

# **TOBACCO CESSATION TOOLKIT (5As & 5Rs)**

**For all Dental Surgeons  
and other  
Health Professionals**

**Edited by  
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## **TOBACCO CESSATION TOOLKIT (5As & 5Rs)** **for all Dental Surgeons and other Health Professionals**

### **Introduction**

Tobacco is a commonly used substance by many individuals all over the world for centuries. It is consumed in different ways including smoking, smokeless and vaporizations.

Main chemical ingredient in tobacco is nicotine which is responsible for many of its harmful properties including addiction. The manufactured products of tobacco lead to the use of high doses of nicotine which alter the brain providing pleasure and addictive effects. Tobacco products are in widespread use and commercial production is derived from three types of tobacco preparation:

1. **Rolls of tobacco** which are used in smoking from (e.g. beedi, cigar, cigarette)
2. **Pipes** (including waterpipes)
3. **Oral preparations** for chewing and holding in the mouth or placing in the nose (e.g. snuff, snus, betel quid)
4. **Vaporization-** Electronic Nicotine delivery systems (ENDS)-e-cigarette, ENNDS

Smoking of manufactured cigarettes is the commonest method of use in most part of the world but the use of smokeless tobacco is very much prevalent in south and South Eastern Asia. The use of cigars is becoming less common and it is not a widely practiced method in Sri Lanka nowadays. Use of smokeless tobacco or chewing tobacco alone or as part of betel quid is a widely practiced method in Sri Lanka. Use of tobacco causes many health problems in every part of the body including oral cavity.

Oral health issues due to tobacco includes

1. Stained teeth
2. Halitosis
3. Reduces sense of taste and smell
4. Delayed wound healing
5. Periodontitis
6. Tooth loss
7. Implant failure
8. Leukoplakia and Erythroplakia
9. Oral cancer

Dental surgeons have a duty and a responsibility to carry out effective tobacco cessation programmes in dental clinics in order to help people to get rid of this dangerous habit.

Even though many measures have been taken in reducing smoking, actions taken on reducing smokeless tobacco (SLT) need to be re-emphasized and strengthen on regular intervals. Implementation of a generalized SLT prevention program is not an easy task due to its relationship with the culture and the society. Therefore, it is important to identify the factors related to this habit. However nicotine is the main addictive agent in the tobacco, SLT contains additional addictive agent such as arecoline present in the areca nut and slake lime as a promoter to release addictive substance present in the SLT.

### **Determinants of SLT Use**

1. Gender (men)
2. Wealth index (inverse association)
3. Cultural/ social influences
4. Peer/ family member use
5. Exposure to advertising and promotions of SLT
6. Lack of knowledge and awareness of health risks of SLT use
7. Misconceptions –eg. Wining sports games

Attitude of SLT users is a determining factor in developing and implementing in SLT cessation programs. There are many individuals with favorable attitude in SLT cessation but continuing with SLT usage highlighting the fact that favorable attitude alone is not enough in controlling SLT use. Other variables like socio-demographic factors, worksite practices, barriers etc. are important in designing a proper prevention and cessation program.

Workplace has a greater effect on SLT use. SLT use is influenced by the practices of others at worksite due to sharing of time, same environment, extended working hours, late night shifts and social acceptance.

Main reasons for intention to quit SLT usage are the fear of tobacco related diseases and fear of developing cancer whereas as reasons for not able to quit include poor knowledge on how to quit, desire not to quit immediately and withdrawal effects.

Therefore it is necessary to increase the awareness among people that SLT is an addictive substance hence it might be difficult to quit. Further they should be instructed clearly as to the details about people or places to seek for help if they wish to quit.

SLT use in children and adolescents is becoming a serious issue in the country. They are a vulnerable target to interested parties because they see them as attractive new markets. They are largely non-users and in influential age, impressionable age who are interested in experimentation. In addition, they lack the skills to resist.

Low levels of awareness about health effects of SLT and misconceptions, weak enforcement of tobacco control legislation, high level of exposure to tobacco advertisements, easy access, availability and affordability of SLT products, social acceptability of SLT use and poor

enforcement of tobacco control policies in schools play a significant role in preventive and cessation strategies.

<b>Risk Factors</b>		
<b>Environmental Risk Factors</b>	<b>Interpersonal Risk Factors</b>	<b>Individual Risk Factors</b>
Different varieties of affordable tobacco products	Family tobacco use	Genetic predilections
Exposure to tobacco smoke in public/ work places	Beliefs and expectations	Knowledge about tobacco use
Weak health warnings	Peer tobacco use	Nicotine addiction
Tobacco marketing and advertising	Social norms	Reasons for tobacco use
Easy accessibility		Refusal skills
		Self image

### **Main barriers in tobacco cessation**

1. Lack of knowledge about ill effects of tobacco
2. Lack of promotion of tobacco cessation
3. Own use of tobacco by health professionals

Self-use of tobacco has been identified as a significant barrier to anti-tobacco counseling. Even though health professionals are aware of the negative effects of tobacco consumption, significant percentage of them continue with the habit.

