International Journal of Community Medicine and Public Health
*Chanda S et al. Int J Community Med Public Health. 2026 May;13(5):2460-2469*
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: https://dx.doi.org/10.18203/2394-6040.ijcmph20261437

**Systematic Review**

# Policy strictness, enforcement and public health effectiveness of tobacco control in India: integrating world health organization framework convention on tobacco control compliance and public perceptions

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**Received:** 21 February 2026
**Revised:** 07 April 2026
**Accepted:** 17 April 2026

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## ABSTRACT

The objective of this study is to examine the extent to which India's tobacco control policies have been implemented in practice and to analyse public perceptions of their effectiveness and alignment with WHO-FCTC provisions. A mixed-method design was adopted. A systematic review of national tobacco control policies was conducted to examine their alignment with selected world health organization framework convention on tobacco control (WHO-FCTC) provisions. Concurrently, a cross-sectional survey involving 95 participants was administered using the policy perception scale. The instrument measured policy strictness, enforcement rigidity, effectiveness of tobacco control initiatives, and policy alignment with international standards. Structural equation modelling (SEM) was performed to test hypothesized relationships among latent constructs and to determine predictors of perceived policy effectiveness. Our review of the policies showed that India is doing well with smoke free rules and warnings on packages but there are still problems with taxes and indirect promotion controls. When we asked people what they thought we found that they believe tougher policies lead to enforcement and good enforcement leads to better effectiveness of anti-tobacco initiatives, which in turn make people think the WHO-FCTC is being followed. For India to be successful in controlling tobacco use it needs to make sure the laws are enforced properly not just passed. India needs to make its enforcement stronger and fix the problems with how the laws are being implemented so that the laws can actually lead to better effectiveness of anti-tobacco initiatives.

**Keywords:** Tobacco control, WHO, FCTC, Enforcement, Public health impact, India, Smoking, Cigarette

## INTRODUCTION

Tobacco use is one of the leading preventable causes of death worldwide, accounting for over 8 million fatalities each year.[1] Low and middle-income countries suffer a disproportionate impact, with India alone responsible for more than 1 million deaths attributable to tobacco annually.[2] The WHO-FCTC, adopted in 2003, created the first global public health treaty aimed at decreasing tobacco demand and exposure.[3]

India ratified the WHO-FCTC in 2004 and became a party in 2005. The cigarettes and other tobacco products act of 2003, supplemented by extensive rules and judicial interventions, governs domestic tobacco control.[4] India demonstrates strong alignment with WHO-FCTC standards, particularly regarding smoke-free public places and pictorial health warnings. However, tobacco consumption remains widespread, highlighting the gap between legal design, enforcement, and public health impact.[5]

Research indicates that tobacco control policy effectiveness depends not solely on legislative strictness but on enforcement quality and public credibility.[6,7] Weak enforcement, uneven implementation across jurisdictions,

and regulatory loopholes can undermine comprehensive legislative frameworks.[8] This study addresses implementation gaps by integrating policy analysis with empirical evidence on public perceptions.

Study aims to analyse reasons why laws are not enforced as they should be and understand what people perceive about these laws. Main question is whether following WHO-FCTC rules actually leads to policy strictness, enforcement rigidity, effectiveness of tobacco control initiatives, and policy alignment with international standards. Understanding this is very important to make sure that laws actually making difference, in people's life.

### *WHO-FCTC framework and India's policy alignment*

WHO-FCTC establishes minimum global standards for tobacco regulation, while simultaneously encouraging Parties to adopt more stringent measures in accordance with national contexts. The present review focuses on four key demand-reduction provisions that hold particular relevance for India's regulatory framework: price and tax measures to reduce tobacco demand (Article 6), protection from exposure to tobacco smoke (Article 8), packaging and labelling of tobacco products (Article 11), and comprehensive bans on tobacco advertising, promotion, and sponsorship (Article 13).

