NATIONAL TOBACCO CESSATION TOOLKIT
(5As & 5Rs)
For all doctors and health professionals
National Tobacco Cessation Toolkit (5A & 5Rs) for all doctors and health professionals

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and

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Dhamanaveshi, Male’,

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Introduction

Tobacco is highly toxic. It is the leading preventable cause of death worldwide, and Maldives is no exception. Tobacco kills and disables more people than any other disease causing agent. Tobacco kills two thirds of all lifetime users and half of those die in middle age (35-69 years). Tobacco is a risk factor for six of the eight leading causes of death in the world (See Figure 1). Tobacco kills nearly six million people each year. More than five million of those deaths are the result of direct tobacco use while more than 600 000 are the result of non-smokers being exposed to second-hand smoke. Approximately one person dies every six seconds due to tobacco, accounting for one in 10 adult deaths. Unless urgent action is taken, the annual death toll could rise to more than eight million by 2030. (1)

Figure 1: Tobacco is a risk factor for six of the eight leading causes of death in the world

Source: WHO. Toolkit for delivering the 5A’s and 5R’s brief tobacco interventions in primary care, 2014. (1)

In Maldives, it was estimated in 2011 that approximately 27% of all deaths were directly attributable to tobacco. Tobacco use is a risk factor for the main non-communicable diseases causing 81% of deaths in 2014. (2) Tobacco use is relatively high in Maldives. According to the STEPS survey in 2011, 34.7% of men and 3.4% of women were tobacco users. These values may be increasing, and prevalence varies across geography and age groups. The highest prevalence of current daily smokers among men (37.6%) was in the age group 25–34 years. Among women, daily smokers were higher in the older age group of 55–64 years (9.2%). (3) Tobacco use among adolescents is high with 11% of boys and 4% of girls between 13-15 years age reporting current tobacco use. (4) The youngest age of initiation reported at present is age 7 years, from patient data at Dhamanaveshi cessation clinic. (5) Surveys across several countries and various age groups including in Maldives show that approximately 70% of smokers have thought of quitting at some time, but only 2-3% have successfully quit without assistance. (4)

In order to reverse the tobacco epidemic, concerted efforts will be needed from a wide range of sectors while health systems are well-placed to take the leading role for implementing measures to prevent and
treat tobacco dependence. Health professionals have several roles to play in comprehensive tobacco control efforts, including role model, clinician, educator, scientist, leader, opinion-builder, and alliance builder. All health professionals should at least:

- Serve as tobacco-free role models for the general public;
- Address tobacco dependence as part of your standard of care practice;
- Assess exposure to secondhand smoke and provide information about avoiding all exposure. (1)

Tobacco cessation is a basic health care service that should be provided in all health facilities, and accessible to all people anywhere in the country, according to the WHO Framework Convention for Tobacco Control (FCTC), to which Maldives is a signatory party. Providing tobacco cessation services to the public is mandated by the Tobacco Control Act of 2010 (6), and is among the activities planned under Health Protection Agency’s national Action Plan for NCD Control. Health Protection Agency (HPA) is the leading public health authority in Maldives under the Ministry of Health, and is responsible for protecting public health in the nation. The Tobacco Prevention & Control Unit of the Health Promotion and Chronic Diseases Division of HPA is responsible for all tobacco control activities in Maldives. Dhamanaveshi Male’ runs the first tobacco cessation clinic under the Ministry of Health in Maldives. This toolkit package was developed for the National Tobacco Control Program of Health Protection Agency by initiative and leadership of the Tobacco Cessation Clinic at Dhamanaveshi Male’, with a group of national experts on tobacco cessation including physicians, psychiatrists and respiratory physicians.

**Purpose of this toolkit**

**Brief Intervention for tobacco cessation** is a set of very basic methods for tobacco cessation that can be used by doctors and health professionals during their routine clinical practice, using basic communication skills, and taking minimal time. It does not require additional special skills such as counseling. This is a simple guide for clinicians to ask all their patients about tobacco use and help them to quit smoking. The most basic and effective requirement for tobacco cessation in the clinical setting is that all clinicians routinely ask all their patients about tobacco use and second-hand smoke exposure, advice and assist those who use tobacco to quit, document this in patient notes and arrange follow up for patients. If all primary care providers routinely ask about tobacco use and advise tobacco users to stop, they have the potential to reach more than 80% of all tobacco users per year; trigger 40% of cases to make a quit attempt; and help 2-3% of those receiving brief advice quit successfully. (1)

Helping patients quit tobacco as part of health care providers’ routine practice takes them only three to five minutes and is feasible, effective and efficient. The 5A’s and 5R’s brief tobacco interventions protocol can guide you to deliver this. While it may seem that there is a lot to do, in actual practice, busy clinicians can divide these steps over several visits, and deliver a couple of interventions within a minute or two of their clinical interaction. All health professionals should also promote smoke-free policies, particularly where services are delivered so that your patients will not be exposed to secondhand smoke in your health facilities. By having a smoke free facility, health professionals can encourage your patients
to live in a smoke free home and work in a smoke free workplace, which will help them avoid exposure to secondhand smoke. (1)

This national toolkit is a package of protocol, guidelines and patient education material for delivering Brief Intervention for Tobacco Cessation by all doctors and health professionals, to be used during routine clinical practice. This toolkit is based on and adapted from the WHO guideline: Toolkit for delivering the 5A’s and 5R’s brief tobacco interventions in primary care, WHO 2014 and the parallel self-help guide: A guide for tobacco users to quit (1; 7). The protocol (flowchart) adapted from the WHO PEN protocols for primary health care - Protocol 2 on tobacco cessation (8). Inputs from some other useful publications (9; 10) and the Maldives experience from the tobacco cessation clinic at Dhamanaveshi were also used. A brief guide for prescribing nicotine replacement therapy (NRT) adapted from WHO and international guidelines (7; 11-14) has been included, as the expert group feels that NRT would be useful in Maldives, given the high smoking prevalence, inadequate social support and lack of time for many smokers of the working group to attend several long consultations and counseling sessions.
Contents of the toolkit for tobacco cessation brief intervention

This toolkit is a package of printed or printable material and electronic (soft) material. This protocol and guidelines in the following pages are the principal part of this toolkit. This package also contains non-printable material such as videos. The soft copies can be printed and shared on computers used by clinicians and primary health care professionals.

1) 5As & 5Rs: Tobacco cessation brief intervention protocol Flowchart
   - for mounting on wall of all doctors’ desks and stations
2) 5As & 5Rs Tobacco cessation toolkit – Abridged version
3) 5As & 5Rs National tobacco cessation toolkit – complete guidance (this document)
4) Quit smoking tips card (START tips)
5) Quit smoking tips poster (START tips)
6) 2 videos that can be used for patient education
   - Quitting Smoking Timeline [available from (16)]
7) Training slides set that can be used additionally for reference and training sessions.
8) Tips for Quitting tobacco – SFT translated to Dhivehi from Smoke Free Teens website (9): a document for health workers and persons engaged educating public or clients.
9) Brief guidance for preparing Smokefree signs for health facilities with some messages and examples
Using this protocol and toolkit in health facilities

Who are expected to use this protocol and toolkit, when and where?

This protocol is to be used by **ALL doctors and dentists**, from primary care level to specialist and super-specialist level, *during your routine clinical work*. It can also be used by **nurses and community health workers** in the clinical and field setting. It would be expected that NRT will be prescribed only by doctors at present. However, NRT products are over the counter (OTC) medicines. So any health professional can use this protocol to provide guidance to a patient or client. It should also be offered to visiting health professionals such as super-specialists to use during their clinical practice in Maldives, which they may find useful.

All clinicians are expected to ask for a history of smoking and tobacco use in other forms from **ALL** patients, use this protocol to assess, advise and assist them, **document** tobacco use and quit plans for all patients, and arrange follow-up.

The protocol is to be used in **ALL** health facilities, for all in-patient care units including special care units, out-patient facilities, state-owned, private-owned health facilities and NGOs providing medical and dental services and primary health care services.
Instructions for using this toolkit and Responsibilities of In-charge of facility and Clinical heads of departments

In-charge of the facility and Clinical heads of departments are responsible for ensuring this protocol is used by all clinicians. The following should be in place in the facility:

1. **5As & 5Rs: Tobacco cessation brief intervention protocol Flowchart:**
   - to be printed in A3 or A4 (preferably in colour, alternatively black & white) and put up on walls of ALL Consultation rooms, wards, ICUs, NICUs and special units, near doctors’ desk/ station.

2. **5As & 5Rs Tobacco cessation toolkit – Abridged version:**
   - to be printed and kept at doctor’s desk of ALL consultation rooms and wards and special units,
   - pdf copy posted on all clinical ward, special unit and OPD computer desk-tops or accessible from servers under clinical resource downloads for doctors and clinical staff.

3. **5As & 5Rs National tobacco cessation toolkit – complete guidance (this document):**
   - pdf copy posted on all clinical ward, special unit and OPD computer desk-tops or accessible from servers under clinical resource downloads for doctors and clinical staff.
   - Printed copies may be kept in key clinical departments.

4. **Quit smoking tips card (START):**
   - pdf copy to be put on health facility server and all clinical computer desktops or accessible from server under clinical resource downloads for doctors/clinical staff to print on prescription paper (A5) for ALL patients currently using tobacco.
   - Print several copies on A5 size and keep at OPD/ward counters and doctors’ desks at all times. Printed copies can be taken for home visits, screenings, educational sessions, fairs, etc.

5. **Quit smoking tips posters (START):**
   - to be printed in A3 size or larger, to be put up in patient waiting areas (easily readable place, e.g. near doctor’s door) of General and specialist OPDs, Antenatal and postnatal clinics, NCD clinics and special clinics, all wards, ICU and NICU waiting areas and inside consultation rooms so that doctors could use them as a guide to explain to patients.

6. **Tips for Quitting tobacco – SFT translated:** a document for health workers and lay persons translated to Dhivehi from Smoke Free Teens website.
   - To be provided to Public Health Units, community health workers, community nurses, nurse educators and health educators to use for providing quit smoking tips.

7. **Package (as a whole):** including Protocol, WHO 5A & 5Rs guidelines, quit tips card, videos and training slides (soft copy) to be made available on all computers or shared through computer server in the health facilities to all doctors, nurses and community health workers.

8. **System measures:** should be put in place to ensure documentation of tobacco use and quit plans in patient notes. E.g. in formats for in-patient notes for doctors and nurses notes, please add under “Personal history:” a tick box “Tobacco use”. This could also be added to formats for discharge summaries, prescriptions. It should particularly be added to any hospital health information systems used for managing and storing patients’ clinical information.

9. **Make your hospital or clinic tobacco-free and quit-friendly by:**
   - displaying attractive ‘No smoking’ or ‘Tobacco-free’ signs at entrances (see CD for examples),
   - using educational material effectively - displaying posters on effects of tobacco and quitting (START) and relevant videos in patient waiting areas, placing leaflets in easy to see and reach places for patients and health professionals,
   - making cessation toolkits and guidelines easily available and accessible to clinical staff,
   - encouraging and helping your staff quit smoking and stay tobacco-free,
   - ensuring that tobacco is NOT sold, made available, displayed, advertised or promoted directly or indirectly in any form within the hospital premises, including in outsourced services,
   - having a ‘No tobacco industry funding’ policy for your health institution.
National Tobacco Cessation Brief Intervention Toolkit (5As & 5Rs) for all doctors and health professionals

1. Basics of tobacco use and tobacco dependence

In order to assist patients in quitting more effectively, every primary care provider should have some basic knowledge of tobacco use and tobacco dependence – such as the impact of tobacco use, the benefits of quitting tobacco use, why people smoke and do not quit, and some common challenges people face when quitting, such as withdrawals, and how to work through them. The following information on the risk of tobacco use, the benefits of quitting, the three challenges in quitting tobacco and effective coping skills will help you deliver brief tobacco interventions. (1)

1.1. THE IMPACT OF TOBACCO USE ON TOBACCO USERS AND OTHERS

For those patients who still do not feel that they should quit tobacco use it is important for them to go over the risks that are involved. Tobacco use will have both health impacts, economic and social consequences on tobacco users and others. (1)

Health professionals should be aware and updated with evidence-based information on the harms from tobacco so that you may apply your knowledge in relevance to your patients. The scientific evidence for the harms from tobacco is strong and growing with more research, and so far there is inadequate evidence of any benefit from tobacco, either health-wise or socio-economically to individuals or to communities and nations.

1.1.1. HEALTH IMPACT

This includes health risks to tobacco users and their family.

You should be familiar with the health risks of tobacco use to be able to relate smoking to your patient’s condition. You will also need to be prepared to help patients debunk misconceptions about health risks of smoking. Many smokers, especially those in developing countries, do not completely understand the dangers of tobacco smoking due to tobacco companies’ misleading information that distort the true facts about smoking. See box 1 in section 1.3 for some common myths and realities about tobacco.

