



## Current Care Guideline

# Smoking, nicotine dependency and interventions for cessation

GUIDELINE GROUP APPOINTED BY THE FINNISH ASSOCIATION FOR GENERAL PRACTICE

- The most recent version of the guideline with evidence summaries and full references can be accessed at [www.duodecim.fi/kh](http://www.duodecim.fi/kh) (in Finnish). This article compiles the main guideline with abridged references.
- The guideline and evidence summaries are updated in electronic format every two years, and major changes reported in the Journal Duodecim (in Finnish).
- Conflicts of interest are disclosed in electronic formats.
- The guideline is based on systematically assembled scientific information and the level of evidence is graded according to the table below. The intended use of the guideline is to support clinical decision making while caring for individuals or groups of patients. Local versions may specify further practical details for example for a hospital district.
- Comments and suggestions for improvement are welcome via internet or by mail to Current Care (Käypä hoito), Finnish Medical Society Duodecim, POB 713, 00101 Helsinki, Finland.

**TABLE: Levels of evidence in Current Care Guidelines**

Code	Level of evidence	Explanation
A	Strong evidence base	Multiple relevant high-quality <sup>1</sup> studies with homogenous results
B	Moderate evidence base	At least one high-quality study or several adequate <sup>2</sup> studies
C	Limited evidence base	At least one adequate study
D	No evidence base	Expert group consensus (best estimate) reached in the absence of good quality evidence

<sup>1</sup> High-quality = Strong study design (e.g. controlled study or good epidemiological study); the study population and method used are suitable to be used as a basis for recommendations

<sup>2</sup> Adequate = Fulfills minimum criteria for scientific methodology; the study population and method used are suitable to be used as a basis for recommendations

## CURRENT CARE GUIDELINE

# Smoking, nicotine addiction and addiction treatment

## AIMS

The aim of this guideline is to help the entire health care system deliver more effective treatment to those suffering from tobacco dependency. The guideline places special emphasis on the doctor's role as a member of a multi-professional team. The guideline does not include prevention of smoking.

## TARGET POPULATION

The guideline applies to all users of tobacco products.

## THE CORE MESSAGE

The nicotine found in tobacco causes physical dependency. Mental and social factors also contribute to the dependency. Nicotine addiction is a serious illness, which greatly increases the risks of disease and premature death. It is brought on by smoking.

Cessation therapies work for many tobacco users. Once physicians take into account their patients' smoking habits, they can more capably intervene. Relapse does not signify absolute failure in treatment, since cessation often involves as many as 3 to 4 quit attempts. Physicians, therefore, must follow up on their patients' progress. Furthermore, they must provide the essential support their patients need during cessation.

## EPIDEMIOLOGY

Nicotine addiction is a chronic condition. Tobacco use is the single most preventable cause of death in Western society. Fourteen % of those deaths result from diseases directly attributable to tobacco use. Every second smoker dies from smoking-related diseases.

Twenty-nine % of all adult males and 20 % of all adult females smoked in Finland in 2001 [1]. Nineteen %

of male smokers and 15 % of female smokers reported having quit smoking during the previous year. Seven out of ten smokers wanted to quit smoking, every fifth male smoker and every fourth female smoker having tried to quit during the previous year. In 2001, 12 % of male and 10 % of female smokers reported having used nicotine replacement therapy in an effort to quit. The majority of smokers (80 %) had consulted a doctor during the previous year; one fifth of them had been advised to stop smoking [1].

In Finland, the sale of smokeless tobacco (snuff) is illegal. Nonetheless 44 % of all 18-year-old males had experimented with it. Over 11 % used snuff occasionally or daily.

Tobacco smoke is a danger to non-smokers also. Smokers spread smoke around the environment in which they smoke. Non-smokers in a smoking environment inhale smoke, thus they become exposed to the same substances that smokers expose themselves to (Environmental Tobacco Smoke, ETS). That exposure can lead to increased risks of cancer and circulatory diseases, in children to asthma. Finnish authorities have classified tobacco smoke a carcinogen. That classification applies to the occupational health code, thus employers must protect their employees from tobacco smoke in their work environments [2].

