Establishing tobacco-free communities
A practical guide for pharmacists

2015
Colophon

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1. Introduction

Tobacco use is the cause of many serious illnesses and premature deaths in both developed and developing countries. Dependence on tobacco is a chronic condition, which is often difficult to overcome. The use of tobacco products has been shown to be detrimental to the health of people who use tobacco and to people who are regularly exposed to second-hand smoke. On average, smokers die 13 to 14 years earlier than non-smokers. (1) What is more alarming is that young nine out of 10 smokers start before the age of 18 years, and 98% of smokers start smoking by age 26. It is estimated that one out of every 13 children born today will die early due to smoking-related illnesses. (1) Unlike other public health crises, these deaths are completely preventable.

The treatment of medical conditions caused by tobacco use is a major cost factor in health care. As health care costs rise and shortages of health care workers present barriers to accessing health care, it is important to recognise how pharmacists and their unique skills and knowledge may contribute to the mutual goal of better health for all. Pharmacists are consistently in a good position to help people who wish to stop using tobacco and encourage others to do so. Pharmacists can accelerate tobacco control strategies.(2)

The International Pharmaceutical Federation (FIP), the global federation of national associations of pharmacists and pharmaceutical scientists, has prepared this briefing document together with its Young Pharmacists’ Group (YPG), a network of pharmacists under 35 years of age through which young pharmacists can get actively involved in international pharmacy.

This document provides an overview of different tobacco cessation activities pharmacists are involved in. Pharmacists can reduce the impact of tobacco through 1) health promotion and prevention; 2) triage activities, including screening, tools for tobacco addiction assessment and referral to interprofessional collaborative teams; and 3) pharmacist-led interventions. These interventions can be pharmacological, including optimising treatment outcomes, or non-pharmacological, pharmacist-led. After successful interventions, pharmacists are frequently involved in follow-up activities that assist patients in maintaining tobacco abstinence. The activities are illustrated by examples of campaigns led by FIP member organisations. This document is not an exhaustive list of all activities run by pharmacists but provides a creative platform for future initiatives national associations may run to support pharmacists and the creation of well-designed interventions in pharmacies.

A separate part focuses on patients with cardiovascular diseases and chronic obstructive pulmonary disease for whom the impact of the use of tobacco products can be even more lethal.

This document also aims to support pharmacists’ associations to take an even more prominent role in World No Tobacco Day, which is devoted to the international fight against tobacco. This world day was established by the World Health Organization (WHO) in 1988 and is marked on 31 May. Moreover, the WHO established a global public health treaty Framework Convention on Tobacco Control (FCTC) and FIP is a non-governmental organisation with a status of observer to the Conference of the Parties of the Convention, which empowers FIP to contribute to its activities.

This document aims to further encourage pharmacists and all professional associations to initiate open discussions on the value of tobacco cessation with their patients, communities, teams and collaborators.
2. Need for action

2.1. Tobacco-use disorder as a chronic disease

Tobacco use can lead to addiction. Addiction changes the brain in fundamental ways, disturbing a person’s normal hierarchy of needs and desire, and substituting new priorities connected with procuring and using the substance. Dependence and the abuse of substances are categorised as mental health conditions.

The resulting compulsive behaviours that override the ability to control impulses despite the consequences are similar to hallmarks of other mental illnesses. The international classification of this disorder is based on the classification of mental and behavioural disorders by Chapter V of the International Classification of Diseases (ICD-10) produced by the World Health Organization (WHO) in 1990.

Recently, the Canadian Network of Respiratory Care, a non-profit organisation that provides certification for the new Certified Tobacco Educator Designation (5) recognised a terminology of “tobacco-use disorder” according to Diagnostic and Statistical Manual (DSM-5) of the American Psychiatric Association (6) diagnostic criteria to describe this problematic pattern of tobacco use leading to clinically significant impairment or distress. Tobacco-use disorder occurs when the use of tobacco harms a person’s health or social functioning, or when a person becomes dependent on tobacco. Tobacco may be consumed in the form of cigarettes, smokeless tobacco products (e.g. snuff, chewing tobacco), cigars, or pipes.

Tobacco-use disorder is highly prevalent. Similar to diseases like diabetes, it has the potential to exacerbate other diseases, the behavioural aspects of treatment, and the effectiveness of medicines on them.

2.2. Burden of tobacco-use disorder

Tobacco use poses a significant threat to the health, social and economic state of families, communities and nations. Cigarettes kill one in two smokers prematurely, most of these deaths occurring during middle age (35-69 years). The total number of premature deaths caused by tobacco during the 20th century has been estimated at around 100 million.

According to the 2009 WHO Report on the Global Tobacco Epidemic, tobacco kills nearly 6 million people each year including 600,000 non-smokers. If the current trend continues, by the year 2030, the number of tobacco-related deaths could reach 8 million a year, with the death toll predicted to reach up to one billion premature deaths. Approximately 80% of these premature deaths will be in low and middle income countries (7). The World Health Organization (WHO), which provides these estimates, also predicts that India will have the fastest rate of rise in deaths attributable to tobacco in the first two decades of the 21st century.

Women smokers might have a 25% greater risk of coronary heart disease than men smokers. Smokers die 10 to 15 years earlier than non-smokers and often spend their final years ravaged by dyspnoea and pain. Although smoking-attributable mortality is expected to decline in high-income countries (classification according to World Bank (11)) between 2002 and 2030, the disease burden of tobacco is expected to double in low- and middle-income countries from 3.4 million to 6.8 million. Indonesia has the third highest number of smokers in the world, surpassed by only China and India, which have five times Indonesia’s population.

One-third of the population in the world smokes. What is more alarming is that over 3% of children ages 3-15 years are active smokers. Approximately 100,000 children start smoking every day with those in China ranking first.

Tobacco dependence and related health problems are a clear burden on health system costs. The global annual economic cost (health care costs plus costs to the economy) of tobacco reached USD 500bn a year by 2010, and is expected to rise.

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*The WHO is revising its classifications in this section as part of the development of the ICD-11 (scheduled for 2017) and an international advisory group has been established to guide this.*
2.3. Pharmacists’ contribution to smoke-free future

Pharmacists play an integral role as part of their professional responsibilities to tackle tobacco addiction and take significant action to eliminate it for the communities they serve. The World Health Organization (WHO)(13) has been encouraging health professionals, including pharmacists, to be proactive in minimising the problems caused by tobacco consumption and exposure to tobacco smoke.

As highlighted in the FIP/WHO Joint Guidelines on Good Pharmacy Practice: Standards for Quality of Pharmacy Services (14) one of the important roles of pharmacists is to “contribute to improve effectiveness of the health care system and public health” and to develop and/or use educational materials for health management, health promotion and disease prevention programmes that are applicable to a wide range of patient populations, age groups and health literacy levels.

