

Tobacco Prevention and Cessation Program

Nueces Training Program
Directorate of non communicable disease prevention



Learning Outcomes

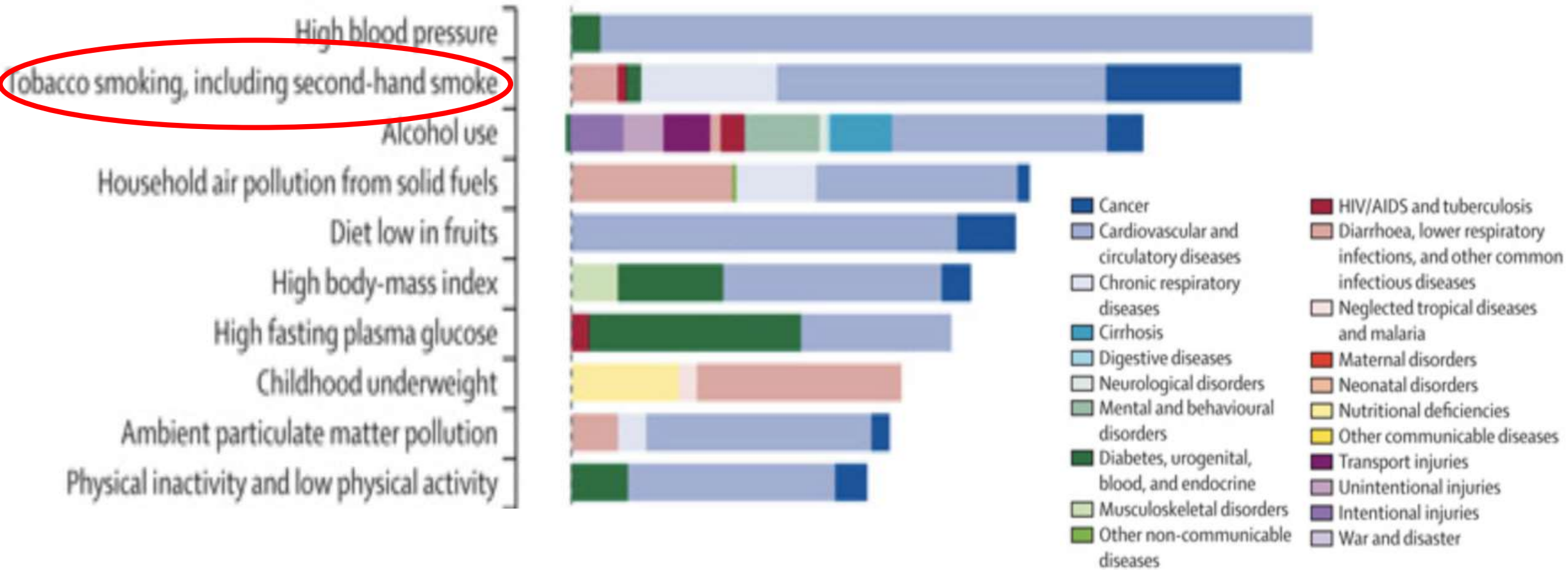
- Classification of tobacco products [smoking & smokeless tobacco]
- Burden and trends in Sri Lanka
- Introducing second hand and third hand smoking
- Role of PHNO (Brief Interventions for tobacco cessation)
- Evidenced based interventions
- Sharing best practices by PHNO/ NO (Special programs/awareness campaigns)

What are the types of tobacco products used in Sri Lanka

Types of tobacco used in Sri Lanka

Smoked tobacco products	Smokeless tobacco products
Cigarettes	Betel quid chewing
Bidi	Tobacco chewing
Cigars	Baabul
Pipes	Snuff
Hookah	Thool
Seesha	Paan Masala
	Guthka

Burden of tobacco smoking – Global situation



Global burden

- . Kills up to 1/2 of its users
- . Kills 8 million of people
 - . Direct tobacco use – 7 million
 - . Second hand smoking – 1.2 million

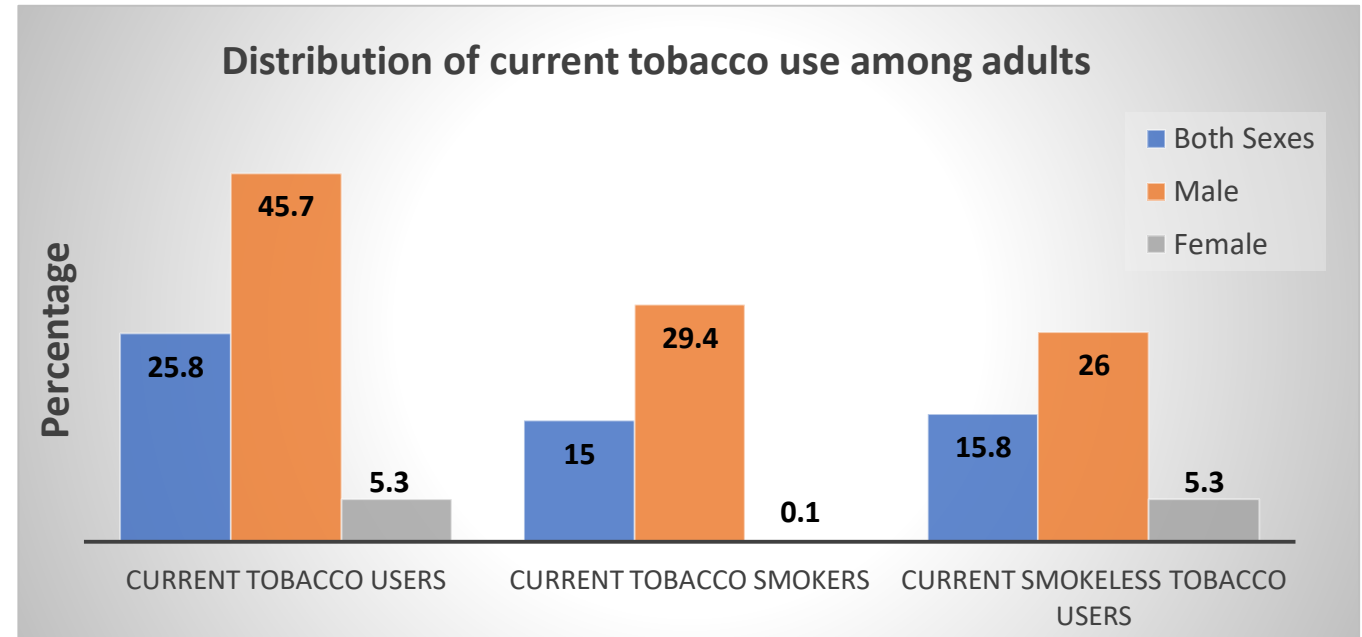
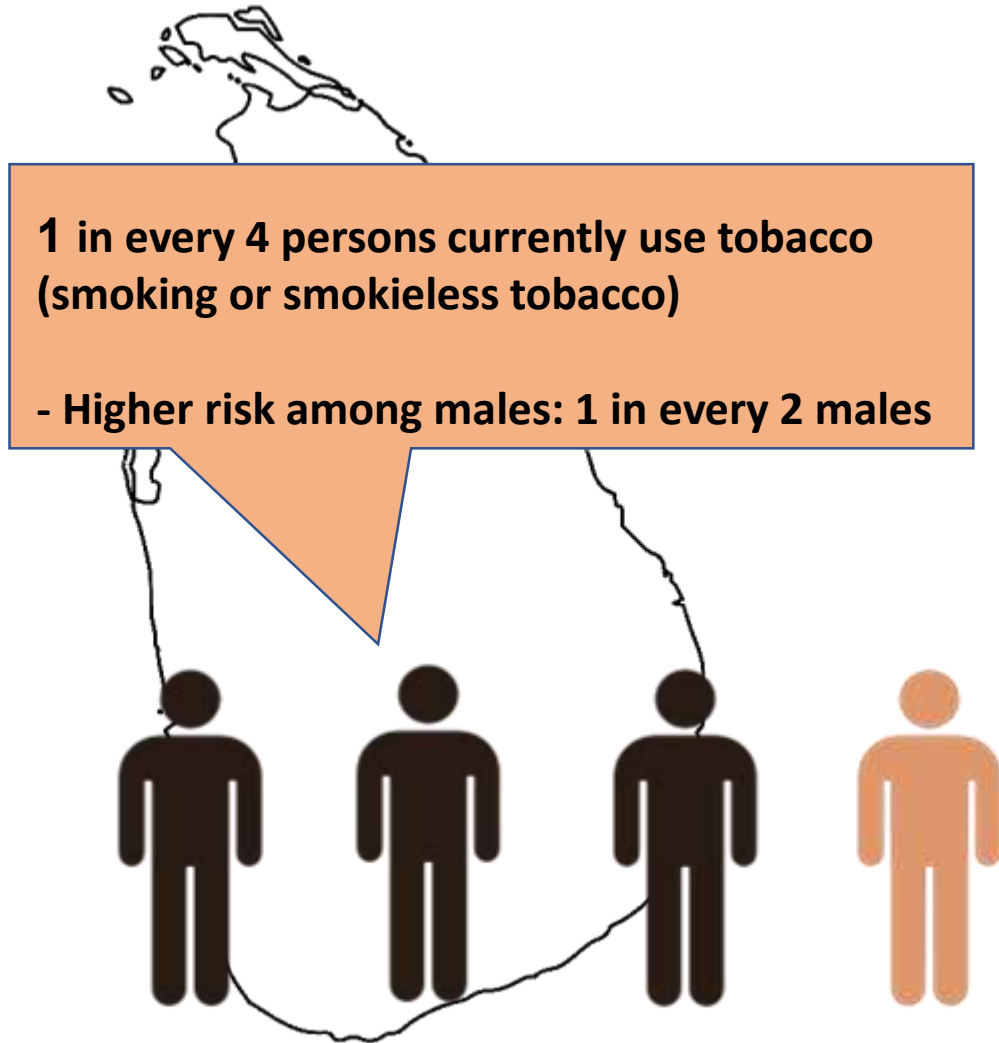
WHO 2010

