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Smoking Cessation and Smokefree Environments for Tuberculosis Patients

**Second Edition
2010**

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International Union Against
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Preface

Exposure to tobacco smoke has been shown to cause or exacerbate a wide variety of cancers, infections, cardiovascular and respiratory diseases. Smoking is the most important risk factor for chronic obstructive pulmonary disease and lung cancer. The health consequences of tobacco use put a huge burden on countries, health services and communities. Tobacco control is crucial to reduce the incidence and consequences of all of these diseases. Smoking cessation and other interventions that prevent these diseases or reduce their impact should become part of routine practice in all health services.

This Guide, developed by the International Union Against Tuberculosis and Lung Disease, addresses the association between tobacco smoke and tuberculosis. It presents an intervention that tuberculosis services can use to help their patients quit smoking and to promote smokefree homes for tuberculosis patients and their families. Although the best practice experience and evidence base for this approach is about quitting cigarette smoking, the approach could be adapted to include quitting other forms of tobacco (e.g., bidis) and other ways of smoking tobacco (e.g., shishas or waterpipes) in settings where these are widely used.

The Union advocates simplifying smoking cessation, expanding it widely through the health services and working with communities in order to reach more people. ‘ABC for TB’ can be delivered by any health care worker in the tuberculosis services—it does not require specialised staff or clinics or medicines. It is delivered systematically within the existing programme activities and can be done within as little as 2–5 minutes.

The ‘ABC for TB’ intervention empowers health care workers at all levels in the tuberculosis programme to make their own working environment healthier and to make a significant contribution to the prevention and control of both tuberculosis and tobacco. By reducing smoking in the community, tuberculosis programmes will make greater progress towards their goal of reducing tuberculosis infection and disease.

The intervention promotes smokefree homes and includes communication with patients and the community about quitting and smokefree health services. As such, it can be used to initiate or strengthen other components of tobacco control and to promote the creation of further smoke-free areas in countries and communities.

Importantly, ‘ABC for TB’ is based on the right of tuberculosis patients to be made aware of the likely harmful effects of smoking on their tuberculosis outcomes and of risks for their families. It helps tuberculosis services to provide the best available support and environment for patients to quit and to make their homes smokefree.

This Guide starts with a brief introduction about the association between smoking and tuberculosis. Three chapters present the ‘ABC for TB’ approach to smoking cessation and smokefree homes for tuberculosis patients. Chapter one is about creating a 100% tobacco-free tuberculosis service. Chapter two describes the activities of **A**sk, give **B**rief advice and provide **C**essation support. Chapter three proposes a way to record and monitor activities to make sure patients are receiving quality care and to find out how to improve services. The appendix contains the proposed forms for recording and reporting.

We would like to thank the experts who made valuable contributions by commenting on drafts of this document: Dr Tara Singh Bam, Assoc. Prof. Chris Bullen, Prof. Asma El Sony, Dr Lin Yan, Dr Hayden McRobbie, Dr Martin Raw and Dr Nevin Wilson. We would also like to acknowledge the work of Dr Karen Slama who wrote the first guide on this topic in 2008.

Abbreviations

ABC	Ask, Brief advice, Cessation support
DOT	directly observed treatment
DOTS	originally an acronym for directly observed treatment, short course, DOTS became the term used to describe the tuberculosis control strategy recommended by the WHO
NRT	nicotine replacement therapy
NTP	national tuberculosis programme
TB	tuberculosis
The Union	International Union Against Tuberculosis and Lung Disease
WHO	World Health Organization

Glossary of terms as used in this Guide

ABC for TB A three-step approach (Ask, Brief advice, Cessation support) to help tuberculosis patients to quit smoking and to make their home smokefree.

Abstinence Not smoking any cigarettes at all, not even a puff. Abstinence can be qualified as temporary (stopping smoking completely for a period) or permanent.

Ask At each visit, ask all patients if they currently smoke and if anyone smokes inside their home. For all patients, record whether they are current smokers and whether they are exposed to smoking inside the home at month 0 and month 6/End on the *Tuberculosis Treatment Card*. For patients with an *ABC Smoking Cessation Card*, record at month 0, 2, 5 and End the status of smoking and of exposure to smoking inside the home.

Brief advice At each visit, give all patients brief advice to quit smoking or to continue not to smoke. Advise patients to make their home smokefree. Personalise the advice by linking smoking and exposure to smoking with tuberculosis and any other associated diseases or conditions. For patients with an *ABC Smoking Cessation Card*, record at month 0, 2, 5 and End whether advice was given or not (yes or no) during that visit.

Cessation support At each visit, provide all patients with cessation support to help them to quit smoking or to continue not to smoke. Support patients to make their home smokefree. 'Support' is providing strategies to help patients change their behaviour. Provide intensive support to patients with strong nicotine dependence. Stop-smoking medications can be offered if available and affordable. For patients with an *ABC Smoking Cessation Card*, record at month 0, 2, 5 and End whether support was provided or not (yes or no) during that visit.

Current smoker On the *ABC Smoking Cessation Card* (i.e., new smear-positive patient): At month 0: patient who has smoked in the **last**

3 months,* even a puff. At months 2, 5 and End: patient who has smoked in the **last 2 weeks**, even a puff, and has not made any attempt to quit since the last sputum examination visit (quit attempt = **at least 24 hours**).

On the *Tuberculosis Treatment Card* (all patients): At month 0: who has smoked in the **last 3 months,*** even a puff. At month 6/End: who has smoked in the **last 2 weeks**.

Intensive cessation support Longer sessions of cessation support or sessions arranged more frequently (if feasible) than the four routine sputum examination visits. Stop-smoking medications may also be offered if available and affordable.

Nicotine replacement therapy (NRT) Stop-smoking medications (nicotine gum, patches, inhalers and lozenges) containing nicotine that are intended to promote cessation by reducing craving and withdrawal symptoms in the initial period of abstinence from smoking. Typically the medications are used for an 8-week period after the patient has quit smoking.

Non-smoker A person who has never smoked or who used to smoke but has not smoked in the **last 3 months**, not even a puff, before starting tuberculosis treatment.

Quit attempt When a smoker tries to quit and succeeds for **at least 24 hours**.

Quitter A smoker at the start of tuberculosis treatment who has since quit: has not smoked at all in the **last 2 weeks** before the current sputum examination visit, not even a puff.

Relapsed smoker A smoker at the start of tuberculosis treatment who has tried to quit but has relapsed: has smoked in the **last 2 weeks** before the current sputum examination visit but has made at least one quit attempt of **at least 24 hours** since the last sputum examination visit.

Smokefree No smoking at any time in a specific environment, e.g., a tuberculosis service (in the buildings and the grounds); general health services in which tuberculosis service is provided (in the buildings

*People sometimes stop smoking by themselves when they start to feel very ill. Tuberculosis patients may have already stopped smoking temporarily before they come to the health services for the first time. However, they may not necessarily intend to quit smoking permanently. The risk is that they may start smoking again once they get on treatment and feel better. Therefore, the definition at month 0 for current smoker is 'a person who has smoked in the last 3 months, even a puff' to ensure that all patients who usually smoke are included in the intervention and provided with advice and support to quit *permanently*.

and the grounds); a home (inside the home). This is to protect patients, staff and visitors from exposure to smoking and to contribute to creating tobacco-free health care.

