PROTECTING YOUNG PEOPLE FROM THE TOBACCO EPIDEMIC

21 JULY 2016, NEW DELHI

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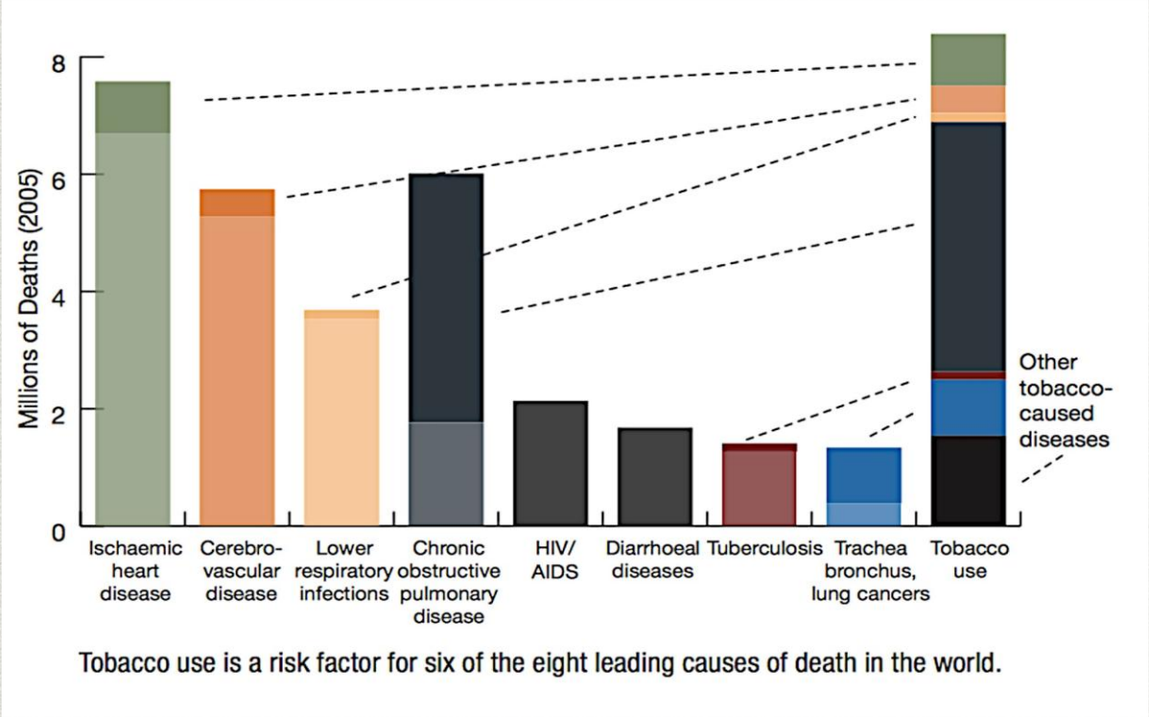
TOBACCO IS A LEADING RISK FACTOR FOR NCDs

In 2012, NCDs were responsible for 38 million of the world's 56 million deaths and are projected increase to 52 million by 2030

40% of these deaths in 2012 were premature, under the age of 70 years

WHO



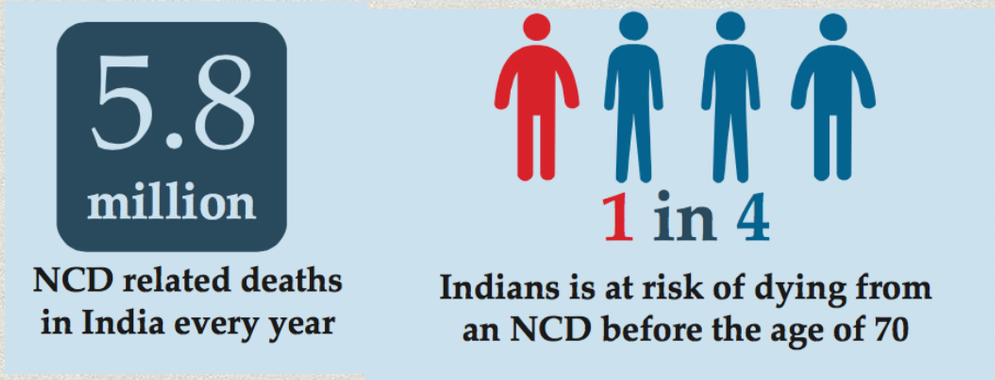
Tobacco use is a risk factor for six of the eight leading causes of death in the world.

TOBACCO USE is the single largest preventable cause of NCDs accounting for 1 in 6 of all NCD related deaths

Beaglehole et al, 2011

6 million preventable deaths occur globally every year due to tobacco use, most in the productive years of life

In India,



60% of all deaths in India are due to NCDs

The probability of dying from 1 of 4 major NCDs in India between 30 to 70 years is 26%

WHO

275 million Indians over 15 years of age use tobacco

1 million Indians die every year due to tobacco use, the top cause for NCDs

One-third of all cancers in India are tobacco-related

ICMR, 2016

82% of all chronic respiratory diseases in India are tobacco-related

RANKING OF RISK FACTORS IN GBD, 2010 (BASED ON DALYs)

15-49 Yrs.	50-70 Yrs.
• Alcohol	• HBP
• Tobacco Smoke	• Tobacco Smoke
• High BP	• Alcohol
• High BMI	• Fruits
• Fruits	
• Drugs	
• Occupational Injuries	

TOBACCO USE AMONG YOUTH IS RISING

- Between **68,000** and **84,000** young people in low-and middle income countries start smoking everyday.

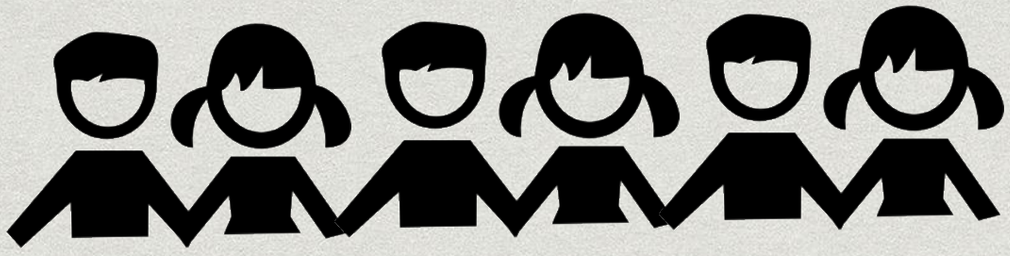
World Bank

- In India, **5500** young people initiate smoking everyday

Patel, 1999

- Tobacco use can start as early as **6 years of age** in low socio-economic strata communities in India (*accessibility; affordability and poor implementation of policies protecting minors in LMICs)*