Burden in Sri Lanka

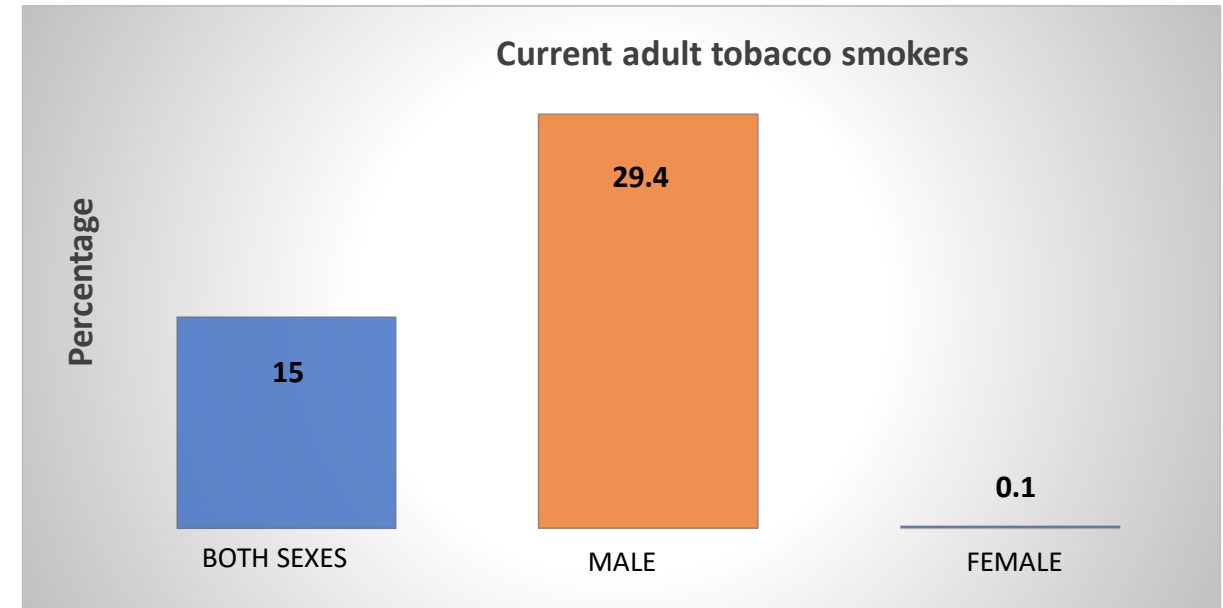
- . Kills 12351 people a year
- . Accounts for 1 in 10 deaths

WHO FACT SHEET 2018

Burden of current tobacco use (smoking and smokeless) among adults in Sri Lanka



Burden of current tobacco smoking among adults in Sri Lanka



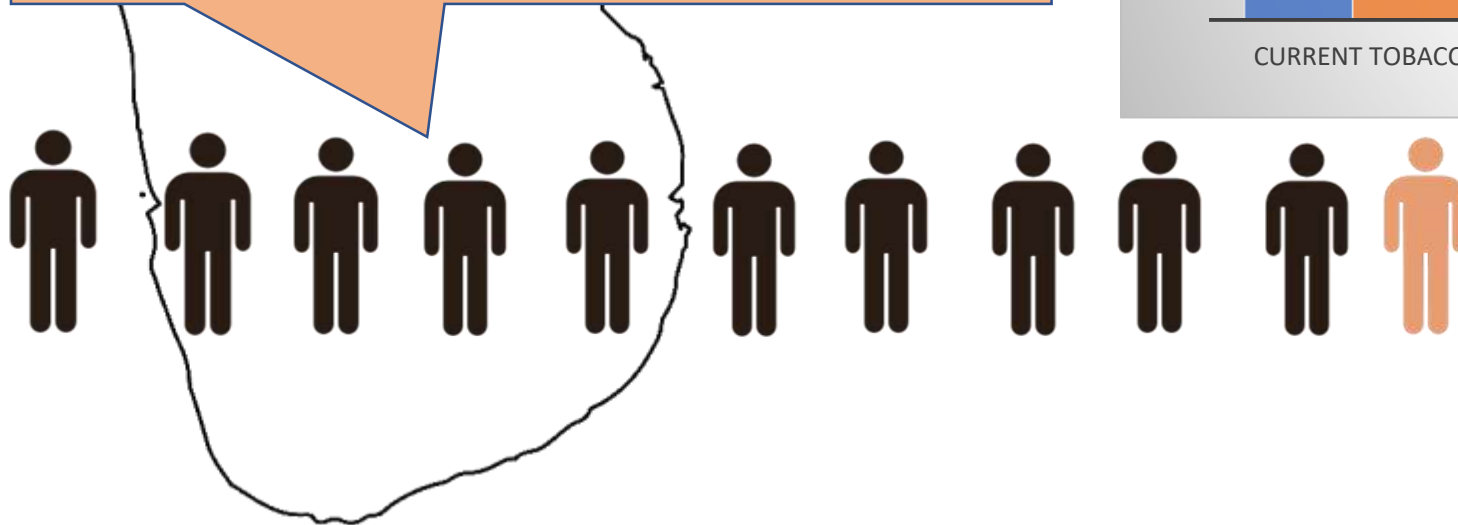
STEPS Survey, 2015

Burden of current tobacco use (smoking and smokeless tobacco) among children in Sri Lanka

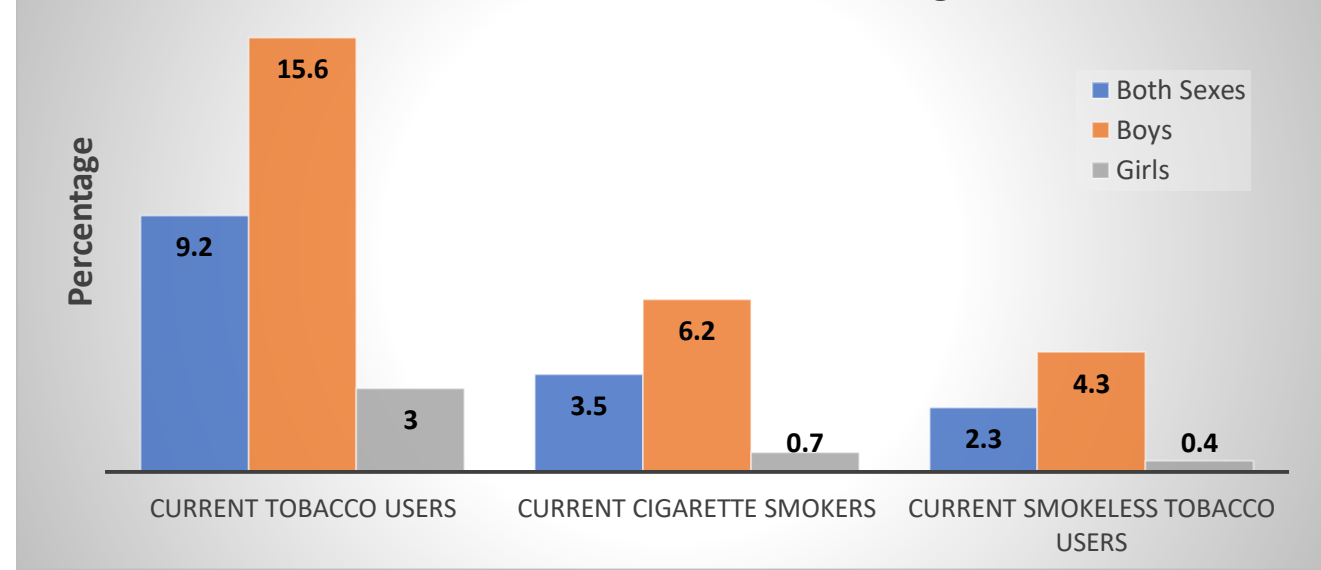


1 in every 11 students of 13-17 years, currently use tobacco (smoking or smokeless tobacco)