Stop-smoking medications Nicotine replacement therapy and other stop-smoking medications, such as bupropion, varenicline and nortriptyline to help patients who smoke to quit.

Tobacco-free Being tobacco-free means having a smokefree environment and banning (prohibiting) the sale of tobacco products, tobacco advertising, promotion and sponsorship, and any other links with or influence from the tobacco industry.

Introduction to smoking and tuberculosis

Tuberculosis is a disease caused by tuberculosis bacilli. When a person with tuberculosis coughs or talks or laughs, tuberculosis bacilli may be expelled from their lungs into the air. If people are in close contact with a person who has tuberculosis, they may inhale tuberculosis bacilli into their lungs. If tuberculosis bacilli get the opportunity to live inside other people's bodies, they will be infected with tuberculosis.

The relationship between smoking and tuberculosis has been noted for many years. Smokers have a higher risk of getting tuberculosis than non-smokers. Smokers have a higher risk of being infected with tuberculosis bacilli than non-smokers. Once infected with tuberculosis bacilli, some smokers may develop tuberculosis disease. This is mainly determined by the condition of their body. Smoking changes the condition of the body in favour of developing tuberculosis. Therefore, smokers have a higher risk of developing tuberculosis. In addition, tuberculosis patients who smoke have a higher risk of getting tuberculosis again. The risk of death is also higher among smokers than non-smokers.

Smokers also put their family at higher risk of getting tuberculosis. People who do not smoke but are exposed to smoking have a higher risk of being infected with tuberculosis bacilli and a higher risk of developing tuberculosis disease. Therefore, to protect their family, it is important that smokers change their behaviour and quit smoking.

Tuberculosis patients who are smokers are more likely to have a cough, to have pulmonary tuberculosis, to have cavitory lesions in their lungs, and to be sputum positive than non-smokers. This means that tuberculosis patients who smoke are probably more likely to spread tuberculosis bacilli than non-smokers.

Tuberculosis control aims at reducing the number of people infected with tuberculosis bacilli and the number of people who develop tuberculosis disease. Since smoking increases the risk of tuberculosis infection and tuberculosis disease, quitting smoking or never becoming a smoker will help to control tuberculosis in the community. This is why it is so important for tuberculosis patients who smoke to quit smoking and for people to never start smoking. For smokers who have not yet quit, it is important that they only smoke away from others and thus help to create smokefree environments.

Creating a 100% tobacco-free tuberculosis service

To help tuberculosis patients quit smoking, tuberculosis services first need to provide a supportive tobacco-free service for their patients and health care workers. Three steps will help to achieve a tobacco-free service. The first step is preparatory. It aims to create awareness, consult and gain support from staff and the patient community for the concept of tobacco-free health care and the importance of quitting smoking. Staff who smoke are encouraged to quit. A coordination team begins discussing what a tobacco-free policy would contain and how it could be operationalised in their setting. Next, a 100% tobacco-free policy is formally written up and the necessary systems and resources are developed. Finally, the policy is launched and implemented. These three steps are described in the sections below, then summarised in Table 1.2 on page 9.

Step 1: Preparing and planning

Ideally, the instruction to create tobacco-free health care facilities will come from the national tuberculosis programme (NTP) and the Ministry of Health. However, as always, a policy that remains on paper is not effective. Simply placing a 'no smoking' sign at the entrance to a facility is not sufficient to create a tobacco-free service. The impact of smoking cessation interventions will be greatly reduced, almost invalidated, if management and staff are seen to not take the policy seriously, if staff and others are allowed to continue smoking onsite, if ashtrays and tobacco products are present and if there is nothing to educate staff, patients and communities about tobacco and how to quit smoking. In this Guide, we advocate that tuberculosis services should go through the steps of creating a truly 100% tobacco-free service to maximise the effect of their smoking cessation intervention and to provide a healthy environment for all.

It is advisable to select a 'tobacco-free coordinator'—one person from within the tuberculosis service who will be responsible for leading the

preparation, development and implementation of a tobacco-free policy. In most cases this task will be additional to their usual work. Usually, a team is established to support the coordinator and to provide a variety of skills and perspectives, e.g., managers, administrators, doctors, nurses, community workers. The coordination team begins consultation and holds preliminary discussions about what the tobacco-free policy should contain and how it could be operationalised in their services. In parallel, they start education and communication with health care workers, patients and their families about tobacco, the importance of quitting smoking and the main upcoming change—soon there will be no smoking in the health care facility.

Health care workers should start to be informed and educated early on. This is different from the specific training about the policy they receive in the next step. The preparatory communication focuses on:

- The harm caused by smoking and exposure to smoking, particularly harm related to tuberculosis.
- The benefits of quitting smoking for health care workers who smoke and their family members.
- Encouraging health care workers to quit smoking and providing them with support to do so.
- Helping health care workers to see themselves as role models and therefore promoting a tobacco-free message through their non-smoking behaviour.
- Informing health care workers that a tobacco-free policy will soon be introduced and that all health care workers will need to respect it and will have a role in implementing it.

Communication can take place on-the-job or in special meetings, as well as through the usual communication channels of the tuberculosis service, such as bulletin boards, posters and pamphlets.

Promotional and educational activities for patients and their families should focus on:

- The harm caused by smoking and exposure to smoking, particularly harm related to tuberculosis.
- The benefits of quitting smoking and some advice on how to quit.
- Encouraging patients and their families to make their homes smokefree.
- Encouraging patients and their families who smoke to quit.

Communication can be through posters, pamphlets and any other activities the health care facility can organise for the communities it serves. Promotional and educational activities for patients and their families continue throughout the development and implementation of the policy.

Step 2: Developing a 100% tobacco-free policy

The tobacco-free coordinator and team make sure that each component of the policy is discussed and decided, e.g., who will see that the policy is actually followed? What will happen if health care workers, patients and visitors do not follow the policy? Consultation with a selection of health care workers in the centre and with representatives of the patient communities will help to check that planned activities of information, communication and education will be appropriate and that systems will work. It may be advisable for people who contribute to policy discussions to first sign a form that they have no conflict of interest. This makes sure that no one with links to the tobacco industry or to anything related to the sale or promotion of tobacco or any tobacco products can try to weaken the content of the policy.

Recommended content for a tobacco-free policy

- A date when the policy will be introduced
- An explanation of why the policy is needed
- References to national or local legislation, or community guidelines
- Information on who the policy covers (e.g., patients, staff, visitors)
- A ban on smoking in the health care facility (buildings and grounds) with clear definitions about what 'no smoking' means
- A ban on the sale of tobacco products, advertising and sponsorship throughout the health care facility
- A ban on ashtrays in the health care facility (buildings and grounds)
- Details on what will happen if people do not follow the policy
- Details of how health care workers and patients can be helped to quit smoking
- A process by which people can submit complaints
- A review date

The tobacco-free policy is then finalised, written up and approved (see Table 1.1 for an example of a tobacco-free policy).

