

# Helping TB patients quit smoking: the potential impact, WHO recommendations and country experience

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# Outline

- **Why national TB programme should support tobacco control activities?**
- **WHO & The Union recommendations on TB and tobacco control**
- **The potential impact of national TB programme on helping tobacco users quit**
- **Case examples of integrating brief advice into TB care services**



# **Tobacco use is a key driver of TB epidemic**



# The associations between tobacco use and tuberculosis outcomes confirmed

- A Qualitative Systematic Review Jointly Conducted by WHO and The Union concluded that:
  - A link between active and passive tobacco smoking and TB outcomes such as infection, response to treatment, relapse rates, and mortality is evident.
  - Active smoking is significantly associated with recurrent TB and TB mortality.



# Associations between Tobacco Use and Tuberculosis (literature review)

Exposure to tobacco	Outcome	Estimate of risk ratios	p-value
Active/passive	TB infection	1.03 to 3.2	< 0.05
Active	TB disease	1.01 to 6.3	< 0.05
Passive	TB disease	1.6 to 9.3	< 0.05
Active	Recurrent TB	2.5 to 3.0	< 0.05
Active	TB-related death	1.1 to 6.6	< 0.05



# Population attributable fraction - selected risk factors & determinants

$$PAF = \frac{P \times (RR - 1)}{P \times (RR - 1) + 1}$$

	Relative risk for active TB disease	Weighted prevalence (22 HBCs)	Population Attributable Fraction
<b>HIV infection</b>	20.6/26.7*	1.1%	<b>19%</b>
<b>Malnutrition</b>	3.2**	16.5%	<b>27%</b>
<b>Diabetes</b>	3.1	3.4%	<b>6%</b>
<b>Alcohol use (&gt;40g / d)</b>	2.9	7.9%	<b>13%</b>
<b>Active smoking</b>	<b>2.6</b>	<b>18.2%</b>	<b>23%</b>
<b>Indoor Air Pollution</b>	1.5	71.1%	<b>26%</b>

**Sources:** Lönnroth K, Raviglione M. Global Epidemiology of Tuberculosis: Prospects for Control. Semin Respir Crit Care Med 2008; 29: 481-491.

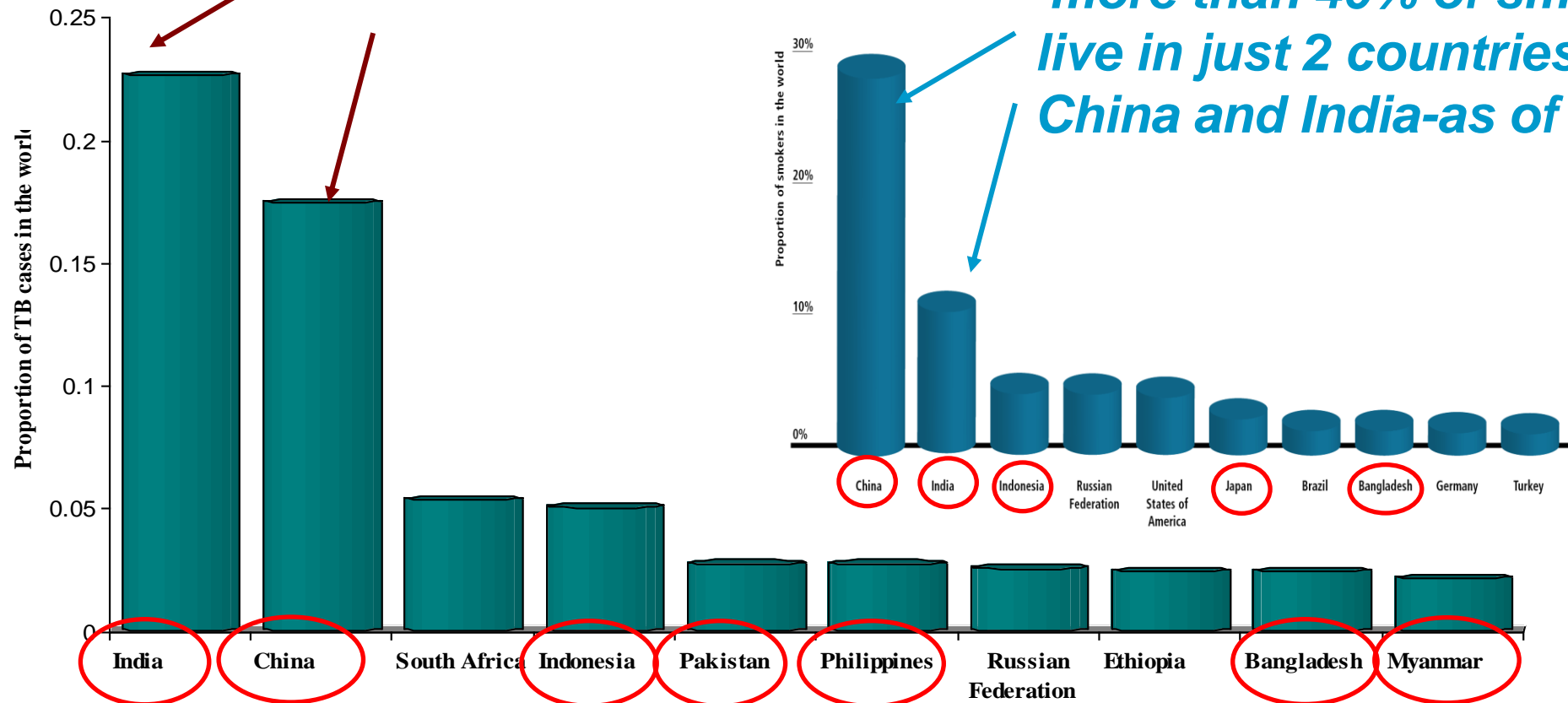
\*Updated data in GTR 2009. RR=26.7 used for countries with HIV <1%. \*\*Updated data from Lönnroth et al. A consistent log-linear relationship between tuberculosis incidence and body-mass index. Submitted, 2009