Arora et al., 2012; Stigler et al., 2006



According to recent estimates

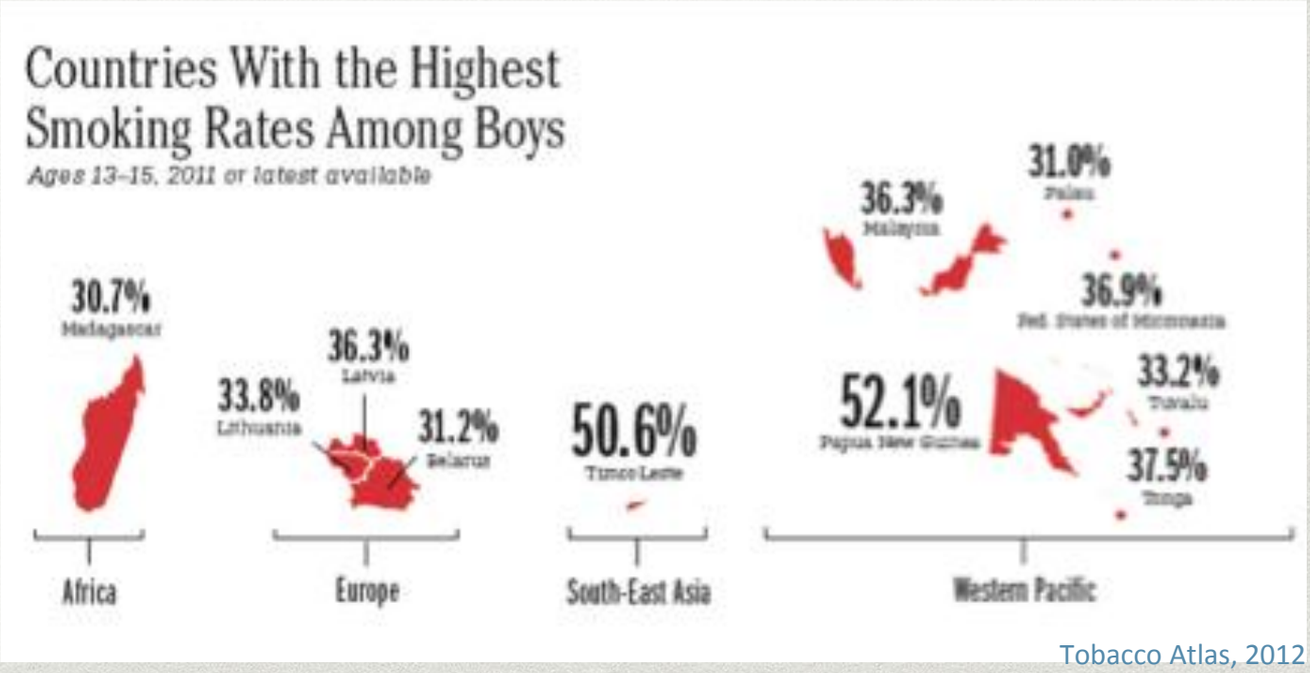
2.5 million

children in India currently use tobacco

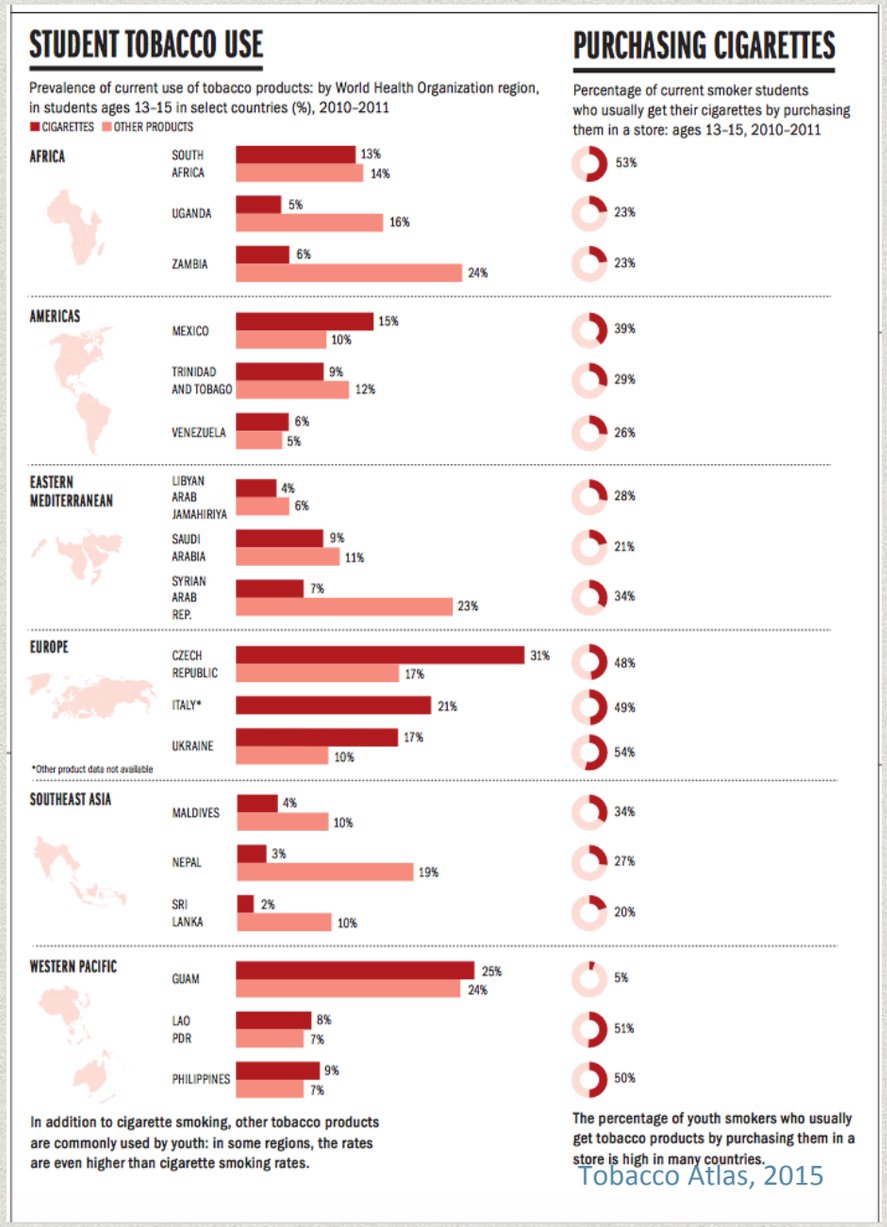
Tobacco Atlas, 2015

TOBACCO USE TRENDS AMONG YOUTH

If present day trends continue, nearly 250 million children and young people alive today, will die from a lifetime of tobacco use, mostly in developing countries