<b>Policy and Program Intervention</b>		
<b>Policy level approaches</b>	<b>Community level approaches</b>	<b>Individual level approaches</b>
Increased taxation	School programs	Prompting cessation
Tobacco free laws	Youth empowerment	Brief advice to quit
Effective health warnings	Community based interventions	Pharmacological therapy
Prohibition of advertising	Tobacco free homes/ places	
Restricting access to children and adolescents	Mass/ Social media campaigns	

### **What we know about SLT use**

1. SLT causes oral cancer and OPMDs
2. Limited evidence on behavioural counselling interventions
3. Pharmacological interventions are not effective

### **What we don't know about SLT use**

1. Overall public health impact in Sri Lanka
2. Key determinants on initiation of the habit
3. Impact of new commercially prepared products
4. Best method for quitting

### **Prevention of Smokeless Tobacco Use**

#### Unique Aspects of SLT Use

1. SLT can be used without other people being aware of it
2. SLT causes oral lesions, as they are direct physical evidence of detrimental health effects
3. Up to 30% of regular users of SLT also use cigarettes
4. SLT is perceived as a safe product to use

5. Unlike cigarettes, SLT products are generally not packaged in individual doses; therefore, self-monitoring of use and accurate measurement of use are difficult

### **Evaluation of ST Prevention Programs**

- Few SLT prevention programs have been evaluated
- Very few independent SLT prevention programs
- Reasons for this scenario are:
  - SLT products are used primarily by males
  - prevalence may be lower for SLT than for cigarette use in men
  - concern about use of SLT is often less than for hard drugs and smoking
- Although logical, inclusion of SLT prevention in other prevention efforts renders evaluation of SLT component problematic

### **Co-use of SLT and Cigarettes**

- Significant percentage of SLT users smoke cigarettes as well
- Since the addictive element in tobacco is nicotine, individuals who quit using SLT might increase their use of cigarettes, and vice versa.
- Decrease in the use of one tobacco product may lead to a direct increase in the use of other tobacco product
- Tobacco cessation rates among those who use both cigarettes and SLT are significantly lower than those who use SLT only

### **Legislation in relation to tobacco use in Sri Lanka**

#### **History of tobacco control in Sri Lanka by means of regulations**

Following legislative measures were taken to control tobacco in Sri Lanka in the past.

1. In 1979, consumer protection act no 1 of 1979, which stated the government warning on cigarette packs



2. In 1971, Railway services act no: 20 of 1971, which prohibited smoking and chewing of betel in and around trains and also in the premises.
3. In 1978, Transport law no 19 of 1978, which prohibited smoking in buses and young person's ordinance which prohibited sale of tobacco cigarettes to person under 16 years of age.
4. Public administrative circular no 08/99, which prohibit smoking in state institutions and aircrafts smoking ban.
5. In 2008, road act no 40, 73 (3), which prohibited spitting on the road.
6. The most important is National Authority on Tobacco and Alcohol (NATA) Act no 27 of 2006, which elaborated on regulations on tobacco smoke, tobacco products and alcohol. It gives the explanation for tobacco products as follows in the page number 36.

“Tobacco products mean any product manufactured wholly or partially from tobacco and which is intended to be smoked, sniffed, sucked or chewed”.

According to the NATA act 2006, following legislations were imposed for all tobacco and alcohol product including smokeless tobacco.

- Prohibit sale to minors (less than 21yr)
- Prohibition on installation and operation of vending machine
- Prohibition on the sale of tobacco product without health warning and the tar, nicotine content in each tobacco product
- Prohibition of tobacco or alcohol advertisements
- Prohibition of sponsorship
- Prohibition of free distribution
- Offences relating to use of trade marks

In 2015 Amendments were made to the section 34 of the NATA Act No 27 of 2006. According to the NATA (Amendments) Act No 3 of 2015, a manufacturer or an importer of cigarettes and other products shall cause to be printed the health warnings referred to in section 34(1), covering an area of eighty per centum of the surface area of both front and back side of every packet, package or carton containing cigarettes and other tobacco products.

On the 1<sup>st</sup> of September 2016, regulation was gazetted as the regulation on Prohibiting Tobacco Products No 1 of 2016 on Smokeless tobacco, flavoured, coloured or sweetened cigarette that contain tobacco and any electronic cigarette that contain tobacco. According to the Gazette published - No person shall manufacture, import, sell or offer for sale any smokeless tobacco products, flavoured, coloured or sweetened cigarette that contain tobacco and any electronic cigarette that contain tobacco. Sri Lanka is the 4<sup>th</sup> country in the world to impose total ban on SLT after Australia, Singapore, and Bhutan.

Any person shall be guilty of an offence under the act and shall on conviction after the trial, be liable to fine: Not exceeding Rs 2000 or to imprisonment for a period not exceeding one year or both such fine and imprisonment.

### **Stopping Smoking is a Complex Issue.**

This course is mainly for those who are new to the smoking cessation field or those with relatively little smoking cessation experience.

It will help you to:

- Understand effects of tobacco on oral health
- Assist smokers and SLT users through the stages
- Provide individual support to tobacco user who are ready to stop
- Help clients to make treatment plans appropriate to their needs and personal resources

- Understand and manage tobacco addiction
- Work within a framework of evidence-based practice while adapting to provide an appropriate service as a member of the oral health team.

## **Treating Tobacco Use and Dependence**

### **Introduction**

Topics discussed in this section are:

1. Assessment of tobacco use
2. Treating the smoker who is willing to quit: the 5As
3. Promoting the motivation to quit; the 5Rs
4. Relapse prevention

Some of the treatments and programs described here may have relevance in different health care settings, but the focus is on tobacco cessation by the dental surgeons and dental nurses working in a dental practice or in a dental institute as a part of the dental team.