Tobacco products are made of extremely toxic materials. Tobacco smoke contains more than 7000 chemicals, of which at least 250 are known to be harmful and at least 69 are known to cause cancer. All tobacco products are harmful. (1) Nicotine is classified as a Class Ib toxin. (17) There is no safe limit for tobacco use, and even for second-hand smoke exposure. Tobacco causes immediate damage to the body. Tobacco smoking can damage every part of the body, causing many acute medical conditions such as shortness of breath, exacerbation of asthma and respiratory infections, as well as many chronic diseases including heart disease, strokes, cancer and chronic respiratory diseases. (1) Tobacco kills about two thirds of its users. (18) Tobacco is also one of the most addictive substances in the world. Addiction leads to poor concentration, reduced performance at studies or work, decreased productivity and increased stress, directly induced by nicotine as well as from the effect of the user constantly living in a cycle of withdrawal and trying to relieve it by smoking. (19) Please see Table 1 below for a summary of health consequences of tobacco by system, and the common risk groups affected. Whether you are a primary health care professional or a specialist, you will find relevant diseases and conditions due to tobacco use that you can relate to your patients, whatever your area of specialty, be it pediatrics, obstetrics, surgery, orthopedics or dentistry.
There is a large body of scientific evidence, including systematic reviews, which can be easily accessed from reliable sources (20-24). Causation has been proven for a long list of diseases, chemicals responsible and pathophysiological mechanisms of damage have been identified, and association has been shown with many more diseases. Be wary of misleading information published by the tobacco industry, which is known to have gone beyond the bounds of accepted scientific practice, by various tactics including funding or carrying out biased research, and supporting scientists to criticize key research published in peer reviewed journals. (20-23)

Also see diagrammatic representations in Figure 2 below for a summary of causality proven chronic effects, and Annex 1 for common systemic effects of tobacco use. You may use the figure in Annex 1 as a tool for showing patients their risks.

**Table 1: Health consequences of active tobacco use**

<table>
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<tr>
<th>System</th>
<th>Diseases /Conditions</th>
<th>Main risk groups affected</th>
<th>Evidence of Causation</th>
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<tbody>
<tr>
<td><strong>Nervous system</strong></td>
<td>Addiction</td>
<td>All (adolescents: dependence at lower levels of consumption)</td>
<td>C, M, (higher risk in younger age)</td>
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<tr>
<td></td>
<td>Damage to brain and neuronal pathways</td>
<td>F,I,C,Y</td>
<td></td>
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<td></td>
<td>Stroke (2-4 times higher risk in smokers)</td>
<td>A</td>
<td></td>
</tr>
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<td></td>
<td>Childhood disruptive behavioral disorders, in particular, attention deficit hyperactivity disorder</td>
<td>C</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>Increased stress</td>
<td>All</td>
<td>S, M</td>
</tr>
<tr>
<td></td>
<td>Increased incidence of psychological symptoms such as depressed mood, anxiety; increased sleep disturbances; In elderly, accelerated declines in physical function, increased levels of clinical illness and physical and cognitive impairment</td>
<td>All</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>Dementia and cognitive decline (including Alzheimer's and vascular dementia) 40-80% risk</td>
<td>Elderly</td>
<td>S</td>
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<td><strong>Cardiovascular System</strong></td>
<td>Coronary heart disease (3 times higher risk in smokers than non-smokers), Cerebrovascular disease (stroke) Atherosclerotic peripheral vascular disease, early abdominal aortic atherosclerosis in young adults, Aortic aneurysm, Sudden cardiac death, Congestive cardiac failure</td>
<td>A (highest proportion of CVD deaths due to smoking were in middle-aged – men 35-39 years, women 40-44 yrs)</td>
<td>C, M, (cessation improves outcomes and decreases risk)</td>
</tr>
<tr>
<td></td>
<td>Hypertension</td>
<td>A,Y</td>
<td></td>
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<td>Atherogenic lipid profile (increase in triglycerides, decrease in HDL cholesterol)</td>
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<td>In women: use of combined oral contraceptive pill with smoking increases risk of myocardial infarction synergistically (multiplicative effect)</td>
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1 **Sources**: The Health Consequences of Smoking – 50 Years of Progress: A Report of the Surgeon General 2014, other reports of the US Surgeon general on tobacco, Tobacco in Australia, and other publications. (1; 16; 18-25)

2 **Key**: A=adults; C=children; I=infants; F=Fetus; Y=young people; E=elderly; W=women; PW=pregnant women; M=men

3 **Key**: C= Causation proven with sufficient evidence; M= Mechanisms of disease identified; S= Suggestive of causation but insufficient evidence to infer causal relationship; A=Association shown.
<table>
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<th>Evidence of Causation&lt;sup&gt;3&lt;/sup&gt;</th>
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<td><strong>Respiratory System</strong></td>
<td>Lung cancer (10-fold risk in men, 20-fold risk in women who smoked); Cancer of larynx, trachea, bronchi; COPD</td>
<td>A</td>
<td>C, M, (cessation improves outcomes)</td>
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<tr>
<td></td>
<td>Reduced lung function</td>
<td>F,I,C,Y,A</td>
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<td></td>
<td>Impaired lung growth during childhood and adolescence</td>
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<td>Asthma, other respiratory effects (Cough, phlegm, wheeze, dyspnea), Pneumonia (incidence and increased risk of death from influenza, pneumonia and other infectious diseases), Tuberculosis (TB) (increased risk of MTB disease, mortality and recurrence)</td>
<td>C,Y,A, All</td>
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<td></td>
<td>Snoring</td>
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<td>M, dose related effect</td>
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<td></td>
<td>Impaired sense of smell</td>
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<td><strong>Cancers</strong></td>
<td>Cancers of the Oropharynx, Larynx, trachea, bronchus, lung, Esophagus, stomach, liver, pancreas, Colorectal adenomatous polyps and colorectal cancer Acute myeloid leukemia, Kidney (renal cell and renal pelvic), ureter, bladder, Cervix Breast cancer</td>
<td></td>
<td>C,M, (cessation improves outcomes)</td>
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<td><strong>Endocrine System</strong></td>
<td>Diabetes mellitus (30-40% increased risk of developing Type 2 diabetes) Smokers with diabetes have higher risk of developing microvascular and macrovascular complications including cardiovascular, nephropathy, blindness and premature death</td>
<td>Y,A</td>
<td>C, M (±ve dose response relationship)</td>
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<td>Peptic ulcer disease in persons who are Helicobacter pylori positive</td>
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<td></td>
<td>Cancers of esophagus, stomach, liver, pancreas, Colorectal polyps and cancer</td>
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<td>C</td>
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<td></td>
<td>Chrohn’s disease – higher risk of developing, worse symptoms, increased recurrence and need for repeated surgery</td>
<td>S, M, (cessation improved outcomes)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Higher risk of carrying H. pylori, leading to PUD</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Urinary System</strong></td>
<td>Cancers of kidney, ureter, bladder Renal failure resulting as a complication of hypertensive renal disease and diabetic renal disease</td>
<td></td>
<td>C</td>
</tr>
<tr>
<td>System</td>
<td>Diseases /Conditions</td>
<td>Main risk groups affected</td>
<td>Evidence of Causation</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td>---------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Reproductive Health</td>
<td><strong>Men</strong>: erectile dysfunction</td>
<td>M</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Subfertility, sperm DNA affected</td>
<td>M</td>
<td>A, M</td>
</tr>
<tr>
<td></td>
<td><strong>Women</strong>: reduced fertility, ectopic pregnancy</td>
<td>W</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Use of combined oral contraceptive pill with smoking increases risk of myocardial infarction synergistically (multiplicative effect)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Women</strong>:</td>
<td>W</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>Earlier menopause (~ 2 years earlier) and more symptoms;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Higher risk of PID</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Smoking may alter menstruation, including dysmenorrhea, secondary amenorrhea and menstrual irregularity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Subfertility treatment:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poorer success rate of conceiving following IVF and intracytoplasmic sperm injection among women whose male partner is a smoker</td>
<td>W, M</td>
<td></td>
</tr>
<tr>
<td>Pregnancy and maternal smoking</td>
<td>Pregnancy complications: premature rupture of the membranes, placenta previa, and placental abruption;</td>
<td>PW, F, I</td>
<td>C, M</td>
</tr>
<tr>
<td></td>
<td>Fetal growth restriction and low birth weight;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Preterm delivery and shortened gestation;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Congenital malformations: Orofacial clefts</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sudden infant death syndrome (SIDS);</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reduction of lung function in infants</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spontaneous abortion,</td>
<td>PW, F, I, C</td>
<td>S, M</td>
</tr>
<tr>
<td></td>
<td>Increased risk for impaired lung function in childhood and adulthood;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disruptive behavioral disorders, and ADHD in particular, among children;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Congenital malformations: clubfoot, gastrochisis, and atrial septal heart defects;</td>
<td>S</td>
<td></td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>Women who smoke are less likely to breastfeed their infant and more likely to wean early.</td>
<td>I, C</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>Tobacco smoke appears to have a direct negative effect on breast milk quality, and the quantity produced</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infant health and maternal smoking</td>
<td>Sudden infant death syndrome (SIDS),</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Increased respiratory problems, infections and pneumonia,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reduced lung function,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other effects of second-hand smoke (see relevant Table 2 below)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental and Orofacial</td>
<td>Congenital Orofacial clefts (maternal smoking),</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Periodontitis</td>
<td>C, M</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dental caries,</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>Failure of dental implants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haemotological and Immunological</td>
<td>Acute myeloid leukemia</td>
<td>C, M</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Immune dysfunction,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increased susceptibility to infections</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>Diseases /Conditions</td>
<td>Main risk groups affected</td>
<td>Evidence of Causation</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td><strong>Acute infections</strong></td>
<td>Increased susceptibility to infections in general due to reduced immunity Pneumonia, frequent respiratory infections, longer duration, increased severity, increased risk of death from influenza, pneumonia and other respiratory infections TB (increased risk of MTB disease, mortality and recurrence) Higher risk of being infected with HIV and HIV positive smokers have a higher risk of developing other infections Periodontitis Legionnaire's disease, meningococcal disease Higher risk of carrying H. pylori, leading to PUD Higher risk of carrying HPV, leading to cervical and probably also oropharyngeal cancers</td>
<td>All</td>
<td>C, M</td>
</tr>
<tr>
<td><strong>Eyes</strong></td>
<td>Blindness, cataracts, age related macular degeneration</td>
<td>All</td>
<td>S, M</td>
</tr>
<tr>
<td><strong>Ears, Nose, Throat (ENT)</strong></td>
<td>Snoring</td>
<td>All</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Impaired sense of smell</td>
<td>All</td>
<td>M, improved after cessation</td>
</tr>
<tr>
<td></td>
<td>Cancers of Oropharynx, larynx, Cancers of Oropharynx, larynx,</td>
<td>All</td>
<td>C</td>
</tr>
<tr>
<td><strong>Skin and hair</strong></td>
<td>Premature ageing of skin, increased wrinkling, discoloration Premature greying of hair Delayed would healing</td>
<td>All</td>
<td>S, M</td>
</tr>
<tr>
<td></td>
<td>Psoriasis, hydradenitis suppurativa, impact of skin lesions that occur with diabetes, lupus and AIDS</td>
<td>All</td>
<td>A</td>
</tr>
<tr>
<td><strong>Bones &amp; joints</strong></td>
<td>Hip fractures, Low bone density in postmenopausal women Delayed would healing and recovery after injury</td>
<td>All</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Rheumatoid arthritis</td>
<td>All</td>
<td>C, M</td>
</tr>
<tr>
<td><strong>Complications in medical/surgical treatment</strong></td>
<td>Increased risks for adverse surgical outcomes related to wound healing and respiratory complications; Drug interactions with oral contraceptives, sedatives, and drugs used to treat a number of different conditions, including aspects of heart disease, mental health problems, and breathing difficulties; Reduced response to treatment of cancers with radiotherapy and chemotherapy, increased side effects of chemotherapy, and greater impairment of immunity following chemotherapy</td>
<td>All</td>
<td>C, M (cessation improved outcomes)</td>
</tr>
<tr>
<td></td>
<td>Cancer patients</td>
<td>All</td>
<td>S (cessation improved outcomes)</td>
</tr>
<tr>
<td>System</td>
<td>Diseases /Conditions</td>
<td>Main risk groups affected</td>
<td>Evidence of Causation</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Poorer levels of general health</td>
<td>Diminished health status that may manifest as increased absenteeism from work and increased use of medical care services; Tiredness, fatigue, reduced wellbeing, satisfaction with life; Increased incidence of psychological symptoms such as depressed mood, anxiety; Increased sleep disturbances; In elderly, accelerated declines in physical function, increased levels of clinical illness and physical and cognitive impairment</td>
<td>All</td>
<td>C</td>
</tr>
<tr>
<td>Smoking and Motor vehicle crashes and other injuries</td>
<td>Driver distraction while smoking, also when not smoking reported; Increased risk of motor vehicle crash; Smokers are more likely to die from injury in motor vehicle crashes or other accidental injuries (probably from higher risk of complications)</td>
<td>Y, A, Road users</td>
<td>S</td>
</tr>
<tr>
<td>Burns and fires caused by tobacco use</td>
<td>Lit cigarettes are a leading cause of fires and fatalities from fires worldwide. Records of investigations into fires in Maldives (MNDF) have also found smoking or lit cigarettes as cause for several fire incidents</td>
<td>All</td>
<td>C</td>
</tr>
<tr>
<td>Tobacco poisoning</td>
<td>Nicotine poisoning is known among tobacco users before developing tolerance, tobacco farmers and employees exposed to unprocessed tobacco leaves, and children ingesting tobacco products or nicotine replacement therapy.</td>
<td>C, A (farmers)</td>
<td></td>
</tr>
<tr>
<td>Health effects in younger smokers</td>
<td>Incidence and more severe asthma in children and adolescents Reduced lung function and impaired lung growth during childhood and adolescence Other respiratory effects (cough, phlegm, wheeze, dyspnea) Lower physical fitness Development of dependency with lower consumption of cigarettes than adults Increased likelihood of substance abuse</td>
<td>C, Y</td>
<td>C</td>
</tr>
<tr>
<td>Occupational exposures and Air pollution</td>
<td>Tobacco smoke is a particulate air pollutant, classified under the WHO list of indoor air pollutants and outdoor air pollutants. It is also a source of indoor carbon monoxide pollution. Smoking in workplaces (particularly indoors) and working in smoking areas (e.g. restaurants) expose workers to second-hand smoke and its effects. (See Table 2 below) Employees of tobacco industry such as farmers and factory employees exposed to tobacco leaves through skin or inhalation have reported signs of tobacco poisoning, and are at higher risk of developing systemic health effects of tobacco.</td>
<td>C, Y, PW, occupational</td>
<td>S</td>
</tr>
</tbody>
</table>