Table 1.1 An example of a 100% tobacco-free policy

Tang Bu Tuberculosis Centre Tobacco-free Policy*

Introduction date	1 January 2010
Rationale	To provide a healthy, tobacco-free service for all health care workers, patients and visitors, and to prevent disease and death from smoking among health care workers, patients, and their families
Relevant legislation	Panduna Tobacco-free Act 2009—'All hospital buildings and grounds must be smokefree'
Scope	This policy applies to everyone: <ul style="list-style-type: none">• Health care workers, patients, volunteers, contractors and others in the buildings and grounds• Anyone attending business or social events at the centre• Those inside vehicles owned/operated by the centre
Content	<ul style="list-style-type: none">• All buildings, grounds, offices and vehicles are smokefree, that means 'no smoking' anywhere in the centre or in vehicles.• If health care workers must smoke, they must smoke offsite, away from main entrances and only during formal breaks. They must not be identifiable as health care workers, e.g., by their uniforms or name tags.• Ashtrays are banned in the centre.• Tobacco products must not be sold or advertised in the centre.• Tobacco sponsorship must not be sought or accepted for any centre activities.• Policies, processes and systems have been amended to reflect the requirements of this policy.• No smoking is allowed at the centre's business and social functions.
Information and communication	<ul style="list-style-type: none">• Patients and their caregivers are informed of the policy at registration.• 'No smoking' signs are clearly visible at all entrances of the grounds and buildings.• The policy is displayed at the main entrance of every building.• Health care workers are informed about the policy at recruitment and orientation.• The tobacco-free policy is included in all new contracts.• The centre promotes quitting smoking and having smokefree homes.
Ensuring the 'no smoking' component of the policy is followed	<ul style="list-style-type: none">• All health care workers advise people who smoke in the centre's buildings or grounds to smoke offsite and away from the main entrances.• Specific health care workers (wearing a 'no smoking officer' badge) are responsible for making sure no one smokes in the buildings or grounds.• Health care workers who smoke in the buildings or grounds will be disciplined.
Smoking cessation	<ul style="list-style-type: none">• All health care workers who smoke are encouraged to quit smoking. For help to quit contact Nurse Fanane, telephone: 0900 234 534.• All tuberculosis patients are given help to quit smoking by their health team.
Complaints procedure	Complaints can be made to Ray Fad, tel: 0900 538 538. All complaints are to be attended to within 24 hours.
Review date	1 January 2011

*The name of the tuberculosis service, country, dates, contact names and details of people are fictional.

Next, the systems and materials (e.g., signs, documentation) for implementing the policy are developed. The policy is communicated in advance to staff and others who will be affected by it. All this needs to happen well before the date on which the policy will be introduced and become official. This is so that the policy can be followed 100% right from the start. The following activities are important:

- 1 Set up systems for implementing the policy.
- 2 Prepare materials (e.g., signs and documentation).
- 3 Communicate the policy to health care workers, patients, their families and treatment supporters prior to its introduction.
- 4 Train health care workers in the policy:
 - All health care workers should be trained in the main aspects of the tobacco-free policy, especially how to follow the 'no smoking' component of the policy themselves and the basic messages for making sure that it is followed by others.
 - Health care workers responsible for implementing and monitoring the 'no smoking' component of the policy should be trained to understand the addictive nature of smoking; how to support health care workers, patients, and visitors who are smokers to quit and to follow the policy; how to deal with people who refuse to smoke offsite; key messages to say to people when they do not follow the policy; and national and/or local tobacco-free legislation.
- 5 Ban all tobacco products and tobacco industry influence from the centre and from the activities of the tuberculosis service:
 - Cigarettes, loose tobacco, cigarette papers, lighters or any other materials associated with any type of tobacco use, such as shisha (water pipes), must not be sold.
 - There must be no tobacco advertising.
 - No senior management or health care workers should accept any tobacco company sponsorship for any events, research or activities in the tuberculosis service, or any personal gift.

Immediately prior to the launch date of the tobacco-free policy, the following activities are undertaken:

- 1 Display clear, permanent signs to notify health care workers, patients and visitors that the health care centre (buildings and grounds) is tobacco-free including:
 - 'No smoking' signs at the main entrances, and at every entrance to a building, as well as in all hallways, toilets, lifts and stairwells.

If the centre opens directly onto the street, signs may need to be displayed requesting people not to smoke around the entrance to the health centre.

- 2 Display the policy document at all main entrances of the centre so that staff, patients and visitors can read the content of the policy.
- 3 Remove all ashtrays from the buildings and grounds.
 - If ashtrays are available, this gives the wrong message—people think that ‘no smoking’ signs are not serious and that smoking is in fact allowed.

Step 3: Implementing a 100% tobacco-free policy

It should be relatively easy to introduce the policy if attention has been given to detail during the preparation and development steps. The following are the basic activities for introducing and maintaining a tobacco-free policy:

- 1 Check that enough ‘no smoking’ signs are displayed. Add signs or change their location if necessary.
- 2 Check that there are no ashtrays or tobacco products or tobacco industry influence in the health centre.
- 3 Make sure no one smokes in the health centre buildings or grounds.
 - It is also important to make it clear that a) the policy applies to all health care workers and b) health care workers do not smoke anywhere in the centre, as they are role models for the patients and visitors. If they do smoke offsite, they should smoke away from the main entrances. Management should discipline health care workers who continue to smoke in the centre, e.g., give them two verbal warnings, followed by disciplinary action.
 - Health care workers should know how to remind colleagues they see smoking to smoke offsite. They should know how to inform patients and visitors about the policy and how to respect it. For example, they could say to a visitor:

“Did you know that you are not allowed to smoke in this health centre? There is the ‘no smoking’ sign on the wall. If you wish to smoke, you will need to leave and smoke offsite and away from the entrances.”
 - A selected group of staff oversee the ‘no smoking’ component of the policy and take action if there are any difficult situations. They

Table 1.2 Steps for creating a 100% tobacco-free tuberculosis service

<i>1. Preparing and planning</i>	<i>2. Developing the policy</i>	<i>3. Implementing the policy</i>
Gain commitment and support from relevant NTP and health authorities	Write a draft policy, consulting with representatives of health care workers and patients/community, then finalise policy and get it approved	Launch the policy and start implementing it on the planned date
Identify a coordinator to lead the preparation, development and implementation of the policy	Identify staff who will make sure the 'no smoking' component of the policy is followed and decide action to be taken if it is not followed	Check that there are sufficient 'no smoking' signs. Add signs or change their location if necessary
Establish a working team with a variety of skills and perspectives	Set and announce a date to introduce the policy and communicate the contents to health care workers and patients	Check that there are no ashtrays or tobacco products or any tobacco industry influence in the health centre
Begin discussion and consultation about what to include in the policy and how to operationalise it	Train health care workers in the policy	Make sure health care workers, patients and visitors follow the 'no smoking' component of the policy
Educate health care workers on the harm of smoking, the benefits of quitting smoking, and the upcoming change into a tobacco-free health service	Ban tobacco advertising and sponsorship, and the sale of cigarettes and other tobacco-related products	Train all newly recruited health care workers in the policy
Encourage and help health care workers to quit smoking	Display 'no smoking' signs throughout the buildings and grounds	Monitor the implementation of all aspects of the policy
Promote quitting smoking and smokefree homes to patients and their families	Display a copy of the tobacco-free policy document at entrances of all buildings Remove all ashtrays	Review the policy at least once a year
Provide educational materials at key locations throughout the health centre and carry out educational activities for patients and their families		

need to have a high level of support from management and their colleagues, and the necessary authority to make sure that people follow the policy.