## FACTORS EXPLAINING SMOKING

### Nicotine addiction

Cigarettes and other tobacco products contain the addictive chemical nicotine [3]. The pharmacological and behavioral processes that determine nicotine addiction are similar to those that determine other substance dependencies. Nicotine addiction develops quickly. Its strength

depends on the sensitivity of the central nervous system to nicotine and its metabolism in the liver. The relative importance of factors contributing to the addiction remains unknown.

According to the international classification of psychiatric disorders nicotine addiction meets the criteria of drug addiction. The International Classification of Diseases (ICD-10) classifies tobacco dependence under the code F17.2, withdrawal symptoms under F17.3.

The nicotine present in smokeless tobacco causes addiction as well. The body absorbs nicotine more slowly from smokeless tobacco than from tobacco smoke. However, the nicotine from smokeless tobacco retains a high level in the circulation for a longer period.

### Other factors behind tobacco use

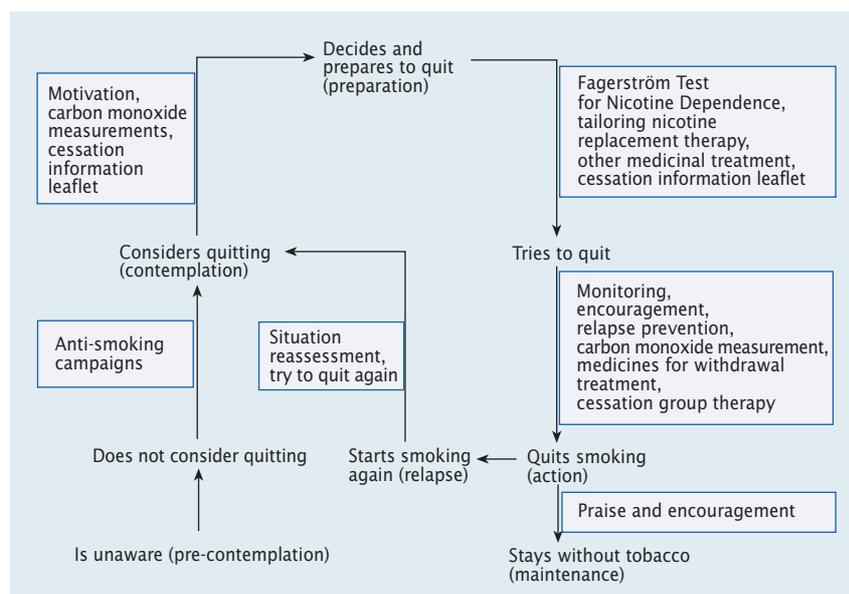
Propensity to dependency, personality, environment, and other factors influence smoking behavior. Age is the most significant variable associated with the first use of tobacco. On the average, tobacco use in Western societies begins at age 14. First use involves a number of social factors [4,5]. The demographic and socioeconomic factors underlying smoking behavior among men are similar to those among women [1,6].

## DISEASES CAUSED BY SMOKING

Smoking affects the body in many ways. It contributes to the onset of a variety of diseases, complicates the treatment of many others and reduces chances for recovery. Those with serious pre-existing conditions are especially vulnerable to the hazardous effects of smoking.

Smokeless tobacco use causes oral leukoplakia, gum disease and recession, as well as tooth yellowing.

## CURRENT CARE GUIDELINE



**Graphic. The process of cessation in stages and the various interventions used during the process (adapted from [7])**

## SMOKING CESSATION

## The Model for Change

A smoker's motivation (stages for change) to quit the habit is personal. Quitting is not just an isolated incident, but rather a process of adapting to another life style. The stages of change are located within Prochaska's and DiClemente's model for change – see graphic [7].

The model of change postulates that cessation occurs in five stages over time: pre-contemplation (stage preceding any consideration about quitting), contemplation, preparation (decision-making stage), action (cessation stage), maintenance (stage without tobacco).

To be able to offer optimal encouragement and support at the appropriate point of their patients' care, health professionals should determine the stage at which the smoker is. Furthermore, health professionals should look upon this therapy as the time-consuming change of behavior and the demanding learning process that it is.