There have been many pharmacist-led initiatives towards promoting the role of pharmacists in tobacco cessation in the healthcare setting and allowing pharmacists to be a strong voice in public education. One of such examples is Pharmacists for Smoke Free Canada (PSFC), a pharmacist-led organisation that works through advocacy and dissemination of information, and tools to promote best-practice in helping people quit tobacco. (15)

Pharmacists’ organisation play an important role in setting up policies towards establishing tobacco free communities. For example, the American Pharmacists Association (APhA) developed a set of policies around removing tobacco products from pharmacies and any facilities that include pharmacies (16) The overview is attached in Appendix 1.

Pharmacists associations around the world have been instrumental in developing and organising campaigns, events or programmes on tobacco-use cessation.
3. Get inspired, get started!

3.1. Health promotion and prevention activities

Changing behaviours and establishing healthy lifestyle habits in young adult populations are strategies incorporated into prevention programmes as a means of delaying or minimising the onset of chronic diseases in later years. (17) (18) Pharmacists can contribute to a smoke-free environment by acting as role models highlighting the health benefits of not smoking. It is therefore important that pharmacists themselves follow a smoke-free lifestyle to maintain their credibility. Many pharmacies have been instrumental in making their areas tobacco-free to guard against passive smoking.

Pharmacists act as reliable sources of information and advice. In their role as primary care professionals, they have a unique position in community settings to educate the general public or special audience groups on well-being and healthy lifestyles. (19) Pharmacists are initiators of communication campaigns, educational programmes, and one-off activities aimed at general or specific topic health literacies. (20) In June 2010, Conseil national de l’Ordre national des pharmaciens, the professional association of pharmacists in France, and the Governmental Agency on Drug Addiction (MILDT) organised a communication campaign through community pharmacies to raise awareness on addictions to tobacco. The campaign was supported by four posters (see Figure 1) raising four different questions: Addiction, when does it start? Who can help me? Do I need it to party? What are the risks? This communication campaign aimed to facilitate dialogue between people with addiction and pharmacists.

Figure 1. Posters supporting awareness on addictions to tobacco
The National Association of Pharmacists in Portugal has developed an educational computer game (see Figure 2) called “Sara’s club” (Clube da Sara) aimed at presenting the importance of healthy habits and tobacco avoidance to young children. Through this specially designed interactive programme, the dangers of tobacco, were learnt about through four major characters: Kápsula, Ampola, Cáoprimido and Sara.

![Figure 2. CD-Rom Clube da Sara](image)

### 3.2. Triage

Triage is defined as “the sorting of patients (as in an emergency room) according to the urgency of their need for care”. (21) In the context of this document, triage is a process of assessing the patients that walk into the pharmacy in terms of whether they can be successfully treated by the pharmacist or whether they need to be referred to another health care professional. Pharmacists can screen for addiction by initiating the dialogue with the patient. If a patient smokes, but is willing to quit, pharmacists can assess his or her addiction. Based on the results of the assessment, there are two scenarios: a pharmacist-led intervention or pharmacist referral to another health care professional, usually a general practitioner. The stages of triage are described in detail below.

#### 3.2.1 Identifying smokers

Pharmacists should be inquiring about tobacco use for every patient and provide counselling and intervention strategies. With simple questions (e.g. “Do you smoke?”) a conversation on individual reasons for smoking and, more importantly, any wish to quit (e.g. “Have you ever considered quitting?”, “Is now a good time to quit?”) can be started.
3.2.2. Tools for tobacco addiction assessment by pharmacists

There is both a physical and psychological addiction to tobacco products. It is pertinent to investigate both of these aspects when assisting a patient with quitting. Some simple and easy-to-use tools have been developed which pharmacists can use regularly in practice to assess tobacco addiction.

By successfully identifying which stage of addiction a patient is in, a pharmacist can tailor the intervention according to the individual’s needs at that time. Some practical assessment tools are listed below.

3.2.2.1 Stages of change assessment tool

Pharmacists can assess the status of a patient’s nicotine addiction by using the Stages of Change model. This model (Figure 3) identifies five behavioural stages that a person with an addiction can cycle through over time.

![Figure 3: Stages of change assessment tool (22)](image)

- **Pre-contemplation**
  - **Situation:** The patient has not considered quitting and may be defensive and unwilling when approached about smoking cessation.
  - **Intervention:** After first seeking permission to intervene, pharmacists should provide information about benefits of smoking cessation and offer assistance and a follow-up appointment.
  - **Dialogue:** “When, if ever, you are ready to discuss your smoking habits I would be happy to help.”

- **Contemplation**
  - **Situation:** The patient has considered quitting but has not made a decision to take action.
  - **Intervention:** The pharmacist can help identify and decrease barriers to quitting as well as inquiring about motivators for quitting.
  - **Dialogue:** “What do you think may be preventing you from making the decision to quit smoking?”, “What are some reasons for you to quit smoking?”

- **Preparation**
  - **Situation:** The patient is willing and ready to try quitting and has made a commitment to action.
• Intervention: Help the patient to set a quit date, assess degree of nicotine addiction, identify if nicotine replacement therapy is appropriate, and help the patient create a plan and strategy for quitting.

• Dialogue: “Congratulations on making the decision to quit smoking”, “I can assist you in making a plan to help you be successful in your attempt.”

✓ Action

• Situation: The patient is within six months of his or her quit date.

• Intervention: Provide ongoing support and identify possible triggers for relapse and implement strategies to prevent relapses.

• Dialogue: “What has been your biggest challenge since you quit smoking?”, “Have you been experiencing any adverse side effects of medicines or withdrawal symptoms?”

✓ Maintenance

• Situation: The patient has maintained smoke free status for at least six months.

• Intervention: Support and encourage progress while monitoring for improvements in health.

• Dialogue: “What positive changes have you noticed since you quit smoking?”, “What strategies have been useful for you to avoid smoking?”

3.2.2.2 Readiness to change ruler

Another tool for assessing a patient’s readiness to change when it comes to tobacco cessation is the “Readiness to change ruler”. (23)

(Not Prepared to Change)  (Already Changing)

Figure 4. Readiness to change ruler

To use this tool, ask the patient to mark on the ruler where they feel they are at on the continuum in regards to tobacco cessation. The next step is to ask the patient why they did not place the mark farther to the right. This can help to identify potential barriers the patient is experiencing and allows the pharmacist to make suggestions of strategies to overcome these barriers. Then ask the patient why he or she did not place the mark farther to the left. This provides material for motivational statements that can be delivered to the patient. This tool is simple to use and easily elicits a conversation with the patient regarding motivations and barriers.