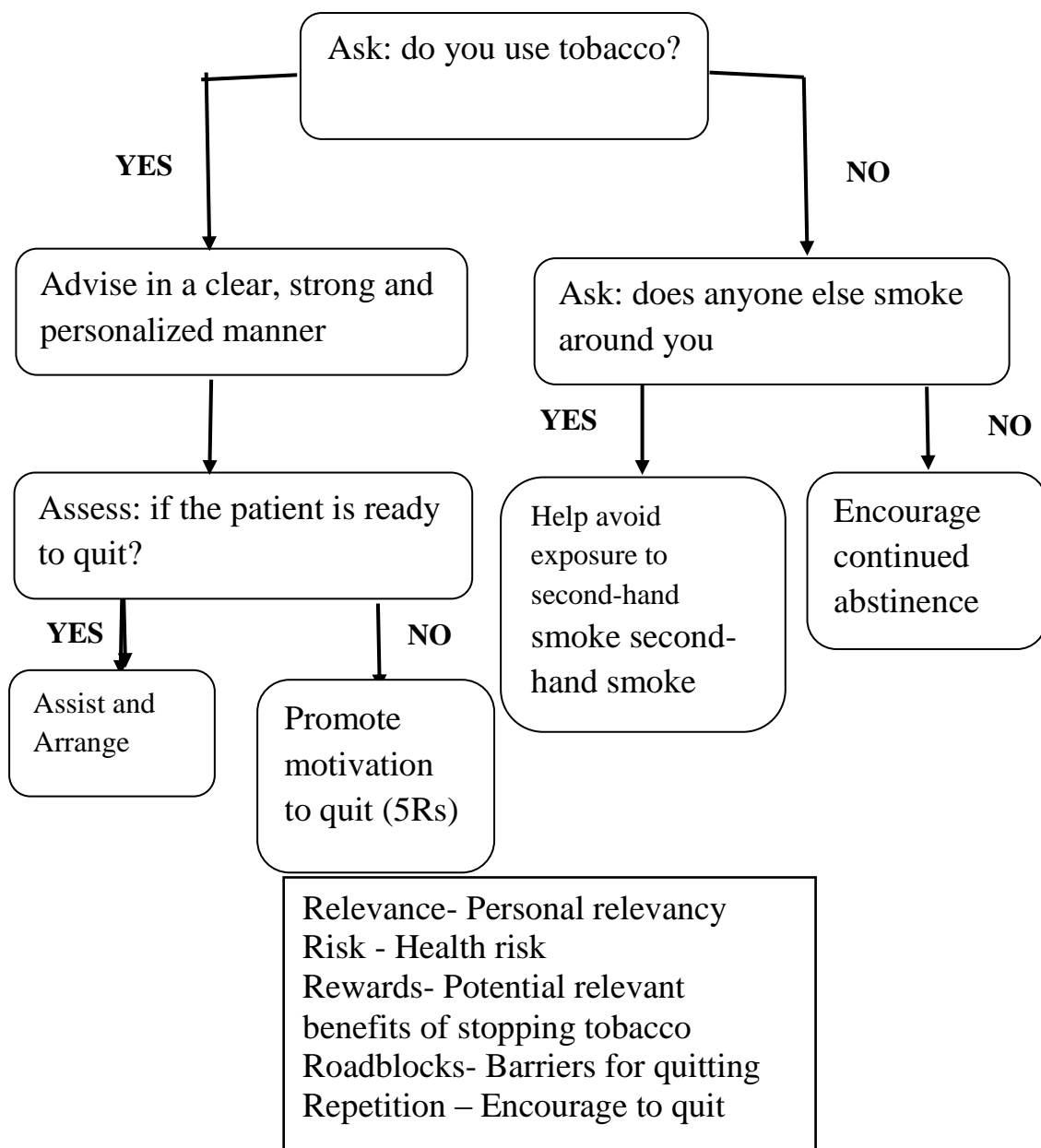
A series of clinical techniques and strategies have been shown to be effective in treating tobacco users specially the smoking. These techniques are categorized based on the time necessary for completion.

Any health care provider who is trained and willing can effectively provide any of these interventions based on the

1. time available
2. willingness of the health care provider
3. compliance of the tobacco user

**Brief intervention** is what is mostly practiced in a dental clinical setting.

### Algorithm for delivering brief tobacco interventions



## Assessment of Tobacco Use

Every patient attending a dental clinic should be asked about their tobacco use (type, duration and frequency) and the tobacco habits should be recorded in a patient's charts. Every patient should be categorized as a current tobacco user, ex user or never user. SLT dependence can be assessed by the use of Fagerstrom test for nicotine dependence- Smokeless Tobacco (FTND-ST).

	Question	Response			
1	How often are you wake up do you place your first dip	After 60 mins	31-60 mins	30-6 mins	Within 5 mins
2	How often do you intentionally swallow tobacco juice	Newer		Some-times	Always
3	Which chew would you hate give up most	Any other		First one in the morning	
4	How many cans/ pouches per week do you use	1	2-3	More than 3	
5	Do you chew more frequently during the first hours after awaking than during the rest of the day	No		Yes	
6	Do you chew if you are so ill that you are in bed most of the day	No		Yes	
	Score				