## The benefits of quitting

After quitting, blood pressure and pulse rate return to normal levels. Within 24 hours, the body has disposed of carbon monoxide. Within three days the bronchi begin to re-

lax. Blood circulation will improve after some weeks. Coughing and shortness of breath decrease after 3 to 9 months [8]. Quitting relieves subjective stress. It improves both the quantity and quality of sleep. Within five years of stopping, the risk of heart attack is halved. Within ten years the risk of lung cancer is halved [8].

## WITHDRAWAL SYMPTOMS

Withdrawal symptoms generally accompany the process of quitting smoking. Withdrawal from smoking may have physiological, psychological, behavior-related, and social consequences [9]. The most common withdrawal symptoms include:

Irritability, frustration (impatience), nicotine/tobacco craving, restlessness/anxiety, difficulty concentrating, insomnia, headache and increased appetite. Most of the symptoms result from the reduced levels of nicotine in the system. Coffee consumption may exacerbate the symptoms.

Withdrawal symptoms begin 2 to 12 hours after the "last" cigarette. They peak in intensity at 1 to 3 days. They last 3 to 4 weeks on average. Although significant individual differences do occur, neither the amount of cigarettes a person has smoked nor the degree of depen-

dency (Fagerström Test for Nicotine Dependence [10]) seem to be the source of those differences.

## WEIGHT GAIN

Weight gain should be expected. Men gain an average of 2.8 kg and women 3.8 kg during the six to twelve months following smoking cessation [4,9,11-23] (B). Yet 10 % of men and 13 % of women gain more than 13 kg. Weight gain may be a significant side-effect of quitting. Recommending diet and physical exercise is appropriate as long as the main focus remains on smoking cessation. Nicotine replacement treatment, especially chewing gum, can reduce weight gain [11, 24]. Smoking as such does not reduce weight [12], but nicotine apparently affects weight control via the central nervous system.

## HELPING THE PATIENT QUIT SMOKING

## Individualized interventions

Physician or dentist interventions definitely help patients stop smoking [25-36] (A). Even simple encouragement to quit has an effect. Studies show that a three-minute-long discussion between the doctor and the patient about smoking has an even greater effect [25-36] (A). The opportunity to discuss smoking should be offered to all smokers, and this should be possible at every doctor's appointment. The family physician and the dentist have obligations to take up the subject of smoking cessation at least once a year. The "Six As of Abstinence" will assist clinicians in this task. (See table 1)

Follow-up appointments for patients during the intervention process can facilitate progress. In general, more time spent on patient assistance spread over several visits also seems to make intervention more effective [32,37,38] (B). Counseling by a nurse, a health visitor or by some other health care professional alone also has a positive effect [33,39-43] (A). Even greater benefit comes from multiple patient encounters with a variety of health care profes-

## CURRENT CARE GUIDELINE

sionals contributing to the intervention process.

The key elements of successful cessation seem to be:

The number of patient encounters during the intervention process, the duration of the intervention process, the type of encounters (multi-professional), the mode of encounters (individualized).

Neither acupuncture [44](A) nor hypnosis [45](C) appear to be effective treatments for smoking cessation. There is not enough evidence of the usefulness of employing exercise as a singular treatment for cessation [46,47](C).

Telephone counseling provided by trained professionals offers additional advantages [39](B). There is also evidence that follow-up by telephone offered to patients who had successfully quit smoking during hospital treatment was also beneficial.

Application of smoking cessation interventions during hospitalization enhances cessation [40,48-50](A).

Self-help materials or reactive telephone support (hot-line support) do provide limited help for those trying to quit smoking on their own. Combined with face-to-face counseling or mini-intervention, self-assistance can be more effective [25,39,51](B). Individually chosen or tailored materials have proven more effective than standard materials [51](A).

The involvement and support of a partner or partners is useful (extra-treatment social support) [52-58](B). The local pharmacy might also provide the means for quitting [59-62]. The pharmacy provides individualized interventions more easily than group interventions.

A scheduled smoking approach with gradual reduction can be a useful technique in cessation therapy [63](D).

Cessation therapy for users of smokeless tobacco is essentially similar to therapy for smokers [25,64].