Sources: The Health Consequences of Smoking – 50 Years of Progress: A Report of the Surgeon General 2014, other reports of the US Surgeon general on tobacco, Tobacco in Australia, and other publications. (1; 19-21; 24-25)
Health consequences of smokeless tobacco and other forms or tobacco:

Chewed forms of tobacco such as tobacco leaf with or without betel quid and arecanut is used in Maldives. Health consequences of smokeless tobacco are similar to smoked tobacco, and include cancers, particularly cancers of the head and neck, cardiovascular disease, respiratory disease and tobacco poisoning. Some forms may deliver a higher content of nicotine than smoked tobacco. (20; 24)

Water-pipe or hookah smoking (locally called ‘gudugudaa’ and commercially called ‘shisha’) is also common in Maldives and is increasingly being marketed to teens. Despite common misconceptions in the community that it is safer than cigarettes, the toxins inhaled from a water-pipe session is equivalent to 100 -200 cigarettes. Therefore users are at risk of all the health consequences of tobacco smoke, particularly risks in pregnancy. It also carries a higher risk of transmitting other infections such as tuberculosis and hepatitis B through sharing of equipment. (26)

**Figure 2: The health consequences causally linked to smoking**

![Diagram showing health consequences linked to smoking](image)

**Cancers**
- Oropharynx
- Larynx
- Esophagus
- Trachea, bronchus, and lung
- Acute myeloid leukemia
- Stomach
- Liver*
- Pancreas
- Kidney and ureter
- Cervix
- Bladder
- Colorectal*

**Chronic Diseases**
- Stroke
- Blindness, cataracts, age-related macular degeneration*
- Congenital defects-maternal smoking: orofacial clefts*
- Periodontitis
- Aortic aneurysm, early abdominal aortic atherosclerosis in young adults
- Coronary heart disease
- Pneumonia
- Atherosclerotic peripheral vascular disease
- Chronic obstructive pulmonary disease, tuberculosis,* asthma, and other respiratory effects
- Diabetes*
- Reproductive effects in women (including reduced fertility)
- Hip fractures
- Ectopic pregnancy*
- Male sexual function–erectile dysfunction*
- Rheumatoid arthritis*
- Immune function*
  - Overall diminished health

**Note:**

*Source: The Health Consequences of Smoking – 50 Years of Progress: A Report of the Surgeon General 2014. Note: This diagram only contains conditions that are causally linked to smoking, and may not contain all the health effects associated with smoking. Each condition presented in bold text and followed by an asterisk (*) is a new disease that has been causally linked to smoking in the 2014 report. (20 p. 4)*
Second-hand smoke exposure

Smoking puts the smoker’s family at risk. (1) Secondhand smoke (SHS) exposure increases the risks of having the following diseases and problems:

Table 2: Health consequences of second-hand smoke (SHS) exposure

<table>
<thead>
<tr>
<th>Diseases in children</th>
<th>Diseases in adults</th>
<th>Risks of maternal smoking for fetus and infant</th>
</tr>
</thead>
<tbody>
<tr>
<td>− sudden infant death syndrome</td>
<td>− coronary heart disease</td>
<td>− stillbirth</td>
</tr>
<tr>
<td>− acute lower respiratory illnesses</td>
<td>− stroke</td>
<td>− premature delivery</td>
</tr>
<tr>
<td>− middle ear disease</td>
<td>− nasal irritation</td>
<td>− low birth weight</td>
</tr>
<tr>
<td>− asthma, chronic respiratory symptoms (cough, phlegm, wheeze, breathlessness),</td>
<td>− exacerbation of asthma</td>
<td>− birth defects: cleft lip/palate</td>
</tr>
<tr>
<td>− impaired lung function</td>
<td>− lung cancer</td>
<td>− respiratory problems after birth</td>
</tr>
<tr>
<td></td>
<td>− reproductive effects in pregnant women (low birth weight)</td>
<td>− sudden infant death after birth</td>
</tr>
<tr>
<td>Studies suggest association for:</td>
<td></td>
<td>− reduced lung function in childhood</td>
</tr>
<tr>
<td>− acute lymphocytic leukemia, lymphoma, brain tumours</td>
<td>Studies suggest association for:</td>
<td>− adversely affects brain development</td>
</tr>
<tr>
<td>− allergies</td>
<td>− cancers of nasal sinus, breast</td>
<td>− nicotine dependence</td>
</tr>
<tr>
<td>− exposure in early infancy may be associated with certain childhood conduct problems and learning difficulties</td>
<td>− COPD</td>
<td>(withdrawals soon after birth, and higher risk of becoming a smoker in later life)</td>
</tr>
</tbody>
</table>

Studies suggest association for:

| − respiratory problems | | |
| − stillbirth | | |
| − sudden infant death | | |
| − low birth weight | | |
| − reduced lung function in childhood | | |
| − ADH in childhood | | |

Sources: WHO Toolkit for delivering 5A’s and 5R’s, Reports of the US Surgeon General on Tobacco and Tobacco in Australia (1; 20; 22; 24)

Figure 3: The health consequences causally linked to exposure to secondhand smoke (SHS)

Source: The Health Consequences of Smoking – 50 Years of Progress: A Report of the Surgeon General 2014. Note: This diagram only contains conditions that are causally linked to SHS, and may not contain all the health effects associated with SHS. Each condition presented in bold text and followed by an asterisk (*) is a new disease that has been causally linked to exposure to secondhand smoke in the 2014 report. (20 p. 5)
1.1.2. ECONOMIC IMPACT OF TOBACCO USE

Tobacco smoking takes away not just the smoker’s health but wealth. It is estimated that 5-15% of a smoker’s disposable income is spent on tobacco, which could be an enormous economic burden on them and their family. (1) You can use the cost calculator below to help patients find out how much money they have spent on cigarettes.

Table 3: The smoking cost calculator

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Example (in Rufiya)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of cigarettes (packs) you smoked per day</td>
<td>N</td>
</tr>
<tr>
<td>Money spent on tobacco per day</td>
<td>N x Pack price (Rf. 40)</td>
</tr>
<tr>
<td>Money spent on tobacco per month</td>
<td>X 30</td>
</tr>
<tr>
<td>Money spent on tobacco per year</td>
<td>X 12</td>
</tr>
<tr>
<td>Amount spent in 10 years</td>
<td>X 10</td>
</tr>
<tr>
<td>Amount spent in your lifetime (e.g. 17 years)</td>
<td>Per Year X 17 years</td>
</tr>
</tbody>
</table>

Alternatively you could try the following calculation tables:

The smoking cost calculator (2)

<table>
<thead>
<tr>
<th>Number of packs you smoke a year*</th>
<th>X</th>
<th>Number of years you have smoked</th>
<th>X</th>
<th>The average cigarette pack price</th>
<th>=</th>
<th>How much you have spent on cigarettes during your lifetime</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>=</td>
<td></td>
</tr>
</tbody>
</table>

*: For day to year conversion, see below tables

<table>
<thead>
<tr>
<th>Number of packs you smoke a year*</th>
<th>X</th>
<th>Number of years you have smoked</th>
<th>X</th>
<th>The average cigarette pack price</th>
<th>=</th>
<th>How much you have spent on cigarettes during your lifetime</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pack a day</td>
<td></td>
<td>1 pack a day</td>
<td></td>
<td>3 packs a day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>365 packs a year</td>
<td></td>
<td>548 packs a year</td>
<td></td>
<td>1095 packs a year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 packs a day</td>
<td>2</td>
<td>730 packs a year</td>
<td>2 ½</td>
<td>913 packs a year</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2 ½ packs a day</td>
<td>2</td>
<td>913 packs a year</td>
<td>3</td>
<td>1095 packs a year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 packs a day</td>
<td>3</td>
<td>1095 packs a year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: WHO Toolkit for delivering 5A’s and 5R’s (1)

Tobacco use causes an acknowledgeable amount of suffering for families and individuals associating with smokers. This suffering manifests itself in the form of diminished quality of life, death, and financial burden. (1)
1.1.2. SOCIAL CONSEQUENCES OF TOBACCO USE

Smoking affects social interaction and relationships negatively. In most cultures, people see smokers negatively. (1) In Maldives, it may overtly seem that smoking is socially accepted, as many people do not openly express negativity towards smokers. However, surveys such as the Global Youth Tobacco Survey (GYTS) in 2011 show that only 10% of teenagers find boys who smoke attractive, and only 7% of teenagers find girls who smoke attractive. The vast majority do not find smoking attractive. (4) There is a stigma attached to smoking (for example, people may think the smoker is smelly, disgusting/dirty, unhealthy, inconsiderate, etc.). As a smoker, their personal relationships may be affected because many people don’t enjoy being in a relationship with a smoker. As a smoker, their children are more likely to smoke and to be heavier smokers at young ages. (1)

Spirituality and religion have a strong role in overcoming addictions including alcohol and narcotic addictions. Maldivian patients who are ready to quit smoking have found spirituality helpful. (5) Most religions prohibit or discourage the use of substances that are harmful to the self, and actions causing harm to others, thus tobacco use, particularly smoking is discouraged. Official Islamic rulings (termed as ‘fatwa’) have been released by Muslim countries, official Islamic bodies and scholars of prominent religious institutions, declaring tobacco as ‘haram’ based on current scientific evidence of the physical, psychosocial and economic losses from tobacco and on related statements in the Qur’an and Sunnah prohibiting the use of substances harmful to the self, actions causing harm or injury to others, economic waste and use of substances causing intoxication or inability to focus in one’s prayer. As tobacco was not available, and not used in Arab countries during the times of the prophet Muhammad (PBUH), there were no specific references to tobacco per se in the Qur’an or the Sunnah. Therefore some scholars take a more cautious approach and declare it as ‘impermissible’, a more lenient term. In any case, contemporary religious scholars are agreed that tobacco cannot be declared as ‘permissible’, given the current scientific knowledge. Further details and some ‘fatwas’ from prominent institutions such as the Permanent Committee of Academic Research and Fatwa of Saudi Arabia are given in the book the book \textit{Islamic ruling on smoking}, and the WHO website. (27; 28)
1.2. BENEFITS OF QUITTING

You can explain to patients about the benefits of quitting, to motivate them to make a quit attempt. (1)

1.2.1. HEALTH BENEFITS

Helping your patients quit is the best thing that you can do to improve their health. There are immediate and long term health benefits of quitting for all smokers. You can extend the patient’s life up to 10 years by quitting. It is important to help your patients quit smoking as soon as possible so they can achieve these beneficial health changes and can live a longer and healthier life. (See Table 4). (1)

Table 4: Fact sheet: Health benefits of quitting smoking

<table>
<thead>
<tr>
<th>Time since quitting</th>
<th>Beneficial health changes that take place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 20 minutes</td>
<td>Your heart rate and blood pressure drop (towards normal).</td>
</tr>
<tr>
<td>After 8 hours</td>
<td>the nicotine in your bloodstream reduces by 93%.</td>
</tr>
<tr>
<td>12 hours</td>
<td>Your blood oxygen level increases to normal, while the carbon monoxide level in your blood drops to normal.</td>
</tr>
<tr>
<td>24 hours</td>
<td>Your quitting related anxieties peak and will return to pre quitting levels within 2 weeks</td>
</tr>
<tr>
<td>48 hours</td>
<td>Damaged nerve endings are regrow and your sense of smell and taste are returning to normal. At this time you're quitting related anger and irritability peak.</td>
</tr>
<tr>
<td>72 hours</td>
<td>You are 100 percent nicotine free your withdrawal symptoms already peaked. The bronchial tubes in your lungs are relaxing and you're now breathing easier.</td>
</tr>
<tr>
<td>5-8 days</td>
<td>You're having an average of 3 cue induced cravings each day and no craving lasts longer than 3 minutes.</td>
</tr>
<tr>
<td>10 days</td>
<td>You have less than 2 cravings a day each less than 3 minutes.</td>
</tr>
<tr>
<td>2-4 weeks</td>
<td>Your quitting related anger anxiety, impatience, insomnia, restlessness and depression are gone. You begin to experience stress relief after quitting.</td>
</tr>
<tr>
<td>2-12 weeks</td>
<td>Your circulation improves and your lung function increases.</td>
</tr>
<tr>
<td>1-9 months</td>
<td>Coughing and shortness of breath decrease, cilia re-grow, and you feel more energetic.</td>
</tr>
<tr>
<td>1 year</td>
<td>Your risk of coronary heart disease and stroke are about half that of a smoker.</td>
</tr>
<tr>
<td>5 years</td>
<td>Your stroke risk is reduced to that of a non-smoker 5 to 15 years after quitting.</td>
</tr>
<tr>
<td>10 years</td>
<td>Your risk of lung cancer falls to about half that of a smoker and your risk of cancer of the mouth, throat, esophagus, bladder, cervix, and pancreas decrease.</td>
</tr>
<tr>
<td>15 years</td>
<td>The risk of coronary heart disease is that of a non-smoker’s.</td>
</tr>
</tbody>
</table>

B. Benefits for all ages and people who have already developed smoking-related health problems. They can still benefit from quitting.

