

Assessment of Tobacco Control Policy in India: An Evaluation using the World Health Organization MPOWER Framework

Anurag Saxena, Khushbu Sharma¹, Vidhee Avashia²

Indian Institute of Public Health, Gandhinagar, ²Public Systems Group, Indian Institute of Management, Ahmedabad, Gujarat,

¹Public Health Foundation of India, Delhi, India

Abstract

Background: Tobacco consumption is considered to be one of the most avertable causes of premature mortality and morbidity. In 2004, the World Health Organization (WHO) successfully negotiated the Framework Convention on Tobacco Control to work toward reducing tobacco consumption globally. Being a signatory, India has implemented several programs to control tobacco consumption. **Objectives:** The objective of this study is to understand the efficacy of tobacco control policies in India between 2013 and 2019 based on the WHO MPOWER measures. **Materials and Methods:** Secondary data from WHO's reports on the global tobacco epidemic program for the years 2013, 2015, 2017, and 2019 is used. Evaluation of tobacco control policies is done using the MPOWER measures proposed by the WHO in 2008, and a checklist of indicators and scoring system which is widely used in literature. **Results:** Of the total score of 37, scores for 2013, 2015, 2017, and 2019 are 24, 27, 28, and 29, respectively. The average score for seven years is 27. **Conclusions:** Tobacco control policies in India have shown an overall improvement. Achievements have been made even though several implementations related challenges requiring urgent attention persist.

Keywords: India, public health, public policy, tobacco, tobacco use, World Health Organization

INTRODUCTION

Globally, the mortality due to tobacco consumption is projected to exceed ten million by 2030,^[1] making tobacco consumption one of the major public health concerns. In this regard, the World Health Organization (WHO) negotiated the Framework Convention on Tobacco Control (FCTC) Treaty in 2004, which has been ratified by 181 countries. In 2008, MPOWER, a set of six measures that are effective in reducing tobacco consumption, was developed under WHO-FCTC.^[2] Several countries across the world have experienced a decrease in tobacco consumption after MPOWER implementation.^[2]

To evaluate the extent of implementation of MPOWER measures, a checklist of indicators has been used in many regions across the globe.^[2] An assessment of the 2015 MPOWER scores for 194 countries indicates that the European region scored an average of 24.35 points, while Africa scored an average of 16.29 points. For individual countries, scores ranged from 3 to 4 in South Sudan and Somalia to 35 for Panama and Turkey, with India scoring 27.^[3] The assessment of the 2017 MPOWER report indicates an improvement in Turkey's score to 36, and India's score improved to 31. It was also found that Africa's average score improved to 17.40

whereas that of Europe increased to 26.41.^[3] Such a high magnitude variation in scores indicates diverse efforts are laid by various national governments toward tobacco control.

One-sixth of the global annual tobacco-related deaths occur in India.^[1] With 267 million consumers, India has the second-largest population of tobacco users.^[4] The economic burden due to tobacco-related diseases on the Indian health-care system has been estimated to be US\$ 22.4 billion.^[4] In India, policy measures toward tobacco consumption control have been implemented. However, there is a lack of attempts that systematically measure the implementation status of tobacco control policies. About 28.60% of India's total population consumes tobacco in some form, of which 10.7% population smokes tobacco while 38.7% population is exposed to secondhand smoke.^[5] Hence, this study

Address for correspondence: Prof. Anurag Saxena, Indian Institute of Public Health Gandhinagar, Opposite Air Force Headquarters, Near Lekawada Bus Stop, Gandhinagar-Chiloda Road, Lekawada, P.O. CRPF Camp, Gandhinagar - 382 042, Gujarat, India. E-mail: anurags@iima.ac.in

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has considered the MPOWER framework that is based on the FCTC measures that are effective in reducing smoking prevalence. This article deals with the compilation and reporting of the past and current status of the tobacco control policies implemented in India. The tobacco control status is quantified using the MPOWER measures, which are provided by the WHO-Global Tobacco Epidemic Report (GTER).