### Group Interventions

A well-planned group cessation program is versatile, flexible, progresses in phases and takes into account the needs of the group. Group counseling based on beha-

vioral scientific techniques has proven to be more effective than self-help or short counseling [31](A). Applying the model of change in group counseling helps both the counselor and the group members to recognize the various stages of smoking cessation, thus to use methods appropriate for the stage. Active participation, the degree of nicotine addiction and gender all influence success rates in the long run [65,66](C).

The ideal size for a cessation therapy group is 8 to 12 people [67,68]. Groups with fewer than 6 participants are not recommended because of absentees or even group dropouts. The recommended group size compares with the group size of six to ten generally recommended by group therapists [69,70].

The average group meets from 6 to 10 times over a span of 6 to 10 weeks. Both the number and frequency of meetings vary in relation to the timetable set for the program. One and one-half hours is the recommended length of a session.

## PHARMACOTHERAPIES

### Nicotine Replacement Therapy (NRT)

NRT substitutes in part the nicotine smokers and chewers derive from tobacco. It alleviates the withdrawal symptoms that cessation brings on; with NRT, patients might avoid them entirely. All forms of NRT (chewing gum, transdermal patches, nasal spray, inhalers, and tablets) are effective in smoking cessation. They increase quit rates by one-and-a-half to two-fold, regardless of the form used or of any additional support or

encouragement users may have received during therapy [71](A). Table 2 lists those medications proven to be effective in cessation therapy in brief. Appropriate dosages and consistent use over a sufficiently long duration are especially important elements to consider in NRT. Drinking acid beverages, such as fruit juice, or coffee while chewing nicotine gum or sucking on a tablet can reduce the amount of nicotine absorbed. Such beverages should be avoided for 15 minutes before and during use [72].

Anyone smoking 10 or more cigarettes a day and trying to quit is a candidate for NRT. There is scant evidence on individual tailoring of the various forms of NRT medications or dosing regimens. Heavy smokers do benefit from choosing the right form of NRT, and a smoker's level of nicotine dependency can be determined with the Fagerström Tolerance Test (table 3) [10]. The results from the test help the physician make the right choices for those with heavy dependency. For example, the 4 mg dose of nicotine chewing gum is more effective for the heavy smoker than the 2 mg is [74,75]. Combining nicotine patches with either nasal sprays or chewing gum is more effective than any of the three used alone [25,76-78](B). Combinations should be recommended especially for those who have relapsed in monotherapy.

NRT does not seem to increase the risk of heart events. It is also safe for patients with coronary heart disease [79,80]. Nevertheless caution should be exercised in recommending NRT to anyone in the immediate (2 weeks) postmyocardial infarction period, as well as to those with unstab-

**Table 1. The "Six A's of Abstinence," recommended for use in helping patients quit smoking.**

- **Ask** about the patient's tobacco use status at least once a year
- **Assess** the patient's willingness to stop smoking. Talk with the patient about quitting
- Keep **Account** of tobacco use status. Record amount and duration of smoking
- **Advise** the patient to quit. Commence treatment when needed
- **Assist** the patient in quitting. Give positive feedback and remit to other treatment when appropriate
- **Arrange** monitoring of progress during ensuing visits

## CURRENT CARE GUIDELINE

le angina pectoris or arrhythmias. Even in these cases, however, NRT is a safer alternative than a cigarette.

NRT is a better alternative for pregnant women and nursing mothers also [25,81]. Nicotine impairs blood circulation in the developing fetus, resulting in decreased birth

weight [82]. Nicotine is excreted in breast milk, so it may cause symptoms in the breastfeeding infant [83]. Therefore, NRT preparations resulting in brief increases in the nicotine levels are preferable to long-acting ones.

NRT is appropriate for those

trying to quit smokeless tobacco as well [84].