3.2.2.3 Fagerström tolerance scale

A critical and valuable tool pharmacists can use for assessment of physical tobacco addiction is the Fagerström Tolerance Scale. This test was developed by Dr Karl Fagerström (24) and rates a patient’s physical dependence on nicotine. Identifying a patient’s dependence score allows pharmacists to decide on an appropriate smoking cessation treatment plan. Due to the ease of use and quick response time of the survey, it is ideally suited for use in pharmacy practice. See Appendix 2.
3.2.2.4 The why test

“The why test” serves to evaluate the psychological component of smoking addiction. This test was developed a few decades ago with contribution from the Canadian Pharmacists Association and now it is widely used and promoted, for example, by The Centre for Addiction and Mental Health (CAMH). (25) The patient answers a short series of questions that gives them a score for each of the different categories of motivators for smoking. Using this tool is beneficial for pharmacists because it helps to identify personal potential triggers for relapse. Pharmacists can then implement individualised non-pharmacological strategies with the patient to deal with these triggers. See Appendix 3.

3.2.3 Initiating tobacco user’s behavioural changes

By using proper tools to aid in the screening process, pharmacists can have a standardised and effective approach for every patient.

The US Public Health Service (USPHS) released the clinical practice guideline “Treating tobacco use and dependence”, (26) which promotes the use of a simple approach called “The 5 As Tool” that pharmacists can use in tobacco cessation interventions. (See Figure 5.)

![Figure 5. The 5 As Tool](image)

In the USA, the National Commission on Prevention Priorities found the 5 As approach to be the most effective and cost-effective clinical preventive service for adults in the general population. It was estimated to save US$500 per smoker and had a long-term quit rate of 22% when smokers consistently received this advice over the course of their care. (26) An intervention using this tool is estimated to be done in 5-10 minutes and so fits appropriately into the time constraints pharmacists often face in practice.
Furthermore, the Prochaska-DiClemente transtheoretical model, (27) which may be applied by any health care professional, can be a useful tool for advising and starting an intervention with any patient who wants to quit smoking.

In 2010, it was estimated that 68.8% of adult smokers were willing to quit, (28) but without an “external boost” they did not do so.

Motivation is essential for every smoker who plans to stop using tobacco. Therefore, it is important to identify methods for strengthening a patient’s motives to quit early in the treatment phase. The European Smoking Cessation Guidelines define motivational interviewing as a method for offering interested patients information on health risks coupled with a dependence, and evoking an interest for change. (29)

The process describes what health care providers should do to increase the probability that the patient will achieve behaviour change. As described by the European Smoking Cessation Guidelines, motivational interviewing is a thorough process in which the provider: (29)

- Acts as a collaborator and sees himself/herself as an equal with the patient.
- Searches for and evokes the patient’s own thoughts and ideas about his/her smoking and how to change it.
- Shows respect for the client’s autonomy and his/her right and capacity to make decisions.

MI therefore builds on improving the provider’s understanding of how to communicate and relate better to the patient. This can be done via the principles summarised in Table 1.

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**Table 1. Underlying principles of motivational interviewing**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show empathy</td>
<td>Show an interest in trying to understand the patient. This is done through reflections and summaries.</td>
</tr>
<tr>
<td>Highlight discrepancies</td>
<td>Help the patient to become aware of the gap between the present situation and how it might look taking into account the patient’s goals and values. The feeling of wide discrepancies is a strong driving force for behavioural change provided that the patient has the ability to change.</td>
</tr>
<tr>
<td>Avoid arguing</td>
<td>So-called resistance is respected as a natural sign of anxiety or doubt about change. The provider “rolls with” the resistance when it appears, but tries to prevent such situations from arising.</td>
</tr>
<tr>
<td>Support self-reliance</td>
<td>Support the patient’s self-reliance by showing trust in his or her ability to change. Appreciate the patient’s efforts.</td>
</tr>
<tr>
<td>Ask for permission</td>
<td>It is always wise to approach the subject by asking for permission to bring it up and start a conversation.</td>
</tr>
<tr>
<td>Reassure</td>
<td>There are always pros and cons for change, the effects of which may play out in a distant future. The provider should aim to help the patient to express his/her reasons for change.</td>
</tr>
<tr>
<td>Ask open-ended questions</td>
<td>Closed questions ask for “yes” or “no” responses; open-ended questions ask for longer answers or elaboration.</td>
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<td>--------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Use “change talk”</td>
<td>It is important for the provider to pick up “change talk”, words and thoughts expressed by the patient that might lead to change.</td>
</tr>
<tr>
<td>Affirm positive talk</td>
<td>The patient will be more ready for change if positive signs or thoughts are identified and affirmed.</td>
</tr>
<tr>
<td>Reflect on what you are hearing or seeing</td>
<td>Reflections are guesses as to what a patient is saying or thinking. Reflections do not confirm agreement with the patient; rather, they tell the patient that the provider has been listening and help the patient hear what he/she has been saying.</td>
</tr>
<tr>
<td>Summarise what has been said</td>
<td>A summary is a special form of reflection. If the patient slows or stops talking, a summary can act as a bridge to help him/her continue. It may also help remind the patient what he/she has said or point out a connection between his/her statements.</td>
</tr>
</tbody>
</table>

### 3.2.4. Referral and interprofessional collaborative practice

In severe cases of addiction, pharmacists need to refer patients to another healthcare professional.

Also, for people with associated diseases who go to pharmacies, smoking should be regarded as a factor that can interfere with the underlying disease, its treatment and the adverse effects of the medicines taken. For some groups, the effect of tobacco use is particularly serious; such groups are cardiovascular disease patients, chronic obstructive pulmonary disease patients or other patients for whom continuation of smoking would exacerbate the associated disease. Patients prepared to quit smoking because of their underlying disease type, should be referred to their primary care provider to assess the strategy and for subsequent action.

Indeed, such interprofessional collaboration is noted throughout various pharmacists’ activities from health promotion to treatment. According to the 2013 Statement on Interprofessional Collaborative Practice by the World Health Professions Alliance, effective interprofessional collaborative practice can lead to improved access to health interventions, efficient use of resources, and reduced incidence and prevalence of disability, in particular disability associated with non-communicable diseases when health systems embrace interprofessional collaborative practice across the full course of the disease (health promotion, illness and injury prevention as well as disease management and cure, and rehabilitation). The need for interprofessional collaborative practice was stressed in the 2010 FIP Statement on Collaborative Pharmacy Practice.