MATERIALS AND METHODS

MPOWER measure checklist proposed by Heydari *et al.* is used to understand the implementation of tobacco control policies. The checklist contains ten indicators, where seven indicators have five options and can be assigned a score between 0 and 4, and three indicators have four options and can be assigned a score between 0 and 3. Thus, the maximum possible score on the checklist is 37.^[2] The GTER released every alternate year for 2013, 2015, 2017, and 2019 are the data sources for this study.^[6,7] Each of the ten indicators are assessed separately and documented for each of these years. The study employs a content analysis method on the secondary data compiled from the GTER reports for years 2013, 2015, 2017, and 2019. Initial scoring was done by two of the researchers. The scores were then discussed with the third researcher and in case of disagreement, discussions were carried out to arrive at a consensus.

RESULTS

The total scores for the years 2013, 2015, 2017, and 2019 are 24, 27, 28, and 29, respectively. Scores for each indicator are listed in Table 1.

Adult daily smoking prevalence

The prevalence of daily smoking among adults has a declining trend from 12% in 2013 to 11% in 2015, and 10% in 2017 and 2019. Therefore, a score of 4 points was assigned.

Monitoring prevalence data

Based on MPOWER's technical notes,^[6] monitoring of prevalence data for 2013, 2015, 2017, and 2019 are given scores of 3, 2, 0, and 1, respectively.

Table 1: Total MPOWER score (2013–2019)

Indicator	2013	2015	2017	2019
Adult daily smoking prevalence	4	4	4	4
Monitoring: Prevalence data	3	2	0	1
Smoke-free policies	0	3	3	3
Cessation programs	3	3	4	4
Health warning on cigarette packages	1	1	4	4
Anti-tobacco mass media campaigns	4	4	3	3
Advertising bans	3	3	3	3
Taxation	2	3	2	3
Compliance with the ban on advertising	2	2	2	2
Compliance with a smoke-free policy	2	2	3	2
Total (37)	24	27	28	29

Smoke-free policies

A score of zero is assigned to 2013, as no data are reported. In 2015, 2017, and 2019, at least six to seven types of public places in India were smoke free. Thus, a score of 3 is given for 2015, 2017, and 2019.

Cessation programs

In the years 2013 and 2015, programs included tobacco cessation counseling, nicotine replacement therapy, national quitline number, and antidepressant and cessation drugs. However, only in some primary health-care centers and hospitals, cessation support was made available. Therefore, 2013 and 2015 are scored 3. In 2017 and 2019, fully covered cessation services at primary health care centers and partially covered services at various hospitals were made available. Thus, 2017 and 2019 are given a score of 4.

Health warning on cigarette packages

In 2013 and 2015, one of the three preapproved health warnings covering only the front 40% of the packaging area was mandated. For 2013 and 2015, the indicator of health warning is given a score of 1. By 2017, the government proposed regulations to rotate the pictorial warnings from two of the preapproved health warnings covering 85% of the area on the back and front of the packaging. The package design was upgraded in 2019 with an inclusion of the quitline number and revised text message. Therefore, in 2017 and 2019, a score of 4 is given.

Mass media campaigns promoting tobacco awareness

Under the National Tobacco Program, pretested anti-tobacco campaigns were launched. These were aired on television and/or radio in 2013 and 2015.^[6] These campaigns were monitored and evaluated. Hence, 2013 and 2015 are scored 4. Campaigns were launched in 2017 and 2019 as well but were not monitored and evaluated. Therefore, they are scored 3 points.

Advertising bans

The rules between 2013 and 2019 prescribed a partial ban on the use of print media, radio, and television for advertising smoking-related products and did not forbid indirect marketing. Furthermore, there is no effective ban at the point of sale display of tobacco products. Thus, all years were scored 3.