**Table 1: Comparison of WHO-FCTC and COTPA provisions.**

| Issues | FCTC provision | COTPA, 2003 provision |
|---|---|---|
| **Taxes** | Tax and price measures to reduce consumption | Not included; handled by ministry of finance |
| **Duty-free sales** | Prohibit or restrict tax-free tobacco products | Requires administrative action by ministry of finance |
| **Second-hand smoke** | Protection from tobacco smoke in public places | Comprehensive smoke-free provisions with enforcement rules |
| **Content regulation** | Guidelines for testing tobacco contents | Provisions for nicotine and tar testing |
| **Product disclosure** | Disclosure of ingredients to authorities and public | Nicotine and tar content required; other ingredients not mandated |
| **Packaging and labelling** | Health warnings covering 30-50% or more | Warnings required but misleading terms not prohibited |
| **Health warnings** | Pictorial warnings on 30-50% of display area | Prominent warnings specified in rules |
| **Advertising ban** | Comprehensive ban within 5 years | Total ban on direct and indirect advertising; point-of-sale allowed |
| **Tobacco cessation** | Promote cessation programs | Requires administrative action |
| **Sale to minors** | Prohibit sale to and by minors | Prohibits sale to minors; not sales by minors |

### *Taxation and pricing (Article 6)*

Article 6 identifies taxation as one of the most effective tools for controlling tobacco use.[9] India imposes a tax of 52.7% on cigarettes, which is notably lower than the WHO-FCTC's suggestion of a minimum of 75% of the retail price.[10] The Global Adult Tobacco Survey (GATS-2) indicated a 6% prevalence of daily smoking among adults in India.[11] However, bidis and smokeless tobacco products are subject to lower taxation, which undermines efforts to reduce demand and promotes product substitution.[12]

Tobacco consumption leads to 1.35 million deaths each year in India, costing the economy INR 1773.4 million, which is more than 1% of the GDP.[13] In spite of these figures, India's tobacco taxation policies do not fully adhere to Article 6 of the WHO-FCTC.[14]

### *Protection from tobacco smoke exposure (Article 8)*

COTPA makes it against the law to smoke in places, such as hospitals, schools and on public transport.[15,16] However some places like airports hotels with 30 or more rooms and restaurants with 30 or more seats are allowed to have special smoking areas. These exceptions make it harder to achieve smoke-free zones as required by Article 8.

The rules are enforced differently in states so the implementation is not consistent. In 2020 43% of adults in India knew about the smoking bans in public places and not many people followed the rules because the enforcement was weak.[17] Enforcement varies widely across states, leading to implementation inconsistencies.[18] In 2020, only 43% of Indian adults were aware of smoking prohibitions in public places, with compliance remaining low due to weak enforcement mechanisms.[19] Second-hand smoke exposure remains high, with 38% of non-smoking adults exposed at home and 30% in public places according to the Global Adult Tobacco Survey.[11]

### *Packaging and labelling (Article 11)*

India mandates pictorial health warnings labels on cigarette packets covering upto 85% of the principal display area, placing it among the countries with the most

extensive warning requirements worldwide.[20] Nevertheless, persistent enforcement challenges particularly within informal distribution channels and the illicit tobacco market continue to undermine the overall effectiveness of these measures.[21]

**Table 2: Pictorial warning label coverage by country.**

| Country | Total display (%) | Front (%) | Back (%) |
|---|---|---|---|
| **Australia** | 82.5 | 75 | 90 |
| **Brazil** | 65 | 30 | 100 |
| **Canada** | 75 | 75 | 75 |
| **India** | 85 | 85 | 85 |
| **Turkey** | 92.5 | 85 | 100 |
| **New Zealand** | 87.5 | 75 | 100 |
| **China** | 35 | 35 | 35 |
| **Japan** | 30 | 30 | 30 |

Between 2010 and 2018, smoking prevalence among men declined from 47.9% to 42%, while among women it dropped from 20.3% to 12.1%.[22] This downward trend indicates the possible influence of strengthened tobacco control measures particularly the introduction of prominent pictorial health warnings in raising public awareness of the health risks associated with tobacco use and encouraging behavioural change.[23] Nevertheless, substantial challenges persist in achieving uniform enforcement and compliance, especially in rural areas where knowledge of smoking-related harms remains comparatively limited.[24] Smokeless tobacco, widely used in these regions, requires more targeted interventions to ensure warning label impact comparable to cigarettes.[25]

***Advertising, promotion, and sponsorship (Article 13)***

Although direct advertising of tobacco products are banned in India, alternative promotional strategies such as point-of-sale displays, digital marketing and surrogate advertising continue to function as notable regulatory gaps. These practices constrain the achievement of compliance with Article 13 of the WHO-FCTC.[26]