Tobacco contains thousands of chemicals which may affect drug absorption, potency, and clearance. Nicotine is an inducer for the liver metabolism by cytochrome p450 enzyme, increasing CYP1A2 enzyme

**Table 2. Medications used in Nicotine Replacement Therapy, modified from [25].**

Medication	Contraindications and warnings	Side Effects	Dosage	Duration of the treatment	Availability
Nicotine gum	No specific contraindications. Note: acute coronary ischemia and pregnancy (see article)	Soreness in mouth and throat, dyspepsia	2 mg gum for less than 25 cigarettes per day or Fagerström <sup>1</sup> index score less than 3 at up to 24 pieces/day; 4 mg gum for 25 cigarettes per day or Fagerström index score of 3 or more at up to 24 pieces/day	3 months	Over-the-counter
Nicotine patch	No specific contraindications. Note: acute coronary ischemia and pregnancy (see article)	Skin reaction, insomnia	Begin with 15mg/16-hour patch or 21mg/24-hour patch	3 months, then gradual dosage reduction	Over-the-counter
Nicotine inhaler	No specific contraindications. Note: acute coronary ischemia and pregnancy (see article)	Local irritation in mouth and throat	4-12 inhalations /day	3-6 months	Over-the-counter
Nicotine sublingual tablet	No specific contraindications. Note: acute coronary ischemia and pregnancy (see article)	Local irritation in mouth and throat	2mg sublingual tablets every 1-2 hours (maximum dosage 30 tabs/24 hrs)	3-6 months	Over-the-counter
Nicotine lozenge	No specific contraindications. Note: acute coronary ischemia and pregnancy (see article)	Local irritation in mouth and oesophagus	1mg lozenge, 8-12 lozenges/24 hrs, (no more than 25 lozenges/24 hrs)	3-6 months	Over-the-counter
Nicotene nasal spray	No specific contraindications. Note: acute coronary ischemia and pregnancy (see article)	Local irritation in nose and throat, cough, watering eyes	0,5 mg dose no more than 1 delivery to each nostril 3 times/hour up to 80 times/24 hours	3-6 months	Prescription
Bupropion	History of seizures or eating disorder	Insomnia, dry mouth	150mg q AM for 7 days, then 150mg b.i.d. (begin 1-2 weeks before quit date)	7-9 weeks	Prescription
Nortriptyline <sup>2</sup>	Risk of arrhythmias	Sedation	75mg-100mg/24 hrs	12 weeks	Prescription
Clonidine <sup>2</sup>	Rebound hypertension	Dry mouth, drowsiness, sedation	0,15mg-0,75mg/24 hrs	3-10 weeks	Prescription

<sup>1</sup> Fagerström twoquestion test (refer to table 3)

<sup>2</sup> Medications not yet acknowledged for use in cessation therapy

## CURRENT CARE GUIDELINE

activity and thereby enhancing the metabolism of a number of drugs. It has been shown that smoking produces a clinically significant decrease in the levels of the following drugs: theophylline, tacrine, flecainide, propoxyphene, propranolol, atenolol, nifedipine, benzodiazepine, chlordiazepoxide, heparin, tricyclic antidepressants, haloperidol, and clozapine [85,86]. Once smoking ceases, plasma concentrations of those drugs may change. Then the dosage levels for them may require adjustment.

Nicotine reduces insulin sensitivity [87]. Because it constricts the blood vessels, nicotine also retards insulin absorption.

#### Anti-depressants and bupropion

The effectiveness of anti-depressants in smoking cessation may be based on the common occurrence of depression either as a withdrawal symptom or as latent depression activated by smoking cessation. On the other hand, it has been shown that this group of drugs is also effective in not-depressed patients.

The two most effective antidepressants are bupropion [88](A) and nortriptyline [89](B). Bupropion is a non-specific antidepressant, which is presumed to have effects on the brain dopamine and norepinephrine metabolism, thereby reducing the craving for tobacco. Nortriptyline is a second-line medication, used only if NRT or bupropion are either inappropriate or ineffective.

#### Other psychiatric drugs

Anxiolytics are not useful in treatment for smoking cessation [25]. Patients with schizophrenia treated with drugs such as clozapine, risperidone, and olanzapine may cease smoking more easily than those treated with older neuroleptics [90].

Clonidine acts on the central nervous system to reduce withdrawal symptoms. It is effective in smoking cessation therapy [91](A); however, prominent side effects limit its usefulness.

#### Long-term drug treatment

Some patients trying to quit may need long-term treatment. NRT can continue for a longer duration than the recommended six months [92].

