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South-East Asia
Regional Response Plan for
Integration of TB and Tobacco
2017–2021

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Foreword



Tobacco consumption and tuberculosis persist as major public health maladies, more so in the context of South-East Asia Region. The lives of millions of people across the Region are being adversely affected by the large comorbidity burden from tobacco consumption and tuberculosis. The Region is home to one-fourth of the world's population; however, it accounts for 45.6% of the global burden in terms of TB incidence. In 2015, about 4.7 million cases of TB occurred, and nearly 710 000 people died due to TB in the Region. Tobacco use is an equally serious public health concern in the Region. The Region has nearly one-quarter of all smokers in the world, and more than 80% of the global smokeless tobacco users. The rising trend of tobacco use among youth and women is particularly alarming.

The proven strong association between tuberculosis and tobacco calls for joint action to curb the epidemics of tobacco and tuberculosis in the Region. In fact, the lethal interaction between tobacco consumption and tuberculosis in adults, youth and high-risk population groups in the Region exemplifies the need for well integrated approaches for disease management and control. Traditional disease-specific approaches fall short of recognizing common features and potential synergies in integration of care, management and control of non-communicable and communicable diseases. Particularly in resource-limited environments in many countries of the Region, the need to tackle a broader range of overlapping comorbid conditions through integrative approaches can hardly be overemphasized.

The countries of the Region have largely not tapped the potential of this partnership for joint action to integrate tobacco and tuberculosis control interventions at different levels of healthcare delivery. The cost of inaction is loud and clear.

In this background, this Regional TB Tobacco Response Plan lays down the ground for integration of tuberculosis and tobacco programmes at appropriate levels to achieve maximum gains from the inputs in resource constrained environments. It is imperative that countries review and implement the strategies described in context of local situation towards saving lives and improving overall health and quality of life.

A handwritten signature in black ink, reading "P. Khetrapal".

Dr Poonam Khetrapal Singh
Regional Director
WHO South-East Asia Region

Background

1. The tuberculosis (TB) epidemic

In 2015, new (incident) TB cases were estimated at 10.4 million worldwide. An estimated 1.4 million TB deaths occurred in 2015, and an additional 0.4 million deaths resulted from TB disease among people living with HIV. TB remained one of the top 10 causes of death worldwide in 2015. Again, in 2015, an estimated 480 000 new cases of multidrug-resistant TB (MDR-TB) and an additional 100 000 cases with rifampicin-resistant TB (RR-TB) were detected.⁽¹⁾ The South-East Asia Region of the World Health Organization (WHO) is home to 26% of the world's population; however, the Region accounts for 45.6% of the global burden in terms of TB incidence. In 2015, an estimated 4.7 million cases of TB occurred, and about 710 000 people died due to TB in the South-East Asia Region.

2. The tobacco epidemic

Globally, more than 21% of adults are current smokers; 950 million men and 177 million women (1.1 billion smokers). Smoking prevalence is highest in high-income countries, with one fourth of adults (25%) in 2013 being current smokers. In contrast, 21% of adults living in middle-income countries and 16% of adults in low-income countries were current smokers.⁽²⁾ In low- and middle-income countries, tobacco use is on the increase. Consequently, 70% of the projected mortality secondary to tobacco use is likely to be borne by low- and middle-income countries. In addition, people die at an earlier age in these countries, causing loss of productive life. Therefore, tobacco use puts enormous burdens on countries' already ailing economies and contributes to existing impoverishment.⁽³⁾

The burden of tobacco use in the South-East Asia Region is one of the highest among the WHO regions, and tobacco use is a growing public health problem. The prevalence across countries varies significantly; smoking among adult men ranges from 24.3% (India) to 70% (Timor-Leste) and among adult women from 0.4% (Sri Lanka) to 10.3% (Nepal).⁽⁴⁾ Tobacco use kills over 1.3 million people annually. The Region is home to over 400 million tobacco users and in particular, prevalence of smoking among men in many countries of the Region is high and among females, smokeless tobacco use is popular.⁽⁵⁾

Countries in the South-East Asia Region, such as India, Bangladesh and Indonesia, have a high burden of both TB and tobacco use, which requires immediate concerted action in order to have effective impact on the global epidemic.