**Table 3: Tobacco advertising regulations across selected countries.**

| Country | Domestic TV and radio | International media |
|---|---|---|
| **Brazil** | Banned | Banned |
| **Russia** | Banned | Banned |
| **India** | Banned | Allowed |
| **Saudi Arabia** | Banned | Banned |
| **China** | Banned | Allowed |
| **Japan** | Allowed | Allowed |
| **Indonesia** | Partial Ban | Allowed |

Countries like Brazil, Russia, and Saudi Arabia demonstrate strict bans across all media formats, showing strong public health commitment.[27] India restricts domestic media but allows international advertising, leaving exploitable gaps.[28] Japan and Indonesia permit unrestricted advertising across domestic and international media, posing significant risks to tobacco control efforts.[29]

***State-level legislation***

India has seen proactive tobacco control at state level, with various states enacting laws to curb smoking in public spaces and regulate tobacco sales. Delhi's prohibition of smoking and non-smokers' health protection act of 1996 serves as a model, prohibiting smoking in public places and vehicles, advertisements, and sales near educational institutions.[30] Similar legislation has been adopted in Assam, Meghalaya, Sikkim, and West Bengal, with variations in specific provisions.[31]

Overall, India demonstrates strong formal compliance but uneven operationalization, highlighting enforcement as the critical bottleneck.

***Policy strictness, enforcement, and effectiveness***

Policy strictness refers to the perceived strength, scope, and comprehensiveness of regulatory measures, including high tobacco taxes, graphic health warnings, advertising bans, and smoke-free public spaces.[32] Strong tobacco control laws are generally associated with lower smoking prevalence and reduced initiation, particularly when consistently and visibly enforced.[33] Nevertheless, strict policy design alone does not guarantee effectiveness. Without adequate monitoring mechanisms, enforcement capacity, and meaningful sanctions, tobacco control laws may function largely as symbolic commitments rather than effective deterrents.[34]

Enforcement plays a central role in shaping public perceptions of whether tobacco control laws work effectively.[35] Visible enforcement actions such as inspections, fines, and prosecutions signal state capacity and regulatory seriousness, thereby enhancing compliance and deterrence.[36] Individuals may perceive tobacco policies as effective not simply because they are strict, but because they believe these rules are actively enforced.[37] From an implementation perspective, strong regulatory frameworks may increase enforcement likelihood by clarifying mandates, reducing discretion, and signaling political commitment.[38,39]

***Perceived effectiveness and WHO-FCTC alignment***

Perceived public health effectiveness refers to the belief that tobacco control policies successfully reduce smoking initiation, encourage cessation, and protect non-smokers from exposure.[40] Such perceptions are critical because they influence public trust in government regulation and long-term policy support.[41] In the international arena, perceived effectiveness is closely linked to judgments

about WHO-FCTC compliance. Countries viewed as effectively enforcing tobacco control measures are more likely to be perceived as aligning with global public health standards, regardless of formal treaty ratification.[42]

This perception-based linkage is particularly relevant in India, where tobacco control legislation is regarded as comprehensive, yet implementation varies considerably across states and local jurisdictions.[43] Understanding public perceptions of this implementation gap helps explain why international alignment may be evaluated based on observable enforcement outcomes rather than solely legal frameworks.[44] Enforcement credibility has been identified as a decisive factor determining real-world impact of tobacco control laws, especially in low- and middle-income countries.[45,46]

### *Role of smoking status in policy perceptions*

Existing literature suggests systematic differences between smokers and non-smokers in tobacco control policy evaluation.[47] Smokers are more likely to perceive regulations as excessive, ineffective, or poorly enforced, potentially reflecting behavioral resistance or cognitive self-justification.[48,49] Non-smokers tend to view tobacco control measures as more necessary, legitimate, and effective.[50] Examining these perceptual differences provides insight into social resistance to regulation and highlights political and behavioral challenges associated with implementing tobacco control policies.[51]

## METHODS

### *Research design*

The study used a combination of methods to examine the situation. It first analysed India's tobacco control policy to see if they match the rules set by the WHO-FCTC. The study compared India's rules to that of other countries. To do this it used information from existing documents like laws and policy reports to see how well the rules are working. At the time a survey was done to find out what people in India think about the tobacco control rules and if they think these rules meet the standards set by the WHO. By using both of these methods the study was able to look at numbers and statistics and also to understand how different things are related to each other like how the rules are working and if people are following them. The study looked at tobacco control rules, in India. How they compare to the rules set by the WHO.

