aims to prevent tobacco use among children, collaborated with the State Education Department to train schools on tobacco, COTPA, and the TFS policy.<sup>18</sup>

Studies that quantitatively assessed compliance with the TFS criteria of banning the sale of tobacco within 100 yards in schools in India, reported weak and inadequate implementation.<sup>19-22</sup> Therefore, following the training program, in 2015, SMF assessed compliance with all TFS criteria. About 11% of a convenient sample of 507 state-affiliated schools in Maharashtra fulfilled all 11 TFS criteria, 80% complied with 0 to 10, and 9% of schools did not fulfil any.<sup>23</sup> No research study has explored

and examined reasons why some Indian schools successfully implemented TFS policy while others failed.

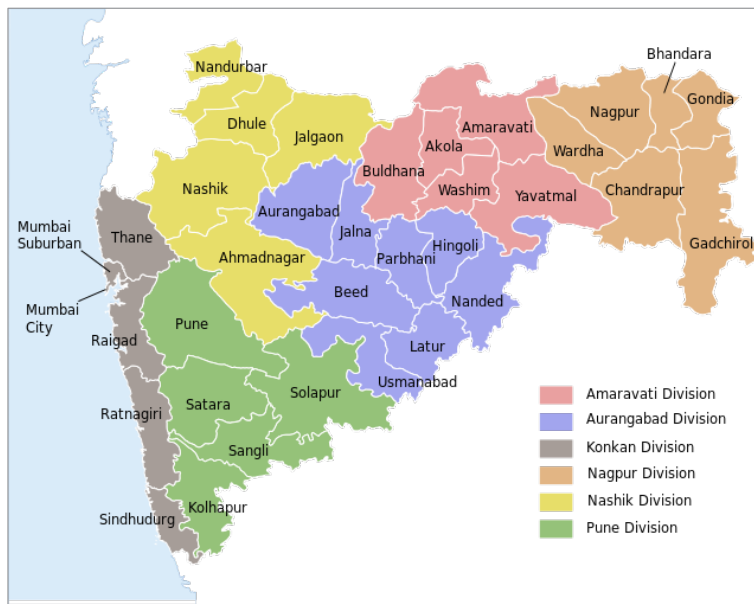
This study aims to fill this existing gap in the tobacco control literature in the Indian context, by identifying factors that facilitated or hindered schools from implementing the TFS policy. Understanding facilitators and barriers to implementation can help policymakers and practitioners adapt existing strategies or develop new approaches to increase the proportion of tobacco-free schools, thereby creating a tobacco free environment for children.

## METHODS

### Participants

We used a 3-stage purposive sampling process for this study. Maharashtra state has 35 districts in 6 administrative divisions (Figure 1).<sup>24</sup> The first, 6 districts – Amravati, Kolhapur, Nagpur, Sangli, Satara and Yavatmal – were selected from 3 divisions to ensure geographic coverage. In the second stage, 3 schools were selected from each of the 6 districts such that school one met all 11 TFS criteria shown in Table 1. School 2 fulfilled 5 to 10 TFS

**Figure 1**  
**Map of Maharashtra State**



criteria and School 3 did not meet any TFS criterion. In the third stage, 42 respondents, stakeholders involved in TFS policy implementation in the total of 18 schools, were purposively identified and interviewed. Stakeholders included school principals and teachers, government block-level education officers, and elected village council leaders, each known as a sarpanch. Responses from multiple stakeholders with different perspectives aids in conformation of findings and constructing a more complete portrait of the process.<sup>25,26</sup>

### Procedure

An interview guide consisting of open-ended questions gathered information from respondents about tobacco use in that area, knowledge of TFS policy, and the process of implementing TFS criteria along with facilitators and barriers. The interview guide was developed and administered in the local language of Marathi. Prior consent to participate in the study was obtained from the respondents. Two experienced interviewers read out a consent form describing the purpose of the study, confidentiality, and voluntary nature of participation, and permission to audio-record interviews. Interviews lasted 30 to 45 minutes on average. We

conducted data collection during September to December 2015.