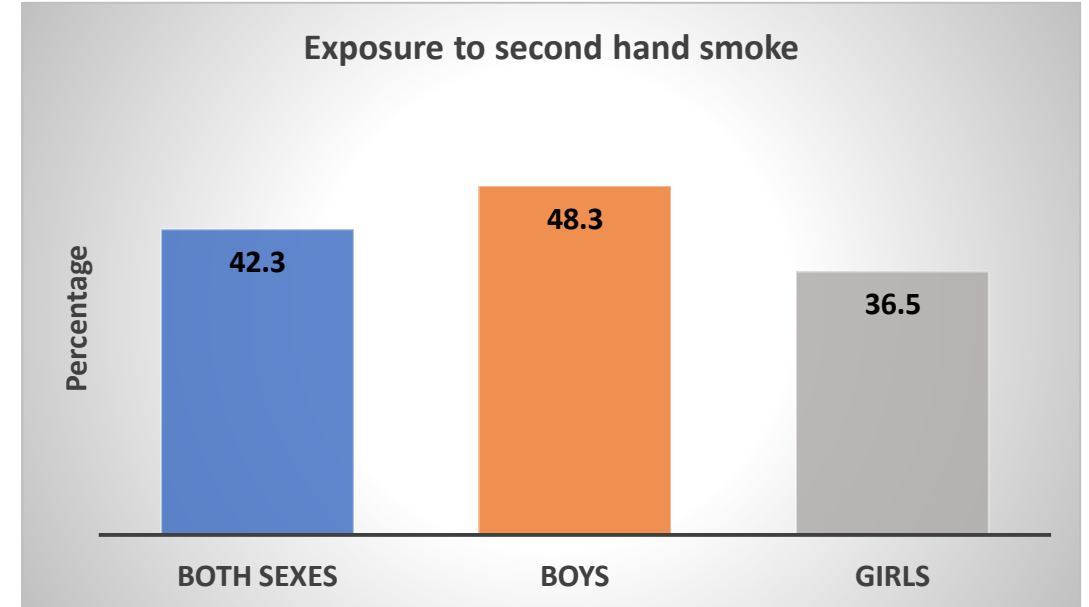
- Higher risk among boys: 1 in every 6 boys



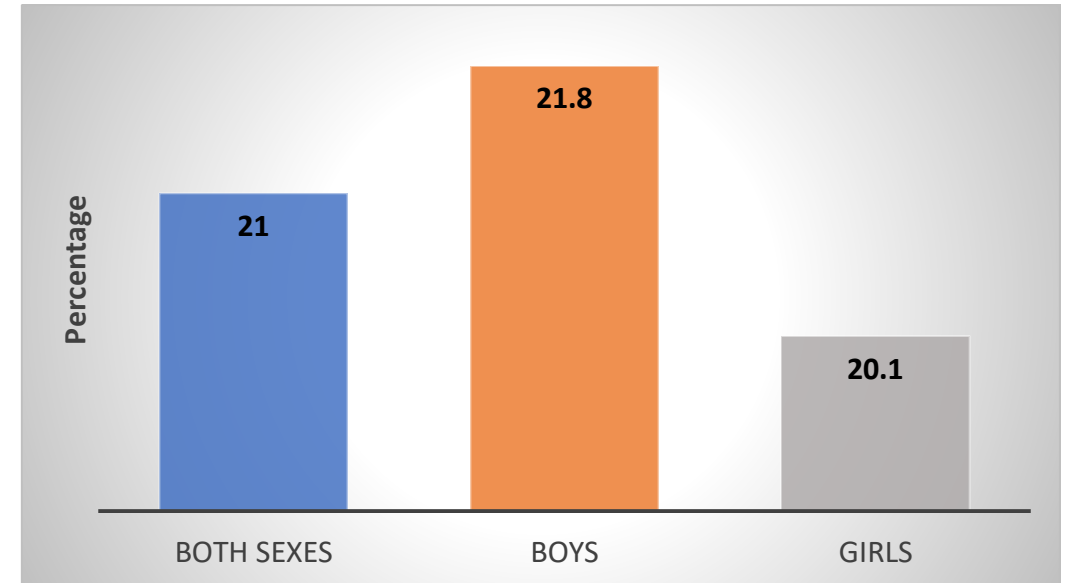
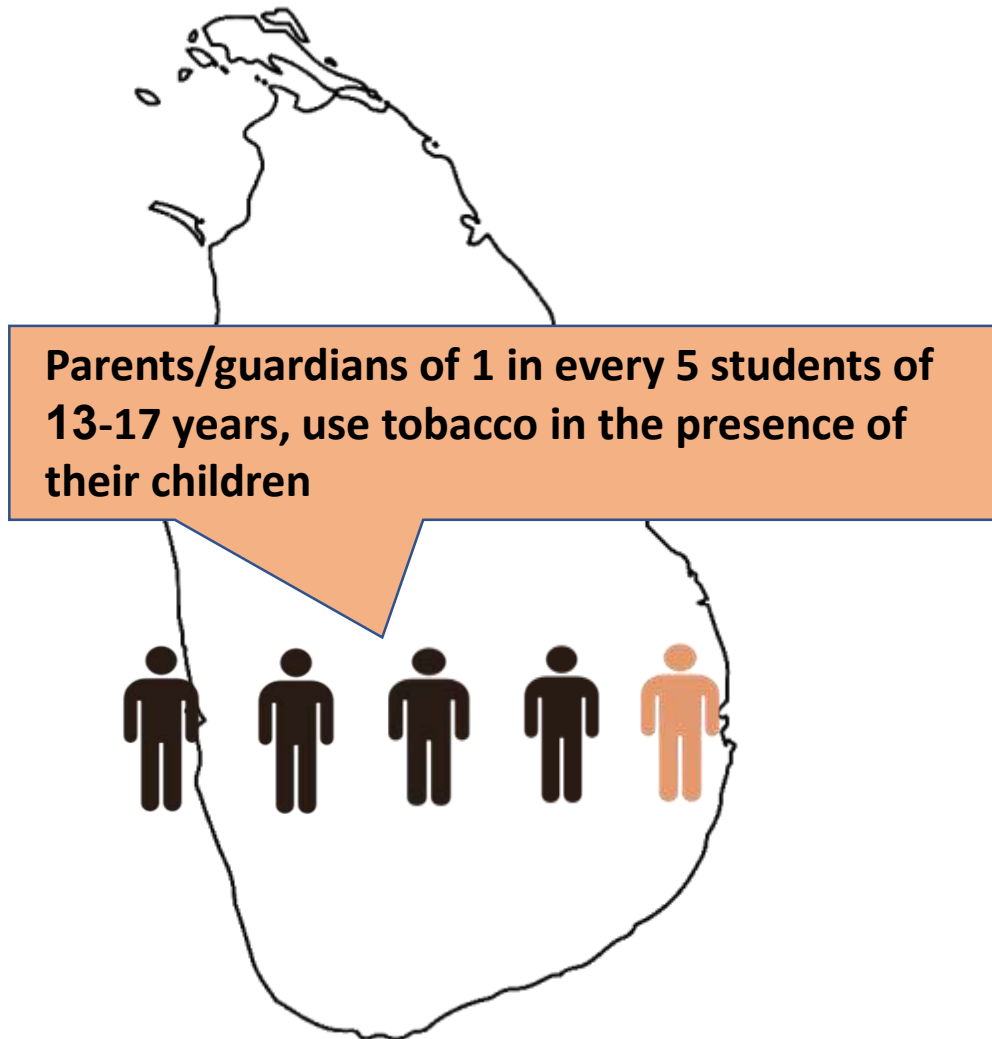
Distribution of current tobacco use among Children



