

Tobacco Endgame in India

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ABSTRACT

The epidemic of tobacco use persists as a leading risk factor for noncommunicable diseases and impoverishment worldwide. Globally, more nations are undertaking measures for moving beyond “tobacco control” to a “tobacco-free world” under the unified theme of “tobacco endgame.” This concept of endgame includes an array of measures addressing both demand side and supply-side strategies for phasing out all commercial tobacco products within a specified time period. Globally, there have been many successes from countries such as New Zealand, Australia, Scotland, Netherlands, Finland, Ireland, Canada, France, and California. The Indian subcontinent has also been stepping up to progress the endgame concept and has been displaying exemplary leadership in the tobacco control. It has several national and subnational achievements to its credit. However, the tobacco endgame requires collaboration and capacity building of several sectors and stakeholders to align their activities with the tobacco endgame goals and vision of the Government of India. Besides, acceptance of endgame as a political objective is perhaps the first requirement for tobacco endgame in addition to program and community-level strategies. The need of the hour calls for a robust unified approach that engages all the stakeholders and involves increased investment in tobacco control by the country’s governments and region.

Keywords: Endgame, India, models, multistakeholder, tobacco

Introduction

Tobacco use burden-global and India

Tobacco use continues to be a major cause of morbidity, mortality, and impoverishment, killing more than eight million people annually. Of these, direct tobacco use accounts for more than 7 million deaths while exposure to secondhand smoke (SHS) results in approximately 1.2 million deaths.^[1] In 2015, there were 148.6 million smoking-attributable DALYs worldwide,^[2] whereas smokeless tobacco use (SLT) contributed to the loss of 2.5 million DALYs, respectively.^[3] The global economic

cost of smoking tobacco is estimated to be about US\$ 1.4 trillion or around 1.8% of the world’s annual gross domestic product (GDP).^[4] Majority (80%) of the globe’s 1.3 billion tobacco users reside in low- and middle-income countries.^[1] South and South-east Asia account for the

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Table 1: Timeline and important milestones of Tobacco Endgame Actions in India

Timeline	Tobacco control and tobacco endgame milestones
2003	India enacts comprehensive tobacco control legislation, COTPA 2003, a Master Stroke
2006-07	NTCP developed with launch of pilot phase
2008	Smoke-free rules notified along with launch of mass media campaign for public education and awareness
2009-2020	Starting with Cities of Chandigarh and Jhunjhunu as the first smoke-free cities in India in 2007 and Kottayam in 2009, more than 170 jurisdictions (states, districts, and cities) have been declared smokefree between 2010 and 2020 across the states after compliance assessment studies. This has protected an estimated population of 400 million from harms of SHS
2009	Uttarakhand bans sale of loose cigarette followed by many states. Till 2020, 14 states have issued such ban orders
2011-2013	Prohibition on use of tobacco or nicotine in any food item leading to ban on consumption of gutkha-flavored chewing tobacco
2009	India introduces Graphical Health Warnings (40% on one side)
2011	Restriction on display of tobacco products and its use in Films and Television Program Rules notified
2012	MoH organizes national level consultations to discuss supply side of tobacco including alternative employment and crops
2012-2014	Private Member's Bill introduced in Parliament in 2012 and again in 2014 for implementing Plain Packaging of Tobacco Products in India
2013	India organizes Tobacco Endgame Conference, September 2013
2013	Youth movement for tobacco control introduced in the Endgame Conference. NMT21C with 10,000 youth signatures collected in India
2014-2020	Punjab takes lead in banning E-cigarette/ENDS in the state followed by 16 other states in India to protect younger generations and de-normalization of tobacco use
2015	Himachal Pradesh enacts legislation on Tobacco Vendor licensing
2016	Introduction of large Graphical Health Warnings on all tobacco products (85% on both sides)
2015-2020	Many Indian states and districts notify policies and protocols to stop Tobacco Industry Interference in Public Health
2017	Tobacco products included in GST system. Bidi the most common form of smoking form first time taxed at 28%
2017	MoH, Govt of India Issues advisory to states to consider Tobacco Vendor Licensing and no sale of any nontobacco products such as toffee, candy, chips, biscuits, and soft drinks, which are essentially meant for children. Till now, 6 states and 48 districts/cities have notified TVL policies between 2016 and 2020
2017	TFG concepts launched in Punjab and Karnataka. The TFG concept extended to include age 21, TVL, counter emerging products and threats, Youth protection strategies, strengthen cessation among youth, effectively implement TC legislation etc.
2017-2020	MoH, Government of India, notifies and establishes three NTTLS to provide analytical facilities for tobacco and tobacco products to generate scientific information for effective tobacco control
2018	In 2018, the Indian Cabinet approved accession to the FCTC Protocol to Eliminate ITP
2019	India enacts Ordinance and then PECA-2020 to ban ENDS, heat not burn and non-nicotine products as well
2019	MoH, Govt of India issued comprehensive guidelines for making all educational institutions tobacco free (ToFEI Guidelines). Tens of thousands of schools across country declared tobacco free in last 2 years