Tobacco Atlas, 2012



Tobacco Atlas, 2015

Nearly 15% youth aged 13-15 years currently use tobacco in India

THE HINDU

MUMBAI » MUMBAI LOCAL

Published: July 4, 2016 00:00 IST | Updated: July 4, 2016 10:33 IST July 4, 2016

Why low-cost kicks among kids are a big concern

THE TIMES OF INDIA

Over 20 per cent Mumbai youth start smoking by 20

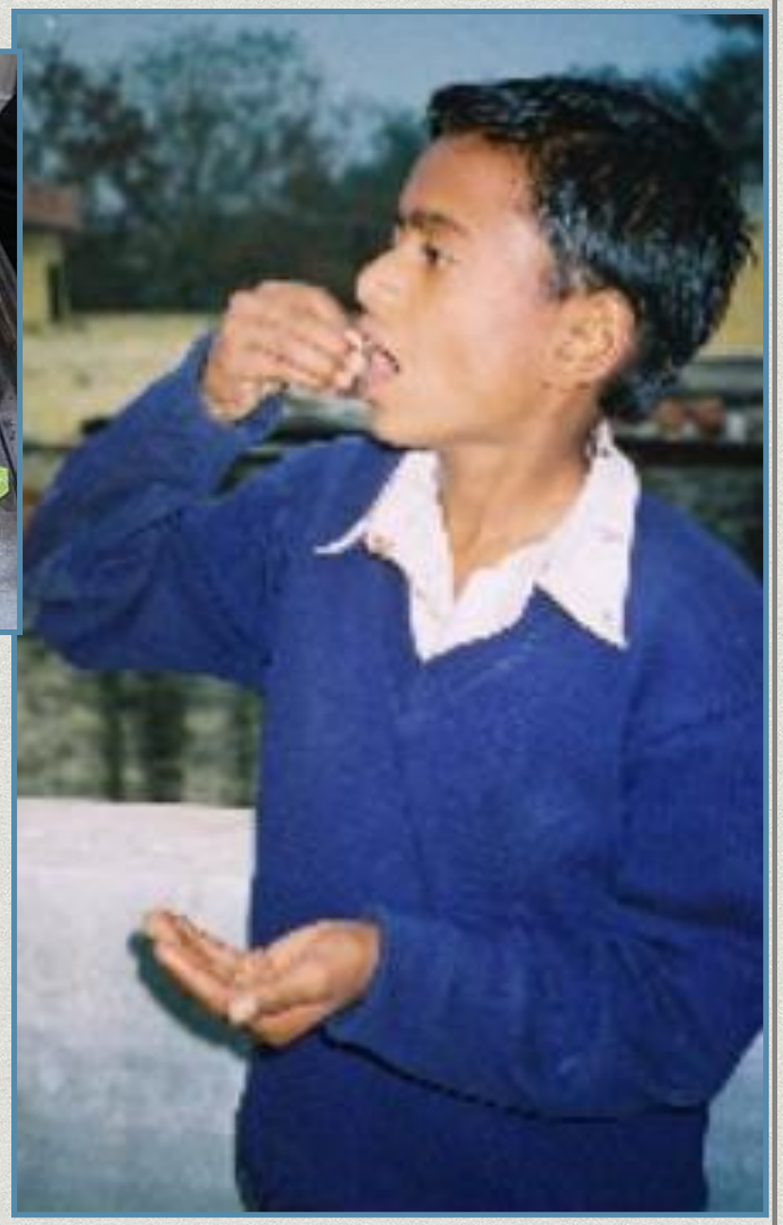
19% girl students in Bhopal use tobacco

Shruti Tomar, Hindustan Times, Bhopal | Updated: Feb 05, 2016 18:52 IST

THE TIMES OF INDIA

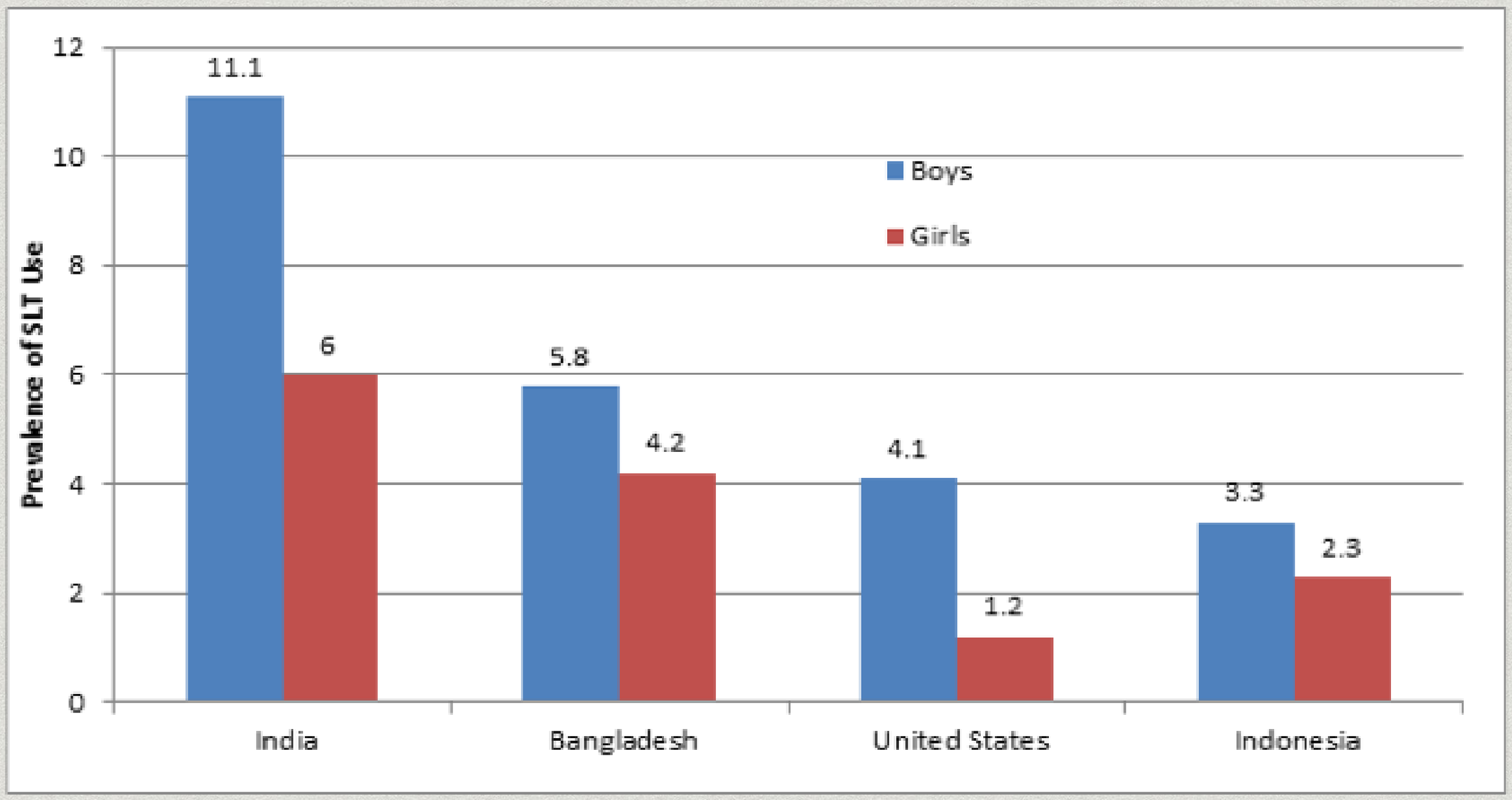
'Cool, fun factor' draws teenagers to e-cigarettes: Study

MYRIAD VARIETIES OF TOBACCO PRODUCTS IN ASIA



Provide opportunities for Adolescents to experiment and continue use

SMOKELESS TOBACCO USE AMONG YOUTH (13-15 years)



IARC Monograph 2009

LOSING OUT EARLY IN LIFE

WHAT MAKES YOUNG PEOPLE VULNERABLE TO TOBACCO USE?

- Tobacco industry sees them as attractive new markets, particularly in LMICs like India
  - Largely non-users
  - Shift in focus from developed to developing countries
- Impressionable age
  - Experimentation
  - Lack of skills to resist/ refusal skills
- Other factors contributing to youth tobacco use in developing countries
  - Low levels of awareness about health effects of tobacco and misconceptions
  - High levels of poverty
  - Weak enforcement of tobacco control legislations
  - High level of exposure to tobacco advertisements through media
  - Easy access, availability and affordability of tobacco products
  - Social acceptability of tobacco use
  - Poor enforcement of tobacco control policies in schools (especially in government schools)

Reddy & Gupta, 2004; Shimkhada & Peabody, 2003; Beaglehole & Yach, 2003; CDC, 2009; Sinha et al., 2002; Sinha et al., 2003; Gupta et al. 2002

RISK FACTORS (VULNERABILITIES) THAT PROMOTE YOUTH TOBACCO USE

Environmental Risk Factors

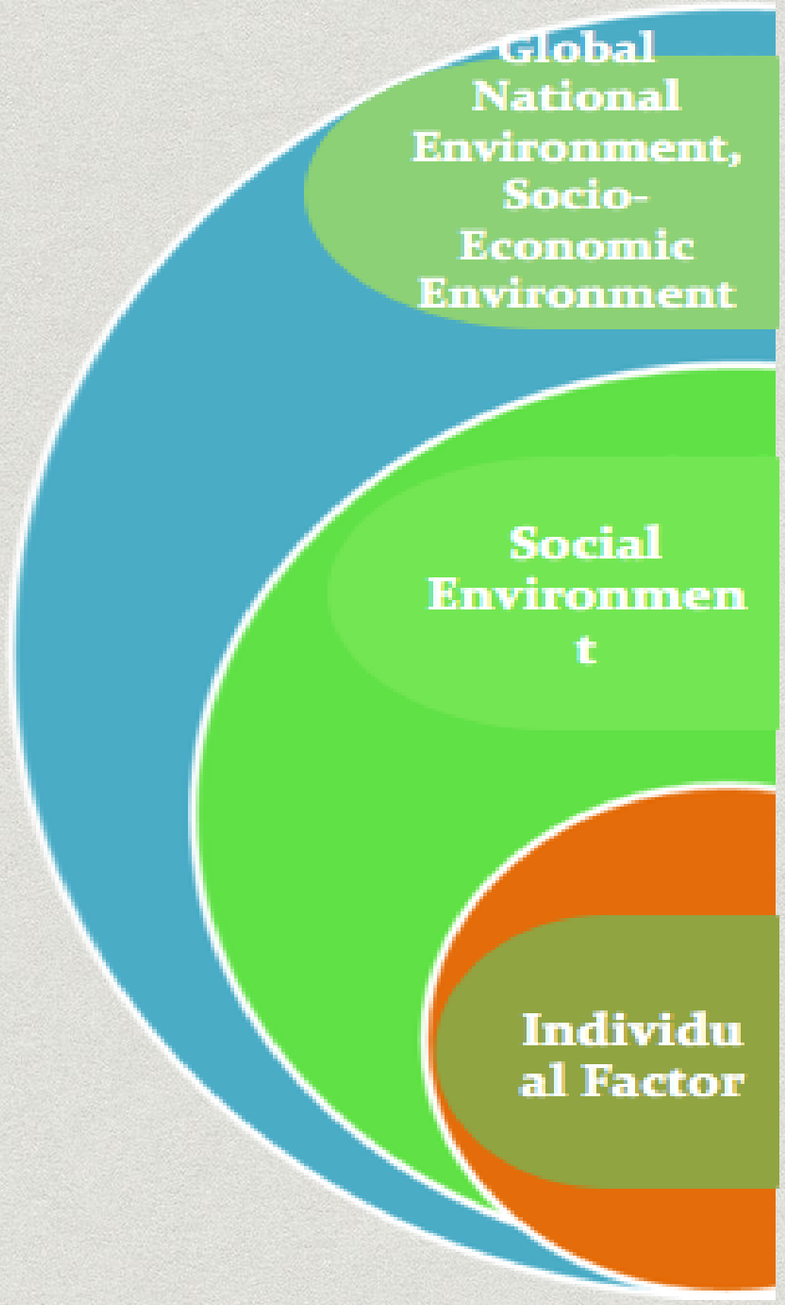
- Myriad Varieties of Affordable Tobacco Products;
- Exposure to tobacco smoke in public and work places;
- In-existent/Weak Health Warnings;
- Tobacco Marketing & Advertising;
- Easy Accessibility of tobacco products to minors

Interpersonal Risk Factors

- Parental Tobacco Use;
- Normative Beliefs & Expectations;
- Peer-tobacco use;
- Social norms

Individual Risk Factors

- Genetic Predilections;
- Knowledge about tobacco use;
- Nicotine Addiction;
- Reasons to use tobacco;
- Reasons not to use;
- Self-efficacy (refusal skills).
- Self Image



Arora et al., 2012

TOBACCO INDUSTRY TACTICS

TOBACCO INDUSTRY TACTICS

ADVERTISING, PROMOTION AND SPONSORSHIPS

INDONESIA

SWITZERLAND

ISRAEL

INDIA

TOBACCO INDUSTRY TACTICS

GLOBAL CAMPAIGN: DON'T BE A MAYBE

Company identifies and engage socially active and influential college going youth (18-21 years) as Campus Ambassadors.

Focus on Metropolitan cities

The campus ambassadors enrolled in outreach programme for generous stipend

Given specified quantity of cigarettes for that month(ranging close to a carton/ month)

Instructed to distribute free cigarettes in pubs, house parties, clubs and other such events, in exchange for a picture with the recipient of the box/boxes as evidence of the distribution.

Expands the overall category of cigarette smokers from the company's point of view, and also allows the benefit of encouraging brand loyalty.