Add up the score from the questionnaire

1-2= Low dependence

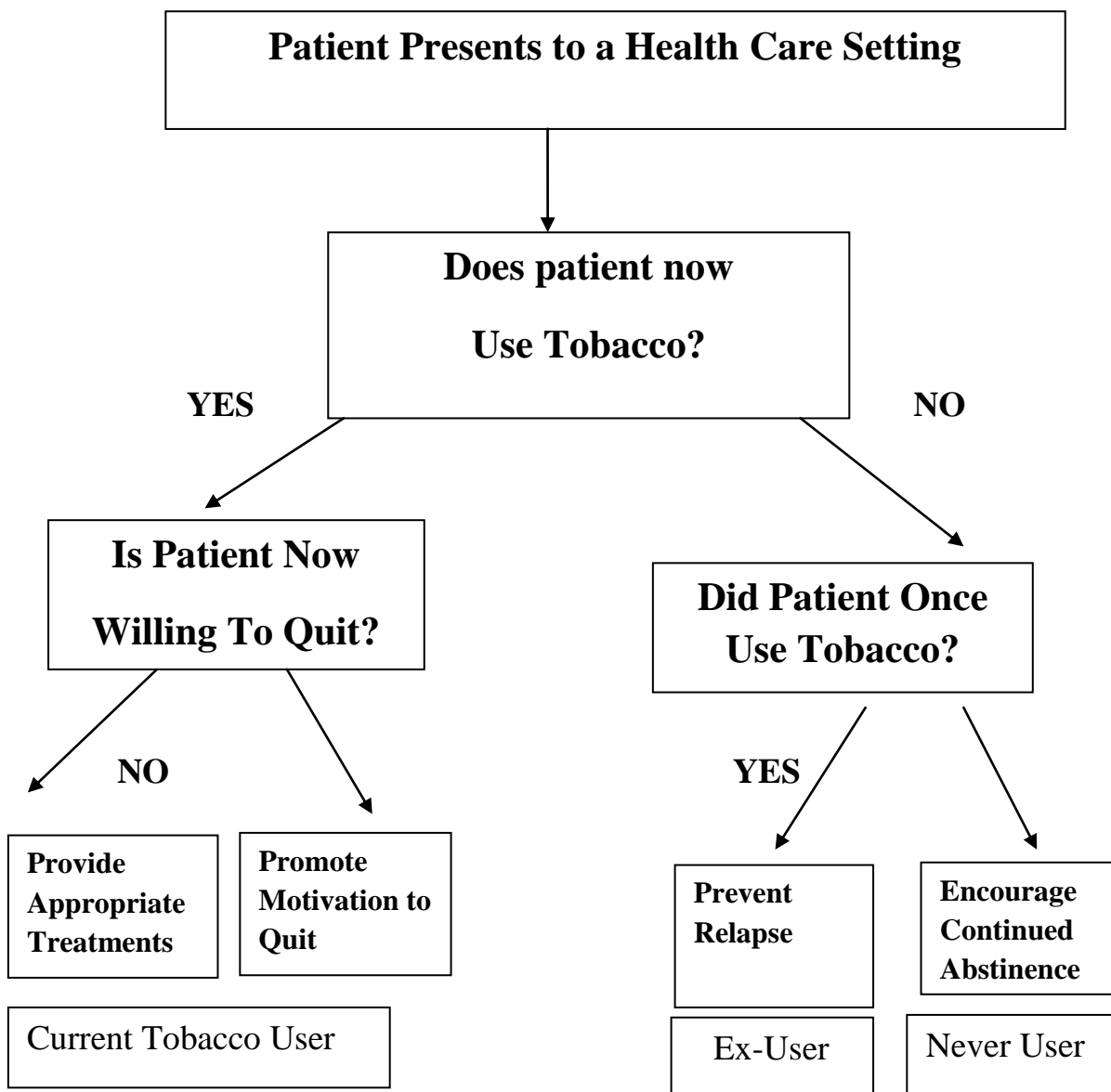
3-4= Low to moderate dependence

5-7= Moderate dependence

8+ = High dependence

Clinicians may find the following algorithm useful for assessing and treating tobacco use

### Assessment to Tobacco Use Algorithm



## Strategies for Treatment for Persons Addicted to Tobacco:

### Treating the smoker who is willing to quit based on the 5A's principle.

The 5A's are designed to be a brief counselling intervention, lasting 3 minutes or less. Evidence has documented that brief counselling modestly, but reliably, improves cessation rates. The 5 A's can also be expanded based on the time available to the clinician.

- A. **Ask** about tobacco use – every patient / every visit
- B. **Assess** willingness to make a quit attempt at this time
  - 1. If yes, continue with the 5A's
  - 2. If no, implement the 5R's
- C. **Advise** all tobacco users who are willing to quit – Advice should be strong, clear, and personalized.
- D. **Assist** in quit attempt for those who are willing to make quit attempt
  - 1. Help patient with a quit plan by having the patient:
    - a) Set a quit date.
    - b) Tell family, friends and co- workers of quit plan.
    - c) Anticipate challenges to the planned quit attempt, especially withdrawal.
    - d) Remove tobacco products from smoker's environment.
  - 2. Provide practical counselling (problem- solving)
    - a) Emphasize total abstinence – “not a single puff after the quit date”
    - b) Review past quit attempts; what helped. what didn't
    - c) Anticipate challenges to upcoming effort
    - d) Consider limiting/abstaining from alcohol, since it is highly associated with relapse.

3. Encourage the patient in the quit attempt
  - a) Communicate in a caring and concerned way- ask how the patient feels about quitting, directly express concerns and willingness to help
  - b) Encourage the patient to talk about the quitting process – ask about the reasons for Quitting, concerns or worries about quitting. The success the patient has achieved, and difficulties encountered while quitting.
  - c) Completing the Smoking Motives Questionnaire (SMQ) will help to understand the problem areas for a given patient.
  
4. Encourage the patient to obtain extra- treatment social support
  - a) Requesting social support from family, friends ,and co- workers
  - b) Inform patient of community resources
  - c) Clinician arranges outside support – assign patient to be “buddies” for one another
  
5. Recommend the use of approved pharmacotherapy except in special circumstances such as any medical contraindications
  
6. Provide supplementary material
  - a) Written material , phone numbers for agencies
  - b) Make sure the material is culturally / racially/ educationally age appropriate for the patient

### **E. Arrange follow- up**

1. Follow-up can be either in person or via telephone
2. Follow- up contact should occur soon after the quit date, preferably during the first month when most relapse begin.