### Data Analysis

Recorded audiotapes of all interviews were transcribed in Marathi. Transcripts were translated to English by a bilingual researcher who listened to each interview to understand respondent perspectives. Ten percent of the final translated interviews were randomly checked for accuracy by another researcher who listened to the audiotapes. Then, 2 researchers reviewed all translated transcripts independent of each other. Analysis included becoming well-acquainted with transcripts by reading them multiple times; identifying the most frequently reported implementation steps, facilitators, and barriers; and marking text in different colors. After noting these impressions, researchers organized responses into different thematic categories based on word repetitions and key words in context. Further review led to identification of commonalities, patterns and differences, refinement of categories, and development of reported themes.<sup>27</sup> Categories and themes along with supporting quotes were checked by the researchers for agreement and to ensure trustworthiness of interpretation.

**Table 2**  
**Socio-demographic Characteristics of the Participants**

Socio-Demographic Characteristic	N = 42	%
<b>Age in years (Mean: 43.80 years, Min: 32 years, Max: 57 years)</b>		
30-40	14	33
41-50	17	40
51-60	11	27
<b>Sex</b>		
Men	28	66
Women	14	34
<b>Education</b>		
Below Senior Secondary School (10th grade)	1	2
Completed Senior Secondary School (10th grade)	3	7
Completed Higher Secondary School (12th grade)	3	7
Completed Bachelor's degree	2	4
Completed Postgraduate degree	33	80
<b>Position</b>		
Block Education Officer	6	15
Principal	14	33
Teacher	18	42
Sarpanch (elected village leader)	4	10

## RESULTS

Most (28) of the 42 participants were male; they ranged in age from 30 to 60 years (mean = 42). Thirty-three participants had a postgraduate degree; 18 were school teachers, followed by 14 principals, 6 block education officers, and 4 village leaders, ie, the sarpanches.

The process of TFS policy implementation in schools started after the training described earlier. Schools designated one teacher as the official representative for the TFS policy implementation. After training, the teacher explained the TFS criteria to the principal and initiated the process to fulfil them. In some cases, student activities were conducted, and interested principals or motivated teachers organized meetings with other staff members and involved school management and village stakeholders. Schools did not follow a set protocol for implementation. Analysis of interview data are organized around 2 broad aspects of the implementation process in schools: (1) success and enabling factors or facilitators; and (2) barriers to TFS implementation.

## Success Factors or Facilitators

*Motivated individual teachers worked as change agents.* Schools that successfully implemented TFS criteria found a designated teacher who was motivated and worked as the prime mover of the program. This lead teacher conducted interpersonal and classroom sessions with students on the harms of tobacco use, and used creative methods such as audio-visuals, role-playing, and personal counseling. Many teachers had prior experience of working in community development programs.

*“Teachers are at the forefront of this tobacco control program. We cannot move an inch without their commitment and efforts.”*

Block Education Officer from Yavatmal district

Teachers took the lead in displaying informational materials, including anti-tobacco posters and signs, inside and outside the school premises. Interpersonal discussions were held with other teaching staff, who were tobacco users, persuading them to stop consuming tobacco inside the school prem-

ises. The process of achieving tobacco-free status was time-consuming, but motivated teachers voluntarily committed time and effort to plan, implement and monitor activities to attain TFS criteria in their schools.

*“I will keep working to ensure that this school and its students stay tobacco-free. I will visit this school even if I get transferred elsewhere.”*

Teacher from Amravati district

Teachers in successful programs were committed, had a strong achievement orientation, and often were motivated by a personal agenda of tobacco control or social change. Some voluntarily advised neighboring schools on how to deal with challenges and achieve tobacco-free status. These teachers viewed the TFS program as an opportunity to apply their knowledge and skills for public good as well as personal growth and development.

*“After joining the program, I was able to convince my husband to quit his habit of chewing tobacco. This was a big win for me, and it reinforced me to push the tobacco control campaign in the school.”*

Teacher from Sangli district

Successful fulfilment of TFS criteria often earned the teachers’ recognition from fellow staff and school management, block and district-level education officers, and local media. This recognition reinforced teachers’ commitment to sustain the tobacco-free status of their school, and inspired others to join this movement.