TOBACCO INDUSTRY TACTICS

CAMPUS AMBASSADOR MODEL

NEW FORMS OF TOBACCO PRODUCTS ARE GAINING POPULARITY AMONG YOUNG PEOPLE

- **The tobacco industry is using the same flavours found in popular candy and drink products to lure kids to use candy-flavoured tobacco products.**
- **Almost 90% of adult smokers start smoking as teenagers. Flavored cigarettes are a gateway for many children/young adults to become regular smokers**

  [FDA, 2009]
- **Flavored smoking products are used by 42% of middle-school and high-school students who smoke**

  [King AB, 2013]
- **Several tobacco products contained flavor chemicals at much higher concentrations than in the non-tobacco products.**
- **Shisha/hookah smoking has become increasingly popular among young people**
- **Tobacco industry has introduced flavor capsule cigarettes to make tobacco products more appealing, particularly to youth, and facilitate addiction.**

[Thrasher, J. F., et al., 2014]

Flavored Bidis

Flavored Hookahs

Flavored Cigars

Flavored Chewing Tobacco

E-CIGARETTES:
THE TOBACCO INDUSTRY'S NEW PROJECT

- Produce an aerosol like vapour Contain carcinogens and toxic chemicals such as diethylene glycol, an ingredient used in antifreeze.
- Marketed in youth-friendly candy and fruit flavors including bubblegum, cookies, cream

[USDHHS, 2014]

- **Diversified to other smoking products like e-shishas and e-hookahs also available in multiple flavors**
- e-cigarettes could be a gateway to nicotine addiction and use of other tobacco products, including cigarettes

[CDC, 2013; FDA, 2009]

- In United Kingdom, e-cigarettes are licensed and regulated as an aid to quit smoking and are available as "medicine" over the counter
- No credible scientific evidence that e-cigarettes are effective as smoking cessation therapies
- The vapours have deleterious effects on different systems of the body.- increase in airway resistance and constriction of the peripheral airways

[Constantine V., et al., 2012]

TOBACCO ADVERTISING – A MAJOR INFLUENCE

- Students of 6th and 8th grades from private and government schools of Delhi followed for 3 years and causation investigated between their baseline exposure to tobacco advertisement and receptivity to tobacco promotional items at baseline and proportion of students progressed to tobacco use.

- Students exposed at more than four places were 1.5 times (95% CI 1.12 to 1.94; $p<0.05$) more likely to progress to tobacco use at endline versus those not exposed.

- Among boys, those exposed at more than four places were 1.7 times more likely to progress (95%CI 1.14 to 2.62; $p<0.05$).

- In both bivariate and multivariate analyses, the risk of progression at endline was more than two times higher (95% CI 1.28 to 4.32; $p<0.05$) among boys who were highly receptive versus non-receptive boys.

Arora et al., 2011

(SLT Advertising on city bus, Mumbai)

(Bravery Awards Sponsored by 'Godfrey Phillips India', a Phillip Morris Affiliate)

TOBACCO USE IN BOLLYWOOD MOVIES

- Content analysis of 59 movies during 2006-2008: 412 tobacco use occurrences, 12 occurrences per movie
- 7.3% adolescents reported owing a tobacco promotional item
- Even after adjusting for covariates ,those with highest exposures are at more than double the risk of being ever tobacco users as compared to those in lowest exposure with a dose response relationship
- Similar relationship exists for receptivity to tobacco promotions and ever tobacco use.

Association of ever tobacco use with exposure to tobacco use in movies and receptivity to tobacco promotions among Indian adolescents (n=3956)

Exposure variable	OR (95% CI)			
		Adjusted		
	Crude	Model I*	Model II †	Model III‡
Movie tobacco use First Q Second Q Third Q Fourth Q	Reference 0.8 (0.5-1.3) 1.3 (0.8-2.0) 1.9 (1.3-2.9)	Reference 1.0 (0.6-1.7) 1.5 (1.0-2.4) 2.3 (1.5-3.6)	Reference 1.0 (0.6-1.8) 1.5 (0.9-2.5) 2.1 (1.3-3.5)	Reference 1.1 (0.6-2.0) 1.6 (0.9-2.7) 2.3 (1.3-3.9)
Receptive to tobacco promotions No Yes	Reference 3.0 (2.1-4.2)	Reference 2.8 (1.9-3.9)	Reference 2.0 (1.4-3.0)	Reference 2.0 (1.4-3.0)

*Adjusted for age, gender, school type and class.
†Adjusted for demographic profiles and receptive to tobacco advertisements, family members using tobacco and friends using tobacco.
‡Adjusted for demographic profiles, social influences, academic performance, sensation seeking and authoritative parenting.

Arora et al., 2012

EFFECTS OF MEDIA AND MARKETING

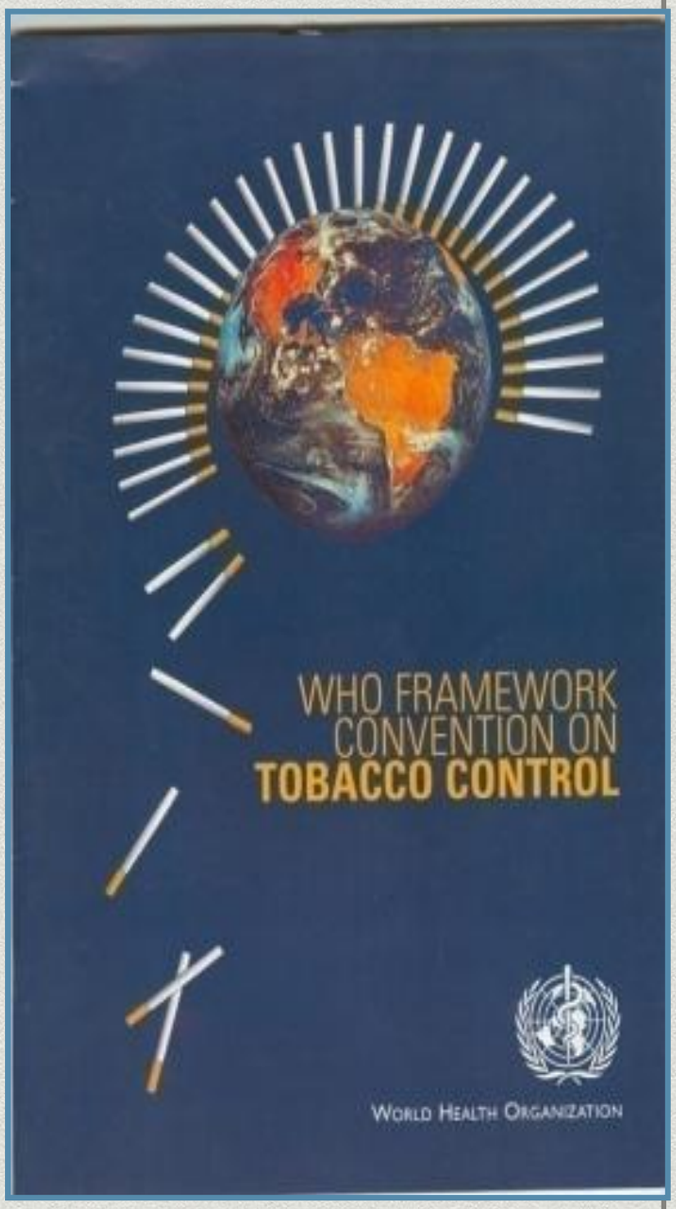
Strength of evidence for effects of media and marketing on adolescent health risks

	Tobacco use	Alcohol use	Obesity	Sexual risks
Distal exposures				
Point of sale advertising (POS)	Strong	Moderate	Strong (food choice)	NA
Imagery in films/movies	Strong	Strong	Moderate (amount of food)	NA
Imagery in television	Moderate	Moderate	Strong (food choice/amount) Strong (food purchase request)	Moderate
Music videos/MTV	No studies	Moderate	No studies	Low
Cartoon media characters	No studies	No studies	Moderate (food choice & purchase request)	No studies
Magazines	Moderate	Moderate	No studies	No studies
Outdoor advertising	NA	Moderate	No studies	No studies
Imagery on Internet	Low	NA	No studies	Low
Online social networking sites	Low	NA	No studies	NA
Concessional stands at events	No studies	Moderate	No studies	No studies
Radio advertising	No studies	Low	No studies	No studies
Composite (multiple media)	No studies	Moderate	No studies	No studies
Advertising (media unspecified)	Moderate	No studies	Strong (food choice/amount)	No studies

The Lancet- Our future: a Lancet Commission on adolescent health and well being

FRAMEWORK CONVENTION ON TOBACCO CONTROL (WHO FCTC) AND COTPA 2003

- **Article 16 -** prohibits sale of tobacco products to and by minors. (Section 6)
- **Article 8 -** provides for protection from exposure to tobacco smoke in indoor workplaces, public transport and indoor and other appropriate public places. (section 4)
- **Article 13 -** comprehensive ban on tobacco advertisement, promotion and sponsorship including cross border advertising. (Section 5)
- **Article 6 -** appropriate tax and price policies on tobacco products.
- **Article 11 -** large, clear and visible rotational health warnings or other messages that include pictures conveying the harmful effects of tobacco use. (Section 7)