3. Congratulate success
4. Arrange to see the patient in your clinic in about 4 week's time.
5. If tobacco use has occurred, review circumstances, problem solve and elicit recommitment to total abstinence
6. Remind patient that lapses can be used as a learning experience
7. Identify problems already encountered and anticipate challenges in the immediate future
8. Assess use of indications for pharmacotherapy and problems of their use
9. Consider referral to more intensive treatment – smoker's clinic

### **III. Promoting the Motivation to quit; the 5 R's**

The 5R's are intended to be used with the patient unwilling to make a quit attempt at this time. The 5 R's is a motivational intervention that a clinician can implement after having identified a tobacco user (Ask) and assessed that the patient is not willing to make a quit attempt at this time (Assess) .

- A. **Relevance** – Encourage the patient to indicate why quitting is personally relevant, being as specific as possible. Motivational information has the greatest impact if it is relevant to a patient's disease status or risk (periodontal health and discoloration of teeth), other health concern (cancer & cardiovascular disease), family or social situation ( e.g. having children in the home)
- B. **Risks** – The clinician should ask the patient to identify potential negative consequences of tobacco use. The clinician may suggest and highlight those that seem most

relevant to the patient. The clinician should emphasize that smoking low- tar/ low nicotine cigarettes or use of other forms of tobacco (e.g. Smokeless and chewing tobacco, cigars, and pipes) will not eliminate these risks

.Example of risks follow:

- i. Acute risks: shortness of breath, exacerbation of asthma, harm to pregnancy, Impotence, infertility, increased serum carbon monoxide
- ii. Long- term risks: Heart attacks and strokes, lungs and other cancers (larynx, Oral cavity, pharynx, esophagus, pancreas, bladder, cervix), chronic obstructive pulmonary diseases (chronic bronchitis and emphysema), long term disability
- iii. Environmental risks i.e. effects of passive smoking: Increased risk of lung cancer and heart disease in spouses – higher rates of smoking by children of tobacco users; increased risk for low birth weight, asthma, middle ear disease, and respiratory infections in children of smokers.

**C. Rewards** – The clinician should ask the patient to identify potential benefits of stopping tobacco use. The clinician may suggest and highlight those that seem most relevant to the patient. Examples of rewards follow:

1. Improved health
2. Whiter teeth
3. Improved sense of smell and taste
4. Save money
5. Feel better about yourself
6. Home, car, clothing, breath will smell better
7. Can stop worrying about cancer
8. Set a good example for kids
9. Have healthier babies and children

10. Not worry about exposing others to smoke
11. Feel better physically
12. Perform better in physical activities
13. Reduced wrinkling/aging of skin better sex life

**D. Roadblocks** – the clinician should ask the patient to identify barriers or impediments to quitting and note elements of treatment (problem-solving, pharmacotherapy) that could address barriers. Typical barriers might include:

1. Withdrawal symptoms
2. Fear of failure
3. Weight gain
4. Lack of support
5. Depression
6. Enjoyment of tobacco

**E. Repetition-** the motivational intervention should be repeated every time an unmotivated patient visits the clinic setting. Tobacco users who have failed in previous quit attempts should be told that most people make repeated quit attempts before they are successful.

#### **IV. Intensive counselling**

Intensive counselling is counselling that often lasts longer than 15 minutes. It can be provided by anyone who has the time, resources, skills and knowledge.

Tobacco cessation counsellors are trained for this purpose and it is best to refer your patient to a counsellor. Before referral one must ensure that the tobacco user is willing to make a quit attempt using an intensive treatment program.

## **V. Follow – up: Treatment / Relapse Prevention**

Relapse most often occurs early on in the quitting process and patients are particularly vulnerable within the first two weeks after quitting. Two intensities of relapse prevention (minimal and prescriptive) have been identified as effective:

### **A. Minimal Relapse Prevention**

1. All patients should be assessed with respect to their smoking status during all follow- up tobacco dependence contacts. In particular, follow- up assessments within the first week after quitting should also be encouraged.
2. Abstinent patients should receive relapse prevention including reinforcement for their decision to quit, congratulations on their success at quitting, and encouragement to remain abstinent.

### **B. Prescriptive Relapse Prevention**

1. Clinician should inquire about current and future threats to abstinence and provided appropriate suggestions for coping with these threats.
2. Patients who have relapsed should again be assessed for their willingness to quit.
3. Patients who are currently motivated to make another quit attempt should be provided with a tobacco dependence intervention.
4. Clinician may wish to increase the intensity of psychosocial treatment at this time or refer the patient to a tobacco dependence specialist / program for a more intensive treatment if the patient is willing to attend such a program.
5. Pharmacotherapy should be again offered to the patient. If the previous cessation attempt included pharmacotherapy, the

clinician should review whether the patient used these medications in an effective manner and determine whether the medication was helpful. Based on this assessment, recommended treatment with the same pharmacotherapy, another pharmacotherapy or combination pharmacotherapy.

## **COUNSELING**

The approach in helping patients quit tobacco and guiding them toward habit cessation by any health professional is termed as counseling. The tobacco user's self-image and socialization behavior should be assessed based on the stages of behavioral changes theory to accommodate the new self-awareness of a smoke-free person rather than expecting an immediate, radical change in that individual. The clinician must also address the patient's fear about the withdrawal symptoms.

Three components of effective counseling and behavioral therapies are:

1. Practical counseling includes identification of events, internal states, or activities that increase the risk of smoking or relapse, and practice coping of problem solving skills. Providing basic information about smoking and successful quitting.
2. Intra-treatment social support by encouraging the patient in the quit attempt, communicating the patient with care and concern, and encourage the patient to talk about quitting process.
3. Extra-treatment social support by training patient in support solicitation from family, friends, and coworkers; prompting support seeking and clinician arranging outside support.

- Patients, who have not used tobacco in any form, should be complimented and encouraged never to begin.
- As for tobacco users, a quick assessment should be made of each patients' current habit and aspire them to quit tobacco use.
- Patients who use tobacco should be advised of the effects of tobacco on general health and on oral health and educate them regarding the oral health that has improved following tobacco cessation explicitly with pictures.
- Simple, tailored questioning, advice, and follow-up support are all required to help patients successfully stop tobacco.