**Table 3. The Fagerström Two Question Test For Nicotine Dependence and scale for determining the degree of dependence [10].**

Questions	Time/Amount	Points
A. How soon after waking (in minutes) do you smoke your first cigarette?	in less than 6 min	3
	in 6 to 30 min	2
	in 31 to 60 min	1
	over 60 min	0
B. How many cigarettes do you smoke per day?	Fewer than 10 cigarettes	0
	Between 11 and 20	1
	Between 21 and 30	2
	Over 30	3

Interpretation: (total number of points)

0-1 points	minor nicotine dependence
2 points	moderate nicotine dependence
3 points	heavy nicotine dependence
4-6 points	very heavy nicotine dependence

There is preliminary data on long-term therapy with bupropion, too [93].

The patients may be weaned from nicotine chewing gum by stepwise reduction of the dosage or by replacing the gum with nicotine patches [85], with which long-term use does not occur.

#### CESSATION THERAPY AS A PART OF MEDICAL TREATMENT AND HEALTH CARE

Cessation therapy must be readily available to all patients with diseases caused by tobacco. It must also be readily available when smoking significantly affects the course, treatment or improvement of those diseases. Smoking reduces both women's and men's fertility, so cessation treatment is always a component of a smoker's fertility treatment [94-96].

Smoking cessation programs aimed at pregnant women reduce maternal smoking thereby reducing the prevalence of pre-term birth or of low birth weight [40, 97](B). NRT can be considered especially as support treatment for those pregnant or nursing smokers unable to stop smoking by other means [25].

Parents of small children should be offered cessation therapy to prevent exposure to environmental tobacco smoke [98], especially when the children suffer from asthma or recurring respiratory infections [99]. Helping these parents stop smoking may decrease the likelihood of their

children and adolescents starting [100,101].

Health care professionals too seldom take advantage of opportunities during visits or other care situations to counsel young tobacco users about tobacco. Young people should be encouraged to stop already at the experimentation and occasional use-stages. Simple questions about smoking express the concern and underline the importance of non-smoking for health.

The same methods used in helping adult smokers to stop can also be used for adolescents. Smoking cessation treatment works best in conjunction with anti-smoking programs at schools and in the community, and with mass media campaigns [5,102].

Stopping smoking also brings health benefits to aging smokers. All effective cessation treatments are also effective with the elderly [103-109]. Cessation treatment for psychiatric patients is has been shown effective [48].

#### TREATMENT SUCCESS RATES

The Public Health Service of the U.S. Department of Health and Human Services has analyzed the efficacy of a range of tobacco cessation treatments and therapies (table 4) [25]. The results are estimates only; corresponding Finnish studies for many of the treatments do not exist.

The average Finnish smoker makes 3 to 4 tries before finally succee-

## CURRENT CARE GUIDELINE

**Table 4. Meta-analysis: The efficacy (estimated abstinence rates) of various types of tobacco cessation treatments over a six-month follow-up period; from the Public Health Service, U.S. Department of Health and Social Services [25]<sup>1</sup>.**

Type of treatment	Abstinence rate (%)
Self-help	3-8
Physician advice to quit	10
Physician advice and short discussion (3 minutes)	13
Telephone counseling and follow-up (proactive programmed follow-up)	13
Group counseling	14
Individual counseling (several treatment sessions)	17
Behavioral therapies	11-20
Nicotine replacement therapy (chewing gum)	24
Nicotine replacement therapy (patch)	18
Nicotine replacement therapy(nasal spray)	30
Nicotine replacement therapy (inhaler)	23
NRT combination (two products)	29
Nortriptyline	30
Bupropion	30

<sup>1</sup> Several studies are based on point prevalence at six months; the definition of "abstinence" is not uniform.

ding [1]. Success depends on these factors: the amount of tobacco smoked daily, the number of years of smoking, and personal resources. A relapse usually occurs within the first month. Three out of four resume smoking within three months [110]. Nine out of ten who successfully cease have occasionally smoked during the cessation process. No differences have been noted between women and men in response to cessation treatments. Relapse risk factors include heavy addiction to nicotine, motivational factors, and problems in weight control [110]. Other risk factors are alcohol and coffee.