### *Study population and sampling*

The study took into consideration people who were 18 years old and older. These people have an idea about government policies and what the government does. The rules about health. The people in the study were doctors and nurses people who make sure others follow the rules and smart people who know about laws to control tobacco. This study was just trying to find out some things so the people doing the study asked people they knew to join in. They also asked those people to ask people they knew to join in. People in study answered questions, on internet using Google Forms. Ninety-five people answered questions in a way that made sense so their answers were used to figure out what was going on.

### *Measurement instrument*

Data were gathered through both online and offline modes employing a non-probability snowball sampling approach. The responses were written down using the policy perception scale. This tool helps us understand what people think about tobacco control measures. We asked people to rate each item on a scale from one to five. A score of one means they strongly agree with something, and a score of 5 means they strongly disagree. The policy perception scale has seven items that are divided into four groups. These groups are about how strict the rules are, how well the rules are enforced, how much the policies help keep people healthy and how well the country's measures match what WHO says. We added up answers to get a score for each group of questions. We did this by finding the average of the answers to the questions in each group. The policy perception scale is used to understand what people think about rules so we looked at answers to questions, about perceived policy strictness, perceived policy enforcement, perceived public health effectiveness and perceived WHO-FCTC alignment.

### *Hypotheses development*

Eight hypotheses were formulated to examine direct effects, mediation and serial mediation relationships, and perceptual differences between smokers and non-smokers across 4 constructs. Policy outcomes rarely result from single-stage processes; rather, public judgments emerge through sequential cognitive evaluations linking policy design, implementation, and observable impact.[52,53] Suppression effects may arise in mediation models when intermediate outcomes expose implementation gaps/unmet expectations, particularly in regulatory contexts characterized by uneven enforcement.[54]

The hypotheses are:

*H1*

Higher perceived policy strictness is positively associated with higher perceived policy enforcement.

*H2*

Positive association exists between perceived policy enforcement and perceived public health effectiveness.

*H3*

Higher perceived public health effectiveness is positively associated with higher perceived WHO-FCTC alignment.

*H4*

Direct positive relationship exists between perceived policy strictness and perceived public health effectiveness.

*H5*

Direct positive relationship exists between perceived policy enforcement and perceived WHO-FCTC alignment.

*H6*

Policy enforcement mediates the relationship between policy strictness and perceived effectiveness.

*H7*

Serial mediation pathway links policy strictness to WHO-FCTC alignment through enforcement and effectiveness.

*H8*

Smokers perceive enforcement and effectiveness as lower than non-smokers.

***Data analysis***

SPSS and AMOS/SmartPLS was used to run the analysis. Analytical procedures included reliability analysis (Cronbach's alpha), exploratory factor analysis, group comparisons using t tests and ANOVA, benchmarking against WHO standards using one-sample t-tests, and structural equation modeling incorporating confirmatory factor analysis and bootstrapped mediation tests.

## RESULTS

***Effect of policy strictness on policy enforcement (H1)***

Hypothesis 1 proposed that higher perceived policy strictness would be positively associated with higher perceived policy enforcement.

Simple linear regression analysis was conducted with perceived policy enforcement as the dependent variable and perceived policy strictness as the independent variable.

The regression model was statistically significant, $F(1, 93) = 78.78$, $p<0.001$, explaining 45.9% of variance in perceived enforcement ($R^2=0.459$; adjusted $R^2=0.453$). Perceived policy strictness exerted a strong positive and statistically significant effect on perceived enforcement ($\beta=0.677$, $t=8.88$, $p<0.001$). The unstandardized coefficient ($B=0.712$) indicates that a one-unit increase in perceived strictness is associated with a 0.712-unit increase in perceived enforcement.

These findings really back up the idea, which is H1 and they show that having strict laws in place is a clear sign that the government is serious about enforcing them. When it comes to controlling tobacco, people seem to think that strict rules mean the government is really committed to making things happen and they are serious, about it35.