# Asia Pacific countries are hardest hit by the dual epidemic

**40% of new and relapse TB cases live in just 2 countries in 2006**

**more than 40% of smokers live in just 2 countries- China and India-as of 2005**



Source: WHO Report 2008: Global tuberculosis control - surveillance, planning, financing



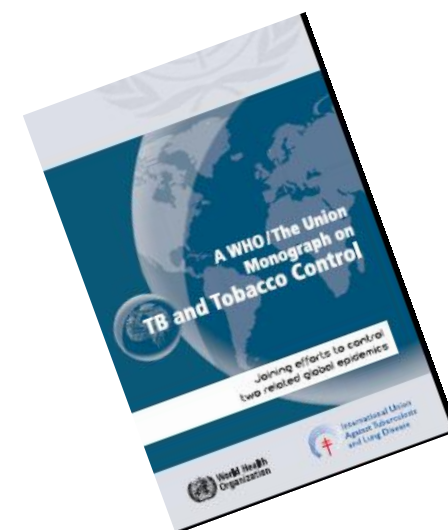
# **WHO & The Union recommendations on TB and tobacco control**





# WHO & The Union Recommendations on TB and Tobacco Control

- Providing treatment of tobacco dependence for TB patients
- Making the clinic where TB patients are treated for tobacco dependence smoke-free
- Taking managerial decisions to overcome barriers in the health system to institute treatment for tobacco dependence



# WHO & The Union Recommendations on TB and Tobacco Control

- The smokers among those presenting or being assessed at PHCs for TB or other respiratory diseases should be identified and offered counselling and other smoking cessation treatments:
  - **Brief advice** (Five As, Five Rs)
  - Intensive support
  - Pharmacological interventions



# Brief advice

- **Definition:**

- Advice to stop using tobacco, usually taking only a few minutes, given to all tobacco users, usually **during the course of a routine consultation or interaction**. Used interchangeably with brief intervention.



- Brief advice (5As, 5Rs) in clinical setting are

- **Feasible:** can be done within 3-5 minutes
- **Effective:** 40% will make a quit attempt, increase quit rate by 30%
- **Efficient:** a “good buy” with the potential to reach more than 80% of the general population at least once per year



Sources: 1. WHO FCTC Article 14 guidelines; 2. West et al 2000; 3. Fiore MC et al 2000; 4. WHO NCD global status report 2010