<table>
<thead>
<tr>
<th>Time since quitting</th>
<th>Benefits in comparison with those who continued</th>
</tr>
</thead>
<tbody>
<tr>
<td>At about 30</td>
<td>Gain almost 10 years of life expectancy</td>
</tr>
<tr>
<td>At about 40</td>
<td>Gain 9 years of life expectancy</td>
</tr>
<tr>
<td>At about 50</td>
<td>Gain 6 years of life expectancy</td>
</tr>
<tr>
<td>At about 60</td>
<td>Gain 3 years of life expectancy</td>
</tr>
<tr>
<td>After the onset of life-threatening disease</td>
<td>Rapid benefit, people who quit smoking after having a heart attack reduce their chances of having another heart attack by 50%.</td>
</tr>
</tbody>
</table>

C. Quitting smoking decreases the excess risk of many diseases related to second-hand smoke in children, such as respiratory diseases (e.g., asthma) and ear infections.

D. Quitting smoking reduces the chances of impotence, having difficulty getting pregnant, having premature births, babies with low birth weights, and miscarriage.

Source: WHO Toolkit for delivering 5A’s and 5R’s (1)
**Educational material:** You may also use the video in this package - *Quitting Smoking Timeline* - to show your patients the benefits of quitting, if you have the time and resources. (16) It is an inspiring 6 minute video. You may have to translate its content to Dhivehi language for your patients.

1.2.2. ECONOMIC BENEFITS

Quitting also has very clear and tangible financial benefits to smokers. You can use the quit & save exercise to help patients understand how much money they can save if they quit. (1)

*Table 5: Quit & Save! Smoking cost calculator*

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Example (in Rufiya)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of cigarettes (packs) you smoked per day</td>
<td>N</td>
</tr>
<tr>
<td>Money spent on tobacco per day</td>
<td>N x Pack price (Rf. 40)</td>
</tr>
<tr>
<td>Money spent on tobacco per month</td>
<td>X 30</td>
</tr>
<tr>
<td>Money spent on tobacco per year</td>
<td>X 12</td>
</tr>
<tr>
<td>Amount spent in 10 years</td>
<td>X 10</td>
</tr>
<tr>
<td>Amount spent in your lifetime</td>
<td>Per Year X 17 years</td>
</tr>
</tbody>
</table>

*Adopted from:* WHO Toolkit for delivering 5A’s and 5R’s (1)

1.2.3. SOCIAL BENEFITS

After quitting, patients will feel less isolated - quitting means they can go anywhere, not just where they can smoke. They will improve their relationships with their family, friends and employers. They will be more productive - they don’t have to keep stopping what they are doing to have a smoke. They will be able to expand and improve the quality of their social interactions (contrary to their beliefs, as they become more socially acceptable). (1) Many patients also find their mental health improved after quitting. They find themselves less stressed than when they smoked, and no longer feel bad about harming or being a nuisance to others. (29)

When patients quit smoking, their children become less likely to start smoking and more likely to quit if they already smoke. (1) It is useful to emphasize to smokers who are parents or grandparents that “Stopping smoking may be one of the most important things you can do for your children (or grandchildren) by being a healthy role model”.

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1.3. THREE CHALLENGES TO QUITTING SMOKING

In order for you to assist smokers in planning and making a quit attempt, it is important that you familiarize yourself with the common challenges and barriers to quitting and effective coping strategies and skills. (1)

Tobacco is highly addictive. As addiction to nicotine may set in very quickly, smoking soon sets in as a behavior that is part of the smokers regular daily life. Changing such a behavior is not easy. An individual trying to change a behavior goes through a cycle of five stages of change before they finally come out of it. Figure 4 shows an example of stages of behavioural change related to quitting smoking. The good news is, that every time a person relapses, they have gone through one cycle of change, and reach one step closer to finally quitting for good. You need to understand this so that you do not get annoyed or disappointed when a patient relapses, and instead can use this knowledge to encourage your patient to try again.

*Figure 4: Stages of readiness to quit smoking*

![Stages of readiness to quit smoking](image)

Not ready to quit; does not recognize smoking as a problem

Recognizes smoking is a problem, and considering quitting some time (time not defined, or in the next few months), no immediate plans.

Has initiated action – Just quit smoking (<1month ago)

Seriously committed to action in next 2 weeks, making plans

Ongoing practice of new healthy behaviour (usually lasts ~1-6 mths)

Source: Irish Cancer Society (30), Adapted from Prochaska, DiClemente and Norcross, 1995 (31).

Different people have different reasons why they smoke and why they don’t quit. Their reasons are typically classified into three categories:

1. physical addiction
2. psychological or emotional connections
3. behavioral and social connections (1)
1.3.1. PHYSICAL ADDICTION

Nicotine, a highly addictive chemical in tobacco products, affects the dopamine systems in the smoker’s brain and increases the number of nicotinic receptors in the brain. As a smoker, their brain and body become used to functioning on certain level of nicotine. If they stop smoking, their nicotine level will drop dramatically one or two hours after the last cigarette, which will cause them to crave nicotine (cigarettes) and have withdrawal symptoms. (1)

Educational material: You may also use the video in this package - Tobacco Addiction Story - nosmokes.com.au - to explain to your patients about addiction, if you have time and resources. (15) You may have to translate its content to Dhivehi language for your patients.

Nicotine withdrawal symptoms that may occur from suddenly stopping the use of tobacco such as headaches, coughing, cravings, increased appetite or weight gain, mood changes (sadness, irritability, frustration, or anger), restless, decreased heart rate, difficulty concentrating, influenza–like symptoms and insomnia, can be a major barrier against attempting to quit or staying quit. The good news is that these symptoms are normally temporary (2-4 weeks) and not all people will experience withdrawal symptoms. But it is important to prepare your patient for the possibility. There are also effective methods available to help patients overcome them. (1; 7)

There are two ways to deal with nicotine withdrawal symptoms: cognitive-behavioral therapies and pharmacological/medical therapies (nicotine replacement therapies (NRT), bupropion, varenicline). (1)

1.3.1.1. Cognitive behavioural therapies

Cognitive-behavioral therapies can effectively help smokers alleviate withdrawal symptoms. (7) They involve focusing on thoughts and behaviours which may assist with smoking cessation. Cognitive behavioural therapies include assessing your patient’s risk for withdrawal symptoms and cravings, explaining about them, reassure that they are temporary and not life-threatening, inform of which symptoms he/she may be most likely to experience, and help him/her work out how to cope with or overcome them using alternative healthy behaviours. Knowing the timings of withdrawal symptoms and informing the patients when to expect them to peak and to disappear could be very helpful for coping with them. The hardest time is the first 72 hours, when withdrawals peak. After this, they keep getting better over time, and most people overcome the anxiety, depression, anger and mood changes by 2-4 weeks. During this period, they may find withdrawals affecting their relationships and work, and may need support from family and friends, so it is important to inform their family and friends before quitting and ask for support during this period. Section 3.1.1(i) gives timings of withdrawals and cravings, main challenges and some cognitive behavioural strategies for helping your patient deal with them. Cognitive behavioural therapies are used in dealing with psychological or emotional connections (sections 3.1.2 and 0) and behavioral and social connections (sections 3.1.3 and 0) as well. These should be addressed in the START method in 5A’s in Section 3 to help those ready to quit.

1.3.1.2. Pharmacological therapies

In addition to behavioral therapies, there are also pharmacological therapies available to help overcome nicotine withdrawal symptoms. (7) Section 3.1.1.ii) describes details of available therapies with proper usage, doses and side effects of these medicines.
1.3.2. EMOTIONAL/PSYCHOLOGICAL CONNECTIONS

Smokers link cigarettes and smoking with certain emotions, thoughts, and beliefs via the process of withdrawal and “operant conditioning”. Part of quitting involves breaking those subconscious connections. It is important to work with your patients to find out the links between smoking and their feelings and beliefs that smokers form and to help them debunk negative beliefs of smoking and quitting (for example, “Smoking helps me relax”, while scientific evidence is that smoking actually increases stress, and quitting successfully has been shown to reduce stress levels, or “Smoking isn’t really harmful”, for which there is ample scientific evidence to prove the opposite). (1) Box 1 below gives some of these myths and explains the realities about them.

You can remind smokers about the risks of smoking and the benefits quitting, as in 5R’s method. You can also suggest patients create positive self-talks to help them form positive thoughts. (1) (See section 3.1.2 for how you can help your patients break these connections.)
Box 1: Debunking misconceptions about health risks of smoking

Here are just some common misconceptions of tobacco and the real facts. Most of these myths are created and spread by the tobacco industry to trick people into using their products and getting hooked.

Only old people get ill from smoking! – Anyone who smokes tobacco increases their risk of ill health. All age groups suffer short-term consequences of smoking that include decreased lung function, shortness of breath, cough, and rapid tiring during exercise. Smoking also diminished the ability to smell and tastes and causes premature aging of the skin. Smoking related diseases often develop over a number of years before diagnosis is made. The longer you smoke, the greater your risk of developing cancer, heart, lung, and other preventable diseases. Because these diseases do develop over the course of a life time, it gives the appearance of only effecting elderly people. However, people in their 20s and 30s have died from strokes caused by smoking.

Cutting down the number of cigarettes can reduce health risks – There is no safe level of cigarette consumption. Some people try to make their smoking habit safer by smoking fewer cigarettes, but most find this hard to do and quickly return to their old pattern. Although reducing your cigarette consumption will slightly reduce your risk, quitting is the only way to long-term health benefits. Just three cigarettes a day can trigger potentially fatal heart disease, with women particularly at risk.

Low Tar cigarettes are safe to smoke – There is no such thing as a safe cigarette. A low-tar cigarette is just as harmful as other cigarettes. Although low-tar cigarettes can be slightly less damaging to your lungs over a long period of time, people who smoke these have been shown to take deeper puffs, puff more frequently and smoke the cigarettes to a shorter butt length. Switching to low-tar cigarettes has few health benefits compared with the holistic benefits of quitting.

“Rollies” are safe to smoke – Roll-your-own (RYO) tobacco, or rollies contain many of the same chemicals as manufactured cigarettes. Research suggests that RYO tobacco is at least as harmful, or possibly more harmful, than smoking factory-made cigarettes. Studies show that RYO smokers tend to make cigarettes that can yield high levels of tar and nicotine. They may also not use a filter. Both RYO only and mixed smokers report inhaling more deeply than factory-made cigarette smokers. More research is required to determine the levels of chemicals inhaled by RYO smokers.

Water-pipe, hookah, Gudugudaa or ‘shisha’ is safe to smoke as they were used traditionally. – Many people think that the water filters some of the toxins, and the flavours or aromas reduce the toxicity. The fact is this does not happen. Flavours are only a mask to cover it up, and are used by the tobacco industry to attract women to this dangerous habit. In reality, a session of gudugudaa is equivalent to smoking more than 100 cigarettes! Sharing the pipes may also lead to spread of dangerous infections such as hepatitis B and tuberculosis.

Historical tradition is also a concept that is not quite accurate, probably propagated by the tobacco industry. Tobacco was introduced to the rest of the world only after Columbus discovered the Americas, and could not have been introduced to Maldives before the Portuguese invasion. In 1558, Maldives has a proud history dating long before this to at least the 12th century. Compared to this, tobacco use had been common for only a short duration. On the contrary, most Islamic scholars declare tobacco as ‘haram’ (unlawful or prohibited) in the light of modern scientific research.

Filters make cigarettes safer. - Filters do not protect you. They are designed to make smoke particles smaller. That makes nicotine easier to absorb. This increases addiction. Cigarettes have been engineered to speed up nicotine’s path to your brain. Their design feeds addiction. Light or low-tar cigarettes may sound less dangerous. They aren’t. No cigarette or tobacco product is safe.