- 4 Train all newly recruited health care workers.
 - The policy should be part of the training of each new health care worker.
- 5 Monitor the implementation of all aspects of the policy.
 - Those responsible for the policy need to make sure that all aspects of the policy are being respected, e.g., signs are still clearly displayed and have not been removed; the policy is displayed; cigarettes are not being sold; and health care workers are being disciplined if they smoke in the buildings or grounds.
- 6 Review the tobacco-free policy at least once a year.
 - It is often possible to strengthen the policy after one year.

Conclusions

Making a tuberculosis service 100% tobacco-free requires institutional support, careful preparation, planning and communication. Very little money is needed. Responsibilities for coordination, policy development, implementation and monitoring should be clearly defined. The tobacco-free policy needs to be well communicated and explained to all concerned. Clear signs must be displayed throughout the health care facility's buildings and grounds. Health care workers need to understand the harm caused by smoking and by exposure to smoking. If they smoke, they should be encouraged and supported to quit—not only for their own health but also because they need to be positive role models for patients when they are advising and supporting patients to quit smoking. Health care workers need to be trained in what the policy contains, how it will be introduced and how they will help ensure that the 'no smoking' rules are followed. The tuberculosis service should actively promote smokefree homes for its tuberculosis patients. Ideally, it should also promote quitting smoking and smokefree homes for the whole community it serves.

Now that it is tobacco-free, the tuberculosis service is ready to introduce a smoking cessation intervention to help patients quit smoking during their treatment and to reduce the number of patients and families exposed to smoking inside their homes.

ABC for TB: an approach to smoking cessation and smokefree homes for tuberculosis patients

The basic ABC approach (Ask, Brief advice, Cessation support)* and similar three-step approaches are being used in various countries to simplify and expand smoking cessation on a broad scale. These are population health approaches. ABC has three easy-to-remember steps to be repeated each time a patient presents for health care: Ask if the patient smokes—Give brief advice about the importance and benefits of quitting—Provide cessation support to help the patient quit. Asking about smoking status and giving brief advice about quitting prompts the patient to try to quit. Cessation support encourages more quit attempts and maximises the chances of the patient successfully quitting smoking. The Union has adapted the ABC approach to the context of tuberculosis programmes—creating ABC for TB. This chapter presents ABC for TB as a whole, then explains each step and finishes with some suggestions for training health care workers in this approach.

Working within the national tuberculosis programme

The national tuberculosis programme (NTP) has been proposed by the World Health Organization (WHO) and The Union as an appropriate mechanism for providing smoking cessation for tuberculosis patients. The structured, systematic DOTS programme has the potential to be very effective in increasing cessation among tuberculosis patients, since it:

- Ensures regular contact between patients and the tuberculosis services over a period of at least 6 months
- Involves patients who are likely to be motivated by their illness to make changes to their behaviour
- Often involves families, and families will often support patients to quit smoking.

*The ABC approach was developed by the New Zealand Ministry of Health in 2007.

Any smoking cessation intervention needs to be very carefully integrated into the tuberculosis programme, so that it can use the existing systems and programme structure, the regular contact with the patients, and health care worker resources without interfering with the smooth operations of the programme.

What is ABC for TB?

ABC for TB is a simple three-step method to be used each time a patient attends the tuberculosis services. It is for helping tuberculosis patients who smoke to quit smoking and for encouraging those who are exposed to smoking inside their home to make their home smokefree (have no smoking inside the home at all). It also supports patients who do not smoke to remain non-smokers and those who have smokefree homes to maintain their homes smokefree.

The three steps are:

A is for Ask At each visit, **ask** all patients if they currently smoke and if anyone smokes inside their home.

B is for Brief advice At each visit, give all patients **brief advice** to quit smoking or to continue not to smoke. Advise patients to make their home smokefree. Personalise the advice by linking smoking and exposure to smoking with tuberculosis and any other associated diseases or conditions.

C is for Cessation support At each visit, provide all patients with **cessation support** to help them to quit smoking or to continue not to smoke. Support patients to make their home smokefree.

Who receives ABC for TB?

All patients receive ABC for TB. They are all asked about smoking and exposure to smoking in the home; they are all given brief advice and they are all provided with some kind of support—e.g., to stop smoking, to remain a non-smoker, to make their home smokefree.

When patients are registered for tuberculosis treatment, ABC for TB divides them into three groups:

- 1 New smear-positive patients who are current smokers
- 2 Other patients who are current smokers
- 3 Patients who are not current smokers.

1 New smear-positive patients who are current smokers

Since the new smear-positive patients have at least four clearly-defined, routine visits, this Guide proposes a recording and reporting system that is built around these four visits:

Visit 1 (referred to as *month 0*): when the patient is diagnosed with tuberculosis and starts tuberculosis treatment.

Visits 2–4 (referred to as *month 2, 5 and End*): when the patient returns for sputum examination visits at 2, 5 and 6 months or whenever the final sputum examination visit is carried out and treatment is considered completed.

These patients receive an *ABC Smoking Cessation Card*. The ABC steps (Ask, Brief advice, Cessation support) are followed at each sputum examination visit and recorded on the card. The information is reviewed at each visit and helps health care workers to give appropriate follow-up. Data from the cessation card is transferred to a register and reported in quarterly reports. This allows for activities and patient outcomes to be monitored and evaluated. ABC for these patients is explained in detail on pages 16–27.

2 Other patients who are current smokers

These patients receive the ABC steps whenever they visit the tuberculosis services, but they do not receive an *ABC Smoking Cessation Card*. ABC for these patients is summarised on pages 27–28.

3 Patients who are not current smokers

These patients receive the ABC steps, adapted for non-smokers. At each visit, 'Ask, Brief advice and Cessation support' are used to very briefly reinforce the patient's decision not to smoke and to help them to make their home smokefree. They do not receive an *ABC Smoking Cessation Card*. ABC for these patients is summarised on pages 28–29.

Who provides ABC for TB?

There are different options for **who** provides the steps of ABC. Each tuberculosis programme will need to decide this. Usually, ABC should be

integrated as much as possible with the procedures and people providing the routine tuberculosis care. It may be that one healthcare worker does all three steps (Ask, Brief advice and Cessation Support) while the patient is with them. Another option would be that one healthcare worker, e.g., a doctor, does 'Ask' and 'Brief advice', then another health care worker, e.g., a nurse, does 'Cessation support'.

Services may decide to expand ABC activities to the decentralised levels that provide DOT (directly observed treatment) and see patients much more frequently than the four sputum examination visits at the basic management unit level. ABC during DOT at local level may be a powerful way for health care workers to continue to encourage patients who smoke to quit and keep giving support to those patients who have quit smoking. The recording and reporting documentation proposed in this Guide, however, is designed for use at the level that holds the tuberculosis treatment cards and registers.

How is ABC for TB documented?

For all tuberculosis patients, health care workers record on the *Tuberculosis Treatment Card* at month 0 and at month 6/End whether the patient is a current smoker and whether the patient is exposed to smoking inside the home.

For those who are identified at month 0 as new smear-positive current smokers, more detailed recording is done. Each step of ABC is recorded at each of their sputum examination visits (month 0, 2, 5, End) on the *ABC Smoking Cessation Card*.

ABC for TB is summarised in a flowchart (see Figure 2.1). A modified *Tuberculosis Treatment Card*, an *ABC Smoking Cessation Card*, a register and quarterly report forms are in the Appendix. Details on how to fill them in are provided in Chapter 3.