***Effect of policy enforcement on public health effectiveness (H2)***

The idea behind hypothesis 2 is that when people think the rules are really being enforced, they also think the public health efforts are working well. To see if this is true a special kind of math model called a linear regression model was used. In this model how well, people think the public health efforts are working is the thing being looked at and it is called the dependent variable.

The main focus of hypothesis 2 is, on public health effectiveness. How it is related to the rules being enforced.

The analysis indicated that the model was statistically significant, $F(1, 93) = 69.91$, $p<0.001$, explaining 42.9% of the variance in perceived effectiveness ($R^2=0.429$; adjusted $R^2=0.423$). Perceived enforcement emerged as a strong positive predictor of perceived effectiveness ($\beta=0.655$, $t=8.36$, $p<0.001$), with an unstandardized coefficient of $B=0.513$.

These findings really show that the second idea is correct and they highlight how important it is for people to think that the authorities are serious about enforcing the rules when it comes to how citizens think about the results of policies. In terms people are more likely to think that rules to control tobacco are working when they can see the authorities enforcing them and when they think the authorities are being consistent, with the rules.[37,38] The tobacco control measures are more likely to be seen as effective when the enforcement's visible and people think it is consistent.

***Effect of public health effectiveness on WHO-FCTC alignment (H3)***

The idea behind hypothesis 3 is that people who think public health is really effective will also think that it is in line with the WHO-FCTC, which is also known as the WHO-FCTC. To see if this is true, we used a kind of math called a regression model to look at the relationship, between how well people think public health works and how well they think it lines up with the WHO-FCTC. We wanted to find out if people who think public health is effective also think that it follows the WHO-FCTC.

The results demonstrated that the model was statistically significant, $F(1, 92) = 93.98$, $p<0.001$, accounting for 50.5% of the variance in perceived international

alignment ($R^2$=0.505; adjusted $R^2$=0.500). Perceived effectiveness showed a substantial positive influence on perceived WHO-FCTC alignment (β=0.711, t=9.69, p<0.001), with an unstandardized coefficient of B=0.918.

These findings up the idea that people think about international rules in a certain way. It seems that what people think about following international rules is shaped more by what they see happening than by being part of a formal agreement. To put it simply people who answered the questions seem to care about whether the rules from the WHO-FCTC are actually working to make people healthier. They look at the WHO-FCTC on tobacco control. Think it is doing a good job if the rules to control tobacco are really making a difference, in public health.[42,45]

***Direct effect of policy strictness on public health effectiveness (H4)***

Hypothesis 4 posited a direct positive association between perceived policy strictness and perceived public health effectiveness. The idea here is that there is a connection between how strict people think a policy is and how well they think it helps health. When we looked at the numbers, we found that the connection, between these two things is real and it means something. Regression analysis indicated that the model was statistically significant, F (1, 93) = 44.06, p<0.001, accounting for 32.1% of the variance in perceived effectiveness ($R^2$=0.321). Perceived policy strictness emerged as a significant positive predictor of perceived effectiveness (β=0.567, t=6.64, p<0.001), with an unstandardized coefficient of B=0.467. These results support H4. Show that the design and how strict policies seem have their own impact, on how effective they are seen to be even before looking at how they are enforced.[38,39]

***Direct effect of policy enforcement on WHO-FCTC alignment (H5)***

The idea behind hypothesis 5 is that people who think the rules are being enforced will also think that what is being done is in line with the WHO-FCTC. When we looked at the numbers we found that the model we used was good at predicting this. The numbers showed that the model was statistically significant which means we can trust the results, F (1, 92) = 26.36, p<0.001, explaining 22.3% of the variance in perceived alignment ($R^2$=0.223).

Perceived enforcement was found to exert a significant positive influence on perceived alignment (β=0.472, t=5.14, p<0.001), with an unstandardized coefficient of B=0.478. These findings back up H5. Show that enforcement is a big part of what helps people understand and decide if they should follow international rules. The role of enforcement is really important because it gives people a signal, about what's expected of them when it comes to international compliance.[42,44]

***Mediation of enforcement between policy strictness and effectiveness (H6)***

Hypothesis 6 advanced a mediation pathway in which perceived policy enforcement was expected to mediate the association between policy strictness and perceived effectiveness (STRICT → ENFORCE → EFFECT). This proposed mechanism was examined through structural equation modeling using maximum likelihood estimation, with the corresponding analytical framework illustrated in Figure 1.