Both statements on collaborative practice highlight the importance of integrating pharmacists into a collaborative healthcare team that improves patient outcomes. The multidisciplinary approach of the interprofessional collaborative practice allows the pharmacist to coordinate a patient’s therapeutic care as prescribed by a physician or other healthcare provider. Evidence shows that pharmacists who work in close collaboration with other healthcare professionals contribute to increased health outcomes. Evidence suggests higher acceptance rates of prescriptions and medication review when pharmacists are regarded as a part of the healthcare team. Health care experts agree that, increasingly, including pharmacists on healthcare delivery teams can improve care and reduce the costs of treating illness.

An example of smoking cessation services on a referral basis from the physicians in the medical group is a one-on-one service in Illinois, USA (under the Illinois Pharmacy Practice Act on smoking cessation services and other patient-centred services via collaborative agreement and protocol). The programme is under a collaborative agreement and protocol signed by the medical director and followed by a pharmacist. The number of times the patient sees the pharmacist depends on his or her needs. Some of the consultations are covered by the patient’s third party insurance coverage.
3.3. Pharmacist-led interventions

Not only do pharmacy staff need to be given support to conduct smoking cessation activities, patients also need to be made aware of the opportunities available to them. By advertising smoking cessation programmes in the pharmacy, the team will be able to increase the number of patients who use the pharmacy’s service. Given that smoking is a public health issue, pharmacy smoking cessation services should be systematically promoted at an institutional level in order to reduce the problems associated with smoking. (33)

Pharmacist-led interventions can be divided into pharmacological and non-pharmacological.

3.3.1. Pharmacological interventions

Pharmacological interventions for the treatment of tobacco addiction are widely used and well researched. There is strong evidence that the use of pharmacological means are beneficial for patients attempting to quit smoking. Double-blind, randomised, placebo-controlled studies show that quit rates compared with placebo can at least double when using pharmacological means without any further support. (34)

Different medicines are available to support smoking cessation (e.g. nicotine-replacement products, varenicline, bupropion). Some are available without a prescription.

3.3.1.1. Optimising treatment outcomes

Smoking cessation can be difficult. Tobacco addiction is among those addictions which are the most difficult to conquer. The average smoker undertakes up to seven quit attempts before he/she is able to quit for good. Therefore, it is necessary to offer the best support possible and to make the best use of the supporting medicine.

Smoking cessation medication is indicated for relieving nicotine craving and withdrawal symptoms in connection with smoking cessation in smokers motivated to quit. (35) In other words, medication is a support in the quit attempt and intended to relieve the physical withdrawal symptoms. Medication is not meant to replace the smoker’s will and motivation, as is often misunderstood by patients. This is important for smokers, as well as pharmacists who want to support the attempt, to understand. To optimise the pharmacological treatment, the following points should be discussed with and understood by the patient:

- The motivation to quit must be there because medication can only ease withdrawal symptoms and not the psychological addiction. It is helpful to have a short motivation period before the start of the treatment. A pharmacist can assist by moving patients through the stages of change to become ready to make the change. During this time, the smoker should be prepared for the effects that smoking cessation can have on the body; he/she should choose the most appropriate type of medication and determine a quit day.
- The medication dosage needs to be adequate — if the dose is too low, the withdrawal symptoms will not pass and the smoker will not feel a benefit. This may influence the motivation within the quit attempt. If the dosage is too high, side effects can be stronger.
- The medicine needs to be taken for long enough. Even though it is known that the first week is the most critical, most medicines should be taken at least for 12 weeks. During this time, the focus of the smoking cessation programme should be on behavioural change, while medication can reduce the physical burden of the cessation.
- For optimisation of the treatment, the patient should consider accepting psychological support. This can be different, depending on his or her wishes. Even minimal support will significantly raise the success chances of staying abstinent. While some will feel best in a group or individual therapy guided by a psychologist, others will find it sufficient to get a clear support from friends and family. The pharmacist can also play an important role as motivator and guide through the 12 weeks (or more) of the cessation phase. Figure 6 shows an example of how a smoking cessation scheme can look.
3.3.1.2 Short overview of available medicines

The available therapeutic options are well investigated and multiple studies show their efficacy and safety in smoking cessation. Generally, it can be stated that the use of medication to support smoking cessation can at least double the chances for permanent abstinence.

**Nicotine**

Therapeutic nicotine can relieve cravings and it does not further stimulate the addiction itself. This is due to the much slower uptake of nicotine via skin or mucosa, compared with the quick nicotine uptake via the respiratory system when smoking a cigarette, which takes only a few seconds (7-10 sec).

Therapeutic nicotine is available as an over-the-counter medicine in many countries and available in a wide range of different formats.

Table 2 shows the different available formats and their respective methods of use. It is important to choose the appropriate format together with the patient, according to his/her preferences and needs. Two questions should be asked before offering the choice of format to the patient:

1. The number of cigarettes smoked per day – this helps to choose the right dosage of therapeutic nicotine. In general, heavy smokers are defined as persons smoking 20 cigarettes or more per day. Heavy smokers are recommended to start with a dosage of about 4mg per hour, while less heavy smokers might be able to start with 2mg/h. (26)

2. The smoking habit: if the patient smokes rather regularly, e.g. 1 cigarette per hour, it is important to replace the cigarette nicotine in the same way. A format with a steady release of nicotine like a patch might then bebest. A person who smokes irregularly will not be satisfied with this format, but will need a more individualised way of dosing. (26)

Combination therapy combines the two different forms of nicotine uptake — regular and non-regular — together for a more intense support of the ex-smoker. Usually, a nicotine patch is used as a base, giving the patient a constant level of nicotine. In addition, an oral formulation (e.g. gum or lozenge) is given to the patient for use during a sudden physical craving or a situation that is heavily linked to smoking in the patient’s mind (e.g. coffee break, drink with friends, before an examination, stress, etc.).
In any case, it is important that the starting dose of the medicine is high enough to avoid the occurrence of craving symptoms. Overdoses are uncommon, especially in heavy smokers who are used to much higher doses of nicotine per day. Pharmacists should encourage patients to listen to the signs of their body and individually adjust the dosage to their needs. The therapeutic margin is broad, hence the fear of overdosing is negligible.

Nicotine replacement therapy is recommended for three to six months. It is of crucial importance not to stop before the end of three months, in order to allow the behavioural change of the smoker to take place. The initial dose of the therapeutic nicotine should be maintained over four to six weeks. Then a gradual decrease of the dosage is recommended over the following six to eight weeks.