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Table 1: Contd...

Timeline	Tobacco control and tobacco endgame milestones
2019-2020	End Tobacco 2030 campaigns launched by civil society
2020	Ministry of Health, Government of India releases "Code of Conduct" to stop TI interference in tobacco control
2020	In response to COVID-19, Government of India banned the use of smokeless tobacco products and prohibited spitting in public places
2020	Government of India re-initiate the process for COTPA amendment to address the gaps and make endgame a reality
2021	State of Jharkhand amends COTPA to make it stronger and free from loopholes to achieve Tobacco ENDGAME. Earlier, Maharashtra, Rajasthan, Gujarat, and Punjab amended COTPA to include ban on Hookah Bars

NTCP - National Tobacco Control Program, SHS - Secondhand smoke, NMT21C - No more tobacco in the 21st century, TVL - Tobacco vendor licensing, TFG - Tobacco-free generation, NTTLS - National Tobacco Testing Laboratories, ITP - Illicit Trade in Tobacco Products, PECA - Prohibition of E-Cigarette Act, COTPA - Cigarettes and other Tobacco Products Act, ToFEI - Tobacco Free Educational Institutions, ENDS - Electronic Nicotine Delivery Systems, TC - Tobacco Control

majority (more than 85%) of SLT-related burden, with India attributing 70% of DALYs lost. In addition, SHS exposure led to the loss of 10.9 million DALYs, with 61% among children.^[5] Furthermore, almost 40% of this economic cost is borne by developing countries, highlighting the enormous strain that these countries bear.^[4]

The Indian subcontinent houses around 267 million (28.6%) tobacco users (adults aged 15 years and above), with 99.5 million (10.7%) and 199.4 million (21.4%) of all adults currently using smoked and smokeless forms of tobacco, respectively.^[6] Tobacco use is a known preventable and modifiable risk factor for noncommunicable diseases (NCDs).^[7] In India, overall economic costs due to tobacco use from all diseases and deaths for people aged 35 years and up totaled INR 1773.4 billion (US \$27.5 billion) in 2017–2018, with 22% being direct and 78% being indirect. Smoking was responsible for 74% of the costs, while SLT was responsible for 26%. Tobacco use costs India approximately 1.04% of its GDP.^[8] Around 22% of the global tobacco smokers (241 million in numbers) and 82% of the adult global smokeless tobacco (ST) users (248 million) reside across 11 countries (Bangladesh, Bhutan, DPR Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand, and Timor-Leste) of the SouthEast Asia (SEA) region of the World Health Organization (WHO).^[9]

Tobacco endgame concept

Globally, a growing number of nations are undertaking measures to eradicate the tobacco epidemic. To realize and achieve this goal, various actions are being undertaken and foreseen across countries, bringing them under the united theme of "tobacco endgame." The landscape of the endgame elements has been evolving, attracting the

interests of academia, policymakers, politicians, and the tobacco industry alike. The focal concept of endgame recommends moving beyond “tobacco control” to a “tobacco-free world” by phasing out all the commercial sales of tobacco products to reduce and limit use and availability within a specified period of time.^[10]