3. Association between tobacco and TB

Worldwide, the rate of decline in TB incidence remained at only 1.5% from 2014 to 2015. This percentage needs to accelerate to a 4–5% annual decline by 2020 to reach the first milestones of the End TB Strategy. It will require tackling the key risk factors of the disease. Table 1 provides details of some of the common risk factors of active TB disease, their prevalence and population attributable fraction in 30 high TB burden countries.

Table 1. Risk of active TB disease, prevalence and population attributable fraction for common risk factors of TB

	Relative risk for active TB disease	Prevalence (%) (adults in 30 high TB burden countries)	Population attributable fraction (adults in 30 high TB burden countries)
HIV	21	0.9	15
Undernutrition	3.2	12	21
Diabetes	3.1	8.5	15
Alcohol use	2.9	4.0	7.0
Smoking	1.9	19	15
Indoor air pollution	1.4	53	17

Source: Lönnroth K, Castro K, Chakaya JM, Chauhan LS, Floyd K, Glaziou P, Raviglione M. Tuberculosis control and elimination 2010–2050: cure, care and social change. *Lancet*. 2010 May 22;375(9728):1814–29

An association between tobacco smoke and tuberculosis (TB) has been debated for nearly 100 years. There is now considerable evidence confirming the presence, strength and consistency of this association. Three independent systematic reviews and meta-analyses have synthesized a large body of evidence on tobacco and TB, summarizing evidence of the association between active smoking and three TB outcomes: TB infection (detected using tuberculin skin testing), active TB disease and mortality due to TB.^(6–8) Table 2 provides an overview of the outcome-specific pooled RR estimates from three independent meta-analyses. These analyses indicate the following associations between TB and tobacco :

- Smokers are almost twice as likely to be infected with TB and progress to active disease.
- Smoking interferes with TB at every stage of the disease. It increases the risk of latent TB infection, culture conversion, sputum smear positivity, cavitary disease, treatment delay, treatment default, poor treatment outcomes and

transmission of the disease.^(6,9) Some of these effects are mediated by a higher bacillary load among smokers.

- Smokers are also twice as likely to die from TB. However, there is limited to no evidence of the association between smokeless tobacco and TB.⁽¹⁰⁾

Table 2. Association between smoking and the risk of TB infection, progression to TB disease and mortality due to TB

Meta-analysis	Pooled Relative Risk (95% CI)		
	TB infection	TB disease	TB mortality
Studies (n)	06	15	05
Slama et al. (2007)	1.8 (1.5–2.1)	2.3 (1.8–3.0)	2.2 (1.3–3.7)
Lin et al. (2007)	2.0 (1.5–2.8)	2.0 (1.6–2.6)	2.0 (1.1–3.5)
Bates et al. (2007)	1.7 (1.5–2.0)	2.3 (2.0–2.8)	2.1 (1.4–3.4)

4. WHO response to the TB epidemic

End TB Strategy: In 2014, the World Health Assembly approved the new strategy to end TB with a vision – “World free of TB”. This strategy includes a bold vision of a world with zero deaths, disease and suffering due to TB, thus ending the global tuberculosis epidemic by 2035. The indicators include: reduction in tuberculosis deaths by 95%, tuberculosis incidence by 90% and elimination of associated catastrophic costs for tuberculosis-affected households by 2035. The principles of the strategy are: 1) government stewardship and accountability; 2) coalition-building with affected communities and civil society; 3) protecting and promoting equity, human rights and ethics; and 4) contextual adaptation of the strategy and targets at the country level.

The strategy is based on three pillars:

- (1) integrated, patient-centred care and prevention;
- (2) bold policies and supportive systems; and
- (3) intensified research and innovation.

The **Regional Strategic Plan 2016–2020 towards ending TB in the South-East Asia Region** outlines a way to address persisting challenges, scale up and integrate TB prevention and care into a wider health and community systems approach, including an overall commitment to health systems strengthening and major progress towards universal health coverage.