Burden of school children being exposed to second hand smoke in Sri Lanka

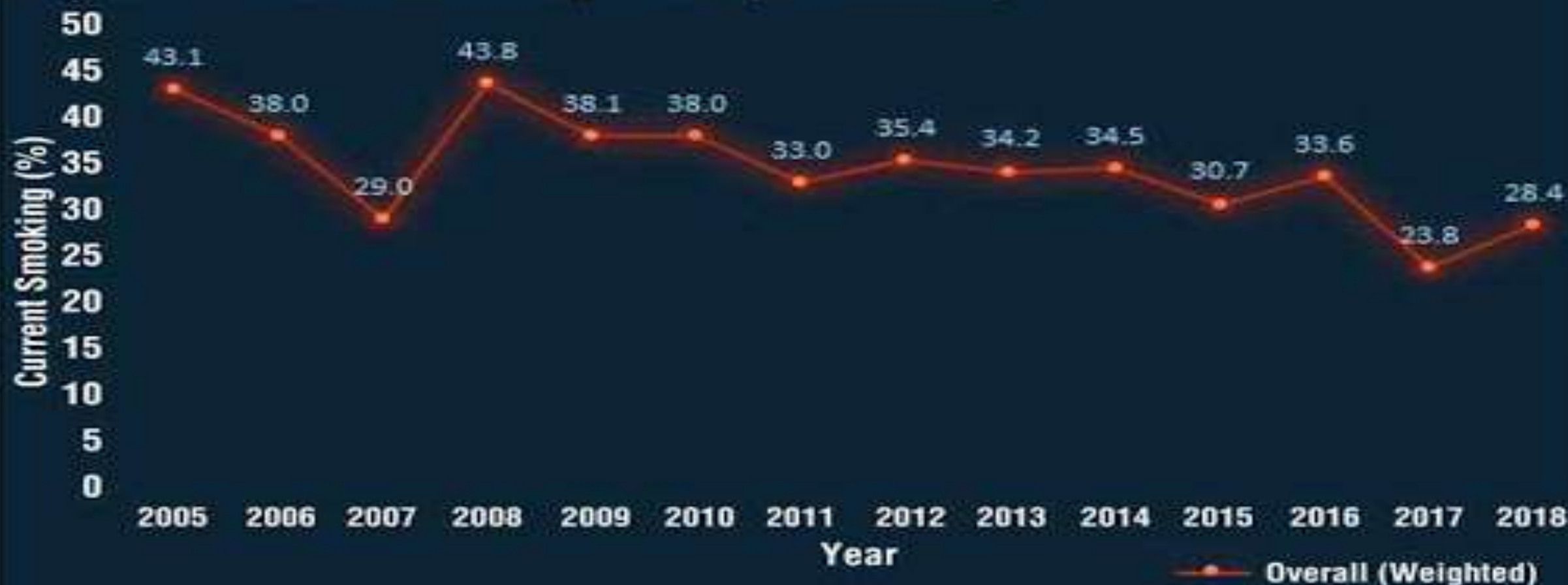


Burden of parents/guardians using tobacco in the presence of their children in Sri Lanka



The trend of Tobacco smoking among males above 15 years in Sri Lanka?

Figure 1 - Current Smoking Trend (2005-2018)



Note: Overall current smoking rate is calculated by weighting age group wise values according to age distribution in Census and Statistics (2012)

Source: Trend Surveys of ADIC, 2005 - 2018

Health, economic, social and environmental consequences of tobacco use

Health consequences of Tobacco use

- Cardiovascular system:
 - Heart attack/angina
 - Stroke/transient ischemic attack
 - Peripheral vascular disease
 - Aortic aneurysm
- Diabetes
- Respiratory system
 - Shortness of breath
 - Exacerbated asthma
 - Chronic obstructive pulmonary disease
 - Respiratory infections

Health consequences of Tobacco use

- Cancers
 - Larynx, oropharynx, oesophagus, trachea, bronchus, lung, acute myeloid leukaemia, pancreas, stomach, colon, kidney, cervix, bladder
- Eyes
 - Blindness
 - Cataract
- Mouth
 - Gum disease
 - Cancer of mouth, lip etc

Health consequences of Tobacco use

- Bones
 - Osteoporosis
 - Hip Fractures
- Reproductive system
 - Impotence
 - Infertility
 - Miscarriage
 - Premature birth
 - Low birth weight

Economic consequences of Tobacco use

- Direct cost for consumption – Rs.65 per cigarette X 5 cigarettes per day x 30 days per month = Rs.9750 spent per month X 12 months per year = Rs. 117,000 spent on cigarette per year
- Direct cost due to tobacco related illness (healthcare expenditure – hospitalization, physician services, medication)
- Premature death
- Lost productivity
- Opportunity costs

Social and environmental consequences of Tobacco use

Social consequences

- Affects personal relationships
- Children of smokers are more likely to smoke and smoke more heavily
- May result in child labour and exploitation

Environmental consequences

- Air pollution
- Deforestation for tobacco growth and curing of tobacco plants
- Environmental degradation – as tobacco plant leaches nutrients from the soil, due to the use of pesticides and fertilizers
- Pollution of ground water and water ways – large and frequent application of pesticides
- Cigarettes manufacturing waste and chemical waste
- Cigarette butts- not bio-degradable
- Pollution by cigarette packages, lighters, matches and other by- products of tobacco use

Second hand smoke and third hand smoke

Second hand smoking

- Second hand smoke is the exposure to side-stream smoke (i.e. smoke emitted from the burning cigarettes, bidi pipes, cigar etc.) and the mainstream smoke exhaled from the lungs of smokers.
- Second hand smoke contains more than **4000** chemical compounds
 - There are at least 250 harmful chemicals
 - Of which, 69 are known to cause cancer

Adverse impact of exposure to second-hand smoke

Diseases in children	Diseases in adults
Sudden infant death syndrome	Cardiovascular diseases
Acute respiratory disease	Nasal irritation
Middle ear disease	Lung cancer
Chronic respiratory symptoms (e.g. Asthma)	Reproductive effects in women (miscarriage, premature birth, low birth weight)

Third hand smoking

- Third hand smoke consists of residual tobacco smoke pollutants that remain on surfaces (e.g. cloths, toys, carpets, rugs, bedsheets, wall paint, car dashboards) and in dust after tobacco has been smoked;
 - That are re-emitted into the gas phase, or
 - React with oxidants and other compounds in the environment to yield secondary pollutants.
- Third hand smoke contains a large amount of chemical compounds including some not found in freshly emitted tobacco smoke
- Results in involuntary inhalation, ingestion or dermal uptake of pollutants in the air, in dust and on surfaces

Benefits of quitting tobacco smoking

Health benefits of quitting smoking

Within...	
20 minutes	Blood pressure, pulse rate and the temperature of hands and feet have returned to normal
12 hours	<ul style="list-style-type: none">• Blood Oxygen level has increased to normal.• Carbon Monoxide levels have dropped to normal
24 hours	Anxieties have peaked in intensity
48 hours	<ul style="list-style-type: none">• Damaged nerve endings have started to re-grow• The sense of smell and taste are beginning to return to normal.• Cessation anger and irritability will have peaked

Health benefits of quitting smoking

Within...	
72 hours	<ul style="list-style-type: none">• Symptoms of chemical withdrawal have peaked in intensity, including restlessness.• Lung bronchial tubes leading to alveoli are beginning to relax• Breathing becomes easier and the lungs' functional abilities are starting to increase.
5-8 days	Encounters an average of three cue induced crave episodes per day. Each episode will be for about 3 minutes.
10 days	Encounters less than two crave episodes per day, each lasting for less than 3 minutes

Health benefits of quitting smoking

Within...	
10 days to 2 weeks	There are no crave episodes.
2 to 4 weeks	<ul style="list-style-type: none">• Cessation related anger anxiety, difficulty in concentrating, impatience, insomnia, restlessness and depression have ended.• If still experiencing any of these symptoms, refer to a specialist for further evaluation
2 weeks to 3 months	<ul style="list-style-type: none">• The heart attack risk has started to drop.• The lung function is beginning to improve

Health benefits of quitting smoking

Within...	
3 weeks to 3 months	<ul style="list-style-type: none">• The circulation has substantially improved.• Walking has become easier.• The chronic cough, has likely disappeared.• If not resolved, refer to a specialist, as it may be a sign of lung cancer
8 weeks	Insulin resistance in smokers has normalized despite average weight gain of 2.7kg

Health benefits of quitting smoking

Within...	
1 to 9 months	<ul style="list-style-type: none">• Any smoking related sinus congestion, fatigue or shortness of breath has decreased.• Cilia have regrown in the lungs, thereby increasing their ability to handle mucus, keep the lungs clean and reduce infections.• The body's overall energy has increased
1 year	The excess risk of coronary heart disease and stroke has dropped to less than half of that of a smoker
5 years	The risk of subarachnoid heamorrhage has declined to 59% of the risk of smoking.