The beginning of endgame as a proposal for ending the tobacco epidemic dates back to 1994, where it was suggested to lower the nicotine content of cigarettes to nonaddictive levels steadily.^[11] Thereafter, in 2005, a Regulated Business Model for tobacco was proposed that advocated removal of residual incentives and potential for commercial tobacco promotion along with the generation of opportunities to promote the production of less harmful tobacco products.^[12]

Further, the endgame models encompass an array of strategies ranging from supply-side to product and consumer-side propositions. The supply-side measures include first, the “Tobacco-Free Generation (TFG)” wherein individuals who are born after a particular date/year are not being sold or supplied with tobacco products.^[13] Second, in the “Sinking Lid,” mechanism the government establishes an overall quota of tobacco products that can be sold in a given jurisdiction (the lid), which is reduced each year. Third, to make the cigarettes less addictive, there has been a proposal to decrease the nicotine content in the cigarettes making them nonaddictive to the new users and easier for addicted smokers to quit.^[14] Fourth, there has been a proposal for complete prohibition on the sale of tobacco products, thus preventing mortality, economic costs incurred upon treating tobacco-induced diseases, and saving lives from impoverishment.^[15] Fifth, removing profit-making from the entire tobacco supply system and imposing price control through are regulatory body for enforcing price caps at the producer level, and limits profits to producers.^[16]

On the product’s side, propositions are made for rendering the cigarette unappealing by undertaking its redesigning (increasing the pH and prohibiting constituents such as menthol) whereas on the consumer’s side issuing a license to the users while purchasing tobacco products from licensed vendors helping in placing a cap on purchase limit along with a check on legal age while making a purchase. There has also been a suggestion to sell tobacco products using prescription at pharmacies.^[17] Another preposition recommends including electronic cigarettes in the endgame scenario; however, benefits and health effects are controversial and continue to

be a matter of debate.^[18] Another school of thought advocates for placing a complete ban on combustibles while lifting already existing bans on SLT or other nicotine product alternatives to provide smokers cleaner nicotine alternatives.^[10]

This review was undertaken with an objective of summarizing the various strategies used globally, in South-East Asian Region and in India toward tobacco endgame. Further, this review also highlights the role of multistakeholder engagement and strategies for the various special population groups to achieve endgame.

Methods

A session on the theme of “Tobacco Endgame” was conducted during the annual conference of the Indian Association of Preventive and Social Medicine organized virtually at Postgraduate Institute of Medical Education and Research, Chandigarh, India, in March 2021. During this session, inputs were sought from experts working extensively in the field of tobacco control across international and national organizations and institutions. Thereafter, these inputs were compiled and shared with all the session experts for their feedback. Further, after incorporating the feedback sought, the second draft was circulated among these experts for further revisions and internal review. The final draft was approved by all the authors.

Results

Global success in tobacco endgame

For the first time in history, parties globally are committed to implementing overlapping treaties and frameworks for tobacco control, sustainable development, human rights, and pandemic control. While progress in India has been significant, there are global successes that serve as the models for developing the vision for a “Tobacco-Free India” within a timeframe of 10 or 15 years. The meaning of “endgame” is more specific than TFG and experts have defined it as “initiatives designed to change permanently the structural, political, and social dynamics that sustain the tobacco epidemic, to end it within a specific time.” At the simplest level, endgame initiatives can be integrated into frameworks for tobacco control, NCDs, Sustainable Development Goals (SDGs), and Human Rights to reduce tobacco use rates to acceptable levels, in some cases 5% or less, within a timeframe of 5, 10, or 15 years that include the phasing out of commercial tobacco sales. Several success stories and tools such as backward mapping for

setting end dates can be used to help parties reach goals and ultimately phase out the commercial sales of tobacco products that addict, harm, and kill consumers. Endgame progress includes a growing number of jurisdictions that have made commitments to achieve Tobacco-Free Generations within specified timeframes based on one or more TFG models including Singapore, New Zealand, Scotland, Netherlands, Finland, Ireland, Canada, France, and California.