5. WHO response to the tobacco epidemic

Tobacco Control and the WHO Tobacco Free Initiative: WHO established The Tobacco Free Initiative (TFI) in 1998 to focus international attention, resources and action on the global tobacco epidemic and to coordinate tobacco control activities with Member States, other international agencies and nongovernment organizations (NGOs). In 1999, WHO started to work towards an international treaty that would respond to the globalization of the tobacco epidemic. In 2003, this international treaty, The WHO Framework Convention on Tobacco Control (WHO FCTC), was adopted by the World Assembly. Today, the WHO FCTC has already been ratified by 180 countries.⁽¹¹⁾ The WHO FCTC is an evidence-based set of legally binding provisions that establish a roadmap for successful global tobacco control by addressing both demand- and supply-side concerns.

To assist countries to fulfil their WHO FCTC obligations, WHO introduced measures referred to as MPOWER, which consist of a package of six key and most effective strategies for fighting the global tobacco epidemic. The strategies are:

- 1) **M**onitor tobacco consumption and the effectiveness of preventive measures;
- 2) **P**rotect people from tobacco smoke;
- 3) **O**ffer help to quit tobacco use;
- 4) **W**arn about the dangers of tobacco;
- 5) **E**nforce bans on tobacco advertising, promotion and sponsorship; and
- 6) **R**aise taxes on tobacco.

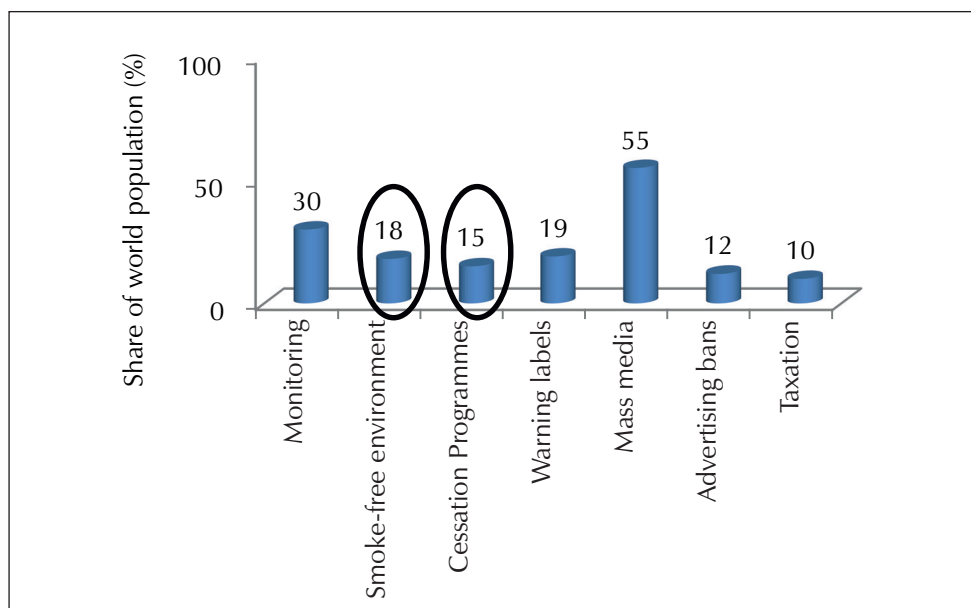
According to the WHO Report on the Global Tobacco Epidemic 2015, more than 2.3 billion people living in 92 countries – one third of the world’s population – are now covered by at least one MPOWER measure, and nearly 1 billion people living in 39 countries are now covered by two or more MPOWER measures. The World Bank is committed to support the implementation of the global tobacco control effort as outlined in this report. Also, Sustainable Development Goal **3a** focuses on tobacco control through effective implementation of the FCTC.⁽¹²⁾

6. TB-tobacco integration

End TB Strategy: The End TB Strategy provides an opportunity for greater alignment among efforts to fight both epidemics. Presence of comorbidities may complicate tuberculosis management and result in poor treatment outcomes. Conversely, tuberculosis may worsen or complicate management of other diseases. Therefore, as part of basic and coordinated clinical management, people diagnosed with tuberculosis should be routinely assessed for relevant comorbidities. This calls for a “health-in-all-policies” approach and

action on social determinants of health, including tobacco control, which is a direct risk factor for TB. The WHO South East Asia Report on Global TB Control states that comorbidities of tuberculosis such as diabetes, tobacco smoking, silicosis, alcohol and drug misuse, and undernutrition are often ignored and not addressed adequately, which hampers tuberculosis control, especially in low- and middle-income countries.⁽¹³⁾ If we are to attain Sustainable Development Goal 3.3 (ending the epidemic of tuberculosis and other communicable diseases by 2030) and end TB, we must address these comorbidities.