*“One of my friends who is a teacher in the neighboring district won an award for his work on the tobacco-free school program. He received a lot of publicity in the newspapers. We were quite impressed and motivated by this.”*

Teacher from Amravati district

The training workshops led by SMF, were helpful for motivated teachers, who saw this as an opportunity to develop their own capabilities. Training workshops and follow-up by SMF staff also helped to sustain interest of motivated teachers in the TFS policy.

*“I was always aware of the harms of tobacco, but it was only after the training workshop that I realized the seriousness of this issue. Now we feel that tobacco control is an absolute necessity not just for students but the whole community.”*

Teacher from Yavatmal district

### **Supportive principals and school-management created organizational ownership.**

Despite having a motivated teacher, schools fulfilled all criteria only when the principal and school management committee members acted as enablers, supporting the lead teacher in the TFS process. This organizational ownership at the school level enabled teachers to mainstream tobacco control messaging into regular school events and activities including parent-teacher meetings, national holidays, and cultural festivals, where the teacher, school management committee member, or an invited local doctor spoke to students and parents about the benefits of a life without tobacco. The principal’s backing also signaled to fellow teaching staff the importance of participating in tobacco control activities and not using tobacco within school premises. Support of principals or school management members helped convene the school tobacco control committee, usually comprising of representatives of school management committee, teaching staff, students, parents, members of the Gram Sabha – village governing council, and the local police.

*“I have received the maximum support from our principal and the school management committee. Our chairman was so moved by this program that he stopped using tobacco. This was a major turning point.”*

Teacher from Yavatmal district

Principals also were driven by the recognition received from block and district-level education officers, viewing TFS implementation as an opportunity to position their school as a model institution. Approval from the school management committee helped secure funding for implementing the TFS criteria, purchasing materials and conducting events.

*“Our school is at the forefront in implementing*

*new programs. Even in the case of the tobacco-free school program, we have achieved success and shown the way to other schools around us.”*

Principal from Satara district

Successful schools also monitored and evaluated their own efforts, thereby helping sustain their tobacco-free status. Lead teachers conducted monitoring personally or with the help of teaching staff, student groups, or tobacco-control committee members. Some schools utilized stricter measures such as checking students' bags for tobacco products during morning assemblies, while some organized health camps to assess oral health.

*“The 11-point criteria gave us a clear structure to keep monitoring our tobacco control performance in the school.”*

Principal from Satara district

#### ***Student involvement helped implementation.***

Successful schools understood the power of student involvement and advocacy. Students were educated about the harmfulness of tobacco as well as the benefits of living in a tobacco-free environment. Successful schools achieved participation commitments from students and provided them with roles in the TFS process such as monitoring tobacco use inside school premises and conducting community outreach through rallies and street plays.

*“We conducted an oath ceremony where students were encouraged to pledge their participation for tobacco control efforts in the school and village.”*

Teacher from Nagpur district

*“In one of the morning rallies in the village, we asked our boys to collect all the tobacco packets they could find on the streets. We gathered these packets and invited villagers to light a fire to these packets. This was a symbolic step towards making the village tobacco-free.”*

Principal from Sangli district

Students were trained in skills to refuse parents or elders when asked to purchase any tobacco products, encouraged to speak to parents about tobacco

use and persuade them to quit. In some cases, students also took the lead in speaking with tobacco vendors.

*“A group of our students approached a shopkeeper near the school and requested him not to sell tobacco. The sarpanch, myself and a few members of the school management committee stood nearby to support them; but, the students were able to convince the shopkeeper without our help.”*

Principal from Satara district

#### ***Involving community stakeholders as partners.***

The lead-teacher or principal conducted meetings with influential community stakeholders, invited them to attend school events and join the tobacco control committee. Stakeholders included the sarpanch, members of the Gram Sabha or the village council, shop vendors, youth and women's groups, and local police.

*“Our sarpanch is a strong and influential woman. She was responsible for making this village free from alcohol addiction. We have approached her, and she is convinced about the tobacco-free school program. We are hopeful about achieving all the 11 criteria with her support.”*

Teacher from Amravati district

Involving influential stakeholders increased their participation and ownership of the TFS program. The sarpanch and Gram Sabha passed resolutions to ban the sale of tobacco in shops near the school or the village, and actively worked with vendors to find alternative income strategies.