Taxation

The tax rate on cigarettes was 43% off the retail price in 2013 and 2017 and 60% in 2015. Therefore, a score of 2, 3, and 2 was assigned for 2013, 2015, and 2017, respectively. In 2019, the tax rate was revised to 54%, hence, a score of 3 points was assigned. Furthermore, the affordability of cigarettes decreased between 2008 and 2018 since the per capita Gross Domestic Product (GDP) needed to buy 2000 cigarettes of the most sold brand increased.^[7]

Compliance with the ban on advertisements

Scores for compliance with the ban on advertising as per GTER for 2013, 2015, 2017, and 2019 were 5, 6, 6, and 7 out of 10, respectively. Therefore, a score of 2 is given for all the years, signifying moderate compliance.

Smoke-free policy compliance

Scores for compliance with smoke-free policies as per GTER for 2013, 2015, 2017, and 2019 were 5, 6, 9, and 7 out of 10, respectively. Therefore, a score of 2 is given for 2013, 2015, and 2019, and a score of 3 is given for 2017.

DISCUSSION

The present study evaluates the implementation of tobacco control policies in India and finds that the mean MPOWER score for India, from 2013 to 2019, is 27. Malhi *et al.* reported a mean score of 25.33 between 2009 and 2013.^[8] Thus, the results indicate that there has been a progressive improvement in implementing tobacco control policies in India.

The scores which remained constant between 2013 and 2019 are adult daily smoking prevalence, advertising bans, and compliance with a ban on advertising. Although scores for monitoring of prevalence data and taxation reduced from 2013 to 2017, they improved in 2019. The scores for smoke-free policies, cessation programs, and health warnings on cigarette packages increased between 2013 and 2019. The scores for anti-tobacco mass media campaigns decreased between 2013 and 2017 and then remained constant. Compliance with smoke-free policy scores increased between 2013 and 2017 but then decreased in 2019.

The monitoring of prevalence indicators shows a severe decline in scores from 2013 to 2017 and then an increase in 2019. This indicates a need for periodic surveys with an adequate representation of national and subnational populations to monitor tobacco consumption prevalence. Such a database will help in the formulation of evidence-based policies. The smoke-free compliance score also warrants attention to the formulation and effective implementation of policies in India.

Counseling services, telephone quitlines, medical assistance, and pharmacotherapy are important for eliminating tobacco dependence.^[6] Highlights of India's program for tobacco dependence treatment are the mCessation program and the Joint TB-Tobacco Framework.^[7] The mCessation program provides dynamic support and encourages tobacco users to quit. However, further research is needed to assess its broader impacts.^[7]

Using pictorial health warnings on packages is a cost-effective way of communication and bringing behavioral changes.^[6] Currently, health warnings on cigarette packages in India are in full compliance with MPOWER recommendations. India has been reported among high-scoring nations.^[7] Anti-tobacco mass media campaigns help in creating awareness on the ill effects of tobacco consumption. These educational campaigns when integrated with the community and school programs are reported to reduce smoking levels by 40% among young adults.^[9] The present study shows a need to introduce effective anti-tobacco campaigns to disseminate information on the adverse outcome of tobacco consumption. Marketing and promotion encourage current smokers to continue the habit and probable smokers to take up smoking. The compliance with a ban on advertising in India requires urgent attention.

GTER-2019 report highlighted that for achieving a complete advertising ban, India needs to ban point-of-sale advertising.^[7] The new internet-based media such as Instagram, YouTube, and Facebook also need to be monitored and regulated.

Increasing the price of tobacco products through higher taxes is considered as the single most efficient way to decrease tobacco consumption. A price increase of 70% can avert 10%–26% of smoking-attributable deaths.^[10] Thus, taxation on tobacco products should be increased, and implementation should be based on the prevalence and pattern of tobacco consumption.^[10]

CONCLUSIONS

The average MPOWER score for India from 2013 to 2019 is 27. The scores for 2013, 2015, 2017, and 2019 are 24, 27, 28, and 29, respectively, indicating an overall improvement. However, attention is required for policy enforcement. Periodic evaluation and monitoring of policies should be done along with the mobilization of adequate financial and human resources. The MPOWER package needs to be incorporated as a part of comprehensive national plans in India.

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Conflicts of interest

There are no conflicts of interest.

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