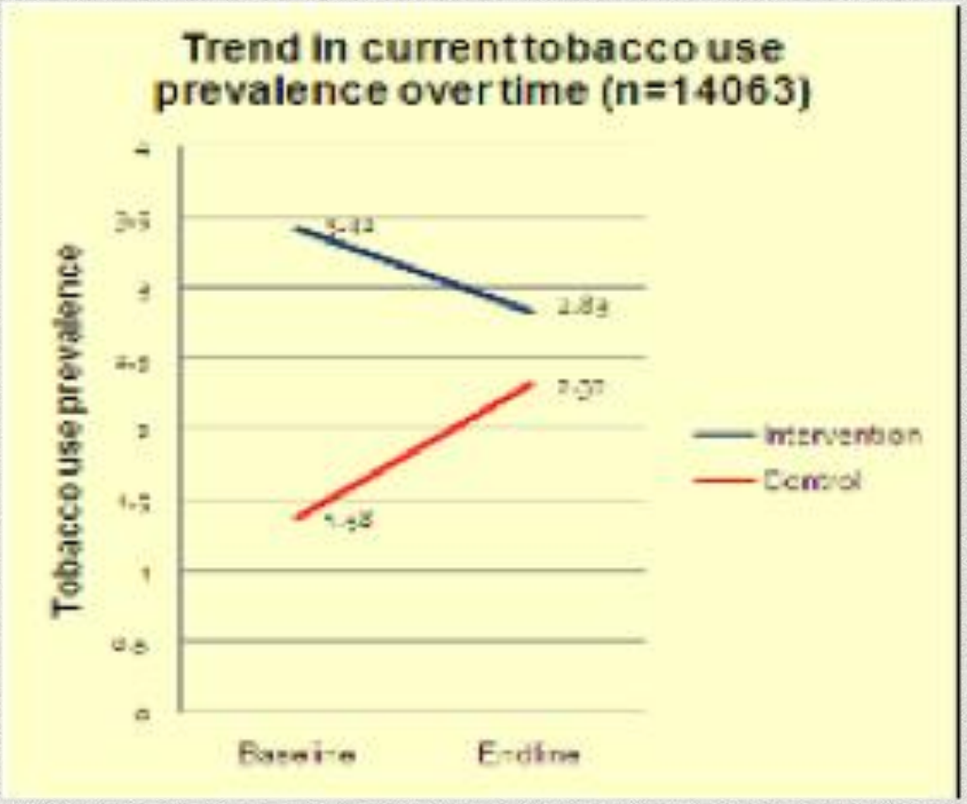
http://www.who.int/fctc/en/

DEMONSTRATING EFFECTIVENESS OF SCHOOL-BASED TOBACCO USE PREVENTION PROGRAMMES: PROJECT MYTRI

- HRIDAY- CATCH, a group randomized trial with 30 schools in Delhi, 1996-1998: Intervention group was significantly less likely 0o have been offered, received, experimented with or have intentions to use tobacco in future as compared to control group. ***Reddy et al, 2009***

- Project MYTRI, a multi-component intervention with school-going youth in urban settings of India,14,000 students in 32 schools - both government and private, Delhi and Chennai. Enrolled adolescents in grade 6 and 8; aged 10 – 16 years; for a two year intervention
  - ***Perry et al., 2006***

  - Overall, current tobacco use increased by 68% in the control group and decreased by 17% in the intervention group over the study duration
  - Intentions to smoke increased by 5% in the control group whereas intentions to smoke decreased in intervention schools by 11%
  - Intentions to chew tobacco decreased by 12% in the control group while decreased by 28% in the intervention group.
  - ***Perry et al., 2009***



MYTRI INTERVENTION DESIGN

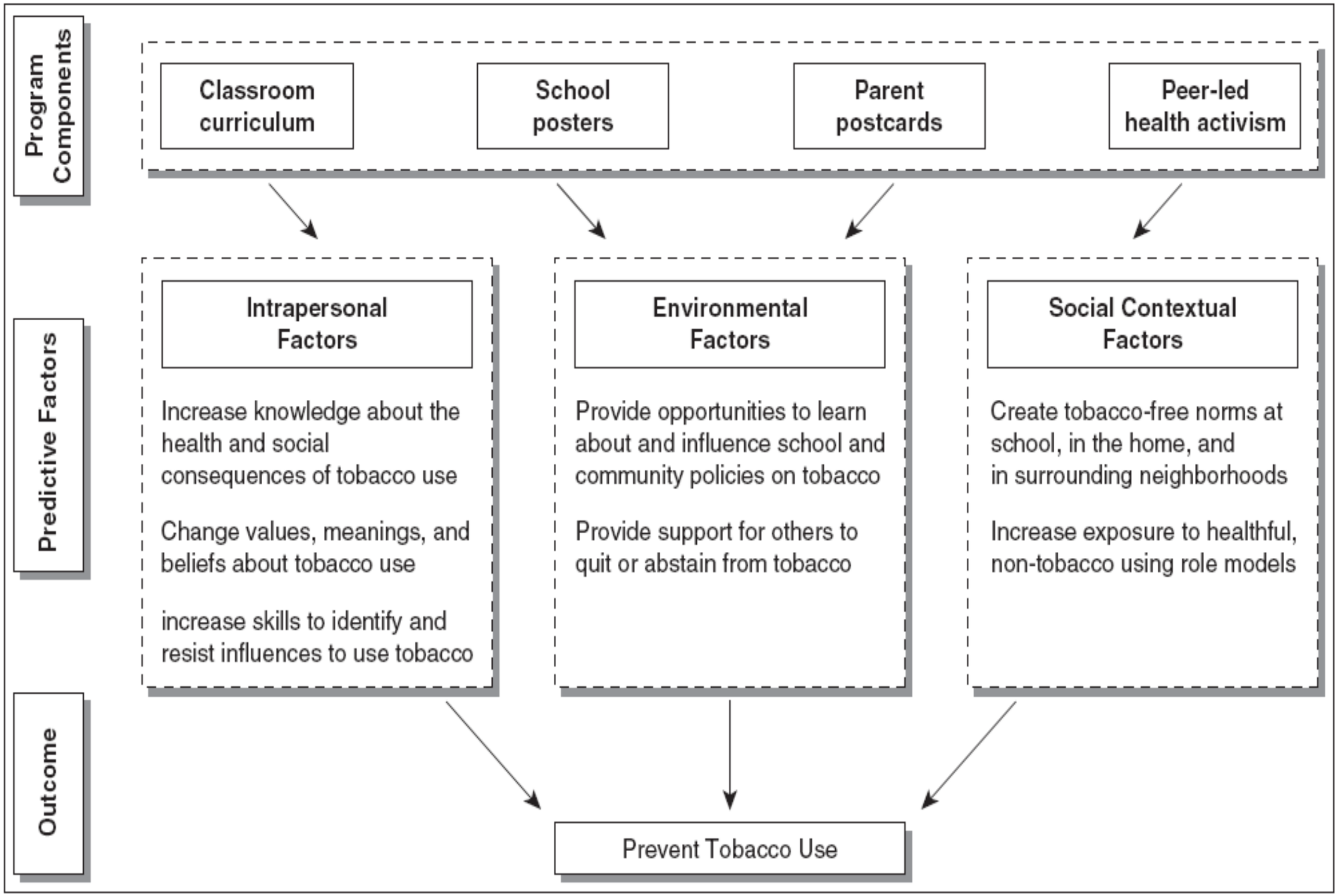


FIGURE 1: Project Mobilising Youth for Tobacco-Related Initiatives in India (MYTRI) Conceptual Model

Perry et al., 2006

DEMONSTRATING EFFECTIVENESS OF SCHOOL-BASED TOBACCO USE PREVENTION PROGRAMMES: INFORMING INDIA'S NATIONAL TOBACCO CONTROL PROGRAMME

Published in final edited form as:
Glob Health Promot. 2011 March ; 18(1): 9–12.

Effectiveness of health promotion in preventing tobacco use among adolescents in India:

Research evidence informs National Tobacco Control Programme in India

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Abstract

This case study has two aims. First, it describes intervention strategies from two school-based programs (HRIDAY-CATCH and Project MYTRI) designed to prevent tobacco use among adolescents in India. Second, it explains how evidence from randomized controlled trials of these intervention programs was used by HRIDAY(Health Related Information Dissemination Amongst Youth), a local non-governmental organization in Delhi, to advocate for scaling up the Government of India's(GOI) tobacco control efforts to include school health interventions as one component of India's National Tobacco Control Program (NTCP).

School health programs were included as a component of the National Tobacco Control Programme, launched in 2007

The ***US Surgeon General's Report 2012*** on 'Preventing Tobacco Use Among Youth and Youth Adults' cites the effectiveness and results of Project MYTRI as a successful school-based multi-component tobacco intervention

(http://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/full-report.pdf)

SCHOOL-BASED INITIATIVES

Evidence

Comprehensive reviews and meta-analyses confirm that school based programmes are successful, provided they:

(a) are interactive;

(b) engage similar-age peers as facilitators;

(c) involve other segments of the community (e.g., parents);

(d) are based on the social influences model;

(e) are conducted across multiple sessions and multiple years, in early to mid adolescence;

(f) provide adequate training and support.