#### CARRYING OUT TOBACCO DEPENDENCE TREATMENT

The guideline development group recommends that care of tobacco dependence should be organized as outlined in table 5.

- Identify tobacco users, advise them to quit, recommend NRT, then remit them to follow-up as needed at every stage of health care.

- Health centres and occupational health units must be able to arrange and administer both individualized as well as group therapy. Further they will be able to direct patients to specialized skills units when necessary.

- Specialized skills units must be

able to arrange and administer all effective methods of tobacco dependence therapy. This unit will consult other branches of health provision.

- Pharmacists must be able to explain the use of cessation medications to patients. They must also be able to monitor self-help NRT efforts.

Organizing cessation treatment on a regional basis must occur. The primary health care centres and occupational health clinics carry the lion's share of responsibility towards that end. School healthcare must provide smoking cessation services. Dental health care, as well, must do its part to recognize smoking and recommend cessation treatment.

Tobacco dependence skills units should exist throughout the country. Their activities should seamlessly blend in with the other primary and specialized health care services available from the health care system. The system must strive to maintain levels of knowledge and expertise. Health professionals must get acquainted with methods of tobacco cessation treatment [111].

NGOs and patients' organizations can provide a great service by acting as trainers, messengers, and organizers of tobacco cessation care. Furthermore, tobacco cessation treatment must become part of every national guideline and regional disease

program in which reduced use of tobacco products would make a difference. ■

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## CURRENT CARE GUIDELINE

**Table 5. Organization of dependence treatment in health care.**

	Minimum Objectives	Minimum knowledge
<b>Outpatient care</b> (public and private sector) Family physician (occupational physician if in such role) Personal dentist Maternity and well-baby clinic nurse, public school nurse, student health nurse Asthma nurse, hypertension nurse, diabetes nurse Medical director or chief physician in primary care and occupational health clinics	Assess annually and document tobacco use status Advise all patients using tobacco products to quit Offer nicotine replacement treatment  Incorporate the elements tobacco dependence treatment into the health care action plan Allocate sufficient resources to implement the plan, and provide for the necessary staff training Take responsibility for carrying out tobacco cessation treatments in the clinic Take responsibility for planning seamless care of tobacco cessation Take responsibility for making services of the dependence treatment unit available Inform municipal decision makers	Know the "Six A's of Abstinence" Be familiar with local cessation services Understand the principles in tobacco cessation treatment Understand the health consequences of tobacco use  Know the prevalence of tobacco use locally Understand the consequences of smoking to public health Understand the benefits of abstinence on the national economy
Chief nurse or chief physician	Arrange therapy groups Take responsibility for carrying out tobacco cessation treatments in the clinic	Know methods used in group therapy.
<b>Pharmacies</b> Pharmacist Chief pharmacist  Pharmacy Director	Good practice of NRT Take care of adequate NRT Provide treatments beyond drugs as well  Take part in planning and implementing seamless care	Understand the ways and means of NRT Follow the "Six As of Abstinence." Be aware of cessation services in the area.  Allocate sufficient resources, and provide for staff training
<b>Hospitals</b> (Specialized health care) Physician Dentist Nurse in charge (of treatment) in cases involving disease, either induced or exacerbated by tobacco use or involving pregnancy  Medical directors Clinic chief physician	Assess and document tobacco use status Advise all patients using tobacco products to quit Offer nicotine replacement treatment  Institute measures for providing for individual counseling and group therapy to all inpatients Allocate sufficient resources, and provide for staff training Take part in planning and implementing seamless care	Follow the "Six A's of Abstinence" Understand effects of smoking on other illnesses Be acquainted with the principles of NRT Be aware of cessation services in the area
<b>Tobacco dependence treatment skills unit</b>	Individual interventions Therapy groups Make all types of therapy available Be involved in planning of seamless care Serve as regional "instructor"	Have a deep understanding of the pathophysiology of smoking Be thoroughly acquainted with tobacco dependence treatment procedures Apply abilities in case problem-solving and behavioral science to dependence treatment Be well versed in group techniques

## CURRENT CARE GUIDELINE

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