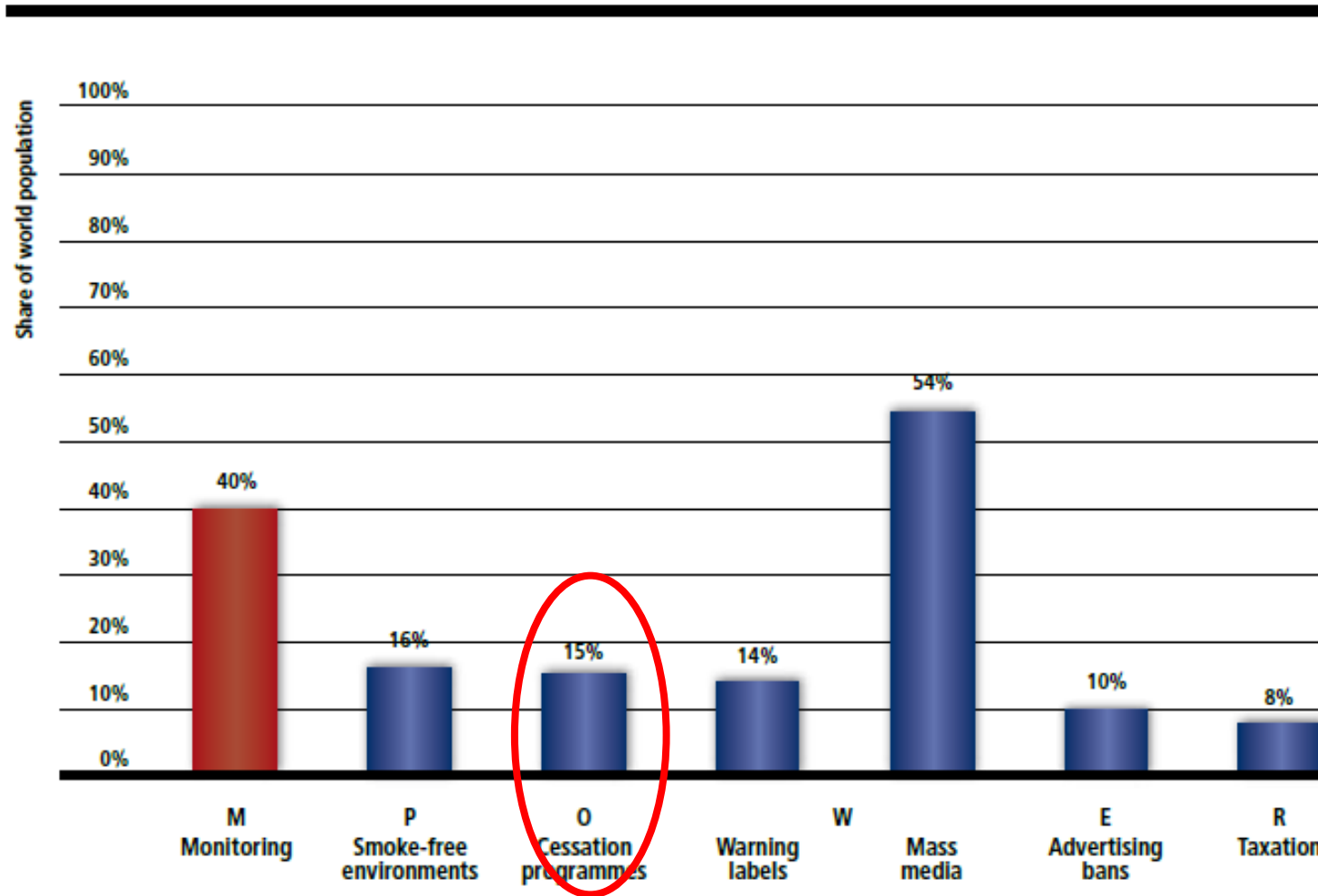


# **The potential impact of national TB programme on helping tobacco users quit**



# Only 15% of the world population currently has access to comprehensive cessation services

SHARE OF THE WORLD POPULATION COVERED BY SELECTED TOBACCO CONTROL POLICIES, 2012



Source: WHO report on the global tobacco epidemic, 2013



# Every opportunity should be used

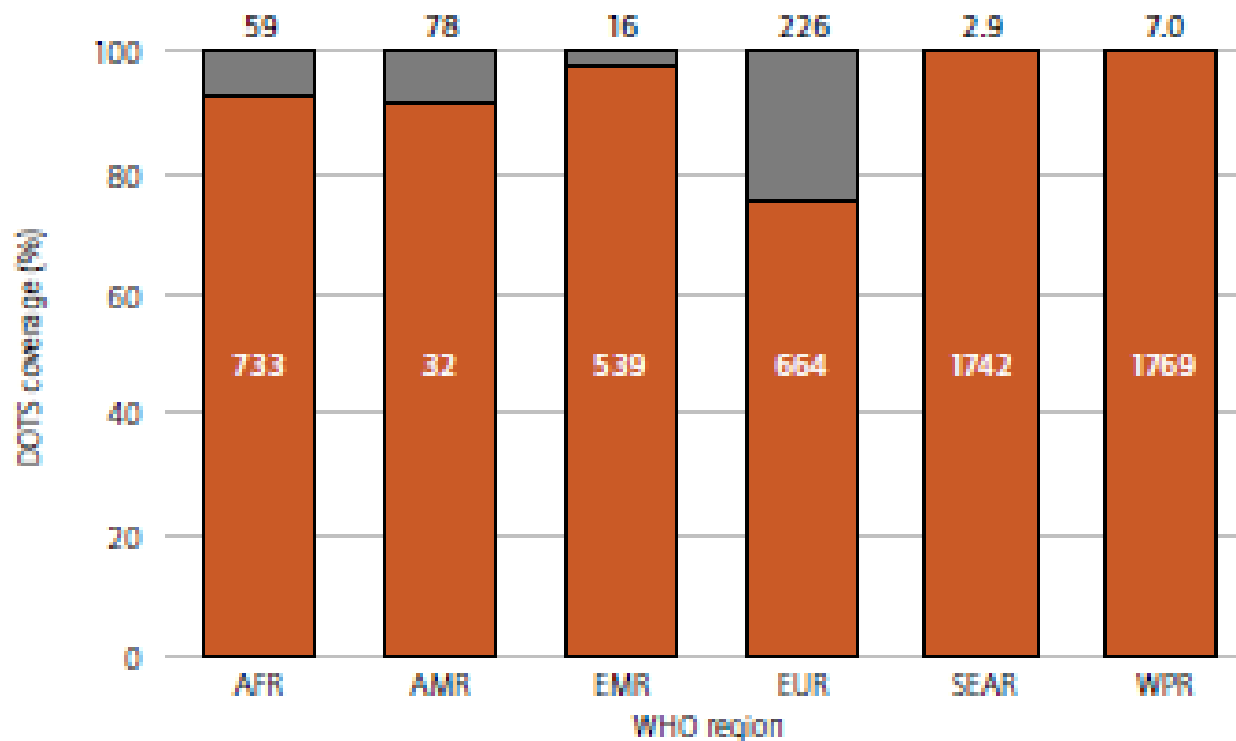
- DOTS programmes have the potential to reach more than 1 million tobacco users a year
- The Practical Approach to Lung Health (PAL) has the potential to reach 20-35% patients in PHC setting