Outcomes

a) If well implemented, could produce a long-term relative improvement (RI) of between 25 and 30%

b) Tobacco-free school policy and non-punishment focused programmes are best for motivating adolescents

c) Need an environment that is supportive at all levels

SCHOOL BASED TOBACCO CESSATION PROGRAMMES ARE EFFECTIVE

- **Project Ex**
  - 8 session school based clinic teen cessation programme
    - Motivational activities (games, talk shows, cue cards etc.)
  - The programme has been tested with school going students who smoke in developed (USA) and developing countries(China, India)
  - **In India, 27% reported that Project EX helped to strengthen their commitment to stay tobacco free or never use tobacco.**

Sidhu AK, 2015

- In the US, three months post intervention 30 day quit rates were demonstrated to be 17% among intervention students as compared to only 8% among control students
- In China, follow-up at four months demonstrated a 30 day quit rate of 10.5%. Among those who did not quit, there was 33% reduction in consumption at four month follow-up

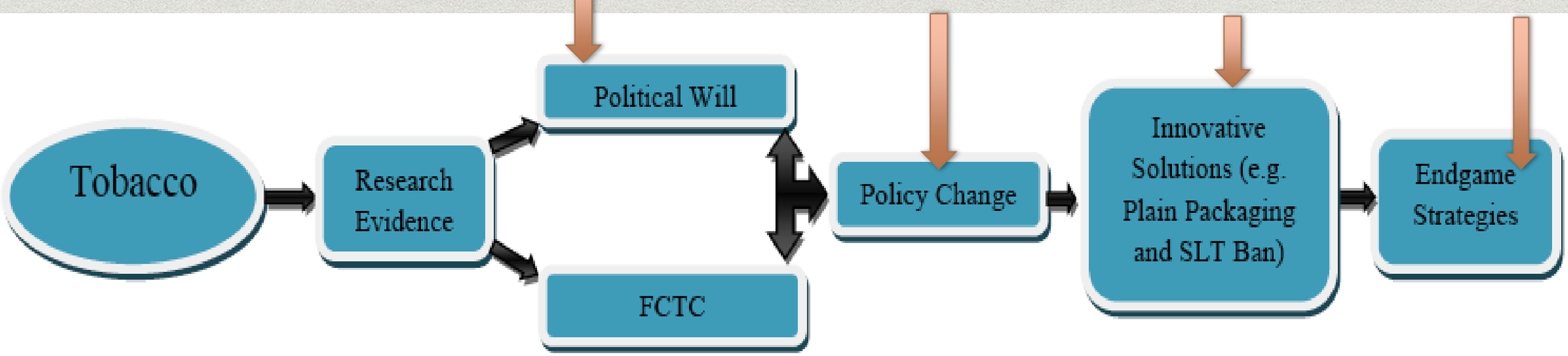
(Sussman et al, 2001; Zheng et al., 2004)

YOUTH AS STAKEHOLDERS AND BENEFICIARIES IN EFFORTS TO ELIMINATE TOBACCO

Appeal to the Prime Minister of India to impose a ban on all forms of tobacco advertising in 1998

Regulation on depiction on tobacco use on screen in 2012

Thumbs Up – Thumbs Down campaign by youth to monitor compliance of film rules



Tobacco Kills 6 million people each year → 30% relative reduction in prevalance of current tobacco use by 2025 → **'Endgame'** To reduce prevalence <5% by 2040

TOBACCO CONTROL POLICY WINS IN INDIA

- Food Safety and Standards Authority of India notified prohibition on sale of food items containing tobacco or nicotine as ingredients: 33 states banned manufacture and sale of SLT (especially Gutkha)

- **India is the first country to strictly regulate tobacco imagery in films and television**

- Sale of tobacco products is prohibited within 100 yards of any educational institutions

- Graphic warnings boards at point of sale

- 85% Pictorial health warnings from April 2016

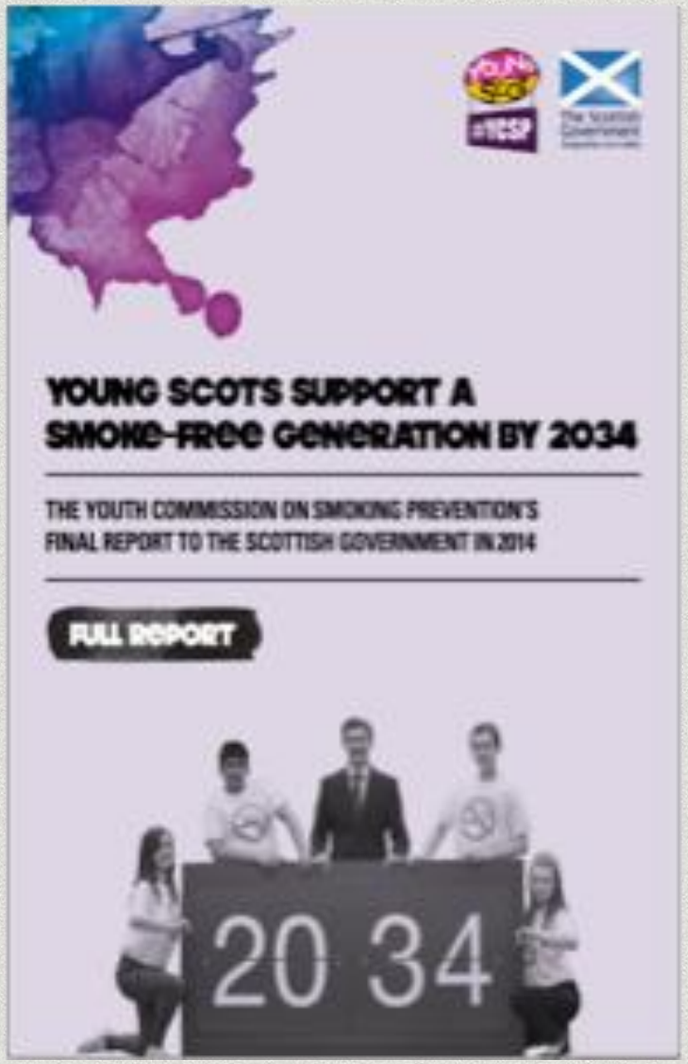
Launched in New Delhi, India in September 2013

NO MORE TOBACCO 21C

Global campaign seeks to convene group of youth worldover who envision tobacco –free generations and prepare strategies/ policies that can protect youth from dangers of tobacco

www.facebook.com/NMT21C

ENGAGING YOUTH ICONS AS ROLE MODELS



USING SOCIAL MEDIA (INTERNET AND PHONE BASED)

SPEAKING THEIR LANGUAGE

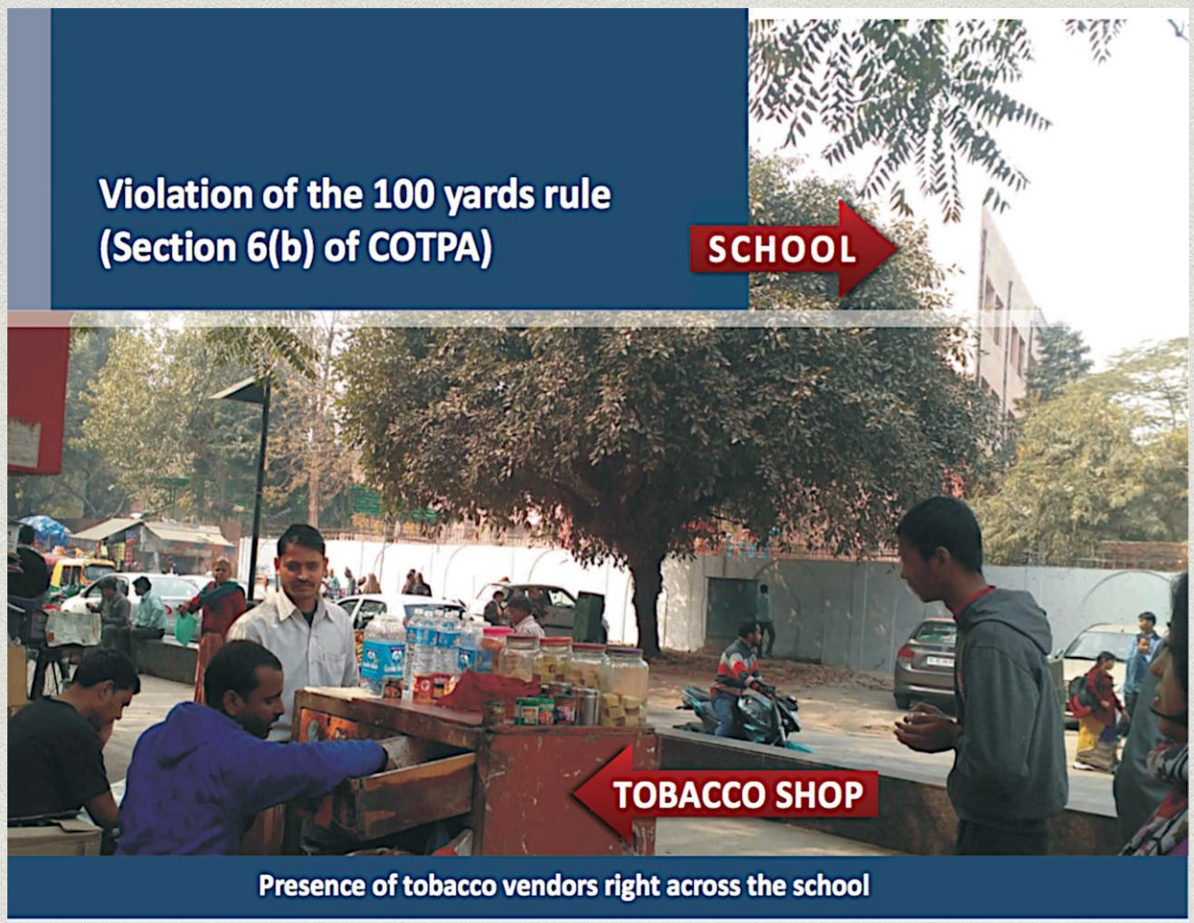
YOUNG PEOPLE DEMANDING STRONG TOBACCO CONTROL POLICIES: 85% PICTORIAL HEALTH WARNINGS IN INDIA

YOUTH ADVOCACY AND EMPOWERMENT TO COUNTER TOBACCO USE

- Youth engagement is imperative for developing an effective and comprehensive tobacco control programme.