Source: A guide for tobacco users to quit (7), US Surgeon general reports, CDC, WHO. (20; 21; 24; 32; 26; 27; 33)
Box 1: Debunking misconceptions about health risks of smoking (continued)

E-cigarettes or vapour devices are safe to smoke and help to quit. – This is misleading. Electronic nicotine delivery devices (ENDS) that are designed to deliver nicotine using aerosols such as propylene glycol should be treated with caution, as there is little research on their safety at present. These are not shown to be effective for quitting so far. However, according to current research, nicotine itself is known to have health risks such as cardiovascular risks, adverse effects during pregnancy including on the fetal brain, and potential for addiction and brain damage in children and youth. Nicotine can also contribute to the process of cancers. Most ENDS devices release nicotine in similar concentrations as cigarettes. Although they do not contain tobacco itself, some ENDS contain various other chemicals, some of which are known to cause cancer. Therefore these devices are not considered safe.

Smoking isn’t really harmful. We are not sure that tobacco actually causes these diseases. – This is a myth propagated by the tobacco industry. Tobacco smoke contains more than 7,000 chemicals. At least 250 are toxic. There is a large body of good quality research that has proven that tobacco causes diseases such as heart disease, stroke, cancer, lung diseases and negative health effects to almost every organ in the body. Scientists have found exactly how some of these chemicals act and cause many of these diseases. The tobacco industry has tried to conduct biased research and show benefits of smoking, however they have not been successful.

Smoking is just a choice – The first time? Maybe. After just a few cigarettes? No. Addiction to nicotine can happen quickly. It changes the chemical balance in your brain. Smoking may seem like it’s just a choice or a habit. In fact, most people who use tobacco are addicted. And surveys show that for most people, even the choice of smoking the first cigarette has not been a properly informed decision, as most had their first cigarette before 18 years age, and without knowing the actual health consequences and addictive nature of tobacco. Breaking nicotine addiction is harder for some people than others. Quitting can take several tries. But don’t give up.

It’s cool to smoke! – Smoking makes the skin age faster and creates bad body odour in addition to the many disabling and disfiguring health risks. In addition, smoking is highly addictive. Nobody really likes losing their freedom and control over their own behavior and the choice to not smoke whenever they want. What is cool about something that slowly destroys your body, makes you unattractive and finally kills you at a younger age?

Smoking helps me relax. - This is a common misconception believed by many smokers. Smoking has absolutely no connection to stress relief. In fact, nicotine leads to increased stress. Addiction to nicotine makes the smoker feel more stressed between two smokes, and a large part of a smokers life would be spent in constant withdrawal. Research shows that smokers who quit successfully have benefited from reducing their stress levels.

It keeps my weight down. – This is again a misleading concept that tobacco industry uses. Tobacco use damages nerve endings and reduces the sensation of taste. So smokers have reduced appetite and cannot eat well. Their bodies become thinner. However, smoking induced weight loss is not a healthy thinness, nor is it a pretty image. Most smokers have skin ageing, and also muscle loss due to increased muscle breakdown. Often male smokers find it difficult to build their muscle mass. Smoking also increases blood cholesterol and blood clotting, and the risk of heart attack and stroke despite being thin.

Source: A guide for tobacco users to quit (7), US Surgeon general reports, CDC, WHO. (20; 21; 24; 32; 26; 27; 33)
1.3.3. BEHAVIORAL AND SOCIAL CONNECTIONS

Smoking is a habit – an addictive habit. It is so intimately tied to the smoker’s everyday activities and to some social cues, or triggers, in his/her environment. (1) Some triggers are everyday behaviours, such as drinking coffee or seeing others smoking, while environmental triggers like fancy ashtrays, or attractive displays of tobacco products in restaurants or shops are often deliberately set-up by the tobacco industry. To quit smoking, the smoker needs to break these connections that have formed the habit. (1; 10)

You should work with your patients to find out what behaviors or actions have been associated with smoking and identify effective strategies or activities to break the connections (See section 3.1.3 for how you can help your patients break these connections.)

It is important to remember that these three types of challenges are not necessarily separate obstacles. Success in dealing with challenges of one category can help patients deal with challenges from the other categories as well. (1)
2. 5As & 5Rs: TOBACCO CESSATION – BRIEF ADVICE PROTOCOL FLOWCHART
Adapted from WHO PEN protocol 2: Health Education and Counseling on Healthy Behaviours (8)

A1: ASK
Do you use tobacco?

A2: ADVISE
YES ➢ Positive Reinforcement with a relevant message.
➢ Ask for Second-hand smoke (SHS) exposure and Advise

➢ Advise to quit in a clear, strong, personalized and non-judgmental manner
E.g. “Tobacco use increases your risk of developing a heart attack/ stroke/ lung cancer / respiratory disease [personalize]. Quitting tobacco use is the one most important thing you can do to protect your health, and you have to quit now.”

A3: ASSESS
Are you willing to make a quit attempt now?

A4: ASSIST
YES ➢ Assist in preparing quit plan
Set a quit date
Tell family and friends and ask for their support
Anticipate and prepare for times when you may be tempted (withdrawals and cravings).
Remove triggers and Remind yourself (card)
Track your progress and follow up1.
Give Quit tips card/phone application.
Consider NRT if required and available.

NO ➢ Motivate to quit: 5R’s
➢ Relevance of quitting
➢ Risks of smoking
➢ Rewards of quitting;
   [Compare pros & cons.]
➢ Roadblocks to quit.
➢ Repeat above (every visit).
➢ Advice to reduce SHS2 to others (esp. family)
➢ Give leaflet.

A5: ARRANGE

➢ At follow-up:
If quit successfully: congratulate, reinforce, relapse prev.
If relapsed: reassure, more intensive follow-up + family support. Counseling +/- NRT, if required AND available.

➢ At follow-up:
Re-assess (as in A3) and manage accordingly.

1 Frequency of follow-ups: Follow-up within 1 week and 1 month (earlier if problems +), then every month thereafter for 4 months and evaluation after 1 year. If not feasible, reinforce counseling whenever the patient is seen for blood pressure monitoring. Telephone / community follow-up if defaults.

2 SHS: Second-hand smoke exposure

Document smoking status, readiness to quit and advice/plan on patient notes / prescription. E.g. Smokes 20 cigs/day, agreed to quit on 1/1/2016. Review on 8/1/2016.

For more details: see National Tobacco Cessation Brief Intervention Toolkit (5A’s and 5R’s) and training slides.
3. THE 5A’s MODEL: to help patients ready to quit

The 5As (Ask, Advise, Assess, Assist, Arrange) summarize all the activities that a primary care provider can do to help a tobacco user within 3–5 minutes in a primary care setting. This model can guide you through the right process to talk to patients who are ready to quit about tobacco use and deliver advice. Please find below action and strategies for implementing each of the 5As (Table 6). (1)

| Table 6: The 5A’s brief tobacco interventions for patients ready to quit |

<table>
<thead>
<tr>
<th>5A’s</th>
<th>Action</th>
<th>Strategies for implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ask - Systematically identify all tobacco users at every visit.</td>
<td>• Ask ALL of your patients at every encounter if they use tobacco and document it.</td>
<td>• Tobacco use should be asked about in a friendly way – it is not an accusation. &lt;br&gt;• Keep it simple, some sample questions may include: “Do you smoke cigarettes?” “Do you use any tobacco products?”</td>
</tr>
<tr>
<td>Advise - Persuade all tobacco users that they need to quit</td>
<td>• Urge every tobacco user to quit in a clear, strong and personalized manner.</td>
<td>Advice should be: &lt;br&gt;• Clear – “It is important that you quit smoking (or using chewing tobacco) now, and I can help you.” “Cutting down while you are ill is not enough.” “Occasional or light smoking is still dangerous.” &lt;br&gt;• Strong – “As your doctor, I need you to know that quitting smoking is the most important thing you can do to protect your health now and in the future. We are here to help you.” &lt;br&gt;• Personalized – Tie tobacco use to: &lt;br&gt;− Demographics: For example, women may be more likely to be interested in the effects of smoking on fertility than men. &lt;br&gt;− Health concerns: Asthma sufferers may need to hear about the effect of smoking on respiratory function, while those with gum disease may be interested in the effects of smoking on oral health. “Continuing to smoke makes your asthma worse, and quitting may dramatically improve your health.” &lt;br&gt;− Social factors: People with young children may be motivated by information on the effects of second-hand smoke, while a person struggling with money may want to consider the financial costs of smoking. “Quitting smoking may reduce the number of ear infections your child has.” or “Stopping smoking may be one of the most important things you can do for your children by being a healthy role model.”</td>
</tr>
</tbody>
</table>
| Asses - Determine readiness to make a quit attempt | • Ask two questions in relation to “importance” and “self-efficacy”: 1. “Would you like to be a non-tobacco user?” 2. “Do you think you have a chance of quitting successfully?” | • Any answer in the shaded area indicates that the tobacco user is NOT ready to quit. In these cases you should deliver the S R’s intervention (see Section 6). <br>Table:<br>Question 1 | Yes | Unsure | No <br>Question 2 | Yes | Unsure | No |<br>• If the patient is ready to go ahead with a quit attempt you can move on to Assist and Arrange steps. |<br>4 Adapted from: WHO Toolkit for delivering 5A’s and 5R’s and A guide for tobacco users to quit (1; 7)
Assist - Help the patient with a quit plan
a) Help the patient develop a quit plan.
b) Provide practical counseling
c) Provide intra-treatment social support.
d) Provide supplementary materials – e.g. the START Quit tips card/leaflet, including self-help tips, information on phone applications, quit lines and other referral resources.
e) Recommend the use of approved medication if needed.

Strategies for implementation
a) Use the START method to facilitate and help your patient to develop a quit plan. Use Quit card/leaflet on START in Annex 4 to explain to the patient:
   - Set a quit date, ideally within two weeks. Choose a time that is not too stressful but relatively busy. A special date may be useful, but not necessary.
   - Tell family, friends, and coworkers about quitting, and ask for support. Ask for understanding, as you may have temporary mood changes due to withdrawal. Ask any smokers among them to refrain from lighting up when you’re around! Ask for support. They can support you by reminding you of your goal to quit and encouraging you to not give in to temptations like cravings. By telling your friends, family, and coworkers you might also inspire those of them who smoke to create a quit plan with you. Having a “quit buddy” is a great way to keep both of you accountable and on track to quitting.
   - Anticipate challenges to the upcoming quit attempt, (withdrawals, cravings and triggers) and prepare for dealing or coping with these. See section 3.1.1, 3.1.2 and 3.1.3 below. Choose healthy alternatives to smoking. Maintain a healthy lifestyle.
   - Remove triggers, such as tobacco products, ash trays and souvenirs from your environment and make your home smoke free. Choose smoke-free places when going out. Spend time with friends and family members who do not smoke (avoiding those who smoke). Also Remind yourself of your goal and why he/she wanted to quit. (Try making a Reminder Wallet Card as in Annex 2)
   - Track progress. Give patient a tick chart or fence chart, or phone app. to mark his/her cravings and how he coped, and review it at follow-up.

b) Practical counseling should focus on three elements:
1. Help the patient identify the danger situations (events, internal states, or activities that increase the risk of smoking or relapse – i.e. Withdrawals, Cravings and Triggers).
2. Help the patient identify and practice cognitive and behavioral coping skills to deal with the danger situations. (See section 3.1.1(i) and 3.1.3) Be prepared with what to do when faced with a trigger, such seeing cigarettes or others smoking, peer pressure to smoke, etc.
3. Provide basic information about smoking and quitting.

c) Intra-treatment social support includes:
   - Encourage the patient in the quit attempt.
   - Communicate caring and concern.
   - Encourage the patient to talk about the quitting process.
   - Engage a close family member or friend who doesn’t smoke to support him/her; a young child of the patient could be particularly helpful. Or a ‘Quit buddy’ to quit together.

d) Supplementary material and institutional support:
   Give Quit tips card/leaflet containing START tips, free self-help phone application and numbers to reach counseling services (Annex 4). Make sure you have a list of existing local tobacco cessation services (quit lines, tobacco cessation clinics and others) on hand for providing information whenever the patient inquires about them. Before you refer a patient to a tobacco cessation clinic, make sure to contact the center and ask if the service is available, open times, contact numbers, etc. particularly if the patient has to travel to another island. The support given to the patient needs to be described positively but realistically.

e) Consider medication such as NRT if it is indicated for the patient and available. Make sure it is available in your area before suggesting it. (See Section 3.1.1 (ii) on Pharmacological therapies)
<table>
<thead>
<tr>
<th>5A’s</th>
<th>Action</th>
<th>Strategies for implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrange - Schedule follow-up contacts or a referral to specialist support</td>
<td>Document smoking status and intervention on patient notes</td>
<td>• Document the patient’s smoking status, readiness to quit and advice/plan on patient notes such as in-patient-notes, discharge summary, prescription. <em>E.g. Smokes 20 cigs/day, agreed to quit on 1/1/2016.</em> This is important for follow-up, even if patient goes to another health care provider.</td>
</tr>
<tr>
<td></td>
<td>Arrange a follow-up contact with your patient either in person or by telephone.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Refer the patient to specialist support if needed</td>
<td></td>
</tr>
</tbody>
</table>

Follow-ups:

- **When:**
  The first follow up contact should be arranged during the first week. A second follow up contact is recommended within 1 month after the quit date. Then monthly for 4 months and evaluation after 1 year. If this is not feasible, reinforce counseling whenever the patient is seen for blood pressure monitoring. Telephone / community follow-up if defaults.

- **How:** Use practical methods such as telephone, personal visit and mail/email to do the follow up. Following up with patients is recommended to be done through teamwork if possible.