While all include targets to reach low rates of tobacco within set timeframes, not all include the Endgame goal of phasing out the commercial sale of tobacco products. Recent positive developments, however, include Beverly Hills, California, became the first American city in the 21st century to pass an ordinance ending the sale of most tobacco products, including cigarettes, with sales ending in 2021; Manhattan Beach in California passed a similar ordinance in February 2020. While both New Zealand and Canadian governments have set the goal of reducing smoking to below 5% prevalence, a comprehensive plan of action has been announced by New Zealand to achieve the goal by 2025.^[19]

Other initiatives helping to identify and change the social dynamics around tobacco include the existing mechanisms of several treaties and conventions for human rights that are used by some parties and NGOs, but not all, to report on threats to health rights caused by tobacco; the STOP global project that is coordinating efforts for recording, exposing, and reporting on tobacco industry interference;^[20] establishment by the Australian Government of an Endgame Centre in Excellence for Research for ending the tobacco epidemic;^[21] the successful campaign for investors divesting billions of dollars from tobacco portfolios led by Tobacco-Free Portfolios;^[22] and the Sunset Project to convince policy-makers to phase out commercial tobacco sales led by ASH USA.^[23] Lessons for India include establishing a consensus position by stakeholders on key elements for embedding, for example, 5% or less goal in national and subnational frameworks; integrating endgame initiatives to progress toward end dates for commercial tobacco sales; a comprehensive strategy that includes backward mapping for identifying goals and pathways for policy integration into NCDs, SDGs and Human Rights; an evidence base to help close gaps, such as the missing voices of children, low tobacco taxes and under investment in health; and comprehensive FCTC Article 5.3 policies across government to protect sustainable development and inter-generational health from tobacco industry interference.

Achievements at South-East Asia regional level

Demand reduction strategies

Over the last couple of decades, few demand reduction strategies were in place for paving way toward tobacco endgame. Bhutan, DPR Korea, India, Sri Lanka, and Thailand have banned sale of SLT products,^[24] whereas DPR Korea, India, Nepal, Sri Lanka, Thailand, and Timor-Leste have banned the sale of electronic cigarettes.^[25] Comprehensive smoke-free laws are in place in all countries of the region. The countries are increasingly using the “best buy” of media campaigns as an effective tool for tobacco control. Maldives and Nepal have banned all the forms of direct and indirect tobacco advertising.^[24] India has banned depiction of smoking scenes in films and television. Five countries (India, Maldives, Nepal, Thailand, and Timor-Leste) are implementing the largest pictorial health warnings in the world.^[25] Share of total taxes in the retail price of the most widely sold brand of cigarettes is more than the recommended 75% only in Thailand.^[26] Population-based cost-effective tobacco cessation approaches such as mTobaccoCessation and quitline have proven to be successful in the region and need to be scaled up.^[25]

Supply reduction strategies

All the countries in the SEA region have specified legal minimum age for tobacco sales.^[24] DPR Korea and Timor-Leste have the lowest legal minimum age of 16 and 17 years, respectively, whereas Sri Lanka has the highest legal minimum age of 21 years. Bangladesh, India, Indonesia, and Sri Lanka have taken several steps to curb tobacco cultivation and provide alternative livelihoods to tobacco farmers. In Bangladesh, many tobacco farmers have shifted to alternate crops under the *UBINIG-NayakrishiAndolon* initiative. In addition, the Ministry of Labor, India, has taken special initiatives to rehabilitate bidi rollers. India and Sri Lanka are parties to the protocol to eliminate illicit tobacco trade.^[25]

Achievements at national/subnational level in India

Despite effective, evidence-based tobacco control policies in place and a National tobacco Control Program (NTCP) launched in India in 2007, tobacco use continues to remain a challenge for public health in the country. During initial few years, implementation of national legislation for tobacco control (COTPA 2003) and NTCP was suboptimal. Post-2010, the Ministry of Health Government of India took few bold steps to advance the tobacco control agenda and demonstrated commitment to reduce tobacco use and early commitment toward a tobacco endgame.^[27] Further, tobacco control advocates and public health experts proposed many innovative and even dramatic “endgame” strategies to address the tobacco epidemic in India.

Launch of Smoke-free Rules in 2008 along with a mass media campaign was a first big step which initiated a smoke-free movement in the country with many cities, districts, and states enforcing the legislation, achieving high compliance and declaring them as smoke free. Starting with cities of Chandigarh and Jhunjhunu as the first smoke-free cities in India in 2007 and Kottayam in 2009, more than 170 jurisdictions (states, districts, and cities) have been declared smoke free between 2010 and 2020 across the states after the third party compliance assessment. This has protected an estimated population of 400 million from harms of SHS.