- Youth advocacy platforms such as **Youth for Health (Y4H)** model aimed at formulating of a global alliance for tobacco control have shown success [http://y4h.hriday-shan.org].

- Youth representatives felicitating Honourable Health Minister of India- Mr. JP Nadda on WNTD for enforcing larger and effective pictorial health warnings on tobacco product packages.

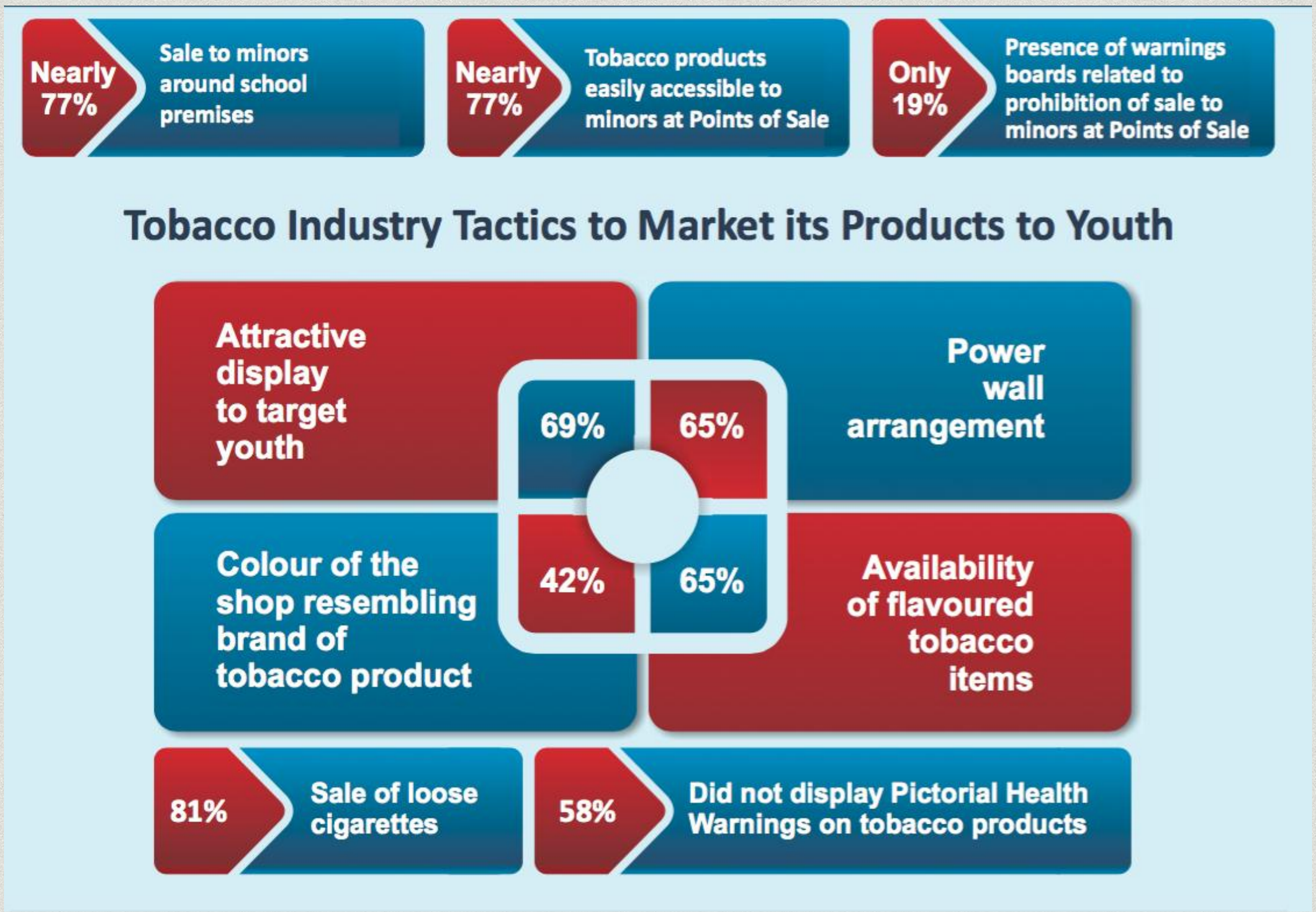


Phase 1: Observations around 306 schools of Delhi to shortlist schools with rampant violations of COTPA

Phase 2: School-based trainings to sensitize school students and school authorities about tobacco control laws, particularly those focused on protecting youth from exposure and access to tobacco

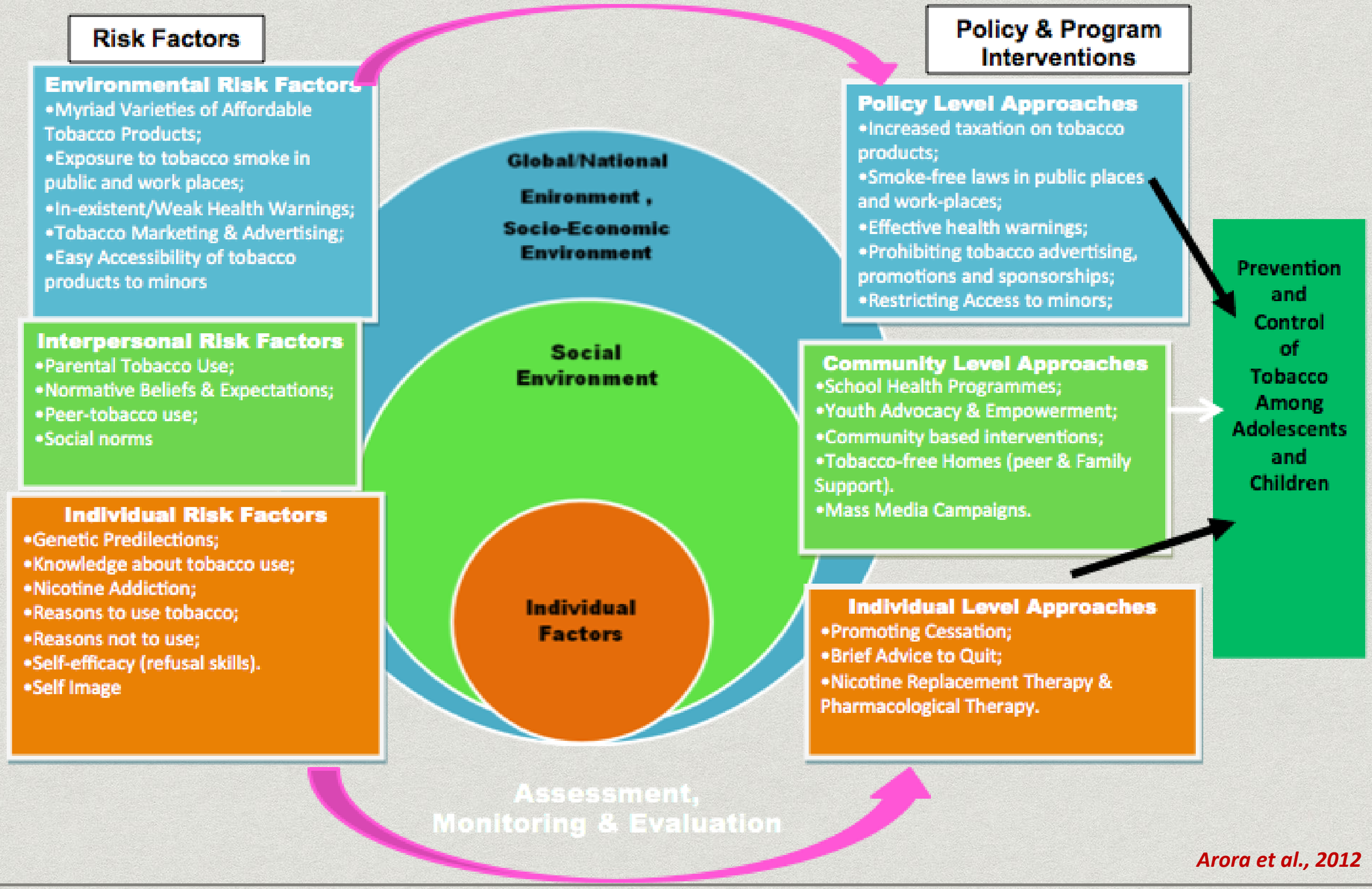
Students from 10 schools monitored 26 tobacco-kiosks in their neighbourhood and reported violations to concerned authorities