**Table 2: Different available formats of nicotine replacement and their respective methods of use**

<table>
<thead>
<tr>
<th>Format</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patch</strong>:</td>
<td>As monotherapy or base medication of a combination therapy. Patches are applied directly onto clean skin. If a reduced dose is needed, the patch should not be cut, but a blister should be put underneath to cover an adequate part of it. Patches for 16 hours (day use) or 24 hours are available. Patches give a continuous nicotine supply. Depending on the patch, the hourly nicotine dose is between 0.3-1.6mg. Recommended for regular smokers or heavy smokers as base medication.</td>
</tr>
<tr>
<td><strong>Gum (2 or 4 mg nicotine)</strong>:</td>
<td>Dosage based on individual needs. Replace a cigarette with gum. The method is to “chew and park”. In other words, the gum should be chewed slowly until a strong taste/mild burning sensation is experienced before resting it between cheek and gums until the taste disappears. Repeat this procedure for 30 minutes (the peak effect occurs in 20 minutes). This method is also called ‘bite-bite-park’ (note: the gum is not chewed like a regular gum).</td>
</tr>
<tr>
<td><strong>Inhaler</strong>:</td>
<td>For patients who like to do something with their hands. Inhalers imitate the hand-to-mouth action of smoking. While puffing over 20 minutes, approximately 2mg of nicotine are released.</td>
</tr>
<tr>
<td><strong>Mouth spray (1 mg per spray)</strong>:</td>
<td>Fast onset of action. This method is often preferred in acute craving situations a part of combination therapy. In craving situations, spray one or two sprays into the mouth, avoiding the lips.</td>
</tr>
<tr>
<td><strong>Lozenge (2 mg/4 mg)</strong>:</td>
<td>Discreet format. A lozenge is placed into the mouth and slowly dissolved (periodically move the lozenge from one side to the other). It takes approximately 20 minutes to get a peak effect.</td>
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**Summary:**

- Therapeutic nicotine is the only available over-the-counter medicine. Various different formats are available that can be chosen according to the patient’s needs.
- The dose needs to be high enough to avoid craving symptoms.
- Therapy should be maintained over 12 weeks (minimum) to achieve long-term abstinence.
- Psychological support should be given. This could be therapy, regular recalls in the pharmacy or doctor’s office, and/or support from partner/family.
- The pharmacist can play an important role as expert of the medication and motivational partner in the cessation phase.

**Nicotine-imitating substances**

Varenicline is a nicotine-imitator on specific nACh-receptors. It is usually available in tablets of 0.5 and 1mg. A titration phase is needed at the beginning of therapy. The final desired dosage is 1mg twice daily. The recommended therapy takes 12 weeks. [36]

Bupropion is a selective dopamine- and noradrenaline-reuptake inhibitor. It is usually available in 150mg tablets, and is recommended to be taken over a period of seven to 12 weeks. The therapy starts about two weeks prior to the quit date. The recommended starting dose is 150mg once daily (week 1), followed by a target dose of 150mg twice daily. There is a need for gradual reduction of dosage before the end of therapy. [37]
3.3.2. Non-pharmacological interventions

There are times in everyday pharmaceutical practice when it is best to intervene. This is the case with pharmaceutical indications (when an individual goes to the pharmacy for a weight-loss product, etc.), when dispensing (to collect prescribed medications for chronic illness) and pharmaceutical care.

Health care providers should offer all smokers who are trying to quit both pharmacological and non-pharmacological smoking cessation therapies. (38) Non-pharmacologic smoking cessation strategies include patient education and advice, behavioural therapy, self-help materials and telephone counselling.

In 2012, the European Network for Smoking and Tobacco Prevention released the European Smoking Cessation Guidelines. It recommends that smoking cessation treatment include individual cognitive-behavioural counselling, telephone support, and group counselling. The use of educational materials and information sources available via the internet has been shown to also contribute to increasing successful tobacco abstinence.(29)

Pharmacists in Spain received a special training in smoking cessation before a campaign targeting people addicted to tobacco, and used interactive tools to engage with the public in an entertaining way, for example, by exchanging a cigarette for a lollipop. In 2011, during a campaign to encourage smokers to quit smoking, pharmacists exchanged cigarettes for lollipops with the motto: “Thank you for not smoking.” This campaign also highlighted that pharmacists can offer solutions to facilitate quitting. Pharmacists also offered stickers with the slogan “Today I do not smoke”. In 2014, the campaign focused on showing people the benefits of stopping smoking, via scratch-cards with messages like “younger skin”, “more delectable meals” or “save for the trip of your dreams” distributed in pharmacies. Pharmacists explained that the first (and easiest) step to quitting smoking is to recognise and be aware of the health problems that smokers can cause to themselves and people around them. Once the decision is made to stop smoking, it is advisable to seek professional help because this can increase by ten-fold the chances of success.

![Figure 7. Anti-tobacco campaigns in Spain](image)

3.3.2.1 Self-help materials

Self-help interventions are defined as “any manual or programme to be used by individuals to assist a quit attempt not assisted by health professionals, counsellors, or group support. (29) Self-help materials, whether provided as stand-alone or as adjuvant treatments, appear to increase abstinence rates compared to no intervention. These materials include booklets, leaflets, manuals, media materials, reactive telephone help lines, computer/web-based programs, and various community programmes.
3.3.2.2 Cognitive-behavioural therapy

As described by the European Smoking Cessation Guidelines, the goal of individual cognitive-behavioural therapy (CBT) is to work with patients to help change learnt, inadapted behaviours through deconditioning towards healthier, adapted behaviours (29). This takes place by establishing a collaborative relationship between the health care provider and the patient, avoiding conflicts, active listening – which refers to rephrasing what the patient says, valuing success, and reaffirming the benefits of quitting smoking. Pharmacists are rated among the most trusted health care professionals (39) and trust is an important element of any successful intervention.

Smoking is a learnt behaviour and CBT teaches smokers to take note of their smoking behaviour, evaluate themselves, and identify routine habits in their thinking and actions. CBT helps smokers recognise their own habits and feeling about smoking, and provides encouragement and advice on ways of minimising and managing the desire to smoke.

The European Smoking Cessation Guidelines further explains that CBT contributes to an increased abstinence ratio by assessing the motivation for quitting smoking, building a provider-patient dialogue based on respect and understanding, evaluating nicotine dependence through the analysis of the smoking habits, and explaining the tobacco dependence concept. Most smokers do not have accurate knowledge about what happens in their brain and body when they smoke and why it is difficult to quit. A discussion with a specialist about the effects of nicotine and the way nicotine dependence manifests itself can spectacularly increase the patient’s initiative towards giving up smoking (29). This form of intervention allows for the in-depth analysis of concerns, self-accusation and fears of failure related to the smoking cessation process, and creates an opportunity for providers to collaborate with the patient on the most appropriate therapeutic strategy.