From 2011 through 2013 and beyond, 33 Indian states and Union territories prohibited the use of tobacco or nicotine in any food item leading to ban on consumption of gutkha with many states and also banned use of flavored chewing tobacco. It was a major step toward endgame for tobacco as ST is most common form of tobacco use in the country. Regulation of tobacco imagery in films and television programs in 2012 was important step to stop TAPS and protect younger generation from exposure to glamorization of tobacco and their advertisement.

An international conference on public health priorities in the 21st century which was held in New Delhi, India, on 10–12 September 2013, focused on the topic of “The Endgame for Tobacco.” The conference was organized by the Public Health Foundation of India in collaboration with the Ministry of Health and Family Welfare, Government of India, and WHO, among others.^[28] Participants deliberated on a range of “endgame” ideas in tobacco control and also launched a youth movement for tobacco control. This generational transition and link demonstrated that India is entering a new era for tobacco control, aiming to achieve the endgame for tobacco.

In 2014, another important step forward was to introduce larger and stronger graphic pictorial health warnings on tobacco products covering 85% of the principal display area of the package. These were finally effective for implementation from April 2016.^[29] With state of Punjab taking the lead, many Indian states and districts notified policies and protocols to implement FCTC Article 5.3 to stop Tobacco Industry Interference in Public Health between 2015 and 2020.

From 2015 onward, notification of policies on Tobacco Vendor Licensing (TVL) was another attempt at national and subnational level to restrict availability and accessibility of tobacco products and ensure compliance to tobacco

control and related legislations.^[30] This received a boost after MoH, Govt of India, Issued an Advisory in 2017 to states to consider TVL and no sale of any nontobacco products such as toffee, candy, chips, biscuits, and soft drinks which are essentially meant for children.^[31] Now, 6 states and 48 districts/cities in additional 7 states have notified TVL policies and are preparing operational guidelines to implement the same.

With further enactment of Prohibition of E-Cigarette Act-2020 to ban ENDS and related products,^[32] Code of Conduct to stop tobacco industry interference,^[33] and re-initiating efforts for COTPA amendment,^[34] the Government of India has made its intent clear that Tobacco Endgame with Tobacco-free India is its ultimate VISION [Table 1].

Multi stakeholder engagement and strategies for special population

Tobacco control provides a good example for the need and the potential impact of Multi-Sectoral Action (MSA) in NCD prevention and control. Effective tobacco control involves not only addressing it at the individual level (preventing use by individuals and helping users to quit) but also leveraging MSAs to address production, trade, taxation, and implementation of tobacco control laws. Tobacco as a risk factor has been causally associated with multiple diseases, and thus, tobacco control can be integrated in several National Health Programs. In India, tobacco control has been successfully integrated with the National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Disease and Stroke, Revised National Tuberculosis Control Program (RNTCP), and National Oral Health (NOH) Program.^[35] While the NCD program attempts to identify and address the modifiable risk factors (including tobacco) across the population,^[36] the NOH presents tobacco intervention initiatives to promote good oral health.^[37] Similarly, the collaboration between NTCP and RNTCP^[38] program aims at reducing the comorbidities due to tuberculosis and tobacco use by identifying tobacco users across the TB patients and thereafter motivating them to quit tobacco use. Effective partnerships within health sector were established with government institutes including the National Institute of Mental Health and Neuro Sciences^[39] and Vallabhai Patel Chest Institute to set up Tobacco cessation clinics and National Tobacco control Helpline.^[40] WHO's NCD Country Profiles (2020) estimate, 13,43,500 lives can be saved in India, by 2025 by implementing all of the sixteen WHO Best Buys strategies that are cost-effective, affordable, feasible, and scalable in all settings. Among these best buys, many of the suggested strategies such as tobacco taxation and advertising ban go beyond the health sector

and underscore the importance of engaging with multiple government sectors at central and state level.