- **What:**
  For all patients:
  - Identify problems already encountered and anticipate challenges.
  - Remind patients of available extra-treatment social support.
  - Assess medication use and problems.
  - Schedule next follow up contact.

  For patients who are abstinent:
  - Congratulate them on their success.
  - Review challenges and give relapse prevention tips. *E.g. use the Reminder wallet card in Annex 2 to feel good and boost confidence when patient is alone, prepare for what to do if others invite or pressure patient to smoke. (Inviting friends / family to also quit smoking may help to boost patient’s confidence and widen social support.*)

  For patients who have used tobacco again (relapsed):
  - Remind them to view relapse as a learning experience.
  - Review circumstances and elicit recommitment.
  - Link to more intensive treatment if available.

See section 3.2 on Relapse Prevention.

Adapted from: WHO Toolkit for delivering 5A’s and 5R’s and A guide for tobacco users to quit (1; 7)
3.1. Strategies and skills to overcome common barriers and challenges to quitting

3.1.1. STRATEGIES FOR PHYSICAL ADDICTION

i. Dealing with withdrawals and cravings - Cognitive-behavioural therapies

<table>
<thead>
<tr>
<th>Withdrawal symptoms</th>
<th>Timings</th>
<th>Main challenges that lead to relapse</th>
<th>Suggestions to overcome challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>• headaches</td>
<td>• usually start within a few hours, increase and peak over 48-72 hours, then gradually decrease over 2-4 weeks.</td>
<td>These can negatively affect relationships and work if patients, their family, friends and work colleagues are not prepared for it. Anxiety symptoms may seem frightening, as some people may feel palpitations, or chest pain, or as if they cannot breathe.</td>
<td>Inform patient of symptoms he/she may expect, and that the first 3 days are the hardest, then they keep getting better. They are often relieved by 2-4 weeks. Encourage patient to inform family, friends and immediate work colleagues that he/she is planning to quit smoking, and may experience some temporary mood changes, over the first 2-4 weeks and need their support. Offer patient to try focusing on positive thoughts about quitting or filling your head with happy, uplifting music or prayers to drown out the negative thoughts and emotions that you are experiencing. Engage in prayer for spiritual support. Remind yourself of all the benefits of quitting smoking; think of how much better you will physically feel, think of all the extra energy you will have. If patient presents with severe withdrawals. Investigate and treat as required, but Do NOT let him/her get the impression that it is ok to smoke under any circumstances. Prescribe symptomatic treatment or NRT if required and available. Some symptomatic remedies include: <strong>Headaches</strong>: hydration, healthy lifestyle (See NOTE below) <strong>Restlessness</strong>: get up and move around! Exercise or go for a walk. <strong>Difficulty concentrating</strong>: Prayer, meditation, and mental imagery. Think of it like exercising for you mind! Also healthy lifestyle (See NOTE) <strong>Insomnia</strong>: Relaxation methods and regular exercise. Common practices to overcome insomnia also include bedtime prayers, counting sheep, guided meditation, and self-guided imagery.</td>
</tr>
<tr>
<td>• mood changes (sadness, irritability, frustration, or anger) – • restlessness • difficulty concentrating • insomnia • decreased heart rate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Coughing</td>
<td>• May begin in the first 2-3 days of quitting. • Gradually improves. • May take 1-9 months to recover completely.</td>
<td>Lowers the quitter’s confidence, leading them to think they were better off when smoking.</td>
<td>Increased secretions are part of the recovery process of the respiratory system. Explain this to the patient helps him/her see it positively. Despite the cough, breathing gradually becomes easier after the first 72 hours, as bronchial tubes begin to relax. Staying hydrated is key to manage cough. Symptomatic treatment may be advised. E.g. A spoonful of honey, warm teas, juices, inhaling vapors, and avoiding dairy milk. Get enough sleep.</td>
</tr>
</tbody>
</table>

5 Adapted from: *A guide for tobacco users to quit*, WHO 2014 (7)
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<thead>
<tr>
<th>Withdrawal symptoms</th>
<th>Timings</th>
<th>Main challenges that lead to relapse</th>
<th>Suggestions to overcome challenges</th>
</tr>
</thead>
</table>
| • cravings (hunger or urges to smoke / use tobacco) | • Rapid fire cravings, last ~1-2 minutes, then ease.  
• Max. in 1st week,  
• After 5-8 days: ~3 /day, last <3 min.  
• After 10 days: <2/day  
• frequency gradually decreases  
• Infrequent cue-induced cravings may last 6 months or more | A strong reason for relapse that patients may find difficult to recognize or understand, as most people do not know that this is due to nicotine withdrawal, and mistaken it for their own choice. | Explain that cravings are due to nicotine withdrawal.  
Help patient identify something to do for a few minutes when cravings occur, to cope or distract his/her attention. A short, 10-minute distraction will do.  
Try 4Ds for coping with cravings:  
Delay (tell yourself “I’ll wait a little longer”)  
Deep breathing  
Drink water  
Do something else instead of smoking (E.g. walk fast, exercise, pray, listen to an inspiring song, roll a pen between fingers, call a friend, etc.)  
Make sure that it is a healthy alternative. |

| increased appetite or weight gain | Appetite increases after a couple of days of quitting, resulting in eating more and weight gain. | Excessive weight gain lowers the quitter’s confidence, leading them to think they were better off when smoking. | Explain that improved appetite (vs. increased appetite) is part of the recovery process, as nerves and taste-buds recover from smoking-induced damage.  
Trying exercise when quitting smoking can reduce weight gain and additionally help to feel energized, experience physical improvement and boost self-confidence.  
Help patient make healthy diet choices – drink more water and eat more fruit and vegetables and cut-down on energy drinks, coffee, fizzy drinks, sugary drinks, junk food and fast-food. The improved appetite can help him/her enjoy healthy foods better.  
Tracking cravings and triggers in a note-book or using the phone app. can help patient avoid triggers and improve confidence as cravings reduce in frequency.  
For patients who cannot tolerate cravings, NRT can be prescribed. |

**NOTE:** All symptoms can be managed with a healthy lifestyle. Make sure to eat healthy and sleeping enough, exercise, drink plenty of water, make good eating choices (particularly eat plenty of fruit, avoid energy drinks, cut down on caffeine and high sugar drinks, junk food and deep fried foods), take a multivitamin, develop relaxation mechanisms (it could be praying, deep breathing, using a stress ball, or something of your own creation!), and reward yourself with things such as a new book or a hot bath to not only help relax you, but to also distract you from your current urges and cravings.  
Avoid arecanut chewing as an alternative, as it increases risk of oral cancer. (34) Spices like cinnamon or a crunchy fruit like apple may be used for those who prefer chewing something as an alternative to smoking.  
Healthy lifestyle helps to reduce stress as well.  

Adapted from: *A guide for tobacco users to quit*, WHO 2014. (7)
ii. Pharmacological therapies

There are two major types of medication available that may be able to relieve withdrawal symptoms: nicotine replacement therapies (NRTs) and non-nicotine replacement therapies. NRTs include nicotine patch and gum or other oral preparations, whereas non-nicotine therapies include medications like bupropion and varenicline. (7)

Medicines are not a must for quitting. Even heavy smokers can quit successfully with good family support and supportive environment.

Prescribing Nicotine Replacement Therapy (NRT)

Scientific evidence shows that NRT increases quit rate, particularly coupled with counseling, and also to some extent on its own, when prescribed and followed up by a GP. Smoking cessation using NRT to quit is always safer than continuing to smoke. (13)

Check availability and assess patient for need for NRT before prescribing. Always give clear instructions for use, follow-up and tailor dose according to dependency, withdrawals and cravings at each visit.

Step 1: Explain how NRT works.

The addictive chemical in cigarettes/tobacco is nicotine. NRT provides some of the nicotine that a person gets from smoking without the other harmful chemicals. NRT works to reduce withdrawals and cravings associated with stopping smoking.

Step 2: Assess the time when the first cigarette is smoked (see note 1)

Smoking after 30 min. of waking

Smoking within 30 min. of waking

Step 3: Assess how many cigarettes are smoked (see note 2)

Smokes <10 a day

Smokes >10 a day

Step 4: Explain which products are available, recommend which product and dose to use and explain how to use the product (see below)

2mg oral or 14mg patch (optional)

21mg patch with 2mg oral

21mg patch with 2mg oral

21mg patch with 4mg oral

Adapted from: New Zealand Guide to prescribing NRT and A guide for tobacco users to quit (7; 11)
### Table 7: Nicotine Replacement Products

<table>
<thead>
<tr>
<th>Product</th>
<th>Nicotine patch</th>
<th>Nicotine oral preparations (gum, pastille, lozenge)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengths</strong></td>
<td>21mg, 14mg, 7mg (long act.)</td>
<td>4mg and 2mg (short acting)</td>
</tr>
<tr>
<td><strong>Action</strong></td>
<td>Controller (long acting)</td>
<td>Reliever (Short acting)</td>
</tr>
<tr>
<td><strong>Dose</strong></td>
<td>≥40 cpd&lt;sup&gt;a&lt;/sup&gt;: 42 mg/day</td>
<td>1-2 pieces every 1-2 hours, when cravings occur (10-12 pieces a day, not exceeding 24 pieces per day)</td>
</tr>
<tr>
<td></td>
<td>21-39 cpd: 28-35 mg/day</td>
<td>First try 4Ds for cravings, if not able to control, then use gum/pastille.</td>
</tr>
<tr>
<td></td>
<td>10-20 cpd: 14-21 mg/day</td>
<td>Taper as tolerable.</td>
</tr>
<tr>
<td></td>
<td>&lt;10 cpd: 14 mg/day</td>
<td>Duration: up to 12 weeks</td>
</tr>
<tr>
<td></td>
<td>Adjust based on withdrawal symptoms, urges, and comfort. After 4 weeks of abstinence, taper every 2 weeks in 7-14 mg steps as tolerated.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Duration: 8 to 12 weeks</td>
<td></td>
</tr>
<tr>
<td><strong>Instructions for correct use</strong></td>
<td>Apply patch to clean, dry and hairless skin (e.g. arms or back). Remove the old and apply new patch daily, alternating sites to reduce skin irritation. Some redness under the patch may occur – this is normal. The patch can be removed overnight if sleep is disturbed. While fasting, apply patch after breaking fast and remove before starting to fast.</td>
<td>Nicotine gum Bite to release the peppery taste and then rest in the side of the mouth (between cheek and gum). Chew again when the taste starts to fade. Chew for about 30 minutes then discard.</td>
</tr>
<tr>
<td></td>
<td>Nicotine pastille or lozenge Suck to release the peppery taste, and then rest in the side of the mouth (between cheek and gum). Suck again when the taste starts to fade. Keep for about 30 minutes then discard. Do NOT bite or chew.</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>cpd = cigarettes per day

Adapted from: *New Zealand Guide to prescribing NRT and A guide for tobacco users to quit* (7; 11)

### Notes for prescribing NRT<sup>6</sup>:

1. When considering NRT, check for availability, nicotine dependence and client’s choice. Inform client about the price. NRT is contra-indicated for non-smokers and not indicated for non-daily smokers. NRT can be useful for people with high dependence who are quitting under constantly stressful conditions.

2. Time to first cigarette is used as a measure of tobacco dependence. If a person smokes within 30 minutes of waking they have a higher degree of dependence and are likely to benefit from higher doses of NRT and more intensive stop-smoking support.

3. It is preferable to plan to start NRT from the quit date. Patches can be started a few days before quit date. We do not recommend using tobacco and NRT at the same time, as it may hinder achieving their goal of quitting.

4. Follow-up after 1 week, then 4 weekly (or monthly), as in 5As protocol. More frequent follow-ups as required.

5. Dose can be adjusted at each follow-up visit after assessing symptoms and patient’s needs.

6. The dose of NRT can be increased if the user has inadequate relief of withdrawal symptoms (e.g. cravings or urges to smoke, irritability, restlessness).

---

<sup>6</sup> Sources: *Guide to prescribing NRT (New Zealand)*, *Supporting Smoking Cessation: a guide for health professionals (RACGP) and A guide for tobacco users to quit (WHO)*; 2014 (7; 11; 13; 12)
After 4 weeks of abstinence, dose can be reduced by one step every 2 weeks if patient is free of withdrawal symptoms and confident of remaining abstinent. E.g. 21 mg patch → 14 mg → 7 mg → stop.

All products should be used for 8 to 12 weeks, or longer for some people.

When using a combination of the patch and oral NRT, a 4-week supply is usually enough. Ongoing need should be assessed and dose adjusted for further NRT given as required. If patient is unable to attend consultation 4 weekly, NRT may be prescribed for 8 weeks, according to the anticipated control of withdrawal symptoms and cravings from patient’s previous experience if any.

Lower strength patches (7mg) are generally used only for weaning. Their use is not strictly necessary.

Note that these recommendations may differ from those on the product packaging. These recommendations simplify NRT dosage and try to ensure that people are getting adequate nicotine replacement without misuse.

Most people who smoke do not use enough NRT, but rarely some have too much and then feel sick. If someone feels sick using NRT they should reduce the frequency or dose of the product.