Health benefits of quitting smoking

Within...	
5-15 years	The risk of stroke has declined to that of a non-smoker
10 years	<ul style="list-style-type: none">• The risk of being diagnosed with lung cancer is between 30%-50% of that of a smoker.• The risk of death from lung cancer has declined by almost half.• Risk of cancer of the mouth, throat, oesophagus and pancreas have declined.• Risk of developing diabetes is now similar to that of a never-smoker
13 years	The risk of smoking induced tooth loss has declined to that of a never-smoker
15 years	<ul style="list-style-type: none">• The risk of coronary heart disease is now that of a never-smoker.• The risk of pancreatic cancer has declined to that of a never-smoker.



Economic and social benefits of quitting tobacco smoking

Economical benefits

- Money spent on tobacco is saved
- Health care cost due to tobacco related illnesses is saved
- Opportunity cost minimized
- Decreases absenteeism from work
- Improves productivity

Social benefits

- Improves quality of life
- Improves social interactions
- Children become less likely to start smoking and more likely to quit if they are already using it



Tobacco smoking and nicotine dependence

Why people smoke or use tobacco? Why don't they quit?

- Due to addiction
- As a social activity
- After a meal
- For stress relief
- While having a coffee or tea
- For emotional support
- Sharing of cigarettes
- Boredom/filling in time
- Bonding/acceptance

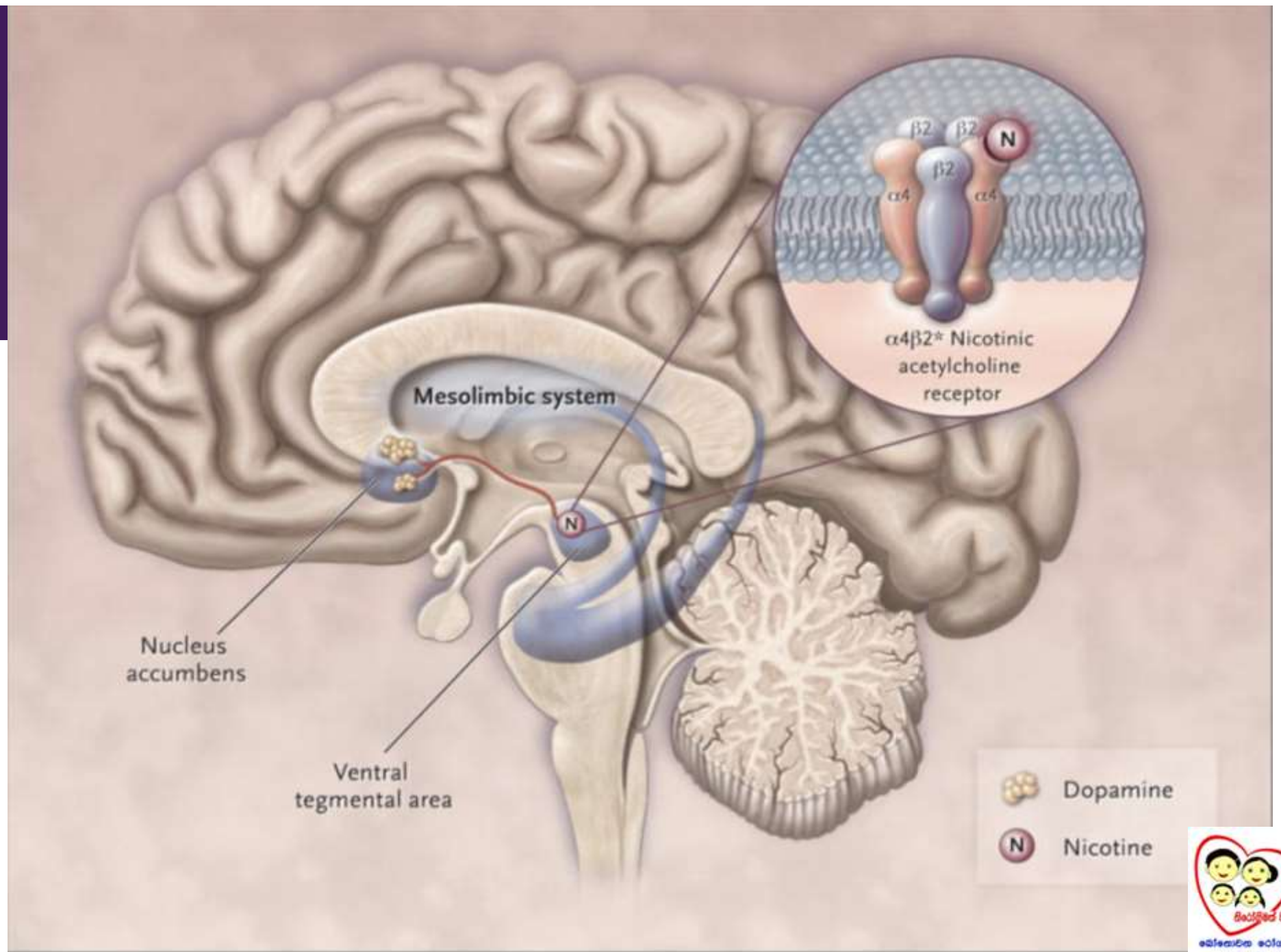
Addiction to tobacco – nicotine's role

- A major factor that maintains tobacco use over time is addiction to nicotine
- Nicotine
 - Not a carcinogen
 - Distilled from burning tobacco and carried on tar droplets
 - Only free nicotine crosses biological membranes
 - Half life is 120 minutes

Addiction to tobacco – nicotine's role

- **The quickest delivery of nicotine:** is the inhalation in the form of smoke (reaches the brain within 7-10 seconds)
- Nicotine has effects on brain dopamine systems similar to those of narcotic drugs such as heroin and cocaine
- **Positive enforcement:** Nicotine increases the number of nicotinic cholinergic receptors in the brain.