The model demonstrated acceptable fit ($\chi^2$ (11) = 23.05, p=0.017). Policy strictness had a strong positive effect on enforcement (β=1.56, p<0.001). However, the direct path from enforcement to effectiveness was not significant (β=-0.14, p=0.828), and the direct effect of strictness on effectiveness was marginal (β=0.82, p=0.060).

The indirect effect of strictness on effectiveness via enforcement was positive but marginally significant (indirect effect=1.28, p=0.061), indicating weak mediation. Thus, H6 receives partial support. People think that being helps with making them think the law is being enforced. Just having enforcement does not really make people think the law is working well. This means that citizens want to see results from the law not just that people are trying to enforce it. The law has to do more than enforce rules it has to show that it is making a difference. Citizens need to see that the law is actually working and that it is not just people, in charge trying to enforce rules.[35,39]

***Serial mediation of strictness, enforcement, and effectiveness on WHO-FCTC alignment (H7)***

Hypothesis 7 proposed a serial mediation pathway linking policy strictness to WHO-FCTC alignment through enforcement and effectiveness (STRICT → ENFORCE → EFFECT → FCTC_ALIGN). The structural equation modeling results demonstrated acceptable fit ($\chi^2$ (9) =24.15, p=0.004) (Figure 2).

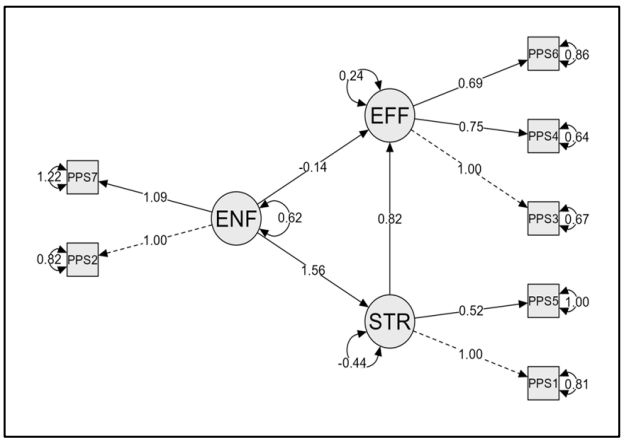


**Figure 1: Mediation model of policy strictness, enforcement, and effectiveness.**

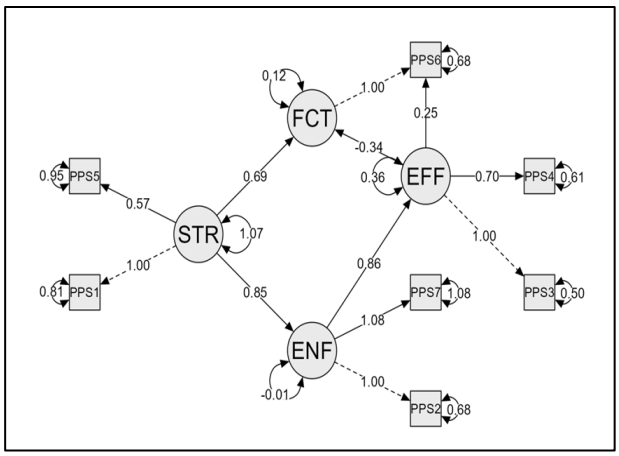


**Figure 2: Serial mediation model linking policy strictness to WHO-FCTC alignment.**

Policy strictness significantly increased enforcement (β=0.85), and enforcement strongly increased perceived effectiveness (β=0.86). However, perceived effectiveness exhibited a negative direct effect on WHO-FCTC alignment (β=-0.34), while policy strictness retained a strong positive direct effect on alignment (β=0.69).

The serial indirect effect was statistically supported (indirect effect=-0.25), confirming the existence of a multi-stage perceptual mechanism. The total effect of policy strictness on WHO-FCTC alignment remained positive (β=0.44). These findings strongly support H7. Show that people in different countries tend to comply because of a chain of rules rather, than just the end results. For people to believe that something is effective it needs to be part of a system of laws and enforcement to show that it is followed globally.[42,45]

### *Differences between smokers and non-smokers (H8)*

Hypothesis 8 proposed that smokers would perceive enforcement and effectiveness as lower than non-smokers. Independent samples t tests showed that non-smokers reported higher perceived enforcement (M=3.73) than smokers (M=3.29). However, this difference did not reach statistical significance, t(92)=1.81, p=0.074.