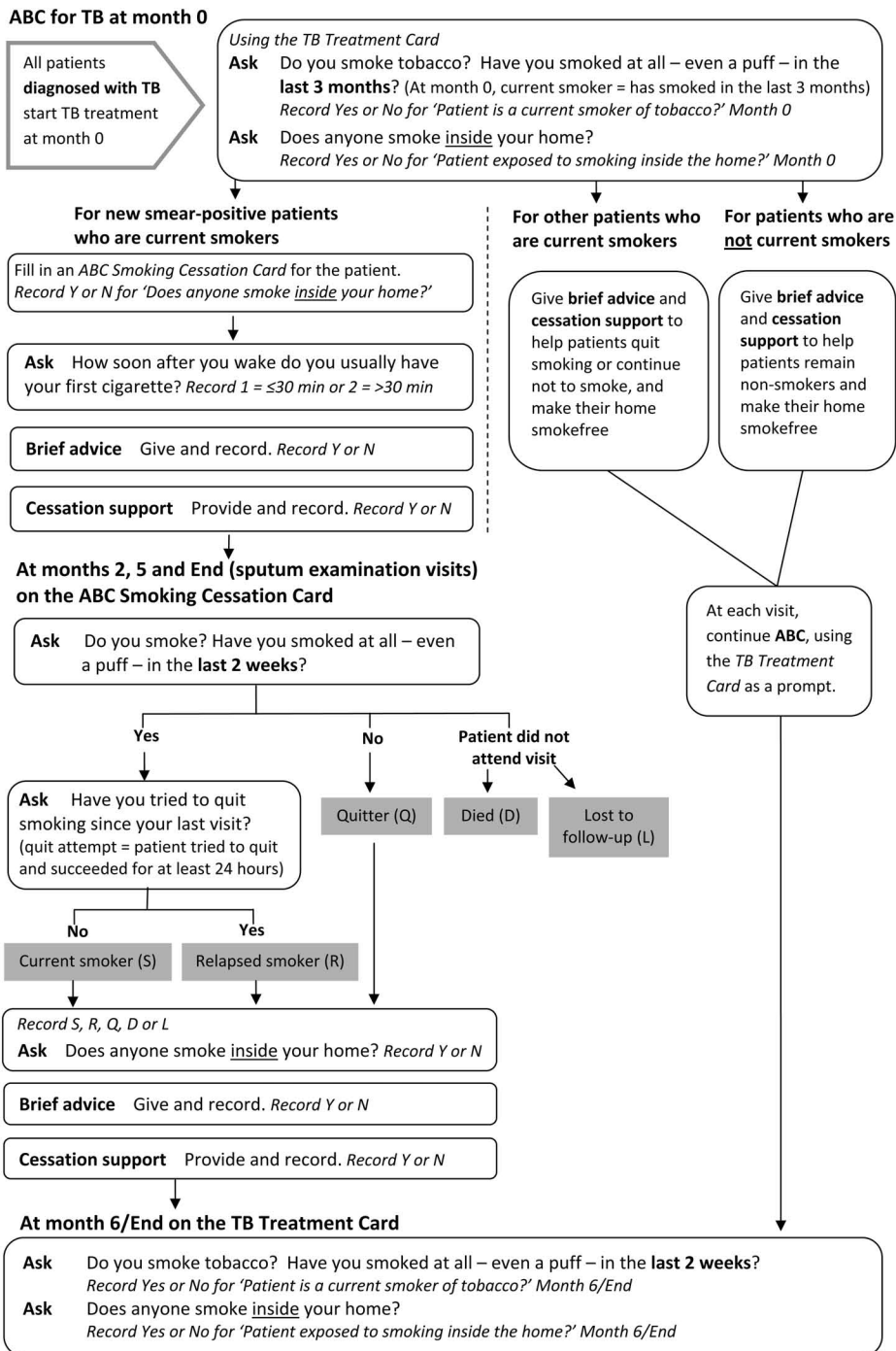


Figure 2.1 ‘ABC for TB’ flowchart

How is ABC for TB done?

A is for Ask

At each visit, **ask** all patients if they currently smoke and if anyone smokes inside their home.

At month 0, **ask** if they have smoked at all—even a puff—in the **last 3 months**.

At all other visits, **ask** if they have smoked at all—even a puff—in the **last 2 weeks**.

For all patients, record whether they are current smokers (yes or no) and whether they are exposed to smoking inside the home (yes or no) at month 0 and month 6/End on the Tuberculosis Treatment Card.

For patients with an ABC Smoking Cessation Card, record at month 0, 2, 5 and End the status of smoking and of exposure to smoking.

When patients are registered for tuberculosis treatment and each time they attend the tuberculosis services during their treatment, they are asked if they smoke and if anyone smokes inside their home. These questions allow the health care worker to work out what type of advice and support to give the patient. They also allow the status of the patient to be documented and monitored.

When patients are asked by health care workers if they smoke, the simple act of asking has an effect on them. Patients understand that the questions about smoking are related to the state of their health. These questions prompt them to think about their smoking and any smoking in their home—within the context of being ill with tuberculosis. The questions may prompt smokers to consider trying to quit smoking.

'Ask' at registration for tuberculosis treatment (month 0)

When registering each new tuberculosis patient and filling in their *Tuberculosis Treatment Card*, the health care worker asks the following questions and records yes or no on the *Tuberculosis Treatment Card*:

- “Do you smoke? Have you smoked at all—even a puff—in the last 3 months?”

This determines which patients smoke (including those who have stopped only recently, i.e., less than 3 months ago).

- **“Does anyone smoke inside your home?”**

This determines if the patient is exposed to smoking *inside* the home. It finds out if family members or other people smoke inside the actual building(s) the patient calls home. It is not to find out the smoking status of family members; if family members smoke, but never smoke at all inside the home, then ‘No’ is recorded.

Patients are then allocated to one of three groups and managed as follows:

1 New smear-positive patients who are ‘current smokers’

‘Ask’ at month 0

The patient is given an *ABC Smoking Cessation Card*. The month 0 smoking status box in the table on the card is pre-filled with an ‘S’ for current smoker, since only smokers receive a card.

The health care worker asks **“How soon after you wake do you usually have your first cigarette?”** and records ‘1’ if within 30 minutes of waking or ‘2’ if more than 30 minutes after waking.

The health care worker asks **“Does anyone smoke inside your home?”** and records yes or no.

The *ABC Smoking Cessation Card* is kept with the patient’s *Tuberculosis Treatment Card* to remind health care workers to perform and record ABC at each sputum examination visit.

‘Ask’ at months 2, 5 and End (next sputum examination visits)

The health care worker asks **“Do you smoke? Have you smoked at all—even a puff—in the last 2 weeks?”** and works out the patient’s current smoking status as follows:

If the patient *has not smoked at all in the last 2 weeks*, the patient is recorded on the card as a *quitter* (Q) for that visit.

If the patient *has smoked in the last 2 weeks*, the health care worker asks: **“Have you tried to quit smoking since your last sputum examination visit?”** (quit attempt = patient tried to quit and succeeded for at least 24 hours)

If the reply is *no*, they are recorded on the card as a *current smoker* (S) for that visit.

If the reply is *yes*, they are recorded on the card as a *relapsed smoker* (R) for that visit.

If the patient did not attend the visit, once confirmed, *died* (D) or *lost to follow-up* (L) is recorded.