Addiction to tobacco – nicotine's role



Source: Benowitz N L, 2010

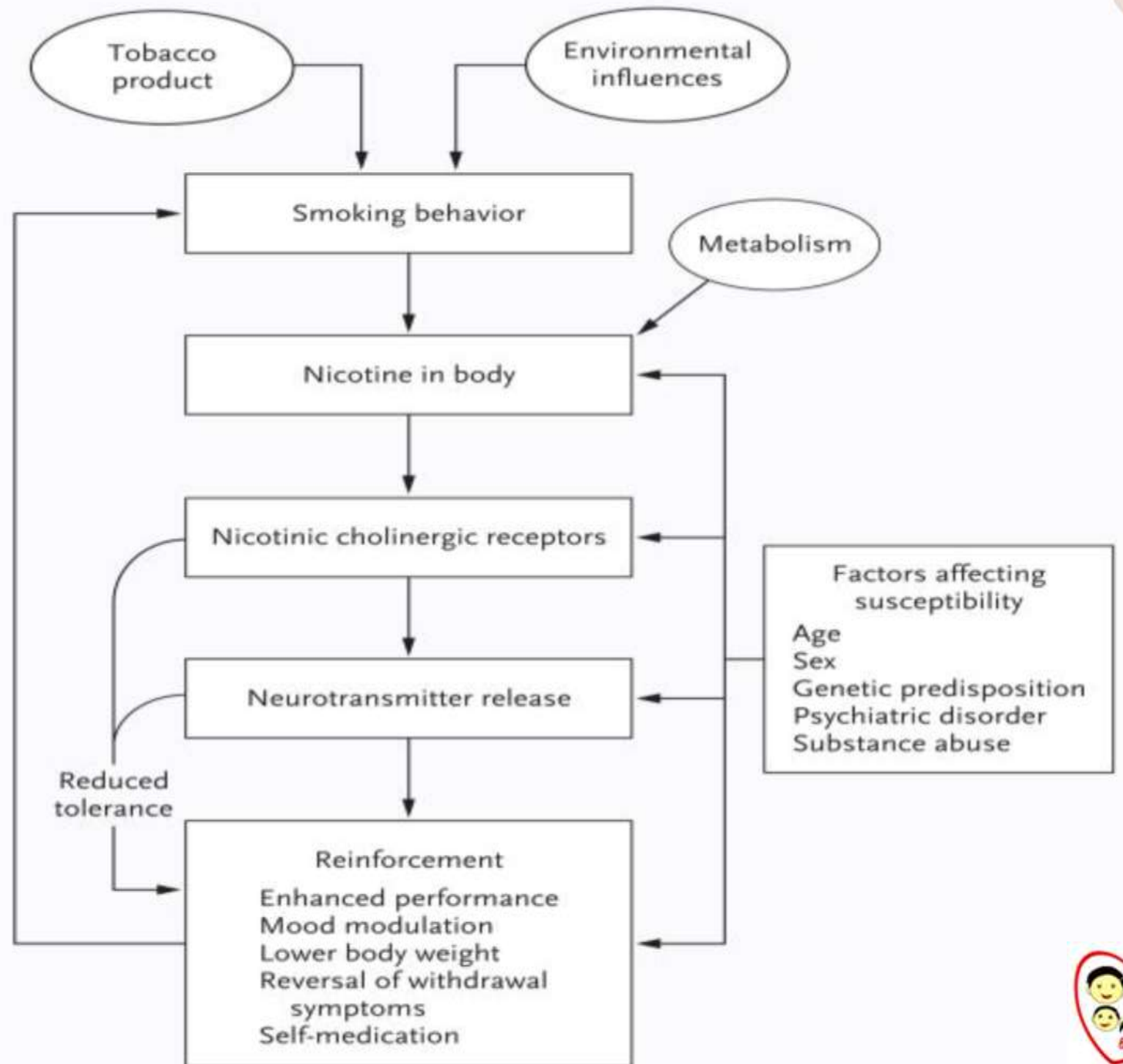
Addiction to tobacco – nicotine's role

- **Tolerance:**

- The brain and body get used to functioning with a certain level of nicotine.
- It gradually increases the number of nicotine receptors in the brain and therefore, tobacco users need higher amounts of tobacco in order to achieve the same levels of satisfaction
- The nicotine level drops dramatically one to two hours after the last cigarette (half life of nicotine is 120 minutes)
- Then, craving for nicotine begins

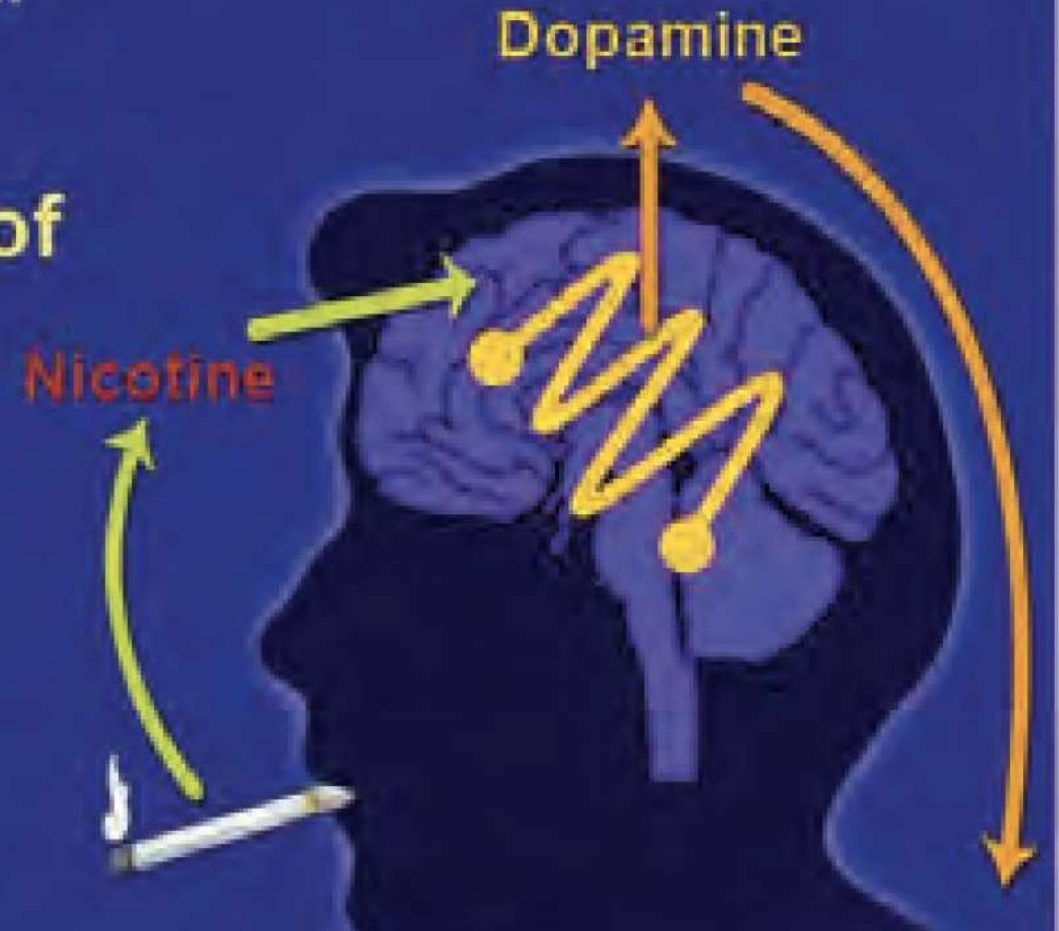
- **Negative reinforcement:** reducing withdrawal symptoms

Addiction to tobacco – nicotine's role



The cycle of nicotine addiction

- Nicotine binding causes an increase in release of dopamine
- **Dopamine gives feelings of pleasure and calmness**
- competitive binding of nicotine to nicotinic acetylcholine receptors causes prolonged activation, desensitization, and upregulation



Features of nicotine dependence

- Craving: a strong desire to use nicotine
- Withdrawal symptoms
- Increase and regular use
- Difficulty in controlling the use
- Use despite knowing the harmful effects

Nicotine withdrawal symptoms

- Nicotine withdrawal symptoms is a group of symptoms that may occur from suddenly stopping the use of tobacco.
- Withdrawal is the adjustment of the body to live without nicotine and it is the physical and psychological adaptation to live without nicotine
- Also known as 'recovery symptoms'
- These symptoms are usually temporary (2-4 weeks)
- They can be a major barrier against staying quit, or even attempting to quit



Nicotine withdrawal Symptoms

Common nicotine withdrawal symptoms are:

- Headache
- Restlessness
- Insomnia
- Mood changes (sadness, irritability, frustration, anger)
- Coughing
- Cravings
- Difficulty in concentrating
- Influenza like symptoms

How can PHNO help a tobacco addict?

Individual approach

- Inquire from each female/Male above age of 18 years about consumption of smokeless tobacco/Smoking of tobacco in each and every opportunity.
- Simply ask them to Reduce/Quit may medically beneficial.
- Appreciate if already quitted/life abstinence.

Tobacco users/ High risk categories

- Refer to the quitting clinic
- Refer to the dental clinic

At HLC

- Document Tobacco/alcohol using status in PMR and H1236
- Ask client to quit/ appreciate if already quitting done.
- Include TPC in common education session at HLC
- Identify clients need support and refer to “”Quitting clinics”
- Clients who cannot achieve targets by few sessions/ addicted refer to the nearest “Addiction clinic” (Guided by Psychiatrist at Base hospital) for further support