3.2.2.3 Telephone support

In many countries, a toll-free smoking cessation telephone service exists. When smokers call the service, they receive information about access to local smoking cessation centres and may receive advice on how to quit with minimal or full counselling (29). Using the telephone to deliver cognitive-behavioural therapy (CBT) is similar to the structure of traditional face-to-face contact, but it is more flexible. Appointments can be arranged at suitable times, including in lunch breaks, in the evening, and on weekends. Phone sessions save patients time and money, since there is no need to travel to and from appointments.

In practice, participants can choose whether to be contacted at home or on their mobile phone and are offered support to put into practice various quitting strategies and to make positive changes in their daily lives. Telephone calls are often 20-25 minutes long and can be adapted to individual needs (29).

Several meta-analytic reviews have established that proactive telephone counselling is an effective intervention for smoking cessation. The current US Public Health Clinical Practice Guideline and the Guide to Community Preventive Services both recommend proactive telephone counselling as a method to help smokers quit (29). Most of the quit line studies conducted so far have focused on proactive quit lines. Proactive quit lines may provide some form of immediate “reactive” assistance when a tobacco-user first calls, but they also provide more comprehensive services through “proactive” calls, which often entail multiple follow-up sessions, typically scheduled by agreement with the smoker.

3.2.2.4 Online tools

In Denmark, an online tool (40) was built to support tobacco cessation throughout the whole process of quitting, and to prevent possible relapses, too. After the people fill in their profile, a personalised tool supports their addiction management via videos, tips and exercises. This programme has several steps, starting with establishing a resolution and maintaining it throughout the anti-addiction techniques until the person is addiction-free, and also for preventing relapse. The tool allows for flexibility as people can access it at any time and adjust it to their needs.
3.3.3 Tailored interventions

Numerous well-designed resources that address specific patient needs are available. Many are designed with specific patient populations in mind, so it is important that health care providers identify materials that best address the needs of their patients. When addressing smokers with associated diseases it is important to note that smoking exacerabtes these illnesses. Addressing smoking by these patients should be a priority. (26)

3.3.3.1 Smoking cessation in cardiovascular patients

The mid-twentieth century saw the publication of the Framingham (41) study, which correlated smoking with cardiovascular disease. Before this, smoking was not accepted as a real cause of heart disease. The study showed that smokers had an increased risk of myocardial infarction and sudden death. Later studies point to the relationship between a reduction in smoking and a drop in coronary heart disease. (42) Other works focusing exclusively on smoking also suggest this relationship. (43) At present, the best-known cardiovascular effect is coronary heart disease. (44)

When approaching the subject of smoking in these patients, familiarity with the mechanism of tobacco on the body is recommended. Carbon monoxide interferes with oxygen-carrying capacity by forming carboxyhaemoglobin, and increases haematocrit and blood viscosity. (45) Nicotine releases adrenaline and noradrenaline, causing elevated blood pressure, cardiac frequency and myocardial contractility (45) Free radicals — involved in prothrombotic and atherogenic processes (45) — are released generally. Endothelial function is impaired, the inhalation of particles causes an inflammatory reaction in the lungs and smokers have a more atherogenic lipid profile (44). Endothelial dysfunction and damage take place, lipid oxidation increases and high-density lipoprotein cholesterol is reduced, leading to inflammation and coagulation. (46)

Work is being conducted on the detection and control of the main modifiable risk factors (hypertension, smoking, excess weight, etc) for the prevention of cardiovascular diseases (47) These aims single out smoking as a priority in prevention programmes (48) The success of any preventive measure depends on knowledge of the risk factors and the positive impact of their modification. In the case of cardiovascular disease, there are many known risk factors and, fortunately, many of these are modifiable, as is the case of smoking (49)

Quitting smoking results in a progressive reduction in cardiovascular risk. (50) Conversely, smokers with cardiovascular disease who do not give up the habit have a poor prognosis. (44) Pharmacists need to send out the message that quitting smoking is the most effective way to prevent cardiovascular damage. (46) If the patient is prepared to quit smoking because of their underlying disease, they should be referred to the doctor to assess the strategy and take subsequent action. (30)
Case study with adoption of the CESAR (51) method:

48-year-old male with a history of hypertension (treated with AIIRA), cholesterol (treated with atorvastatin 40mg), acute myocardial infarction two years previously and sleep apnoea. No allergies or digestive problems. Height 170cm and 72.2kg. Smoker of 20 to 20 cigarettes/day for 20 years with two previous attempts at quitting, once for three months, without any treatment.

Richmond test score of 10 (strong motivation to quit smoking), Fagerström test score of 5 (moderate dependence) and co-oximetry result of 21-30ppm (typical value for a smoker).

He cites health as his reason for quitting. He is referred to his doctor for assessment because of his medical history. He is also given self-help materials.

The doctor prescribes varenicline for three months and the patient returns to the pharmacy for follow-up. He is given an explanation as to how to use the treatment and successive visits are scheduled (seven days after “D-day” and at 15, 30, 45, 60, 90 and 180 days) to assess any adverse effects, conduct co-oximetry, check his weight and blood pressure, answer any questions he may have and offer him support in his actions.

The patient quits smoking within seven days of starting the treatment and reports gastrointestinal problems that are resolved by medication after the ingestion of food. He is given behavioural therapy at each follow-up visit. At the 7th control visit, six months later, the patient still has not started smoking again. His actions are supported and he is invited to return if necessary.

### 3.3.3.2 Smoking cessation in chronic obstructive pulmonary disease patients

Chronic obstructive pulmonary disease (COPD) is the third leading cause of deaths in the USA (52) and affects 5% of people worldwide (53). Cigarette smoking, especially by those with a history of more than 40 ‘pack-years’ (a ‘pack-year’ is defined as twenty cigarettes smoked every day for one year), is the single most important risk factor for developing COPD (54). Smoking cessation is the only intervention that has been shown to slow the rate of decline of lung function in COPD and, therefore, should be an integral part of management of these patients. Fletcher (55) showed the relation between smoking cessation and rate of decline of lung function.

![Fletcher curve](image_url) Figure 9. “Fletcher curve” Adapted from Fletcher & Peto (1977)
The Fletcher curve is an important tool for pharmacists to educate patients with COPD. It is essential to stress that although the decline in lung function will never be reversed, the time to disability or death can be extended. Many patients have the mentality that after many years of smoking the damage is done and quitting will not have a beneficial effect on their overall health. By discussing this graph with patients it can be emphasised that, regardless of smoking history, smoking cessation at any age can slow the rate of decline of lung function.