Figure 1. Share of the world population covered by selected tobacco control policies (highest level) (GTCR, 2015)



Over the past two years, there has been notable progress in global tobacco control. However, some of the MPOWER measures, such as taxation and cessation programmes, have not received due attention (Figure 1).⁽²⁾ About 6 million new and relapse TB cases are notified by NTPs each year; even if only 20% of these cases use tobacco, NTPs could reach more than 1 million tobacco users a year. Thus, on the one hand, integration with NTPs could significantly improve access to tobacco cessation interventions using “Brief advice” approach based on 5As and 5 Rs. Smoke-free TB care facilities could also protect patients and communities from tobacco smoke. On the other hand, tobacco control interventions could lead to improved TB treatment outcomes, reduced incidence of TB infection and disease, and reduced deaths due to TB.^(6,10)

After integration of diabetes into TB care, TB-tobacco integration will certainly go a long way in guiding management of other chronic comorbidities among TB patients.

7. Progress made thus far

A situational analysis of the level of TB-tobacco integration in the context of policy, planning and practice was made in 11 countries of the South-East Asian Region. All countries in the Region have a strategic national plan for TB control and technical guidelines for diagnosis and management of TB – except for Nepal, which does not have a national strategic plan for TB control. All countries in the Region have a national tobacco control law and programme. Most countries of the South-East Asia Region except for Bhutan, India and Thailand do not have national technical guidelines for management of tobacco dependence.

All countries of the South-East Asia Region have a national TB programme under which TB diagnosis and treatment is provided; the programme is integrated into the primary health care delivery system. However, in most countries, the public health system does not offer tobacco cessation services, except in Bhutan, DPR Korea, India, Maldives and Sri Lanka. Of these countries, only Bhutan, DPR Korea and India integrate tobacco cessation services into primary health care .

Besides India, none of the countries have a formal coordination mechanism between the Technical Working Groups for National TB Programme and Tobacco Control. None of the countries have a policy of joint training of programme officers and staff from the National TB and Tobacco Control Programmes. There is no policy for joint supervisory activities under TB and Tobacco Control Programmes.

Screening for TB is offered to tobacco users only in Sri Lanka. Bangladesh, Bhutan, DPR Korea, India and Sri Lanka have provision for counselling to TB patients for tobacco cessation, if they are found to be tobacco users. However, there is no provision of referral for pharmacotherapy for TB patients to assist in quitting except in India. Table 3 outlines details of TB and tobacco policies, practices and integration at both policy and practice levels in the 11 countries of the South-East Asia Region.

In addition, a few pilot studies integrating brief advice for tobacco cessation in TB patients based on 5As and 5Rs have been implemented in Bangladesh, India and Indonesia, suggesting that simple tobacco cessation intervention can be effective in promoting quitting among TB patients. This is encouraging for other low-resource settings.⁽¹⁴⁻¹⁶⁾ In Indonesia, for example, a brief advice of 5–10 minutes with minimal cessation support at every visit of TB patients resulted in high quitting rates (66.8% at six months) and higher awareness of adverse health effects of second-hand smoke exposure, which led patients to make their homes smoke free and health providers to make health care tobacco free.⁽¹⁴⁾ In India, at the end of treatment, of the total patients who were offered brief advice, 67.3% quit tobacco use, 18.2% relapsed and 14.5% were lost to follow-up.⁽¹⁵⁾ Similarly, in Bangladesh, high quitting rates (82%) have been reported.⁽¹⁶⁾

Table 3. TB status of TB-tobacco collaborative activities in 11 countries of the South-East Asian Region, 2016