The result of the effect is what we thought it would be. H8 does not have enough statistical support. This means that the perceptual polarization of H8 is not as strong as we thought it would be. The perceptual polarization of H8 is actually weaker than we anticipated.[47,49]

## DISCUSSION

The findings indicate that perceived policy strictness strongly influences enforcement judgments, while enforcement itself emerges as a key driver of perceived effectiveness in bivariate relationships. However, enforcement alone is not sufficient unless it produces visible and credible impact. Perceptions of WHO-FCTC alignment are shaped less by formal legal framing and more by observed outcomes and institutional credibility, suggesting that legitimacy is earned through demonstrable performance rather than stated intent.

International compliance perceptions appear to follow a sequential logic wherein strict legal provisions shape expectations of enforcement, enforcement informs assessments of effectiveness, and the coherence between institutional capacity and real-world outcomes ultimately determines whether compliance is considered credible.

The partial support for mediation effects (H6) and the complex serial mediation pathway (H7) reveal important implementation dynamics. While policy strictness increases enforcement expectations, the translation to perceived effectiveness requires more than enforcement visibility it demands observable health outcomes. This finding aligns with policy implementation theory, which emphasizes the importance of outcome credibility over procedural compliance alone.[55]

The non-significant differences between smokers and non-smokers (H8) suggest that perceptions of tobacco control effectiveness may be converging, potentially indicating broader social acceptance of tobacco control measures across population segments. However, the directional trend warrants continued monitoring in larger samples.

## CONCLUSION

The findings of this study suggest that public perceptions of tobacco control in India extend beyond the mere presence of stringent legislation. Rather, individuals evaluate tobacco control through the lens of how effectively these policies are implemented in practice and the tangible outcomes they produce. Despite India's comprehensive regulatory framework, perceptions of effectiveness are shaped primarily by the visibility and consistency of enforcement and by observable changes in everyday behaviours and public health environments. These experiential dimensions play a critical role in shaping whether people believe that tobacco control measures are meaningful and aligned with global standards such as those advocated by the World Health Organization.

From a policy perspective, the results underscore that enforcement is a pivotal mechanism linking policy intent with perceived public health impact. The success of tobacco control cannot rely solely on favourable attitudes toward policy design; rather, it depends on the translation of regulations into routine practice that encourages healthier lifestyles and reduces tobacco exposure. Strengthening enforcement systems, enhancing monitoring, and ensuring accountability may therefore improve both actual and perceived effectiveness. Moreover, public judgments regarding India's adherence to international tobacco control commitments appear to

be informed by a holistic assessment of the tobacco control ecosystem, including coordination across regulatory, institutional, and community levels. Taken together, these insights highlight the need for policy approaches that prioritise implementation fidelity and system-wide coherence, thereby reinforcing public trust and maximizing the health benefits of tobacco control initiatives. From a policy perspective, several recommendations emerge:

Strengthening enforcement visibility through increased inspections, fines, and public reporting of violations may enhance both domestic legitimacy and international credibility. Reducing inter-state implementation disparities through standardized enforcement protocols and adequate resource allocation is essential. Publicly communicating enforcement outcomes and health impact data can build public confidence in tobacco control measures. Addressing taxation gaps for bidis and smokeless tobacco products would close significant regulatory loopholes. Eliminating designated smoking areas would strengthen alignment with article 8 requirements. Regulating surrogate advertising and digital marketing more effectively would enhance article 13 compliance

For India, aligning legal strictness with credible implementation remains essential for transforming formal compliance into perceived and substantive public health success. The enforcement-effectiveness chain represents the critical pathway through which policy design translates into health impact and international credibility.

*Funding: No funding sources*
*Conflict of interest: None declared*
*Ethical approval: Not required*

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**Cite this article as:** Chanda S, Sarkar S. Policy strictness, enforcement and public health effectiveness of tobacco control in India: integrating world health organization framework convention on tobacco control compliance and public perceptions. Int J Community Med Public Health 2026;13:2460-9.