3.3.3 Smoking cessation in pregnant women

In 2007, Denmark decided to start a campaign to assist women who were pregnant or planning on becoming pregnant with smoking cessation. It was focused around “World No-Tobacco Day 2007 for (Future) Pregnant Women”. The campaign lasted for three months and was organised by the Association of Danish Pharmacies and the Minister of Health. Pharmacy staff was trained with material specifically developed for the programme to ensure that they had extensive knowledge about smoking and pregnancy. Municipalities, midwives and general practitioners were then invited to refer any smokers who were pregnant or planning on becoming pregnant to their community pharmacy. The pharmacist was then able to provide free, one-on-one smoking cessation counselling to these patients with emphasis on the effect of smoking during pregnancy.

3.4. Preventing relapse: follow-up activities

Pharmacy managers should routinely conduct follow-up reviews and assessments of pharmacist-led programmes and activities. This will allow the team to identify areas of strength, weakness, opportunities, and threats. Pharmacists will continue to play a significant role in reducing the effects of the public health crisis that smoking presents, by ensuring that programmes successfully address the needs of patients participating in these programs. Follow-up care with a patient is an essential part of the tobacco cessation process. Multiple visits with a patient are required to provide the best care possible. Below is a suggested outline for a follow-up plan with patients adapted with permission from the Quit Using and Inhaling Tobacco (QUIT) training session by the Canadian Pharmacists Association; see Figure 10(p20). (56)

It is important that pharmacists make themselves available to patients throughout the entire smoking cessation process. By following up closely with a patient, a pharmacist can identify potential barriers and intervene before it results in a relapse. An important strategy is scheduling the next follow-up appointment at each interaction. This decreases the likelihood that the patient will be lost to follow-up in practice. It is estimated that 22% of smokers relapse within three months (57) and 35-40% of smokers will relapse between years 1 and 5 after quitting (58). Knowing this, pharmacists need to be diligent about providing long-term follow up care with all patients who have a smoking history.
Initial visit - 14 days pre-quit:
• Set a quit date in ~14 days’ time
• Provide patient with resources
• Set up next follow-up appointment

7 Days pre-quit:
• Re-confirm Quit Date
• Ask about concerns or fears associated with quitting
• Set up next follow-up appointment

Quit day
• Congratulate and motivate patient on making the decision to quit
• Discuss coping strategies for nicotine withdrawal in the short-term
• Set up next follow-up appointment

3 Days post-quit
• Monitor for withdrawal symptoms and assess compliance, efficacy and tolerance of pharmacological therapies
• Congratulate patient on success and motivate patient to get back on track if they have suffered any relapses
• Set up next follow-up appointment

Subsequent follow-ups
• Schedule as appropriate on a patient-to-patient basis
• Motivate and encourage patient on successes
• Help to manage any difficulties or barriers the patient may be experiencing

Figure 10. Quit Using and Inhaling Tobacco (QUIT) follow up plan
4. Facilitating implementation

Numerous models intended to assist providers in working with patients have been studied. In a study completed by Patwardhan & Chewning (2009), (59) the authors assessed the potential barrier of fear among pharmacists about negative reactions from patients in response to initiating tobacco cessation.

4.1. Ask-Advise-Refer (AAR)

The Ask-Advise-Refer (AAR)(60) approach has been used by health care providers with the hope that it will be easier for community pharmacists to implement a brief tobacco-cessation assessment and referral service into daily practice. In this approach, the pharmacy collaborates with public health programmes by playing the assessment and referral role within the tight time limitations of the pharmacy.

Pharmacists' fear of offending patients and assumptions regarding patients' negative reactions appear to be key barriers to their implementation of AAR. Study authors suggest that providers use the following strategies to promote pharmacists' adoption of the AAR approach in working with patients:

- Focus interventions around a specific disease state or medication that would be relevant to tobacco-cessation discussions;
- Train pharmacists how to ask patients about tobacco use and initiate tobacco-cessation conversations;
- Train pharmacy technicians or other staff to assess whether patients are smokers and alert patients about the new programme and the pharmacist as a source of information;
- Create signs and messages to encourage patients to ask questions and inform them about the pharmacist as a potential source of information and referral;
- Help pharmacists to set up a workflow system compatible with incorporating the AAR approach; and,
- Help pharmacists generate tobacco-status intake procedures.

Steps should be taken by pharmacy managers to ensure their staff have sufficient support to conduct these activities. Without the necessary support, staff will not be able to successfully carry out these processes, thereby doing a significant disservice to patients interested in quitting smoking.
5. Steps to get started

The following 10 steps for initiating anti-tobacco activities are taken from the 2005 FIP publication “Pharmacists against tobacco: How to get started” (61).

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<tbody>
<tr>
<td>1</td>
<td>Get enough information about tobacco use, quitting use of tobacco, and what pharmacists can do to help</td>
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<tr>
<td>2</td>
<td>Educate your staff</td>
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<td>3</td>
<td>Build local networks and collaborations</td>
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<td>4</td>
<td>Organise services according to the needs</td>
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<td>5</td>
<td>Use window displays</td>
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<td>6</td>
<td>Provide suitable information</td>
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<tr>
<td>7</td>
<td>Provide personal support</td>
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<tr>
<td>8</td>
<td>Organise follow up visits to your Pharmacy</td>
</tr>
<tr>
<td>9</td>
<td>Document your activities and results</td>
</tr>
<tr>
<td>10</td>
<td>Report your results to your partners and to your professional association</td>
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6. Conclusions

The burden of tobacco use on the health of people and on the health care system is evident in countries all around the world. As health care costs rise and health care workers worldwide become more burdened, it is important to recognise how pharmacists and their unique skills and knowledge may contribute to the mutual goal of better health for all.

Pharmacists have a unique and unparalleled ability to interact with the public. Pharmacists are capable of reaching and assisting patients effectively from health promotion and screening through assessment, intervention, and follow-up.

Pharmacists and their associations have an important role in supporting patients and advocating for lifestyle changes that will improve the quality of life. This is exemplified through programmes such as QUIT in Canada and via campaigns organised by other national pharmacists associations. This document provides an overview of pharmacists' activities in tobacco cessation from different countries of the world. It is supported by examples, practical tools and steps to follow for integrating tobacco cessation, as part of routine patient care.

Pharmacists should be used further to their full potential as active and recognised resources for tobacco cessation. This document therefore serves as a mean of supporting dialogue with different stakeholders, policy makers and collaborators, who can facilitate pharmacists' involvement and recognition of their roles in a tobacco-free future.
Acknowledgements

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Appendices

Appendix 1. American Pharmacists Association policies on removing tobacco products from pharmacies and any facilities that include pharmacies

Since the late 1960s, the American Pharmacists Association (APhA) has been an advocate of removing tobacco products from pharmacies and any facilities that include pharmacies. The APhA has a number of policies related to this issue.