TB-tobacco collaborative activities	Bangladesh	Bhutan	DPR Korea	Indonesia	Maldives	Myanmar	Nepal	Sri Lanka	Timor-Leste	Thailand	India
Formal coordination mechanism for TB and tobacco control	No	No	NA	No	No	No	No	No	No	No	Yes
Integration of tobacco control information in National TB Programme Training	No	No	NA	No	No	No	No	No	No	No	Yes
Integration of TB control information in NTCP Training	No	No	NA	No	No	No	No	No	No	No	No
Staff/programme officers are jointly trained in TB/Tobacco Programme	No	No	NA	No	No	No	No	No	No	No	No
Supervision of TB/tobacco activities	No	No	NA	No	No	No	No	No	No	No	No
Collection of tobacco-related data among registered TB patients	No	No	NA	No	No	No	No	No	No	No	Yes
Any joint programme to engage NGOs/CBOs	No	No	NA	No	No	Yes	No	No	No	NA	No
PHCs are smoke free/tobacco free	Yes	Yes	Yes	Yes	Yes	Yes	NA	Yes	Yes	Yes	Yes
Clinics are smoke free/tobacco free	Yes	Yes	Yes	No	Yes	Yes	NA	Yes	Yes	Yes	Yes
TB screening is offered to tobacco users	No	No	NA	NA	NA	NA	No	Yes	No	No	NA

India	Thailand	Timor-Leste	Sri Lanka	Nepal	Myanmar	Maldives	Indonesia	DPR Korea	Bhutan	Bangladesh
Yes	No	No	Yes	No	NA	NA	NA	Yes	Yes	Yes
Yes	No	No	No	No	NA	NA	NA	NA	No	No
NA	No	No	No	No	NA	NA	NA	NA	No	No
Yes	No	No	Yes	No	No	Yes	Yes	NA	No	No
No	No	No	Yes	No	No	No	No	NA	No	No

TB-tobacco collaborative activities
 TB patients using tobacco are being counselled for tobacco cessation
 TB patients referred to pharmacological therapy
 Conducted joint supervision for TB and tobacco control
 IEC for TB-tobacco
 Integration of IEC plan on TB and tobacco

TB= Tuberculosis; NA=Not available; NTCP=National Tobacco Control Programme; IEC=Information Education and Communication; PHC=Primary Health Care; NGO=nongovernmental organization; CBO=community-based organization.

Challenges and gaps

Some of the key challenges identified in integrating TB and tobacco Policies/ Programmes are:

- Slow and delayed uptake of evidence-based global TB and tobacco policies by programmes
- Lack of leadership and political commitment
- Lack of planning and resources for roll-out of national policies and evidence-based practices
- Poor coordination among various stakeholders working in TB and tobacco control programmes in the Region
- Limited capacity of TB programme staff in tobacco cessation services and tobacco control staff in TB management
- Poor community awareness about TB-tobacco linkage
- Lack of awareness that advocacy efforts by the tobacco control community alone are not sufficient to address the issue

Goal

To reduce the burden of TB and tobacco in the WHO South-East Asia Region.

Objectives

The objectives of TB/tobacco integration are:

- Reduce tobacco-related TB incidence and mortality
- Improve TB treatment outcomes
- Provide universal access to counselling and tobacco cessation services for all people with TB and presumptive TB
- Encourage tobacco cessation in the health system
- Promote tobacco-free environments

Strategies

The interventions and activities to reach the overall goal and objectives are grouped under the following three strategies:

- (1) Joint TB-tobacco actions-policy development, planning, training and monitoring
- (2) Integrated patient-centred care and prevention
- (3) Research and innovation

Strategy 1: Joint TB-tobacco actions-policy development, planning, training and monitoring

Joint strategic policy development, planning and monitoring is essential for ensuring that TB/tobacco activities are effectively implemented and monitored at all levels of the health-care delivery system. Monitoring and supervision of joint TB and tobacco control activities should be included in the supervisory checklist of both TB and tobacco control programmes at the district managerial level and at all health units delivering diagnostic and treatment services to TB patients and tobacco users .