NRT can be used with caution by pregnant or breastfeeding women if they would otherwise continue to smoke. Do a risk-benefit assessment – can she quit without NRT? If not, NRT is safer than smoking. Intermittent, short-acting dosage forms (oral) are preferred in pregnancy to long-acting dosage forms (patches). If a patch is used by pregnant women it should be removed overnight. (11; 13) (Similar for 14 below.)

NRT can be used by people with cardiovascular disease. Caution is advised for people in hospital for acute cardiovascular events, but if the alternative is active smoking, NRT can be used under medical supervision. (13)

NRT can be used in adolescents (aged 12 and over). Use the product best suited to their needs. (11; 13)

There are no serious drug interactions with NRT that people who use tobacco don’t already have. However, because of the impact of tobacco smoke on the liver’s metabolism, the doses of some medicines (e.g. some psychiatric medicines) may need to be adjusted when people stop smoking. (11)
Writing an NRT prescription:

First give for 1 week, then 4-weekly or 1 monthly. If patient is unable to come for follow-up, it may be prescribed for 8 weeks, but 4-weekly prescription is preferred when patient can be followed up. Here is a scenario demonstrating how you could prescribe NRT.

Ahmed is a 42-year-old seaman who currently smokes 15 cigarettes per day. He usually smokes his first cigarette within 15 min. of waking up. He has used nicotine patches and gum before and wishes to use it again to quit smoking. You are following him up after the first week and he’s doing well, but he will be traveling on sea and cannot come for follow-up visit for the next 2 months.

<table>
<thead>
<tr>
<th>Product</th>
<th>Dosage and duration</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicotine patch (controller)</td>
<td>☑ 21mg patch, one patch per day for 4 weeks. Start on day before quitting.</td>
<td>21mg x 28 patches</td>
</tr>
<tr>
<td></td>
<td>After completing above treatment, then start ☑ 14mg patch, 1 patch per day for 2 weeks,</td>
<td>14 mg x 14 patches</td>
</tr>
<tr>
<td></td>
<td>Then start ☑ 7mg patch, 1 patch per day for 2 weeks, then stop. (Usage instructions: Apply patch on waking up in the morning and remove next morning. If sleep is disturbed, remove patch before sleeping at night. While fasting, apply patch after breaking fast and remove before beginning the next day’s fast.)</td>
<td>7 mg x 14 patches</td>
</tr>
<tr>
<td>Nicotine pastille / gum (reliever)</td>
<td>☑ 4mg pastille, Start on day of quitting. Use upto 12 pieces per day for 2 weeks, when urge /cravings occur. Taper as cravings reduce. Suck to release taste and keep in side of mouth for about 30 min. Do not chew.</td>
<td>150 pieces (15 cards of 10)</td>
</tr>
</tbody>
</table>
Other medications for aiding tobacco cessation

Other medications include Varenicline and Buproprion. Varenicline has been shown to be more effective than buproprion. (13) These medicines, if needed, should be prescribed by a physician, psychiatrist or specialized tobacco cessation clinic. Their availability in Maldives is currently limited.

See section 6 on referral of patients to higher levels.

**Table 8: Other medications for aiding tobacco cessation**

<table>
<thead>
<tr>
<th>Medication</th>
<th>How to use</th>
<th>Side effects and Warning Advice</th>
</tr>
</thead>
</table>
| **Varenicline:**  
(prescription only)  
Attaches to nicotine receptors partially blocking the reward of effects of nicotine and partially stimulating the nicotine receptors.  
(available in 0.5mg, 1mg) | **Dosing:** Take with food, start medication one week prior to the Target Quit Date (TQD).  
0.5mg once daily for 3 days, then 0.5mg twice daily for 4 days, then on TQD, stop smoking! and take 1mg twice daily for 11 weeks.  
May stop abruptly, no need to taper. | Nausea, sleep disturbances (insomnia, abnormal dreams), constipation, flatulence, vomiting  
**Warnings:** stop varenicline if patient experiences agitation, depressed moods, and/or any changes in behavior that are not typical of nicotine withdrawal or if they experience suicidal thoughts or behaviors.  
Dose adjustment required for renal impairment. For people with creatinine clearance <30 mL/min, the recommended daily dosage is 1 mg/day (0.5 mg/day for 3 days then increasing to 1 mg/day). Avoid in end stage renal failure. |
| **Buproprion:**  
(prescription only)  
Originally used as antidepressant.  
Affects the levels of neurotransmitters reducing the urge to smoke.  
(available in 150mg sustained release tablet) | **Dosing:** take doses at least 8 hours apart, start medication one week prior to the TQD.  
150mg once daily for 3 days, then 150 mg twice daily for 4 days, then on TQD stop smoking! Continue at 150 mg twice daily for 12 weeks.  
May stop medication abruptly, no need to taper. | Seizures (risk is 1/1,000)  
**Common effects:** insomnia, dry mouth, anxiety / difficulty concentrating, headache, dizziness, rash.  
**Contraindications:** history of seizures, eating disorders and patients taking monoamine oxidase inhibitors.  
**Caution** in people taking medications that can lower seizure threshold, such as antidepressants, oral hypoglycaemic agents and antimalarials.  
Can be used for smokers with depression or schizophrenia, cardiac disease and COPD.  
**Warnings:** Smokers using varenicline should be advised to report unusual mood changes, depression, behaviour disturbance that are not typical of nicotine withdrawal and suicidal thoughts and if these occur to stop using the medicine. |

Source: *A guide for tobacco users to quit*, WHO 2014 (7)
3.1.2. STRATEGIES FOR EMOTIONAL/PSYCHOLOGICAL CONNECTIONS

You need to help your patient break the connection between smoking or tobacco use and their emotions and beliefs. Look for any such beliefs and misconceptions and clear their misconceptions.

Here are some things you could explain to your patient:

You may not have realized this, but, as a smoker, you link cigarettes and smoking with certain emotions, thoughts, and beliefs. Part of quitting involves breaking those subconscious connections. Some common links that smokers form include smoking when they feel stressed, happy, sad or angry. In fact, using cigarettes to cope with these feelings is misguided. It does not help solve the source of your problems. (7)

In addition to linking emotions or feelings with smoking, it is also common to link certain beliefs with smoking. These beliefs include, and are not limited to:

- “Smoking helps me relax.”
- “Smoking isn’t really harmful!”
- “It’s cool to smoke!”
- “It keeps my weight down.” (7)

You can remind smokers about the risks of smoking and the benefits quitting, as in 5R’s method in section 4. (1) You may use the Motivation tool in Annex 3 to help your patient list the pros and cons of smoking and quitting that are most important to him/her, which they could keep in a visible place to remind themselves and motivate them to quit.

See section 1.3 - box 1 on debunking the myths.

You can encourage your patient create positive self-talks based on the benefits of quitting such as “Quitting smoking can save my life”, “quitting smoking can save me money”, “quitting can help my family”, “quitting can help me become a better/stronger person”, etc. to help him/her break the connections between quitting and negative beliefs. (7)
3.1.3. STRATEGIES FOR DEALING WITH BEHAVIORAL AND SOCIAL CONNECTIONS (TRIGGERS)

You could help your patient break the connection between smoking and behaviours and social cues or triggers.

Below are just a few suggestions on how to begin breaking the links of smoking and certain behaviors.

<table>
<thead>
<tr>
<th>Action/behavior</th>
<th>Suggestion to break the link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking associated with eating</td>
<td>Begin a new activity immediately after eating. Distract yourself from the temptations and urges. Wash the dishes, exercise, read, pray or do other household chores are just a few examples.</td>
</tr>
<tr>
<td>Smoking associated with coffee</td>
<td>Avoid coffee and energy drinks. These are high in caffeine, and can increase stress and withdrawals and dehydrate you. Try a healthy alternative like water, green tea, a fruit, or take a short walk or stretch for a break instead.</td>
</tr>
<tr>
<td>Smoking as a social activity (while with friends or coworkers)</td>
<td>Avoid these situations until you have successfully quit smoking. You do not have to cease ties with your friends all together, just avoid going to coffee, dinner, or out, with them until you are strong in your commitment to abstain. Spending more time with family and friends who do not smoke, spending more time with children bearing in mind that you should be a good role model, choosing smoke-free places to go out, choosing healthy meals and trying a different social activity with your friends (like a new sport, religious activities or volunteer work), may be helpful.</td>
</tr>
<tr>
<td>Smoking as a stress reliever</td>
<td>This is a common misconception believed by many smokers. Smoking has absolutely no connection to stress relief. However, there are many other ways to deal with stress. Drink water or tea, carry around a stress ball to keep your hands busy, practice deep breathing, read qur’an, engage in prayer or exercise (e.g. walk fast) to relieve stress. Avoid energy drinks and coffee, as these also increase stress.</td>
</tr>
<tr>
<td>Smoking on the motorcycle / vehicle</td>
<td>Remove all cigarettes from the vehicle, listen to qur’an or music, take public transportation, or pool vehicles to help avoid temptation.</td>
</tr>
<tr>
<td>Smoking while on the phone</td>
<td>Engage in another activity while on the phone. Whether it’s playing with a stress ball, or walking around, distract yourself from the urge to smoke.</td>
</tr>
<tr>
<td>Seeing other people smoking and seeming to enjoy</td>
<td>Make your home smoke free. Choose smoke free places to go out. Be prepared with what to do. Try positive self-talks (e.g. “poor thing – he’s still addicted. I’ve quit already and I’m feeling great”, walk away, and try 4Ds if it makes you feel like smoking again.</td>
</tr>
</tbody>
</table>

Adapted from: A guide for tobacco users to quit, WHO 2014 (7)

Environmental triggers like fancy ashtrays with logos in restaurants and office buildings, or attractive displays of tobacco products in shops are unsuspecting product promotions by the tobacco industry that are designed to make people feel that smoking is ‘cool’, ‘normal’, or ‘the thing to do’. These are also often deliberately set-up to act as triggers to induce cravings when smokers try to quit, and have worked in pushing them into relapse. Look out for such triggers in your patients and educate them about it. There is evidence that educating people about how the tobacco industry traps them into smoking helps to reduce smoking prevalence. (20)

Remind your patients that: it is important to always keep your end goal at the forefront of your mind so that you are not derailed by your connected habits and triggers. If you find yourself craving a cigarette, get up and remove yourself from the situation – whatever it may be! Do what you must to distract yourself until the tied habits are no longer a trigger for smoking cravings. Typically cravings/urges are brief, lasting only 1 to 2 minutes. (7)
These three categories, while separate on paper, are not necessarily separate obstacles. Success in dealing with symptoms of one category can help to deal with symptoms from the other categories as well. Every quit attempt is unique to the smoker trying to quit and they may experience challenges and barriers not listed here. An individual smoker may experience all of these and more, or none of them. (7)

3.2. Relapse Prevention

Follow-up your patient regularly as in 5As above. At follow-ups, identify any problems he/she has encountered. Show understanding and empathy, as it is normal to go through a few cycles of quit attempts before finally quitting.

If your patient has quit and is abstinent:

Congratulate them on their success. Identify any challenges he/she may anticipate and what situations may prompt him/her to relapse. (1) Use less attractive language to describe these situations. E.g.

- a ‘not so smart’ smoking friend or family member offering cigarettes or bullying you
- seeing people smoking and ‘seeming to’ enjoy/relax
- seeing the cigarettes displayed to dupe you at the shop counter or café (10)

How about planning on what you would do in these situations?

Some relapse prevention tips include reminding him/herself of his/her goal and preparing for challenges.

Doctor: Remember how good you felt when you quit and the effort you made. Even 1 cigarette may get you addicted again! (1)

Use the Reminder wallet card in Annex 2 to help your patient feel good and boost his/her confidence when he/she is alone. This is a small piece of paper that fits into the patient’s wallet. You could use coloured paper, or write with coloured pens to make it attractive. Some patients who use smart phones may find it useful to take a photograph of the card and save it on their phone as a wallpaper or memo.

Engage family members. Encourage them to get help from family, friends and workmates to help focus on their goal and prevent relapse. Family and friends could help to remove triggers from the house or office, choose smoke-free places to go out to reduce seeing other smokers while socializing, help to distract them when cravings occur, and close friends or family members can even help to stop them from lighting up again.

Prepare your patient for what to do when faced with triggers or social pressure, e.g. if others invite or pressure your patient to smoke. Have a justification ready for when you see people smoking (e.g. I feel sorry for them), or cigarettes on display (e.g. It’s a trick!). Practice to say NO assertively. Talking about how good they feel after quitting and inviting other friends or family members to also quit smoking may help to boost patient’s confidence and widen social support.

If your patient has relapsed:

Remind them to view relapse as a learning experience. Explain to your patient the following.

Every quit attempt is a positive step in the right direction towards quitting permanently. It might take multiple quit attempts, but each time you resume your attempt to quit, you move farther and farther in the right direction and will make it easier for you to stop next time. Relapsing and making mistakes are...
only natural. Do not let a relapse hinder your confidence - a relapse does not mean failure. Use any relapse as a learning experience in how to develop better coping skills, and to adjust them for future attempts to ensure even greater success. So let's start by seeing what may have pushed you into smoking again? (7)

Review circumstances to find out the reasons and triggers for relapse and roadblocks to quit, explain to patient and elicit recommitment. Engage a close family member or friend to help him/her. Link to more intensive treatment if available, e.g. counseling and/or medications. (1) Consider referring patient if he/she has more than 2 relapses with available support from your facility and it is feasible for patient to attend treatment at referral center. See section 6 on referring patients. If patient is not ready to try quitting again, go to 5Rs in Section 4 below.