*“I can ensure that no shop in this village sells tobacco. That is my job.”*

Sarpanch from Amravati district

In many cases, these stakeholders also endorsed the TFS program during school and community events and nudged parents to give up tobacco for better health of their families. Recognition events in the school were used as a method to promote and publicize positive role models in the community. Schools that favored the TFS policy and in-

involved local stakeholders, saw a seamless connect between a tobacco free school and village.

*“This tobacco-free program should be extended from the school to the entire village as tobacco control is the need of the hour. Tobacco is embedded in people’s daily routines, but they are still not aware of the diseases it can cause.”*

Sarpanch from Kolhapur district

*“In our school management meetings, we felicitate villagers who quit tobacco use. This is a matter of pride for the person and also acts a stimulus for other villagers.”*

Principal from Satara district

### **Barriers to Attaining Tobacco-free Schools**

Barriers were mentioned at 4 levels: (1) individual teacher level; (2) school or organizational level; (3) community level; and (4) institutional level.

**Individual-level barriers.** In schools that did not attain TFS goals, designated teachers complained of TFS-implementation activities as an additional burden on a pre-existing, excessive workload consisting of academic and administrative tasks. They cited lack of support from management, fellow teachers, and administrative staff. Furthermore, teachers found some TFS criteria challenging as they were not one-off tasks but required regular follow-up and attention to detail.

*“It is not easy to get all teachers to work on this (TFS) program. Some complain that this is an extra burden as they have to also work on other social welfare schemes.”*

Block Education Officer Satara

Teachers who were tobacco consumers themselves and unwilling to quit were unsupportive; the TFS policy does not have measures or resources to support cessation.

*“When we find a teacher consuming tobacco inside the school premises, we are not equipped to counsel them. We do not have any cessation-based counselling services in the education department. The only thing that we can do is to threaten to*

*suspend the teacher for some time, but this makes no difference in their behavior.”*

Block Education Officer from Satara district

**School level or organizational barriers.** Lack of a supportive and enabling environment in schools was a major barrier for implementation of TFS criteria. If the principal was unconcerned, other staff were not obligated to contribute to or participate in the activities organized by the lead teacher. Many principals from unsuccessful schools, were unaware or did not understand the TFS criteria, and reported sending teachers to training workshops only because the state education department mandated it.

*“I cannot tell you what the TFS criteria involves. I have no idea. We send the teachers for training as it is compulsory. They (teachers) are supposed to know it.”*

Principal from Nagpur district

Negative attitudes of senior management, especially if they were tobacco users, hampered setting up of tobacco control committees or involvement of village stakeholders. This created financial shortfall and difficulties in procuring materials and organizing events to fulfil the TFS criteria.

**Community level barriers.** Two major community level barriers that hindered the TFS program included the culturally accepted practice of tobacco consumption and reluctance of shopkeepers or vendors to stop tobacco sales due to loss of earnings. Tobacco use was a culturally accepted practice in rural communities, and it was not perceived as harmful. Parents consumed tobacco at home, often asking children to purchase tobacco packets from nearby shops. Tobacco was routinely served to guests.

*“We have to deal with a habit that is common across many households. Women roast and grind tobacco at home for daily use. It is difficult to persuade parents to quit tobacco.”*

Principal from Amravati district

Prohibiting shops from selling tobacco products within 100 yards of the school premises was challenging, especially in schools located near a market

area or a bus depot. Vendors were reluctant to comply because tobacco was a major source of revenue and banning sales would reduce earnings. In some cases, the sarpanch owned a shop that sold tobacco. Some vendors had close connections with local police or politicians.

*“We don’t have the power to enforce the ban on sale of tobacco in shops near the school. The government needs to take care of this criteria.”*

Teacher from Amravati district

*“When we approach tobacco vendors near the school and request them to stop selling tobacco, they retort back by saying that the Government should stop producing it and then there will be no tobacco to sell.”*

Principal from Sangli district

***Institutional level barriers.*** One TFS criterion requires schools to consult with the state tobacco advisor from the health department. However, many principals complained that the advisor often was unavailable, did not follow up with schools to check on implementation of TFS policy, or set up any formal appointments for telephone calls.