# DOTS programmes have the potential to reach more than 1 million tobacco users a year

- By the end of 2007, DOTS was being applied in more than 180 countries, covering 94% of the world's population
- By the end of 2007, **Almost the entire population of the Asia Pacific Region** had access to DOTS
- About 5.8 million new and relapse TB cases notified under DOTS in 2011. **Even if only 20% of them use tobacco, the DOTS programmes could reach >1 million tobacco users a year**

DOTS coverage by WHO region, 2007. The red portion of each bar shows DOTS coverage as a percent of the population. The numbers in each bar show the population (in millions) within (red portion) or outside (grey portion) DOTS areas.



Source: Global Tuberculosis Report 2012



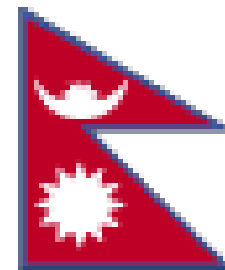
# Case examples of integrating brief advice into TB care services





# Nepal

## Integrating brief advice into PAL

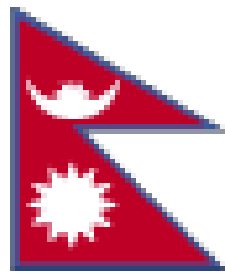


- Practical Approach to Lung Health (PAL) is a patient-centred approach aims to improve TB diagnosis and care by improving the quality of care for every respiratory patient in PHC settings
- **PAL is an existing PHC program**, initiated in 2001 in Nepal
  - Approximately 2 million respiratory patients seek care in PHC
- Integrating brief advice into PAL initiative in two pilot districts as a WHO pilot project (2007-2008):
  - Secured support from policy makers
  - PAL guideline includes tobacco control component
  - Training ( trained 17 future trainers, 146 health workers)
  - Integrated smoking status into PAL register



# Nepal

## Integrating brief advice into PAL



- Impact/outcome (data from one PHC facility)

Number and percentage of smokers identified among respiratory disease patients	59.1% (n=88)
Number and percent of patients with respiratory diseases who are current smokers who have been given brief routine counseling to quit smoking	22.2%
Number and percentage of patients receiving smoking cessation counseling who quit smoking for 6 months	23%

- Integration of brief advice with PAL planned to expand to 25 districts during 2010-2015 through the Global Fund NSA funding

Source: PPT slides from Dr Pushpa Malla, Nepal, 2009

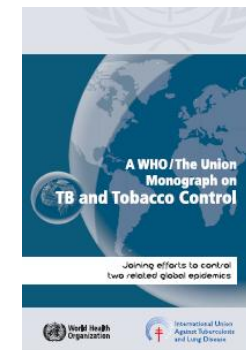


# India

## Integrating brief advice into DOTS



- Brief advice for tobacco cessation based on five A's, advocated by the WHO and The Union was incorporated into the on-going TB Control programme in India in the year 2010
- All the registered TB patients receiving directly observed treatment short-course (DOTS) who used tobacco in any form were offered brief advice
- At the end of treatment, **67.3%** of the patients who were offered brief advice, quit tobacco use.



Source: Jagdish Kaur, et al. Promoting tobacco cessation by integrating 'brief advice' in tuberculosis control programme. WHO South-East Asia Journal of Public Health, 2013



**Thank you for your attention**