The best way to prevent relapses is to use effective treatments and avoid using unapproved therapies. Effective and approved treatments include self-help materials; advice from healthcare providers; individual behavioral counseling; group behavior counseling; telephone counseling; “Quit and Win” contests and the above-mentioned medications. Many communities offer common, alternative therapies such as E-cigarettes, acupuncture, laser treatment, and other alternative measures that claim to aiding in quit attempts but there is no or not enough evidence to support that they can improve quit rate and increase quit attempt success. (7)
4. THE 5R’s MODEL: to increase motivation to quit

The 5 R’s - relevance, risks, rewards, roadblocks, and repetition – are the content areas that should be addressed in a motivational counseling intervention to help those who are not ready to quit.

If your patient doesn’t want to be a non-tobacco user (doesn’t think that quitting is important), please focus more time on “Risks” and “Rewards”. If your patient wants to be a non-tobacco user but doesn’t think he or she can quit successfully (doesn’t feel confident in their ability to quit), please focus more time on the “Roadblocks”. If patients remain not ready to quit, end positively with an invitation to them to come back to you if they change their minds. Table 9 summarizes some useful strategies to deliver a brief motivational intervention in primary care. (1)

Table 9: The 5R’s brief motivational intervention for patients not ready to quit

<table>
<thead>
<tr>
<th>5R’s</th>
<th>Strategies for implementation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance</td>
<td>Encourage the patient to indicate how quitting is personally relevant to him or her. Motivational information has the greatest impact if it is relevant to a patient’s disease status or risk, family or social situation (e.g. having children in the home), health concerns, age, sex, and other important patient characteristics (e.g. prior quitting experience, personal barriers to cessation).</td>
<td>HCP: “How is quitting most personally relevant to you?” P: “I suppose smoking is bad for my health.”</td>
</tr>
</tbody>
</table>
| Risks | Encourage the patient to identify potential negative consequences of tobacco use that are relevant to him or her. Examples of risks are:  
- **Acute risks**: shortness of breath, exacerbation of asthma, increased risk of respiratory infections, harm to pregnancy, impotence, and infertility.  
- **Long-term risks**: heart attacks and strokes, lung and other cancers (e.g. larynx, oral cavity, pharynx, esophagus), chronic obstructive pulmonary diseases, osteoporosis, long-term disability, and need for extended care.  
- **Environmental risks**: increased risk of lung cancer and heart disease in spouses; increased risk for low birthweight, sudden infant death syndrome, asthma, middle ear disease, and respiratory infections in children of smokers. | HCP: “What do you know about the risks of smoking to your health? What particularly worries you?” P: “I know it causes cancer. That must be awful.” HCP: “That’s right – the risk of cancer is many times higher among smokers.” |
| Rewards | Ask the patient to identify potential relevant benefits of stopping tobacco use. Examples of rewards could include:  
- improved health;  
- food will taste better;  
- improved sense of smell;  
- saving money;  
- feeling better about oneself;  
- home, car, clothing and breath will smell better;  
- setting a good example for children and decreasing the likelihood that they will smoke;  
- having healthier babies and children;  
- feeling better physically;  
- performing better in physical activities.  
- improved appearance, including reduced wrinkling/ageing of skin and whiter teeth. | HCP: “Do you know how stopping smoking would affect your risk of cancer?” P: “I guess it would be more successful if I quit.” HCP: “Yes, and it doesn’t take long for the risk to decrease. But it’s important to quit as soon as possible.” |

7 Adapted from: WHO Toolkit for delivering 5A’s and 5R’s (1)
<table>
<thead>
<tr>
<th>5R’s</th>
<th>Strategies for implementation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>For patients considering quitting but not quite ready, the <em>Motivational tool for 5Rs</em> in Annex 3 may be used to help patient note down and compare his/her Risks from smoking and Rewards of quitting vs. any factors associated with continuing the habit. This may help him/her to make a positive decision to quit smoking.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Roadblocks

Ask the patient to identify **barriers or impediments to quitting** and provide treatment (problem-solving counselling, medication) that could address barriers. Typical barriers might include:
- withdrawal symptoms;
- fear of failure;
- weight gain;
- lack of support (family, friends, workplace, living conditions);
- depression;
- ‘enjoyment’ of tobacco;
- being around other tobacco users;
- limited knowledge of effective treatment options
- social acceptance of smoking in the community
- lack of smoke-free spaces (home, workplace, leisure)
- tobacco industry influence – easy availability, unsuspected promotions (e.g. cigarettes arranged attractively at shop counters, ashtrays in restaurants, etc.)

**HCP:** “So what would be difficult about quitting for you?”

**P:** “Cravings – they would be awful!”

**HCP:** “We can help with that. We can give you nicotine replacement therapy (NRT) that can reduce the cravings.”

**P:** “Does that really work?”

**HCP:** “You still need will-power, but research shows that NRT can double your chances of quitting successfully.”

### Repetition

**Repeat assessment of readiness to quit. If still not ready to quit repeat intervention at a later date.** The motivational intervention should be repeated every time an unmotivated patient visits the clinic setting.

**HCP:** “So, now we’ve had a chat, let’s see if you feel differently. Can you answer these questions again...?”

(Go back to the **Assess** stage of the 5A’s. If ready to quit then proceed with the 5A’s. If not ready to quit, end intervention positively by saying “This is a difficult process but I know you can get through it and I am here to help you”.)

**HCP:** health-care provider; **P:** patient

Adapted from: *WHO Toolkit for delivering 5A’s and 5R’s* (1)
5. **THE 5A’s TO AVOID EXPOSURE to secondhand smoke**

If your patient is a non-smoker you can offer a brief advice to inform them about the dangers of secondhand smoke (SHS) and help them avoid exposure to SHS. Please find below action and strategies for using 5A’s model to help patients avoid exposure to SHS (Table 10). (1)

**Table 10: The 5A’s brief interventions for reducing exposure to SHS**

<table>
<thead>
<tr>
<th>5A’s</th>
<th>Action</th>
<th>Strategies for implementation</th>
</tr>
</thead>
</table>
| **Ask** - Systematically identify non-smoking patients who are exposed to SHS at every visit | • Ask **ALL** of your non-smoking patients at every encounter if they are exposed to SHS.  
• Make it part of your routine. | • Keep it simple. For example:  
  - “Does anyone else smoke around you?”  
  - Consider including the information on SHS in all medical notes. |
| **Advise** - Persuade the patient to avoid exposure to SHS | • Educate every patient who is exposed to SHS about the dangers of SHS and advise them to avoid it. | • Your advice should be clear, positive, and tailored to that specific patient’s characteristics and circumstances. For example, “There is no safe level of exposure, it is important that you avoid exposure to SHS, which may dramatically reduce your respiratory symptoms.” |
| **Assess** - Determine the patient’s willingness to reduce exposure to SHS | • Assess if the patient is willing to reduce his or her SHS or not.  
• Assess where the patient is exposed to SHS and whether there is a possibility to reduce the patient’s exposure. | • Have your patient list off all the common places where they can be around secondhand smoke. Common examples include their:  
  - Home  
  - Workplace  
  - Restaurants  
  - Recreational settings  
• Encourage your patient to assess the possibility of reduce exposure to SHS in each place. Some places, for example, exposure to SHS at home, the patient would have a high possibility to reduce exposure by encouraging his or her family to quit or to smoke outside. |
| **Assist** - Help the patient in making an attempt to make his or her daily life environment smoke-free | • Assist your patient in developing an action plan to reduce their exposure to SHS. | • Use MAD-TEA to help your patient plan what they can do:  
  - Meet their friends at spaces in the community that are smoke free  
  - Ask family members and visitors to smoke outside  
  - Declare their home and personal spaces (e.g. their car) to be smoke free  
  - Talk to family members and people they work with about the risks of secondhand smoke  
  - Encourage family members, friends, and workmates who smoke to stop  
  - Advocate comprehensive smoke-free laws or regulations in workplaces and public places. E.g.:  
  - Request your local authorities to make all public places smoke-free, such as parks, restaurants, leisure areas for family, children and youth.  
  - Request the restaurants you go to become fully smoke free.  
  - Make fun events smoke-free. Demand that organizers choose smoke-free restaurants or places for fun events and outings; if such places are not available, at least request the restaurants to make it smoke-free during the time of the event. |
| **Arrange** - Schedule follow-up contacts | • Arrange a follow-up contact after around one week to provide necessary support. | • When:  
  - The first follow up contact should be arranged after one week.  
• How:  
  - Use practical methods such as telephone, personal visit and mail/ email to do the follow up. Following up with patients is recommended to be done through teamwork if possible.  
• What:  
  - Congratulate them on their success if the patients have reduced exposure.  
  - Identify problems already encountered and anticipate challenges.  
  - Provide necessary support.  
  - Schedule next follow up contact. |

Adapted from: *WHO Toolkit for delivering 5A’s and 5R’s* (1)
6. Referring patients to tobacco cessation clinics, counseling or higher centers

When to refer patient to higher level for specialized cessation counseling or other medicines:

Referral may be considered if patient has relapsed more than twice after treatment with NRT and quit-smoking support. Please contact referral center before sending a patient on a long journey to another island! Please ask for guidance on managing the patient and check on availability of counseling and higher level services before you refer. Also check with your patient on the feasibility of referral, whether he/she is ready to travel to a referral center, and if so, when.

Contacts for further information

For any further guidance, information or queries on managing your patient for tobacco cessation, contact:

Dhamanaveshi Male’ Tobacco Cessation Clinic,
Dhamanaveshi, Majeedhee Magu, (next to Maldives Blood Service),
Male’, Maldives.
Telephone: 3322403, 3325228.
Email: dhamanaveshi@health.gov.mv

For further information on protocols, guidelines and educational material, contact:

Health Promotion & Chronic Diseases Division,
Health Protection Agency,
Ministry of Health,
4th Floor, Roashanee Building, Sosun Magu,
Male’, Maldives.
Telephone: 3014411, 3014455.
Email: tobaccofreemaldives@health.gov.mv
7. References

This toolkit was based on the following publications and adapted for the Maldivian context:


4. Smokefree Teen: http://teen.smokefree.gov, an online smoking cessation resource for teens created by Tobacco Control Research Branch at the National Cancer Institute, USA in collaboration with the U.S. Food and Drug Administration, accessed through CDC’s online resources on Tobacco cessation.


NRT guide adapted from:


List of References:


9. Smokefree Teen (SFT). [Online] Tobacco Control Research Branch at the National Cancer Institute, USA in collaboration with the U.S. Food and Drug Administration. [Cited: July 10, 2016.] an online smoking cessation resource for teens created by Tobacco Control Research Branch at the National Cancer Institute, USA in collaboration with the U.S. Food and Drug Administration, accessed through CDC's online resources on Tobacco cessation. http://teen.smokefree.gov.


8. Annexes
Annex 1: Health consequences of tobacco use

- Addiction
- Stress
- Premature loss/graying of hair
- Colds
- Yellow teeth, gum disease, deadens taste buds/smell
- Arteriosclerosis
- Mouth/throat/larynx cancer
- Cough
- High blood pressure, blood clots, hardening of the arteries
- Leukemia (cancer of the blood)
- TB, pneumonia, emphysema
- Lung cancer
- Cancer of the pancreas
- Cancer of the kidneys
- Cancer of the bladder
- “Smoker’s cough”
- Worsens eczema
- Heal slower
- -2,000 smokers/yr get gangrene due to poor circulation and have a leg amputated

Source: Taiphoon – a Taiwanese online magazine
My 3 Reasons to Quit Smoking:

1. 
2. 
3. 

Get your patient to write his/her 3 main reasons to quit on a small card or coloured paper, or using coloured pens to make it attractive, and keep it in his/her wallet. Alternatively, write on a paper and take a photo of it and save on his/her phone as a reminder.
# Motivation Tool for 5Rs

## Comparing your pros and cons for Quitting smoking

<table>
<thead>
<tr>
<th>My losses due to smoking</th>
<th>My “benefits” I get from smoking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits I gain if I Quit</td>
<td>What I lose if I quit</td>
</tr>
</tbody>
</table>

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**Note:** The table is meant to be filled out by the individual to help them decide if quitting smoking is worth it to them.
WANT TO START A NEW LIFE?
QUIT SMOKING - START NOW!

Set a Quit Date

Tell Family and Friends about your decision to quit and get their support

Anticipate and prepare for time when you may be tempted

Remove triggers and Remind your self

Track and monitor your progress

For more details or assistance to quit:

QUIT START

In Male’s Dhovanaveshi: 3318901, SHE: 7676326, Youth Health Cafe: 3313755
Atolls: the nearest Regional or Atoll hospital.

QuitSTART: or try the FREE QuitSTART Phone App. from:
Smoke Free Teens (SFT) website: (http://teen.smokefree.gov/sftapps.aspx)

quitSTART is a product of Smokefree Teen—a smoking cessation resource for teens created by the Tobacco Control Research Branch at the National Cancer Institute in collaboration with the U.S. Food and Drug Administration and input from tobacco control professionals, smoking cessation experts, and ex-smokers.