Tobacco endgame is not possible without adopting a multisectoral and a “Whole of community” approach. Tobacco control objectives are interlinked to all SDGs.^[41] The United Nations has emphasized the need to garner broad support across governments, the private sector, civil society, and people to successfully achieve SDGs. Tobacco endgame requires accelerating tobacco control action and addressing present challenges like-the need for strengthening COTPA to curb circumvention by the tobacco industry; develop and enforce comprehensive guidelines for FCTC Article 5.3; scale-up tobacco cessation services; and addressing ENDS related challenges.

National Inter-ministerial Taskforce for Tobacco Control and Steering Committee on Section 5 of COTPA are excellent examples of inter-sectoral coordination for effective tobacco control in India. Recently, the Ministry of labor launched alternate livelihood initiative for training bidi rolling women on alternate vocations. MoHFW has collaborated with Ministries of Rural Development and Women and Child Development for providing alternate economically viable livelihood options to bidi rollers under their ongoing schemes. M-cessation program for quitting tobacco was successfully launched by MOHFW in collaboration with Department of Electronics and Information Technology in the year 2015.^[42]

E-cigarettes ban and Gutkha ban in India underscore Government's intent to protect the youth of India and move toward endgame. Since Endgame concepts such as tobacco-free future generation and NMT 21C require active participation of adolescents and youth, partnership with the Ministry of Education, CBSE and UGC is paramount to actively engage adolescents to understand and embrace these concepts. Both supply-side and demand-side action for tobacco endgame requires collaboration and capacity building of several sectors and stakeholders to align their activities with tobacco endgame goals and vision of the Government of India.

Discussion

The paper highlights the key strategies adopted at global, regional, and national level on tobacco endgame. Based on the current context of measures being undertaken at various levels, the authors propose following recommendations to the Government of India at political, program implementation, and community level for achieving the overarching aim of tobacco endgame in India.

Political

Acceptance of Endgame as a political objective is perhaps the first requirement for tobacco endgame. The reason is that the endgame strategies would require collaboration and implementation by many departments of the government in addition to Health-Agriculture, Industries, Commerce, Finance, Labor, Consumer, Information and Broadcasting, Environment, etc., As per their long-standing practices, many of these departments still promote, encourage, and protect tobacco. Therefore, all the relevant departments need to come to a common platform to agree for endgame. Any proposed strategy for endgame, intense and powerful lobbying by the industry and its front groups starts with relevant departments and is often successful because of sympathetic ears they get.

Program and strategies for endgame in India may not be simply copied from other countries. A universal experience is that any strategy for reducing tobacco consumption is met with strong resistance from the industry and the vested interests. In most countries, the resistance is from the industry backed by their financial prowess. In India, in addition to financial power, people power that is highly influential in a democratic set up is used extensively to vigorously oppose tobacco control. In India, there are 6 million tobacco farmers and 20 million tobacco farm laborers.^[43] There are 4.5 million bidi workers^[44] and 6 million tendu leaves collectors^[45] used in making bidis. There are a large number of tobacco retailers and the total employment in tobacco sector in India is estimated as 46 million.^[46] Endgame strategies in India will not be successful unless concerns and misgivings of these are addressed.

Program implementation

This needs to be done at the local level. It will require considerable efforts and investment in raising awareness among implementers and enforcers, their training and capacity building for implementation and enforcement. India has a large spectrum of tobacco products and ways of using tobacco that differ from place to place. Tobacco endgame program and their implementation will need to be adapted for local situation.

Community level

Awareness needs to be raised in the community. That would need to be done by using media of all different types: print, audio, visual, audio-visual, outdoor, etc. Tobacco use is much higher in less privileged sections of the society which are most difficult to reach with media messages. Help can be sought from the grassroots-level NGOs toward raising awareness in the community.

Conclusion

The way forward for the countries of the region is not easy and fraught with challenges, but this is the time to patiently build on what has been accomplished. Besides sustaining the gains, the Indian government needs to accelerate implementation of the WHO framework convention on tobacco control, with special focus on tobacco taxation and supply-side issues. A unified approach that engages all the stakeholders and enables increased investment in tobacco control by the government is needed for advancing towards the endgame.

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Conflicts of interest

There are no conflicts of interest.

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