1. Ensure that TB/tobacco operational plans are part and parcel of the national strategic plans and adequate resources allocated for the same;
2. Establish a Joint Working Group with representatives of relevant entities such as Technical Advisory Groups of the TB and Tobacco control programmes;
3. Involve NGOs, CBOs and communities: Perspective of the civil society is essentially to be incorporated into any planning and implementation process;
4. Frame national TB/tobacco collaborative plan incorporating the latest global recommendations;
5. Develop technical and operational policies and frameworks for implementation for TB-tobacco integration in primary health care settings;
6. Establish guidelines for joint planning and monitoring;
7. Build the institutional capacity necessary to ensure sustainability of the joint activities of the NTP and the National Tobacco Control Programme;
8. Integrate tobacco cessation in NTP modules and TB diagnosis and management in tobacco control modules;

9. Integrate training: Training on joint activities of the NTP and the National Tobacco Control Programme should be established, integrating reciprocal elements in training curriculum and training materials, thereby facilitating capacity-building of health-care professionals;
10. Integrate supervision and monitoring: put systems in place for supportive supervision, regular monitoring and reporting as per recommended indicators on joint activities in TB and tobacco programmes.

Strategy 2: Integrated patient-centred care and prevention interventions

1. Improve awareness among patients and communities: generating awareness on TB/tobacco linkage should be part of the overall information education and communication efforts of both TB and tobacco programmes;
2. Advocate and strongly enforce a policy of smoke (tobacco)-free environments for all places where services are delivered to TB suspects and TB patients;
3. Ensure tobacco use screening of all patients with TB and presumptive TB using standard screening tools;
4. Ensure access to tobacco cessation services for patients with TB and presumptive TB who need them;
5. Offer brief advice (“5As approach”) routinely through the health staff managing TB patients in primary health care facilities. Institutionalize ‘5Rs’ approach for patients who are unwilling to quit. Alternatively, use the ABC (Ask, Brief advice, Cessation support) approach.⁽¹⁷⁾ Pharmacotherapy can be instituted by trained medical staff as per need; and
6. Refer support for patients needing intensive behavioural intervention or other pharmacological medications by specialized health professionals.

Strategy 3: Research and innovation

1. Develop prioritized research agenda for TB/tobacco, including association between TB and smokeless tobacco use;
2. Promote TB/tobacco research with a focus on operational research; and
3. Support innovations in models of integration, tobacco cessation services, diagnosis and management.

Regional targets and milestones to be achieved

Regional targets and milestones	Baseline 2016	2019	2021
Number of countries in the Region that have constituted Joint Working Group on TB and Tobacco	0	6	11
Number of countries in the Region that have put in place a coordinated response plan for integration of TB and tobacco	0	6	11
Number of countries that have developed technical and operational guidelines for implementation for TB-tobacco integration	0	8	11
Number of countries where presumptive TB patients are screened for tobacco use	2	11	11
Number of countries where TB patients are screened for tobacco use	2	11	11
Number of countries where TB patients who use tobacco receive brief advice for tobacco cessation	2	8	11
Number of countries where all health facilities are declared smoke free	9	11	11
Number of countries that have developed prioritized research agenda for TB/tobacco	2	6	11

Regional and national indicators

The following indicators are essential for regional and national-level monitoring and reporting. They have been grouped into the categories as given under:

Indicators to measure screening of TB and presumptive TB patients for smoking and cessation care services

- (1) Proportion of presumptive TB/TB patients who are screened for tobacco use
- (2) Proportion of tobacco users identified among TB/presumptive TB patients who are referred for tobacco cessation interventions
- (3) Proportion of tobacco users identified among TB/presumptive TB patients who received brief advice (5As) for tobacco cessation within two weeks
- (4) Among TB/presumptive TB patients using tobacco and unwilling to quit, proportion who received 5Rs intervention

Indicators to measure quitting rates

- (1) Proportion of tobacco users among TB patients who stayed tobacco free at the end of TB treatment
- (2) Proportion of tobacco users among TB patients who remained a tobacco user at the end of TB treatment
- (3) Proportion of tobacco users who made attempt(s) to quit, but continued using tobacco at the end of TB treatment
- (4) Proportion of tobacco users among TB patients who received tobacco cessation services and stayed tobacco free at the end of TB treatment
- (5) Proportion of tobacco users among TB patients who received tobacco cessation services but remained a tobacco user at the end of TB treatment
- (6) Proportion of tobacco users among TB patients who received tobacco cessation services but remained a tobacco user at the end of TB treatment despite making attempts to quit