## **I. The Science of Addiction**

- A. Tobacco dependence shows many features of a chronic disease.
- B. For most users, tobacco use result in a true drug dependence, one comparable to the dependence caused by apistes, amphetamines, and cocaine.
- C. Most of the adult smokers have made at least one prior quit attempt and approximately 4-5% quit each year. Unfortunately, most of these efforts are unsuccessful.
- D. These discouraging statistics have contributed to clinician reports that they feel ineffective in the treatment of tobacco dependence.
- E. A minority of tobacco users achieves permanent abstinence in an initial quit attempt. The majority persists in tobacco use for many years and typically cycles through multiple periods of relapse and remission. A failure to appreciate the chronic nature of tobacco dependence may undercut clinician's motivation to treat tobacco use consistently.

## **II. Tobacco Dependence as a Chronic Disease**

- A. A chronic disease model is useful in the treatment of tobacco dependence. Through it a clinician can better recognize the long-term nature of the disorder with an expectation that patients will have periods of relapse and remission.
- B. If tobacco dependence is recognized as a chronic condition, clinicians will better understand and accept the relapsing nature of the ailment and the requirement for ongoing, rather than just acute, care.
- C. Clinicians should recognize that despite the potential for relapse, numerous effective treatments are now available.
- D. A Chronic disease model emphasizes for clinicians the importance of counselling and advice. While most clinicians are comfortable in counselling their patients about diabetes, hypertension, or hypelipidema, many believe that they are ineffective in providing counselling to patients who use tobacco. As with these chronic disorders, clinicians encountering a patient dependent on tobacco must be encouraged to provide that patient with simple counselling advice, support and appropriate pharmacotherapy.

## **III. What formats of counselling work?**

- A. Individual counselling is an effective treatment format.
- B. Group counselling is an effective treatment format.
- C. Telephone counselling can be effective treatment format.
- D. Self-help formats such as pamphlets/booklets/mailings/manuals, audiotapes, mass media community interventions, etc. Are quite common, but have not shown consistent efficacy.

1. Clinician self- help
  - a. Self – help is of marginal efficacy in a clinical setting.
  - b. Self- help materials vary greatly in nature and intensity.

#### **IV. What counselling contents work?**

- A. Providing practical counselling (problem –solving) improves cessation rates. Examples:
  1. Identify events, internal states, or activities that increase the risk of smoking or relapse.
    - a. Negative affect
    - b. Being around other smokers
    - c. Drinking alcohol
    - d. Experiencing urges
    - e. Being under time pressure
  2. Identify and practice coping or problem- solving skills. Typically, these skills are intended to cope with danger situations.
    - a. Learning to anticipate and avoid temptation
    - b. Learning cognitive strategies that will reduce negative moods
    - c. Accomplishing lifestyle changes that reduce stress, improve quality of life, or produce pleasure
    - d. Learning cognitive and behavioural activities to cope with smoking urges (e.g. distracting attention)
  3. Provide basic information about smoking and successful quitting.
    - a. The fact that any smoking (even a single puff) increases the likelihood of full relapse



- b. Withdrawal typically peaks within 1- 3 weeks after quitting
- c. Withdrawal symptoms include negative mood ,urges to smoke, and difficulty concentrating
- d. The addictive nature of smoking

**B. Providing intra –treatment social support improves cessation rates.**

Examples of effective clinical social support programs include:

1. Encourage the patient in the quit attempt.
  - a. Note the effective tobacco dependence treatments are now available
  - b. Not that half of all people who have ever smoked have now quit
  - c. Communicate belief in patient’s ability to quit
  
2. Communicate caring and concern.
  - a. Ask how patient feels about quitting
  - b. Directly express concern and willingness
  - c. Be open to the patient’s expressions of fears of quitting, difficulties experienced and ambivalent feelings.
  
3. Encourage the patient to talk about the quitting process. Ask about:
  - a. Reasons the patient wants to quit
  - b. Concerns or worries about quitting
  - c. Success the patient has achieved
  - d. Difficulties encountered while quitting.

**C. Providing extra- treatment social support improves cessation rates.**

Elements of effective extra- treatment social support programs include:

1. Train patient in support solicitations skills

- a. Practice requesting social support from family, friends ,and co- workers
  - b. Aid patient in establishing a smoke- free home.
2. Prompt support seeking.
- a. help patient identify supportive others
  - b. call the patient to remind him/ her to seek support
  - c. inform patients of community resources such as hotlines/ hiplines
3. Arrange support outside of the clinical setting on behalf of patient.
- a. Assign support to be “buddies” for one another.

## **V. Special Populations**

When possible, interventions should be tailored to be culturally and developmentally appropriate. However, the same basic principles (5 A;s ., 5R’s, relapse prevention, pharmacotherapy) apply to all tobacco users. One over- riding issue relevant to all tobacco users considering a quit attempt is that all treatment interventions should be delivered at an appropriate educational level and are language appropriate.

Special population groups include the following;

- A. Older Smokers
- B. Adolescents
- C. Alcohol misusers
- D. Women
- E. People with mental diseases.

While women benefit from the same interventions as men, women face different stressors and barriers, including greater likelihood of depression, greater weight control concerns, and hormonal cycles.

Women who are considering becoming pregnant may be especially receptive to treatment.

#### E. Pregnant women and nourishing mothers

- 1) Smoking in pregnancy: smoking imparts risk to both the women and the fetus. Quitting prior to conception or early in pregnancy is most beneficial, but health benefits result from abstinence at any time. Therefore the pregnant smoker should receive a strong cessation message throughout the pregnancy and be offered extended or augmented interventions. The potential risks of the various pharmacotherapies must be weighed against the risks of continued tobacco.
- 2) Breast feeding: Small amounts of medications may pass through breast milk, and again relative risks must be considered in nursing mothers.