The health care worker records yes or no for “**Does anyone smoke inside your home?**”

2 Other patients who are current smokers (i.e., other types/categories of tuberculosis case)

The patient does not receive an *ABC Smoking Cessation Card*. The patient is asked at each visit if they currently smoke and if anyone smokes inside their home. This is not recorded again until month 6/End on the *Tuberculosis Treatment Card*.

3 Patients who are not current smokers

The patient does not receive an *ABC Smoking Cessation Card*. The patient is asked at each visit if they currently smoke and if anyone smokes inside their home. This is not recorded again until month 6/End on the *Tuberculosis Treatment Card*.

B is for Brief advice

At each visit, give all patients **brief advice** to quit smoking or to continue not to smoke. Advise patients to make their home smokefree.

Personalise the advice by linking smoking and exposure to smoking with tuberculosis and any other associated diseases or conditions.

For patients with an ABC Smoking Cessation Card, record at month 0, 2, 5 and End whether advice was given or not (yes or no) during that visit.

Brief advice should be given at every visit. It consists of short, standard messages given by the health care worker directly to patients when they come for their tuberculosis care. It is recommended that brief advice last between at least 30 seconds and one minute. The messages are used to advise patients of the health risks from smoking and being exposed to smoke, to explain the benefits of quitting, and to strongly recommend

Table 2.1 Examples of brief advice

<i>General advice</i>	<i>Personalised advice</i>
For smokers	
<ul style="list-style-type: none"> • Smoking is very harmful for your health • It is extremely important for you to quit smoking as soon as possible • Quitting smoking is one of the best things that you can do to improve your health now and for the future • Occasional or light smoking is still dangerous • We can help you to quit smoking 	<ul style="list-style-type: none"> • You need to quit smoking now so that you can recover properly from TB • As soon as you quit smoking, your coughing and sputum will decrease and your breathing will become easier • Quitting smoking will reduce your risk of getting TB again • By smoking in your home, you are putting your children and family at a greater risk of getting TB
For those exposed to smoking inside their home	
<ul style="list-style-type: none"> • It is very harmful to breathe in other people's smoke • One of the best things you can do to improve your health and your family's health is to not allow any smoking inside your home • We can help you to make your home smokefree 	<ul style="list-style-type: none"> • It is even more harmful for you to breathe in other people's smoke now that you have TB • By making your home smokefree, you will reduce the risk of your family getting TB

that patients quit smoking and make their homes smokefree. Brief advice aims to prompt patients to decide to quit smoking, to make an attempt to quit or to continue attempting to quit. Brief advice should be given to all patients who smoke regardless of whether they want to stop or not. Health care workers should be provided with a set of basic, easy-to-remember messages (see Table 2.1).

The first messages given to the patient should contain general advice about why stopping smoking is important for their health. The second set of messages is personalised and made relevant and even more urgent for the patient by linking smoking and exposure to smoking with tuberculosis. If the patient is pregnant or has associated diseases or conditions such as HIV infection, diabetes, asthma, chronic bronchitis or chronic obstructive pulmonary disease, then the personalised advice can also refer to these conditions. All patients who smoke should be told of the harm they can cause to others, especially children, if they smoke in their presence.

Patients who have quit smoking since the last visit should be congratulated, encouraged to stay quit and given brief advice about how important it is for their recovery from tuberculosis and their general health not to smoke any cigarettes at all.

For patients with an *ABC Smoking Cessation Card*, health care workers record whether the brief advice was actually given or not at each visit (0, 2, 5 and End). They need to understand how important it is for this self-reported data to be recorded accurately. If they did not give brief advice to the patient at that visit for any reason, they should record that they did not give brief advice. It is important for managers to find out if brief advice is not being given on a routine basis. It may indicate that health care workers have not been sufficiently trained in how to give or record brief advice or are deciding that they do not have enough time for it. In the 'Comments' column on the card, health care workers can write their own comments, e.g., how the patient responded to the advice or anything that may be useful to refer to at the next visit.

C is for Cessation support

At each visit, provide all patients with **cessation support** to help them to quit smoking or to continue not to smoke. Support patients to make their home smokefree.

Provide intensive support to patients with strong nicotine dependence.

Stop-smoking medications can be offered if available and affordable.

For patients with an ABC Smoking Cessation Card, record at month 0, 2, 5 and End whether support was provided or not (yes or no) during that visit.

A (Ask) and B (Brief advice) prompt the patient to think about quitting and to make attempts to quit. C (Cessation support) aims to increase the number of quit attempts patients make and to increase their chances of successfully quitting.

At each visit, all patients identified at month 0 as a smoker are provided with some type of cessation support. Multiple sessions of face-to-face support help patients to have the knowledge, skills and motivation to quit smoking. Even if the patient does not yet want to quit, the health care worker should encourage the patient to think seriously about

quitting and give at least one tip that may help the patient if they do make an attempt to quit.

Intensive support (longer or more frequent sessions) should be given, where possible, to patients who have a high level of nicotine dependence (recorded on the *ABC Smoking Cessation Card* as those who smoke within the first 30 minutes after waking) and relapsed smokers.

For patients with an *ABC Smoking Cessation Card*, health care workers record whether the cessation support was actually provided or not at each visit (0, 2, 5 and End). Health care workers need to understand how important it is for this self-reported data to be recorded accurately. If they do not provide cessation support for any reason, they should record that they did not give it. It is important for managers to know if cessation support is being provided on a routine basis or not. Low rates of providing this support may indicate that health care workers have not been sufficiently trained in how to provide or record cessation support or are deciding that they do not have enough time for it. It may also be that health care workers are not feeling comfortable providing it, or that it is being offered in a culturally inappropriate way and patients are not comfortable receiving it. Managers should aim to identify the obstacles, then find constructive solutions.

Cessation support can include one or more of the methods listed below (see also Table 2.2). The health care worker should be trained how to use these methods. Ideally, they should also be trained how to select the most appropriate method(s) for each patient and each visit. The extent of the cessation support will often depend on the health care workers' knowledge about cessation, their skills, and available time and resources. Selecting the appropriate method(s) for each patient also depends on the patient's needs, questions and progress in cessation.

1 Give practical help with planning to quit smoking

The health care worker discusses with patients how and when they can quit smoking. Patients are encouraged to decide to quit smoking as soon as possible. If they do not want to quit straight away, they are encouraged to set a date very soon when they will smoke their last cigarette (a quit date). The health care worker asks patients to identify any potential barriers to quitting (such as having family members or people at work who smoke) and discusses with them how to overcome these challenges. Together they can work out strategies to distract them from thinking about

Table 2.2 Examples of cessation support

Examples of cessation support—select one or more of the following at each visit:

- | | |
|---|---|
| 1 Give practical help with planning to quit smoking | Encourage patients to: <ul style="list-style-type: none"> — Tell family, friends and co-workers that they are quitting, and ask for understanding and support — Anticipate challenges to quitting and plan how to overcome them — Work out strategies to distract themselves from thinking about smoking — Avoid alcohol and being around others who smoke — Remove all cigarettes and smoking accessories from their home and workplace |
| 2 Give advice on making a home smokefree | <ul style="list-style-type: none"> — Listen to how patients feel about making their home smokefree and suggest how they might overcome any obstacles — Give information about the TB-related risks of exposure to smoking so that patients can share this with family and friends — Suggest patients display ‘no smoking’ signs inside and outside their home (provide the signs if possible) — Suggest patients tell friends and neighbours that their home is now smokefree |
| 3 Ask about previous attempts to quit smoking | <ul style="list-style-type: none"> — Ask patients what helped and what did not in previous quit attempts — Help them build on their past successes — Tell patients that successful quitting takes practice and encourage them to try again — Tell success stories of people who have quit or introduce them to someone who has quit |
| 4 Emphasise the importance of complete abstinence | <ul style="list-style-type: none"> — Tell patients to aim for complete abstinence — Explain that this means having no cigarettes at all from the moment they quit, not even a puff |
| 5 Give more information on the harm of smoking | <ul style="list-style-type: none"> — Give a set of simple messages about the harm of smoking — Be prepared to answer questions that patients might ask — Give patient leaflets, pamphlets or information sheets |
| 6 Emphasise the benefits of quitting smoking | <ul style="list-style-type: none"> — Explain health benefits, especially those related to TB, for patients, their families, especially children — Tell patients about the immediate physical benefits of quitting, such as easier breathing — Mention financial benefits of quitting, i.e., money saved — Help patients to make their own list of benefits |

Table 2.2 (Continued)

7 Advise on coping with nicotine withdrawal	<ul style="list-style-type: none"> — Explain the symptoms patients might experience — Reassure them that symptoms will only be temporary — Help them to learn to anticipate or avoid situations that trigger or tempt them to smoke
8 Advise on dealing with weight gain	<ul style="list-style-type: none"> — Tell patients they may gain weight — Reassure patients that this will help them to recover from TB and regain their strength and good health
9 Recommend stop-smoking medications (if available and affordable)	<ul style="list-style-type: none"> — Explain how stop-smoking medications can increase quitting success — Explain which medications are available and affordable — If recommending nicotine replacement therapy (NRT), suggest patients use a combination of patches and a fast-acting NRT product, such as gum or lozenges — Continue to provide non-medication strategies as well.

smoking, to remove all cigarettes and smoking accessories from their home and workplace and to get support from people around them.

Health care workers might say, for example:

“Let’s make a plan to help you quit smoking. What do you think will make it difficult for you to quit? We can discuss some ways for you to overcome these difficulties.”

2 Give advice on making a home smokefree

If the patient’s home is not smokefree, the health care worker may offer advice on how the patient can try to make it smokefree. Patients may be concerned about upsetting family members or friends and neighbours. Health care workers should reassure them that if people understand why their home should be smokefree, they are more likely to be supportive. Most people will not be aware of the additional health risks of smoking for people who have tuberculosis or the additional risks for non-smokers who are exposed to both tuberculosis and smoking. It will also make it easier for them to quit if no one else is smoking inside their home. Some patients might like to place a few discreet ‘no smoking’ signs around the house, or even outside it.

Health care workers might say, for example:

“If your home is smokefree, it will be easier for you to quit smoking. A smokefree home is also much healthier for you and for your family.

They will be less likely to get TB, and you will be less likely to get TB again. I can give you some information to give to your family if that would be helpful.”

3 Ask about previous attempts to quit smoking

Health care workers should ask patients about any previous attempts to quit smoking. Most smokers attempt several times before they quit permanently. After each failed attempt, patients should be provided with cessation support and encouraged to try again. Useful lessons can be learned by discussing previous attempts to quit smoking and what caused them to fail or succeed. If possible, health care workers should spend slightly longer with patients who have previously attempted to quit smoking.

Health care workers might say, for example:

“You mentioned that you tried to quit smoking recently but that it didn’t work. What made you try to quit? How long did you stop for? What do you think made you start smoking again?”

4 Emphasise the importance of complete abstinence

Patients need to be informed and reminded that complete abstinence from smoking is best. Patients should be discouraged from only aiming to ‘cut down’ the number of cigarettes smoked to fewer cigarettes, unless this is part of a planned stepwise reduction to quit within a few weeks. Otherwise they could end up smoking more of each cigarette, and not reducing the harm to their health.

Health care workers might say, for example:

“You need to completely give up smoking. That means having no cigarettes at all from the moment you quit.”

5 Give more information on the harm of smoking

Patients need to know about the harm caused by smoking, particularly in relation to tuberculosis. After giving brief advice about this, the health care worker may see that it is appropriate to go into greater detail or the patient may ask questions. The health care worker can be trained to communicate a set of simple health messages to patients and to answer simple

questions. Pamphlets, leaflets or information sheets may be a useful accompaniment if they are available.

Health care workers might say, for example:

“Smoking is very harmful. Smokers are more likely to be infected with TB, to develop TB and then to get TB again later. Breathing in other people’s smoke is also harmful, particularly for people who have tuberculosis. I can give you some information to take home and share with your family if that would be helpful.”

6 Emphasise the benefits of quitting smoking

There are many benefits to quitting smoking. The brief advice step can communicate some of them. The cessation support step can be a chance to go into more detail. Patients can be encouraged to make their own list of benefits. Health care workers should explain general health benefits as well as those related to tuberculosis, e.g., quitting will help their recovery from tuberculosis and prevent them getting it again. However, it may be appropriate to mention other types of benefits, e.g., their children are less likely to start smoking if they quit and are less likely to have health problems related to exposure to smoking. The amount of money a person can save by quitting may motivate some smokers to stop.

Health care workers might say, for example:

“If you quit smoking your health will improve and you will reduce your risk of getting many serious diseases, including getting tuberculosis again. You will also save a lot of money.”

7 Advise on coping with nicotine withdrawal

Major symptoms of nicotine withdrawal include irritability, anxiety or sadness, constipation, headache, increased appetite and lower levels of concentration. These symptoms seem to be most intense 3–7 days after quitting, then disappear gradually. For most people, they do not last more than 21 days, but the duration of symptoms can vary considerably between patients. Health care workers should warn patients about what they might experience, as it will be easier to cope if they understand the symptoms when they occur and know that they will only be temporary. However, most smokers will usually also experience strong cravings for cigarettes and urges to smoke, which can keep occurring for many months,

even years, especially when they see someone smoking or smell cigarette smoke.

Planning coping strategies ahead of time will help patients deal with withdrawal symptoms and urges to smoke. By identifying situations that trigger or tempt them to smoke, they can learn to anticipate or avoid such situations.

Health care workers might say, for example:

“You may feel irritable, sad or depressed or have some other negative reaction as a result of having less nicotine in your body. This will probably be worse in the first week after you have quit, but it shouldn’t last longer than 3 weeks. Let’s discuss how you can prepare for this.”

8 Advise on dealing with weight gain

Patients who quit smoking may put on weight. People who smoke often eat less, because nicotine has an appetite suppression effect. In many low-income settings where malnutrition is prevalent, this particular effect of nicotine makes smokers even more vulnerable to disease. For patients on tuberculosis treatment, weight gain can usually be viewed positively, since it can be associated with helping their treatment to be successful and helping them to recover from tuberculosis.

Health care workers might say, for example:

“You might find that you eat more and put on some weight when you quit smoking. This would be a good thing while you are recovering from TB, because it will help you to get back your strength and good health.”

9 Recommend stop-smoking medications (only if available and affordable)

If available and affordable for patients, stop-smoking medications such as nicotine replacement therapy (NRT) should be offered to patients who want to stop smoking, as they can double the chance of sustained abstinence over 6 months. However, in many low- and middle-income countries, such medications are not available or affordable for the majority of people. In these countries, brief advice combined with face-to-face behavioural support can definitely help patients to stop smoking. For this reason,

health services should never use the unavailability or cost of stop-smoking medications as a reason not to provide any smoking cessation services.