*“Communication with a Health Advisor is difficult. We try to contact them but don’t get a response.”*

Principal from Kolhapur district

Some principals and teachers wanted the education department to go beyond sending circulars and start working closely with schools, by understanding local challenges and providing practical solutions to implement the TFS policy.

*“We only hear about tobacco free schools during the visits of staff from Salaam Mumbai Foundation. There is no other channel, platform, or department that provides support for a tobacco free school.”*

Teacher from Sangli district

However, whereas the department mandated schools to comply with TFS policy, it did not have

the resources or capacity to monitor the implementation process.

*“There are schools located in remote areas. It becomes difficult to visit these schools and even offer monitoring support as we don’t have a vehicle.”*

Block Education Officer from Satara district

## DISCUSSION

Tobacco-free school policy forms a critical component of tobacco-prevention efforts for adolescents; however, research about its implementation in Indian schools is limited.<sup>23</sup> This is one of the first qualitative studies to explore facilitators and barriers to implementation of the TFS policy in India. Our findings have implications for tobacco control and school health policymakers and practitioners.

Successful implementation of the TFS policy requires a motivated teacher, a principal, or school management to provide organizational support, and involvement of community stakeholders. Encouraging students to become advocates creates a virtuous cycle for TFS implementation. Barriers are unmotivated teachers, lack of support from principals or school management, deep-rooted community norms of tobacco use, earnings from tobacco products that deter sales bans in local shops, and lack of institutionalization of TFS efforts.

In our study, we showed that implementation of the TFS policy in a school is typically assigned to one designated teacher. Whereas it is assumed that this teacher is willing to commit time and efforts for tobacco control, this assumption does not always hold true. In schools that were unable to implement the TFS policy, teachers were often disinterested, and cited workload, time constraints, and organizational barriers for lack of implementation. Other studies globally have found similar staff-related obstacles in implementation of tobacco control interventions.<sup>28,29</sup>

In the case of tobacco-free schools, the principal and school management played a crucial role in helping a motivated teacher achieve TFS goals by providing a supportive organizational culture. In general, culture has been found to play a significant role in organizational effectiveness.<sup>30</sup> It is well established that strong organizational cultures provide staff with values, structures, and an enabling



environment to achieve shared goals.<sup>31</sup> Studies also have shown a relationship between school culture and its effectiveness and achievement,<sup>32-34</sup> academic aspiration,<sup>35</sup> teacher job satisfaction,<sup>36</sup> and organizational commitment.<sup>37</sup> Furthermore, principals have been found to be responsible for establishing a pervasive school culture of teaching and learning.<sup>38</sup>

Students in tobacco-free schools in this study were encouraged to become advocates by disseminating messages in households, monitoring tobacco use on school premises, and conducting community outreach. Studies have found that the role of youth health advocates is vital for acceptance and implementation of TFS policies, especially where youth leaders work in collaboration with school administrators and stakeholders to strengthen policies and monitor their implementation.<sup>39,40</sup>

Training workshops motivated teachers in this study. This component has been found to have a significant effect on implementation of school-based tobacco control programs.<sup>41,42</sup> However, in the state of Maharashtra, in addition to providing knowledge on tobacco and COTPA, teacher-training programs must include proficiency in managerial skills like communication, planning, problem solving, persuasion, networking, and advocacy. Successful teachers were driven by a personal mission of tobacco eradication or social change. Future training needs to incorporate ways in which this sense of purpose can be reinforced and sustained.

That the rural school and community are intertwined, especially with respect to tobacco control, was amply demonstrated in this study. Making students understand harms of tobacco was challenging as the adults in their villages routinely used tobacco. Adult modeling of tobacco consumption has been found to be a determining factor of tobacco use among school children.<sup>28,43</sup> Schools also found it difficult to prohibit the sales of tobacco within 100 yards of the premises because of potential financial losses to the shop owners. Studies have found that areas with greater numbers of tobacco-vendors promote experimentation with and initiation of tobacco use habits.<sup>44</sup> To address these community-based problems, successful schools enlisted the support of influential stakeholders such as village council members and police. Effective leadership from influential organizations and individuals, and grassroots work through community coalitions and

youth groups have been found to contribute to tobacco-free program success in rural areas.<sup>12,45</sup> In the future, TFS policy guidelines must create specific roles for community stakeholders and formally recognize grassroots efforts in implementation.