#### **Brief Behavioral Interventions**

- Brief intervention of 3-4 min can move patients through various stages of change.
- Interventions as brief as 3 min can increase cessation rates significantly.
- A brief intervention using available resources on the various effects of tobacco use (e.g., tooth discoloration), was effective in educating tobacco users who were not prepared to quit.
- Brief advice against smoking (“verbal instructions to stop smoking with or without the added information about the harmful effects of smoking,”)- increase rates of smoking cessation in a general population.
- can be used with 3 types of patients:
  1. Current tobacco users now willing to make a quit attempt;

2. Current tobacco users unwilling to make a quit attempt at this time;
3. Former tobacco users who have recently quit.

### **Relapse Counseling**

- Very few tobacco users accomplish permanent abstinence in an initial quit attempt
  - Most of them continue in tobacco use for many years and classically cycle through several periods of relapse and remission.
  - be aware that relapse is common and that it reveals the chronic nature of dependence, not their own or their patients' failure

Several steps include in relapse counseling

1. Understanding that relapses are possible and do not imply a personal failure
2. Knowing about situations that can lead to using tobacco again and handling them differently
3. Dealing with urges or cravings Learn how to handle tensions, irritation and low moods
4. Develop a healthy lifestyle and a healthy outlook
5. Increasing support to prevent relapse
6. Handling a lapse or a relapse.

### **Methods of Quitting**

- Different methods suit different people
- Options are:
  1. Tapering off S-L-O-W-L-Y
  2. Stopping all at once

## **Withdrawal Symptoms**

- unpleasant symptoms that occur when a person suddenly stops use of any psychoactive drug
- Common symptoms of withdrawal are:
- Depressed mood, craving, insomnia, irritation, poor concentration, restlessness, and increased appetite. Withdrawal symptoms are most severe during the 1st week and last 2-4 weeks after stopping tobacco.
- However, the urge to use or “craving,” an important symptom of withdrawal, may last a few months and is an important cause for restarting tobacco use.

## **Strategies for TCC at Community Level**

- Some of the activities that could be included are
  1. community-based programs comprising educating the health risks of environmental tobacco smoke,
  2. developing smoke-free public places
  3. encouraging policies and programs that help tobacco control interventions.

## **Contribution of health professionals in tobacco use cessation at a community level**

- As a role model by abstaining from tobacco or by quitting successfully
- Conducting periodic individual or group meetings about the significance of tobacco use cessation
- Developing and executing tobacco cessation intervention models in schools
- Exhibiting educational materials
- Writing a column in newspaper or magazines

## **Barriers for the Tobacco Cessation Counseling (TCC)**

- Tobacco use among professionals
- Lack of awareness of the need to counsel
- Doubting their own efforts/skills of counseling may be due to lack of formal training, lack of confidence and concern, prioritizing other areas over counseling considering TCC as time-consuming, fear of losing patient, uneasy talking to their patients, and other factors

## **Using Pharmacotherapy to Treat Tobacco Use and Dependence**

### **1. Introduction**

- A. As with other chronic diseases, the most effective treatment of tobacco dependence requires the use of multiple modalities. Pharmacotherapy is a vital element.
- B. Who should receive pharmacotherapy for smoking cessation?
  1. Most smokers trying to quit expect in the presence of special circumstances.
  2. Special consideration should be given before using pharmacotherapy in selected populations:
    - a. Medical contraindications (Varies per type of medication)
    - b. Smoking less than 10 Cigarettes/day
    - c. Pregnant women/ breast feeding mothers
    - d. Adolescent smokers

## **II. First- line pharmacotherapy**

### **A. Nicotine Replacement therapies (NRT)**

- 1) These products all contain nicotine as the active ingredient, supplied as steady dose (patch) or self-administered (gum, a lozenge, inhaler, nasal spray).
- 2) The self- administered products (gum, inhaler, and nasal spray) should be used on a scheduled basis for

the first 4- 12 weeks to minimize urges before being tapered to ad lib use and eventual discontinuation.

- 3) Medical contraindication for NRT: immediate (within 2 weeks) post- myocardial infarction period, serious arrhythmias, serious or worsening angina pectoris, accelerated hypertension.
- 4) It should be noted that there is no evidence of increased cardiovascular risk with nicotine replacement products with the exception of the above acute cardiovascular diseases.
- 5) NRT is not known to be carcinogenic

### **Nicotine Gum**

1. Available in 2 strengths: 2mg and 4 mg
2. 2 flavours: regular and mint
3. 2-mg gum improves long-term abstinence rates by approximately 30% compared with placebo
4. 4-mg gum may be more efficacious than 2-mg gum for highly dependent smokers (with characteristics as)
  - i. Smoke 25 or more cigarettes / day
  - ii. Smoke within 30 minutes of waking
  - iii. Find it difficult not to smoke in place where it is forbidden.
5. Availability – prescription and pharmacist
6. Prescribing instructions – inform smoker of “chew and park” use: chew the gum several times slowly until a peppery / tingly sensation occurs, then park the gum between the cheek and gums. When taste / tingle dissipate, chew and re- park in different location. Each piece of gum lasts about 30 minutes when chewed properly. Acidic beverages (esp. Juice, cola, and coffee) interfere with buccal absorption and should be avoided 15 minutes before and during chewing.