YOUNG PEOPLE MONITORING VIOLATIONS OF TOBACCO CONTROL LAWS

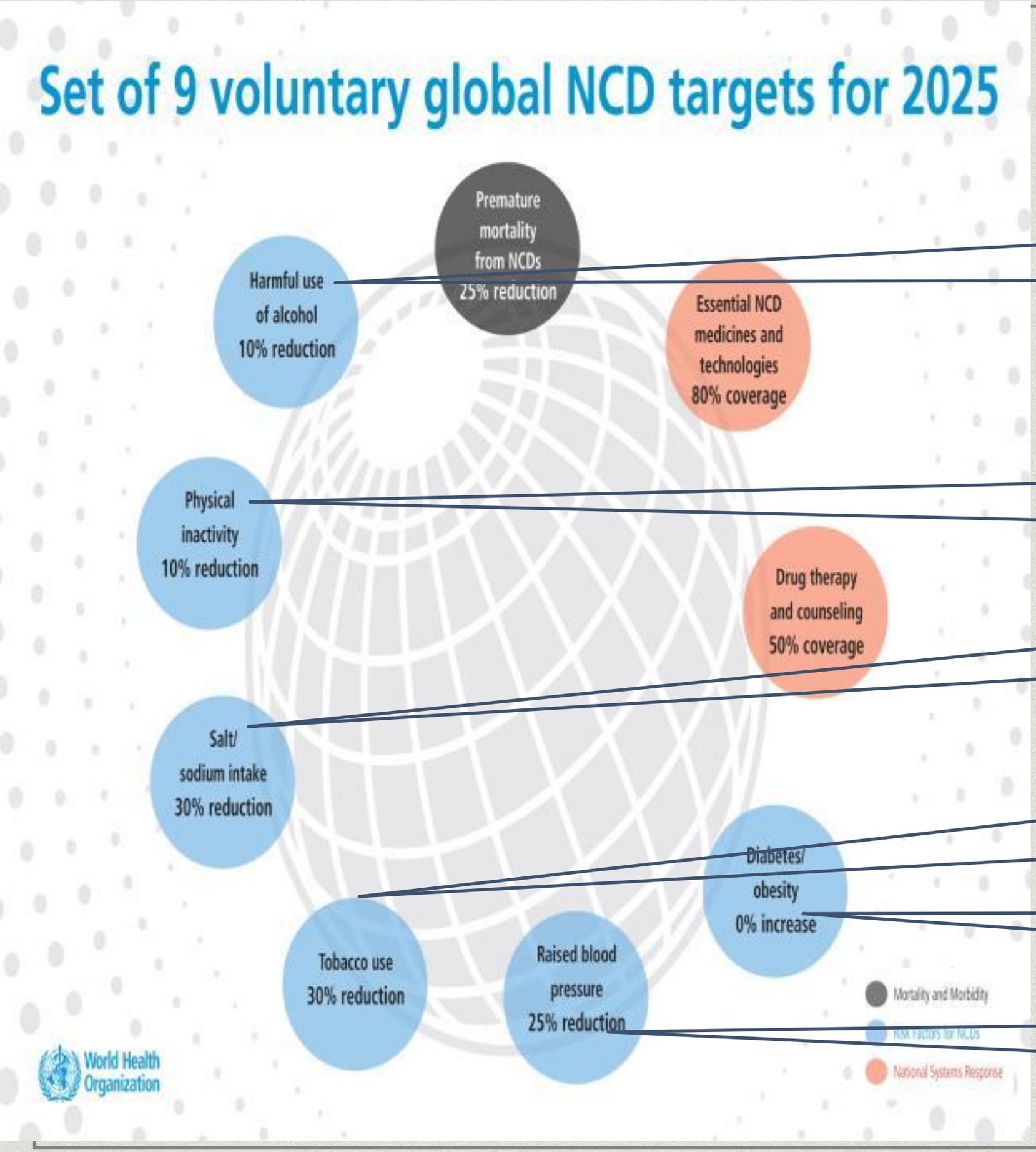


RESULTS FROM YOUTH-LED MONITORING ACTIVITIES

INTERVENTION MODEL FOR PROTECTING CHILDREN AND ADOLESCENTS FROM TOBACCO3: THE IMPACT FRAMEWORK



Arora et al., 2012



Youth specific indicators

- Per capita consumption
- 5% reduction by 2020;
- 10% by 2025

Insufficient physical activity
- 5% reduction by 2020
- 10% by 2025

Reduction in salt intake
- 20% by 2020
- 30% by 2025

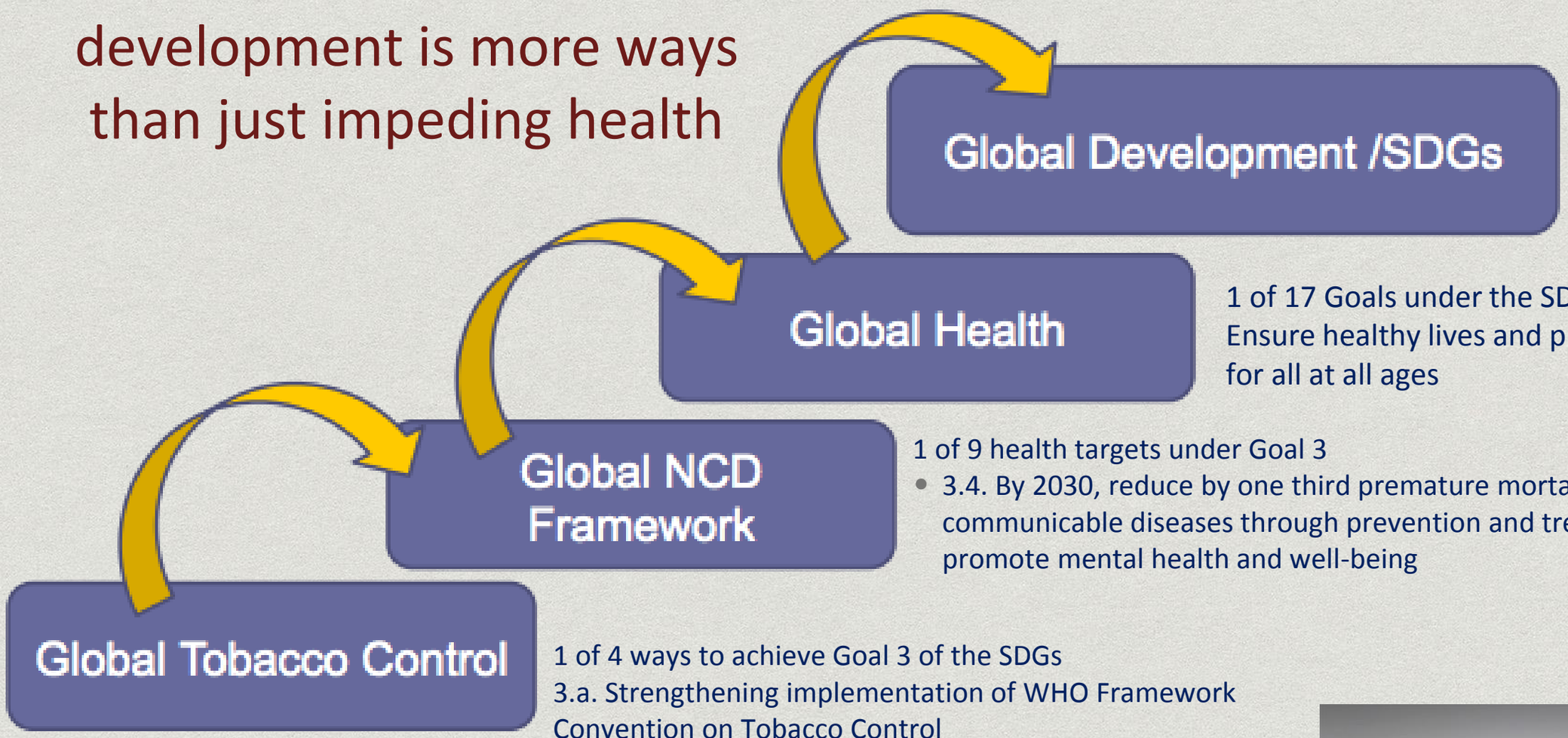
Prevalence of current tobacco use
- 15% reduction by 2020
- 30% by 2025

Halt the rise in obesity by 2025

Reduction in blood pressure
- 10% by 2020
- 25% by 2025

TOBACCO AND THE SDGS

Tobacco hinders development is more ways than just impeding health



1 of 17 Goals under the SDGs
Ensure healthy lives and promote well-being for all at all ages

1 of 9 health targets under Goal 3

- 3.4. By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

1 of 4 ways to achieve Goal 3 of the SDGs
3.a. Strengthening implementation of WHO Framework Convention on Tobacco Control

TOBACCO CONTROL IS IN THE NEW DEVELOPMENT AGENDA

CREATING A TOBACCO-FREE FUTURE IS POSSIBLE WITH YOUNG PEOPLE IN THE FOREGROUND!

THANK YOU!

MONIKA.ARORA@PHFI.ORG