Stages of Behavior Change



1. Pre-contemplation

Not intending to start changing in the near future

2. Contemplation

Seriously considering change

3. Preparation

Ready to change

4. Action

Starts to make changes

5. Maintenance

Maintains the behavior change

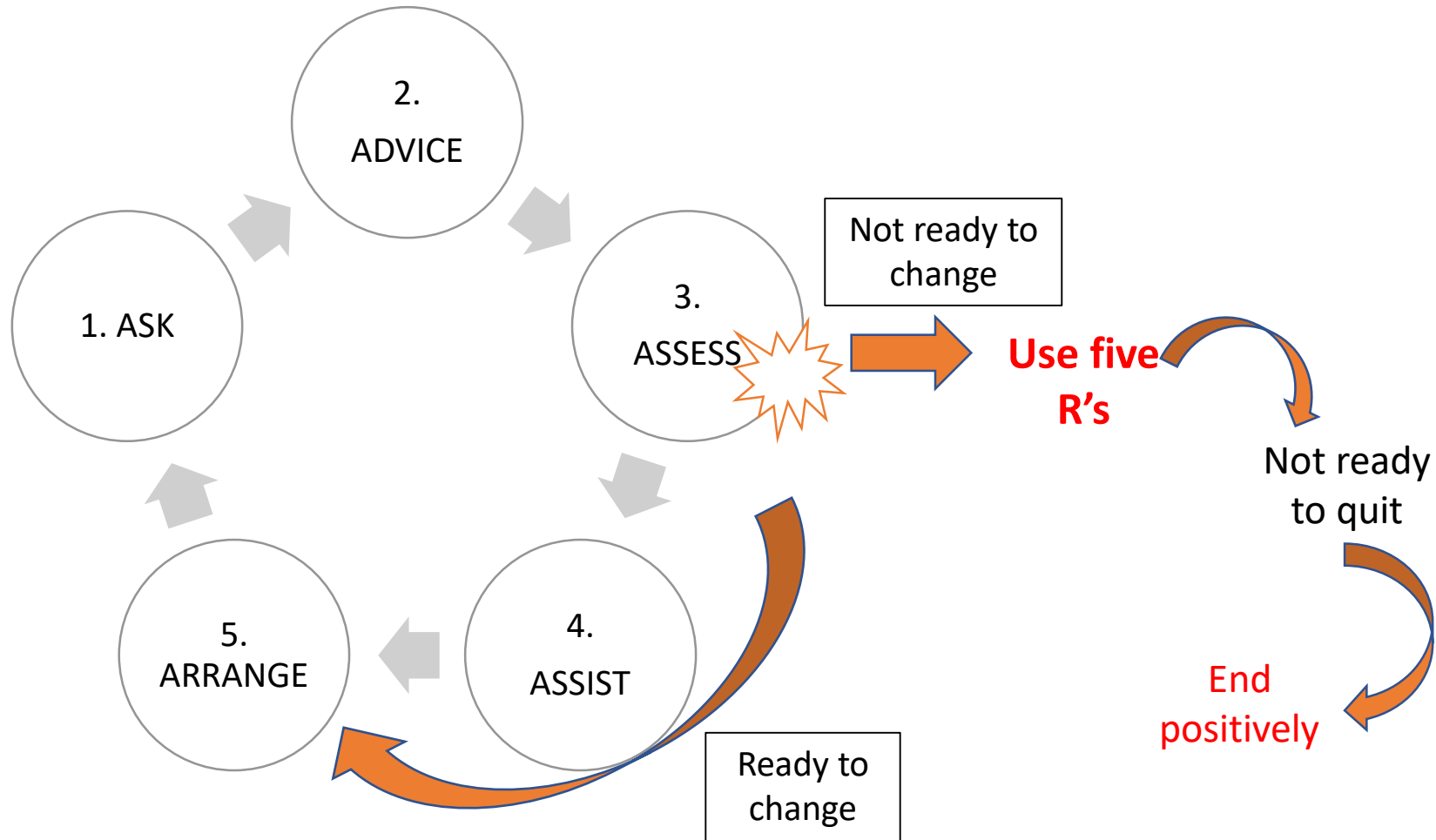
Relapse can occur at
any point

Brief Intervention at tobacco quitting clinic

A brief intervention is a

- short intervention of 3–20 minutes
- aims to identify the problem
- provide information about it, and
- motivate and assist the client to solve it.

Using the 5A's and 5R's



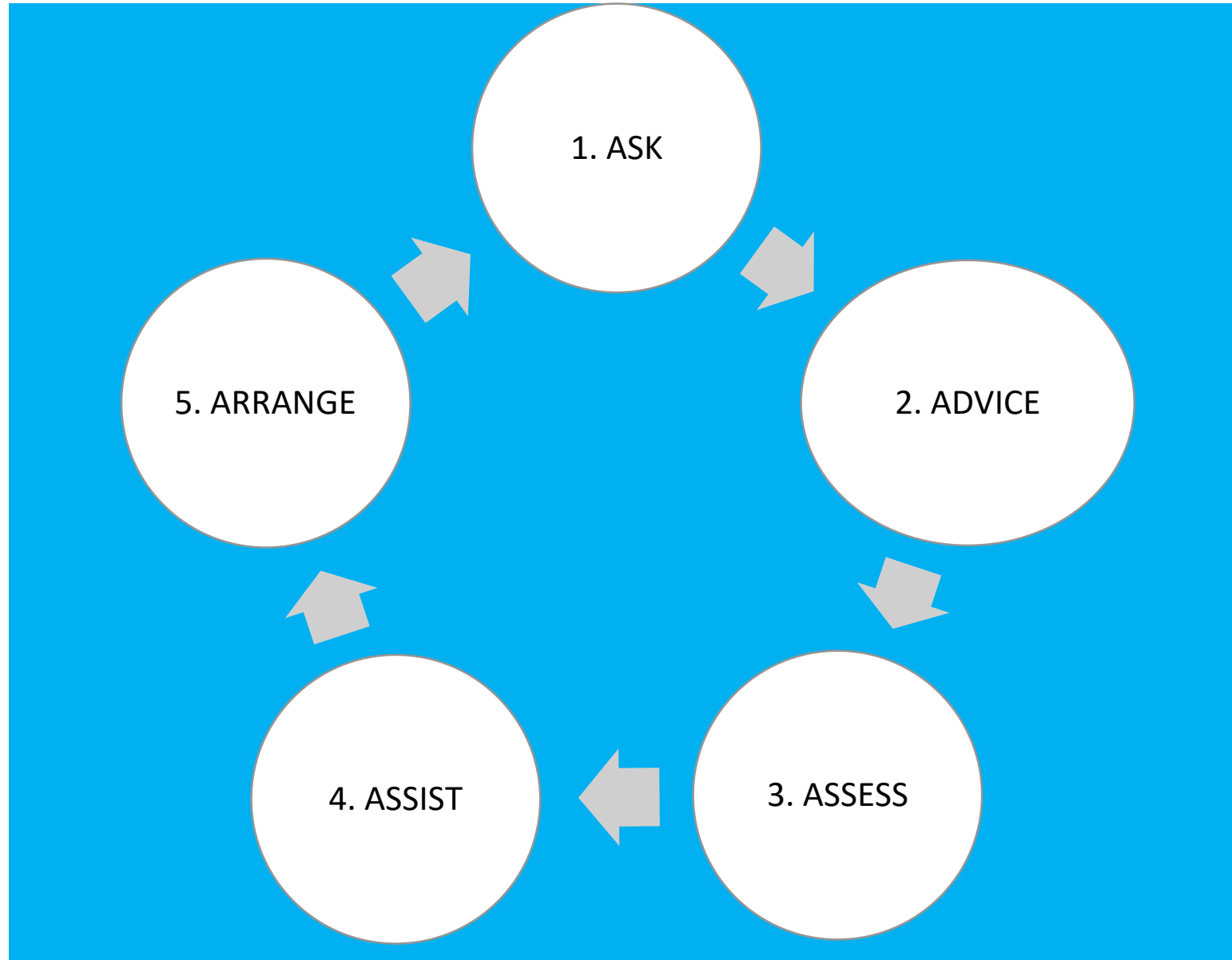
When do we deliver the 5A's?

We deliver the 5R's following the "Assess" stage in the 5A's, after we have asked the following questions...