7. Scheduled vs. Ad lib: chewing on a fixed schedule (at least one piece every 1- 2 hours) for 1-3 months may be more beneficial than ad lib use
8. Side effects – mouth soreness, hiccups, dyspepsia and jaw ache; these effects are generally mild and can often be alleviated by correcting the patient's chewing technique.
9. Quantity – use at least 10 pieces / day; key to encourage smokers to use sufficient amount of gum to reduce cravings (tendency to under – utilize gum)

### **Nicotine lozenge**

1. The nicotine lozenge is a small, candy-like tablet. It can be placed in the mouth and allowed to dissolve which takes about 20 - 30 minutes; nicotine is absorbed into the bloodstream thereby reducing the short-term desire to smoke.
2. Food can reduce the absorption of the drug therefore it is advisable to wait at least 15 minutes after a meal to use the drug.
3. This over the counter drug comes with strength of 2mg and 4mg. From the first day up to six weeks, one lozenge has to be used every 1 to 2 hours whereas **7 – 9 weeks**, one lozenge has to be used only in every 2 - 4 hours. Frequency of use has to be reduced to one lozenge in every 4 - 8 hours in 10-12 weeks.

### **Nicotine Patch**

1. Approximately doubles long term abstinence rates when compared to a placebo patch
2. Delivers steady doses of transdermal nicotine, takes 4-8 hrs to reach peak blood level. Strongly dependent patients may wish to apply patch at bedtime on quit night.
3. Availability: by prescription and through pharmacists
4. Available as 24 hour patch with tapering doses (21 mg, 14mg, and 7 mg per 24/hr)



5. Prescribing instructions - patient should place a new patch on a relatively hairless location between the neck and waist? treatment should be approximately 8 weeks.
6. Side effects – local skin reaction, however skin irritations are usually mild and self- limiting; insomnia
7. Patch may be worn in shower, while swimming, etc. May reinforce with skin tape to maintain patch – skin contact
8. Dosing (does May be extended if patient desires additional treatment time)
  - a) 24 hr patch: 21 mg x 4 weeks, 14 mg x 2 weeks, 7mg x 2 weeks
  - b) Nicotine Middle
  - c) Nicotine needs spray

## **B. Bupropion SR**

1. Approximately doubles abstinence rates compared to placebo
2. Is a non- nicotine medication approved by NICE/FDA for smoking cessation.
3. Mechanism of action is presumed to be mediated by its capacity to block neural re – uptake of dopamine and / or nor epinephrine
4. Availability – prescription only (UK/USA)
5. Prescribing instructions – patients should begin with a dose of 150 mg for a week before quitting ,then increase to 150mg bd. At the time of quitting dosing at 150mg.bd should continue for 7-12 weeks following the quit date. May discontinue use without tapering (no withdrawal)
6. Maintenance – Bupropion SR has demonstrated increased efficacy as a maintenance medication for up to six months
7. Side effects – insomnia and dry mouth. Typically mild and improve over time
8. Alcohol in moderation while on Bupropion SR to minimize seizure risk

9. Contraindicated in:

- a. Patients with a seizure disorder
- b. Patient with a current or prior diagnosis of bulimia or anorexia nervosa
- c. Patient using an MAO inhibitor within the previous 14 days
- d. Patients on other medication that contains Bupropion
- e. Pregnant or breastfeeding

**C. Varenicline (Champix) –**

1. Varenicline (Champix) is a FDA approved prescription drug for smoking cessation.
2. Mechanism of action- It is potent against reduction for  $\alpha 4\beta 2$  nicotine acetyl choline receptors in the brain. It has an agonist and antagonist actions. Varenicline stimulates nicotine receptors more weakly than nicotine. Drug may reduce smoking thereby potentially reducing the chance of relapse.
3. Dosage- start with 1 week before quit date
4. 0.5mg once daily for 3 days followed by 0.5mg twice daily for 4 days followed by 1mg twice daily for 3 months
5. Patient should be able to quit smoking on day 8.
6. To reduce nausea, drug must be taken on full stomach.

**III. Second –Line pharmacotherapies**

Indications for those who found that first- line medications were not helpful

- A. Clonidine
- B. Nortriptyline

**IV. Multiple pharmacotherapies**

- A. Bupropion SR and NRT

1. Bupropion SR is a non- nicotine product and it may be combined with the NRT products but not recommended by NICE (UK)

**B. combination NRTs**

1. Risk of nicotine overdose – caution patients about titrating self- delivered form
2. The combined use of NRT is not currently clinically indicated.

**Professional Dental Care**

Routine dental care must consider the individual patient; this applies to tobacco users, previous users, and nonusers alike. Considerations include oral cancer screening, oral mucosal lesions, periodontal care, and preventive care. Oral cancer screening should be performed during the routine dental examination and should begin with a visual examination and palpation intra orally and extra orally systematically of the head and neck. Adjunctive devices like toluidine blue or light detection systems used for oral cancer screening can aid early identification. Regular oral cancer screening is important for all adult patients, not just tobacco users.

Smokers are less likely to respond to standard periodontal therapy and may be candidates for systemic or locally applied antimicrobial therapy. Patients should be advised to quit tobacco use. In addition, patients who needs implant therapy should be advised to quit prior to implant surgery in order to improve the likelihood of successful implant therapy and the long-term health of the peri-implant tissues. Tobacco users may experience xerostomia, and both bupropion and varenicline can be associated with xerostomia in some patients. Consideration can be given to preventive therapy that could include topical fluoride applications (fluoride varnish or gel) and home use of

prescription-level fluorides. Other options include the use of xylitol chewing gum, which reduces the bacterial load. For smokers in the process of quitting, the physical activity of chewing the gum may help substitute for the activity of smoking in addition to stimulating saliva.

Effective tobacco cessation programme in the dental clinic by all dental surgeons has to be a routine activity. Successful implementation of such programmes will help in reducing the tobacco induced disease burden in the country.

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