Discontinuation of the sale of tobacco products in pharmacies and facilities that include pharmacies

1. APhA urges pharmacies and facilities that include pharmacies to discontinue the sale of tobacco products.
2. APhA urges the federal government and state governments to limit participation in government-funded prescription programs to pharmacies that do not sell tobacco products.
3. APhA urges state boards of pharmacy to discontinue issuing and renewing licenses to pharmacies that sell tobacco products and to pharmacies that are in facilities that sell tobacco products.
4. APhA urges colleges of pharmacy to only use pharmacies that do not sell tobacco products as experience sites for their students.
5. APhA urges the Accreditation Council for Pharmacy Education (ACPE) to adopt the position that college-administered pharmacy experience programs should only use pharmacies that do not sell tobacco products.
6. APhA urges pharmacists and student pharmacists who are seeking employment opportunities to first consider positions in pharmacies that do not sell tobacco products.

The use and sale of electronic cigarettes (e-cigarettes)

1. APhA opposes the sale of e-cigarettes and other vapoured nicotine products in pharmacies until such time that scientific data support the health and environmental safety of these products.
2. APhA opposes the use of e-cigarettes and other vapoured nicotine products in areas subject to current clean air regulations for combustible tobacco products until such time that scientific data support the health and environmental safety of these products.
3. APhA urges pharmacists to become more knowledgeable about e-cigarettes and other vapoured nicotine products.
4. APhA urges the FDA to require the full disclosure of all ingredients in e-cigarettes and other vapoured nicotine products in both the pre-use and vapor states.

Tobacco use data entry field in pharmacy patient records

APhA supports standardizing patient records and clinical decision support tools (including pharmacy dispensing systems) to collect, document, and utilise information regarding the patient’s tobacco use.

Cigarette Sales in Pharmacies

1. APhA recommends that tobacco products not be sold in pharmacies.
2. APhA recommends that state and local pharmacist associations develop similar policy statements for their membership and increase their involvement in public educational programs regarding the health hazards of smoking.
3. APhA recommends that individual pharmacists give particular attention to educating young people on the health hazards of smoking.
4. APhA recommends that APhAASP develop projects aimed at educating young people on the health hazards of smoking, such as visiting schools and conducting health education programmes.

Cigarette sales in pharmacies

APhA recommends that pharmacists not allow smoking in their prescription departments.

Exclusion of alcohol and tobacco sales in pharmacy practice settings

APhA opposes the sale of tobacco products and non-medicinal alcoholic beverages in pharmacies.

Appendix 2. The Fagerström test for nicotine dependence

The Fagerström Test for Nicotine Dependence is a standard instrument for assessing the intensity of this physical nicotine addiction. The Fagerström test helps professionals document the indications for prescribing medication for nicotine withdrawal. In the test below.

1. How soon after you wake up do you smoke your first cigarette?
   Within 5 minutes (3 points)
   5 to 30 minutes (2 points)
   31 to 60 minutes (1 point)
   After 60 minutes (0 points)

2. Do you find it difficult to refrain from smoking in places where it is forbidden, such as the library, theatre or doctors’ office?
   Yes (1 point)
   No (0 points)

3. Which cigarette would you most hate to give up; which cigarette do you treasure the most?
   The first one in the morning (1 point)
   Any other one (0 points)

4. How many cigarettes do you smoke each day?
   10 or fewer (0 points)
   11 to 20 (1 point)
   21 to 30 (2 points)
   31 or more (3 points)

5. Do you smoke more frequently during the first hours after awakening than during the rest of the day?
   Yes (1 point)
   No (0 points)

6. Do you smoke even if you are so ill that you are in bed most of the day?
   Yes (1 point)
   No (0 points)

Scoring: 7 to 10 points = highly dependent; 4 to 6 points = moderately dependent; less than 4 points = minimally dependent.

The higher the Fagerström score, the more intense is the patient's physical dependence on nicotine. Higher scores indicate that treatment of withdrawal symptoms, usually with nicotine replacement therapy, will be an important factor in the patient's plan of care.

Appendix 3. The why test.


Instructions:

Please answer each question with a number on a scale from 1 to 5, with 1 = never, 2 = rarely, 3 = once in a while, 4 = most of the time, 5 = always)

A. I smoke to keep myself from slowing down.
B. I enjoy holding the cigarette.
C. Smoking is pleasant and relaxing.
D. I light a cigarette when I feel angry.
E. When I am out of cigarettes, it is torture until I can get more.
F. I smoke without being aware of when I smoke I keep going.
G. I smoke when other people around me are smoking.
H. I smoke to perk myself up.
I. I enjoy getting ready to light up a cigarette.
J. I get pleasure from smoking.
K. I smoke when I feel uncomfortable or upset.
L. When I am not smoking, I am very aware that I am not smoking.
M. I often light a cigarette when one is still burning in the ashtray.
N. I smoke cigarettes with friends when I am having a good time.
O. I enjoy watching the smoke as I blow it out.
P. I want a cigarette most often when I am comfortable and relaxed.
Q. I smoke when I am feeling sad and want to take my mind off things.
R. I crave a cigarette when I have not had one in a while.
S. I have found a cigarette in my mouth and did not remember it was there.
T. I always smoke when I am out with my friends at a party or bar etc.
U. I smoke cigarettes to get a lift.

Answer: Write the number you put beside each letter in the boxes below. Add each set of boxes and put this in Total. Circle your highest totals to see the reasons why you smoke.

**Highest total by sum of questions A + H + U.**

**Smoking stimulates me:** You feel that smoking gives you energy and keeps you going. Try to do things that give you energy instead, like washing your face, walking, jogging or a hobby you enjoy.

**Highest total by sum of questions B + I + O.**

**I want something in my hand:** There are many things you can put in your hand instead of a cigarette. Try pencil doodling, knitting, holding a small smooth stone, penny or rubber cigarette.

**Highest total by sum of questions D + K + Q.**

**Smoking is a crutch to manage stress:** There are many ways to deal with stress instead of smoking. Take some time to find something you would like to do such as relaxation breathing, meditation or music therapy. Ask other people how they manage stress.

**Highest total by sum of questions E + L + R.**

**I am hooked on smoking:** You may have a psychological and physical addiction to nicotine. Chewing nicotine gum or wearing a nicotine patch may help.

**Highest total by sum of questions F + M + S.**

**It is part of my routine:** If smoking is a habit, it helps to become aware of every cigarette you smoke. Keep a diary or write down every cigarette you smoke on the inside of your cigarette pack.

**Highest total by sum of questions G + N + T.**

**I am a social smoker:** You smoke when people are around you smoking or they offer you a cigarette. Remind others that you are a non-smoker. You may want to change your social habits to avoid places that lead you to smoke.