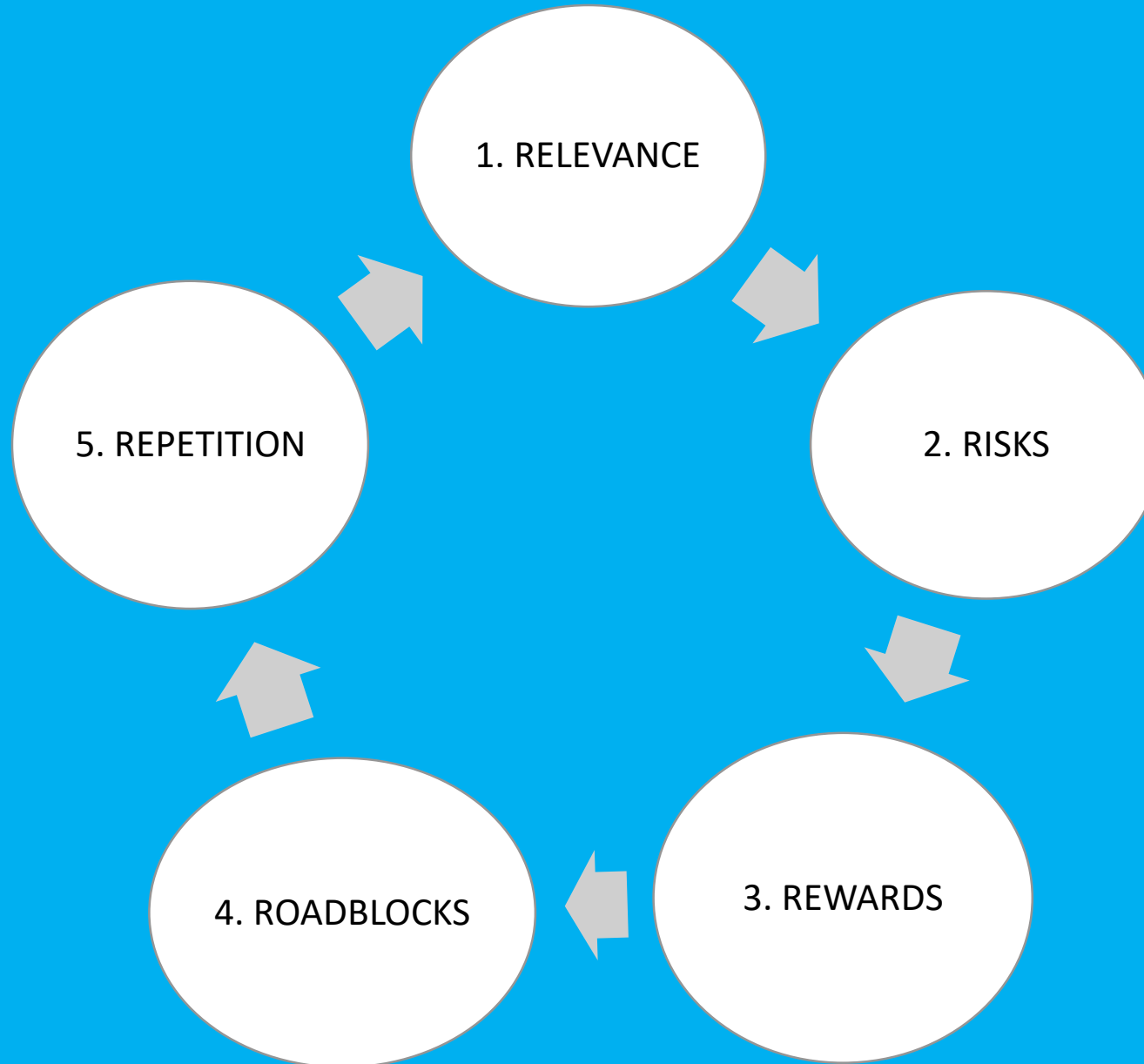
Are you interested in quitting tobacco use?	Yes	Not sure	No
Do you think you will succeed in quitting?	Yes	Not sure	No

Any answer in the **shaded area** indicates that the tobacco user is **NOT** ready to quit and we should deliver the 5R's model.

The 5A's brief intervention model



The 5R's brief intervention model



Principles and techniques of motivational interviewing

- Not to tell the person what to do
- To listen and show empathy
- To help the client see the gap between where they are and where they want to be
- To let the client tell that he/she needs to change
- To help the client feel confident about changing
- Roll with resistance

Basic Principles of Motivational Interviewing

- Avoid argument
- Roll with resistance
- Express empathy
- Discuss discrepancies
- Enhance Self-efficacy

Probable reasons for using tobacco for school Adolescent and youth

How the are advertised

- To be smart
- To be a member of gang
- To be an adult



Counter argument

- Smelly
- Wrinkling of skin
- Discolored teeth and eyes

Probable reasons for using tobacco for male

How the are advertised

- Freedom
- Strong
- To make other guilty

Counter argument



Probable reasons for using tobacco for Female

How the are advertised

- To obtain equity



Counter argument



Evidence base practices

Part of the National NCD program

NATIONAL MULTISECTORAL ACTION PLAN FOR THE PREVENTION AND CONTROL OF NONCOMMUNICABLE DISEASES 2016-2020



MINISTRY OF HEALTH, NUTRITION AND INDIGENOUS MEDICINE
SRI LANKA

9 voluntary targets to be achieved by 2025

Target 5 : A 30% relative reduction in prevalence of current tobacco use in persons aged 15+ years

Our strategies

4 Key Strategic areas

1. **Advocacy, partnership & leadership**
2. **Health promotion & risk reduction**
3. **Early detection & management of NCD and their risk factors**
4. **Surveillance, monitoring, evaluation & research**

Action plan for tobacco prevention and cessation 2021-2025

Tobacco prevention and cessation unit,

Directorate of Non Communicable Disease (NCD)



World agenda towards the tobacco control



F C T C

WHO FRAMEWORK CONVENTION
ON TOBACCO CONTROL

What is FCTC

- Evidence-based treaty developed in response to the globalization of tobacco epidemic, in 2003
- Considered the rapid spread of the tobacco epidemic through trade liberalization and global marketing, transnational tobacco advertising, promotion and sponsorships
- Demand the signatory countries to act against the tobacco epidemic
- Legally bound to implement evidence-based tobacco control measures
- Sri Lanka – 1st Asian country to ratify

Demands in FCTC

- Price and tax measures to reduce the demand for tobacco
- Non-price measures to reduce the demand for tobacco
 - Protection from exposure to tobacco smoke
 - Regulation of the contents of tobacco products
 - Regulation of tobacco products disclosures
 - Packaging and labelling of tobacco products
 - Education, communication, training and public awareness
 - Tobacco advertising, promotion and sponsorships
 - Demand reduction measures concerning tobacco dependence and cessation
- Illicit trade in tobacco products
- Sales to minors
- Provision of support for economically viable alternative activities

National Authority on Tobacco and Alcohol



PARLIAMENT OF THE DEMOCRATIC
SOCIALIST REPUBLIC OF
SRI LANKA

NATIONAL AUTHORITY ON TOBACCO AND
ALCOHOL ACT, No. 27 OF 2006

[Certified on 29th August, 2006]

Printed on the Order of Government

Published as a Supplement to Part II of the *Gazette of the Democratic
Socialist Republic of Sri Lanka* of September 01, 2006

PRINTED AT THE DEPARTMENT OF GOVERNMENT PRINTING, SRI LANKA
TO BE PURCHASED AT THE GOVERNMENT PUBLICATIONS BUREAU, COLOMBO 1

Sri Lanka is the 1st in the SEAR
to introduce tobacco control
legislation

Established by the NATA Act in
2006

Provide legislative cover for
the alcohol and tobacco
prevention in Sri Lanka



Prohibits under NATA

- Sales to or by persons under 21 years of age
- Smoking in public places
- Installation of vending machines for tobacco products
- Sale at Duty free shops at the airport
- Sale of tobacco products without health warning and the tar, nicotine content in each tobacco product
- Direct and indirect advertising and promotion, Free distribution of tobacco products
- Import and sale of smokeless tobacco including electronic smoking products banned since 2015

Other tools and circles

National tobacco quit line (1948) service

Cabinet approval to ban on sale of cigarettes within 100 meters of school premise.

Circular No 11/2019 date 06.05.2019 and 08/99 date 18.03.1999
Ministry of Public administration Prohibiting tobacco and alcohol respectively in all state institution



Other tools and circles

Circular No. 20/2020, date 29.07.2020 education ministry

- Schools and other institution
- including Contractors and labors
- Including Sports events, big matches, Exhibitions

Community approach

- Include tobacco prevention and cessation program in health promotion settings
 - Schools and pre-schools
- Tobacco free work places/hospitals/MOH office
- Tobacco free areas
- Smoke free areas
- Establishment/Improvement of surveillance on tobacco selling by PHI

Most people sensitive for their children's health

WHAT IS THIRD HAND SMOKE?



It is nicotine residue that remains on surfaces that include:

- walls
- doors
- drapery
- carpets
- clothes
- furniture
- flooring material
- acoustic tiles in ceilings

Who's affected by third hand smoke?



People, especially seniors and children, who are at home, in hotels, cars, or any indoor environment that was used long-term by smokers.

Infants, toddlers and children are at greater risk of negative health effects because:



1) They inhale 80 times more than adults.

2) They have greater hand/object/mouth contact and thus absorb smoke particles more through ingestion.

3) They have greater absorption through their skin.

World no tobacco day

31st May 2021

Commit to quit !

Thank you !