This study has limitations. Data were collected from a sample of government-supported schools in rural Maharashtra, thereby making the findings difficult to generalize across all public and private schools. Convenience sampling could have introduced selection bias. Although generalization to larger populations is difficult, our findings warrant further investigation. Future research must examine the impact of TFS implementation on tobacco use among children. Studies should explore school organizational culture and TFS, examine how school management and staff view tobacco prevention and control programs vis-à-vis overall school development. The relative effectiveness of school-based approaches versus multi-level community interventions for tobacco prevention among adolescents also remains to be determined.

## IMPLICATIONS FOR HEALTH BEHAVIOUR OR POLICY

Globally, studies indicate that consistent and strict enforcement of policies, rather than their comprehensiveness, reduce tobacco use among students.<sup>46</sup> Similarly, achieving tobacco-free schools in India is possible, but this will require effective implementation of existing policy. In the context of India however, implementation is often weak and inadequate, affecting economic growth.<sup>47,48</sup> Even for critical issues such as gender violence and climate change, the country has strong policies and laws in place, but falls short in implementation.<sup>49,50</sup> Weak public policy implementation in India has been attributed to over-centralization with excessive powers vested in limited actors, lack of institutional capacity to oversee implementation, and time constraints due to administration of existing policies.<sup>48,51</sup> Research also has highlighted measures to address these issues in policy implementation, such as competent and driven leaders, long-term investment of time and resources, intersectoral coordination, increased involvement of and powers to actors that are closer to the implementation process, and community participation.<sup>48,51,52</sup>

Effective implementation of tobacco-free schools

in the country will require local and state level measures. At the local school level, greater community involvement, support from school management, and autonomy for designated teacher representatives will assure TFS policy implementation. At the state level, there is a need for a champion, ie, a competent politician or government official, acceptable to the public and to different political parties who can bring together different sectors and ensure long-term investment in the TFS program. This will require advocacy by state actors, civil society, and community-based organizations.

Schools that adhered to the TFS policy in this study demonstrated an intuitive understanding of the link between student participation and positive adolescent health outcomes; furthermore, they viewed compliance with the policy as an area of achievement for the school. Currently, school level TFS implementation is individual-teacher shouldered; to be successful, it must become organizationally owned. TFS policy implementation will require state governments to create supportive organizational culture in schools – incentivizing principals and school management to recognize the all-round benefits of a positive culture for school performance and create an enabling environment for TFS implementation. The state education department must position TFS as an opportunity for achieving overall school development as it helps students develop life skills, enhances teachers' transferrable skills, and advances their personal growth and career. These factors support the school in achieving better academic results and attaining success in extra-academic competitions; both are outcomes desired by school management. The state health and education departments, in collaboration, also must develop clear guidelines for policy violations and highlight them unfailingly, as the severity of enforcement and consequences of violations make a difference in compliance.<sup>53,54</sup>

Collaborations with other schools and external organizations working on tobacco control, especially at an early stage of program implementation, are seen to promote tobacco-free schools.<sup>28</sup> The state education department must institutionalize and incentivize school-community-NGO partnerships. With mobile phones and social media technology, the education department can set up a virtual network of schools and tobacco-control organizations

to exchange ideas and share resources to achieve a tobacco-free environment. The tobacco control advisor from the health department also can become a part of this social media network, thereby facilitating a smoother connection between the government's tobacco control division and schools. A connection between the TFS teams and officials in the state education and health departments, via mobile technology and social media platforms, also could induce seriousness about TFS implementation and support monitoring.

## Conclusion

Effective implementation of the tobacco-free school policy must be positioned as a gateway for achieving overall school development and increasing school-community engagement, thereby creating tobacco-free schools that can then lead the way for tobacco-free communities in rural India.

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## Human Subjects Approval Statement

The study was approved by the Institutional Ethical Review Board of the Narotam Sekhsaria Foundation and the Salaam Mumbai Foundation.

## Conflict of Interest Declaration

We wish to confirm that there are no known conflicts of interest associated with this publication and there has been no financial support for this work that could have influenced its outcome. The entire manuscript has been read and approved by all named authors.

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