Indicators to measure impact on TB treatment outcomes

- (1) Proportion/number of times that a tobacco using TB patient received cessation services
- (2) TB treatment outcomes among tobacco users who stayed tobacco free at the end of TB treatment
- (3) TB treatment outcomes among tobacco users who did not quit tobacco use
- (4) TB treatment outcomes among tobacco users who made attempt(s) to quit, but relapsed by the end of TB treatment

References

- (1) World Health Organization. Global Tuberculosis Report. Geneva, 2016.
- (2) World Health Organization. WHO report on the global tobacco epidemic. Geneva, 2015.
- (3) World Health Organization and World Bank. Tobacco control in developing countries. Geneva, 2001.
- (4) World Health Organization, Regional Office for South-East Asia. Noncommunicable diseases risk behaviours among adults in the South-East Asia Region: findings from STEPS and GATS, New Delhi 2016.
- (5) World Health Organization, Regional Office for South-East Asia. The WHO FCTC Indicators: Global Adult Tobacco Survey, 2009. New Delhi, 2011.
- (6) Slama K, Chiang C-Y, Enarson DA, Hassmiller K, Fanning A, Gupta P, et al. Tobacco and tuberculosis: a qualitative systematic review and meta-analysis. *Int J Tuberc Lung Dis.* 2007 Oct;11(10):1049–61.
- (7) Lin H-H, Ezzati M, Murray M. Tobacco smoke, indoor air pollution and tuberculosis: a systematic review and meta-analysis. Novotny TE, editor. *PLoS Med.* 2007 Jan 16;4(1):e20.
- (8) Bates MN, Khalakdina A, Pai M, Chang L, Lessa F, Smith KR. Risk of tuberculosis from exposure to tobacco smoke: a systematic review and meta-analysis. *Arch Intern Med.* 2007 Feb 26;167(4):335–42.
- (9) Huang C-C, Tchetgen ET, Becerra MC, Cohen T, Galea J, Calderon R, et al. Cigarette smoking among tuberculosis patients increases risk of transmission to child contacts. *Int J Tuberc Lung Dis.* 2014 Nov 1;18(11):1285–91.
- (10) Gegia M, Magee MJ, Kempker RR, Kalandadze I, Chakhaia T, Golub JE, et al. Tobacco smoking and tuberculosis treatment outcomes: a prospective cohort study in Georgia. *Bull World Health Organ.* 2015 Jun 1;93(6):390–9.
- (11) WHO FCTC. Parties to the WHO Framework Convention on Tobacco Control. http://www.who.int/fctc/signatories_parties/en/ - accessed 24 May 2017.
- (12) United Nations Development Programme. Sustainable Development Goals. New York, 2015.
- (13) World Health Organization, Regional Office for South-East Asia. Tuberculosis control in the South-East Asia Region: Annual Report 2016. New Delhi, 2016.
- (14) Bam TS, Aditama TY, Chiang C-Y, Rubaeah R, Suhaemi A. Smoking cessation and smokefree environments for tuberculosis patients in Indonesia—a cohort study. *BMC Public Health.* 2015 Jul 2;15(1):604.
- (15) Kaur J, Sachdeva KS, Modi B, Jain DC, Chauhan LS, Dave P, et al. Promoting tobacco cessation by integrating “brief advice” in tuberculosis control programme. *WHO South East Asia J Public Health.* 2013;2(1):28–33.
- (16) Siddiquea BN, Islam MA, Bam TS, Satyanarayana S, Enarson DA, Reid AJ, et al. High quit rate among smokers with tuberculosis in a modified smoking cessation programme in Dhaka, Bangladesh. *Public Health Action.* 2013 Sep 21;3(3):243–6.
- (17) International Union Against Tuberculosis and Lung Disease. Tobacco cessation interventions for tuberculosis patients: a guide for low-income countries. Paris, 2008.

The Regional TB Tobacco Response Plan for South-East Asia Region is prepared in view of many Member States facing the double burden of tobacco and tuberculosis. Reviewing the current situation of tobacco and tuberculosis epidemics and underscoring strong association between the two major public health challenges in the Region, the response plan advocates for greater alignment among different interventions at appropriate levels to reach the overall goal of containing the two epidemics at the country level by undertaking joint actions leveraging the existing policies and programmes.



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