NRT is the most common stop-smoking medication. It works by reducing the severity of withdrawal symptoms so that the patient's energies can be focused on breaking emotional, social, cultural and context-specific ties with tobacco. Nicotine patches are the most commonly used type of NRT. They lower background craving by providing a steady level of nicotine (about half the level achieved by smoking). However, this is not always sufficient to protect smokers from sudden urges to smoke. The faster-acting products such as gum, lozenges or inhalers can provide the extra nicotine needed in such circumstances. A combination of the patch plus one or more of the faster-acting types of NRT tends to produce better results than patches alone, probably because the individual can increase delivery of the faster-acting NRT at times of strong craving. Most people can use these products safely, but patients who have unstable cardiac disease, pregnant women and adolescents should only use them after seeking medical advice.

Intensive cessation support

Patients with a high level of nicotine dependence and relapsed smokers are more likely to be successful in their attempts to quit smoking if they have intensive sessions of cessation support. This can be done by having longer sessions or by increasing the number of support sessions.

Some health care facilities might have specialist smoking cessation services available, in which case the tuberculosis patient can be informed about these services and referred to them, if this is feasible. In some countries or communities, there may be additional cessation services, such as telephone numbers that a person can call to get help (cessation quitlines) or patient associations that can give extra support. Even if the tuberculosis services 'refer' patients to these other services, they must still keep the patients in ABC for TB and continue to record as usual.

ABC for TB patients who are not new smear-positive but are current smokers when registered for tuberculosis treatment

At each visit, health care workers provide ABC for these patients, just as they would for the new smear-positive current smokers—it is only the recording that is different. These patients do not receive an *ABC Smoking Cessation Card*.

Ask: ask if they currently smoke and if they are exposed to smoking inside the home. Record at month 0 and month 6/End on the *Tuberculosis Treatment Card*.

Brief advice: give as described on pages 18–20.

Cessation support: provide as described on pages 20–27.

ABC for TB patients who are not current smokers when registered for tuberculosis treatment

Patients who have not smoked in the last 3 months before starting tuberculosis treatment are not considered to be current smokers. At month 0, 'No' is recorded to the question 'Patient is a current smoker of tobacco?' on the *Tuberculosis Treatment Card* and they are not given an *ABC Smoking Cessation Card*.

However, at each visit, the health care worker provides a version of ABC that is adapted for patients who do not smoke. ABC aims to reinforce their decision not to smoke and to prompt and support them to make and maintain their home smokefree. This is important for their own recovery from tuberculosis but it is also an opportunity for the health services to send messages through the patient back to their family and community about the harm of smoking and being exposed to smoking. This work with non-smokers plays an important part in improving the tuberculosis situation. It helps to change tobacco-related perceptions and behaviour in the community, thus reducing smoking and exposure to smoking in populations where tuberculosis is prevalent. ABC for these non-smoking patients can be done in as little as 30 seconds.

Ask: Health care workers ask patients at each visit if they smoke and respond positively when patients confirm that they do not smoke. Health care workers ask if patients are exposed to smoking inside their home and help them to make their home smokefree. At month 0 and month 6/End, they record yes or no for current smoker and for exposure to smoking on the *Tuberculosis Treatment Card*. These data are not transferred to any register, but could be extracted from the *Tuberculosis Treatment Cards* to see whether any patients change their smoking status during treatment and how many non-smokers exposed to smoking inside the home at month 0 were no longer exposed at End.

Brief advice: Health care workers give brief advice about the importance of remaining a non-smoker and about the importance of having smokefree home. The advice follows the usual pattern: a general message

about the importance of not smoking and having a smokefree home, followed by a personalised message linking exposure to smoking and tuberculosis (see Table 2.1).

Cessation support: This is practical support for making their home smokefree and keeping it smokefree. This may include strategies and information about quitting for the patient to take home to their family members who are smokers.

Note: Sometimes patients might say at the start of tuberculosis treatment that they do not smoke. Yet, later they say that they do in fact smoke. Although it is unlikely that tuberculosis patients will start smoking during their treatment, it is possible that patients who have never previously been asked about their smoking might be afraid of saying the wrong thing and say instead that they do not smoke. Patients should never be made to feel guilty about their smoking. Health care workers should listen to patients respectfully and use the ABC steps to help them to quit. For any new smear-positive patient, they would also start an *ABC Smoking Cessation Card*. However, these patients who are starting late should **not** be included in the cohort reporting for that quarter (see Chapter 3 for details). On the *ABC Smoking Cessation Card*, a line should be drawn through the months when they were not registered as a current smoker.

'ABC for TB' training for health care workers in tuberculosis services

Health care workers in tuberculosis services need training to gain the knowledge and skills required to deliver ABC for TB and convince patients to try to quit smoking. An example of the content and knowledge and skill outcomes that could be used for an 'ABC for TB' training programme is presented in Table 2.3. Tuberculosis programmes could hold regional training courses to 'train the trainers'. On their return, participants would train the health care workers within their own services.

In addition to teaching the components of ABC for TB, training should aim to make sure that health care workers understand their responsibility and the importance of their work. In many low- and middle-income countries, smoking and exposure to smoking is widespread and not yet understood as harmful. It may be that health care workers themselves are not yet aware of the health risks of tobacco and have never raised the topic of smoking with their patients. Maybe they felt it was not their

Table 2.3 An example of an 'ABC for TB' training programme for health care workers in tuberculosis services

<i>Content</i>	<i>Knowledge and skills gained by the health care worker</i>
ABC for TB	Understands the ABC approach and why it is important.
Nicotine dependence, and the harm caused by smoking and exposure to smoking	Has some understanding of nicotine dependence, the harm caused by smoking and exposure to smoking. Can explain these to patients and colleagues.
Benefits of quitting smoking	Knows the general benefits and tuberculosis-related benefits for adults and children. Can explain these to patients and colleagues.
Withdrawal and side-effects of quitting smoking	Knows what the symptoms of nicotine withdrawal are and can help a patient identify what triggers cravings and urges to smoke.
Behaviour change	Understands that addiction affects behaviour and that patients have to make changes to successfully quit smoking.
Ask	Can ask patients if they currently smoke and if they are exposed to smoking inside their home. Can record this step.
Brief advice	Can give brief advice to patients on the harm of smoking, and the benefits of quitting smoking and making homes smokefree. Can record this step.
Cessation support	Can provide support to patients to quit smoking using a range of strategies and understands how to focus on the patient (patient-centred approach). Knows about stop-smoking medications, if available and affordable. Can record this step.
ABC information system, recording and reporting procedures	Understands why information is important and how to use it at their level. Knows how to review and record data on the forms. Coordinators know how to report, monitor, analyse and set up operational research.

responsibility to mention smoking or they did not know how. Likewise, for tuberculosis patients and their families, ABC for TB may be the first time they have ever heard about the harm of smoking. It may be their only source of information about smoking and their only chance to have some repeated support over a period of time.

Health care workers should be trained to communicate positively and effectively with patients and to focus on the patient's needs and situation.

This includes explaining smoking and cessation in terms that their patients will understand. It also includes treating patients who smoke with respect and understanding, listening to them and expressing interest in both their recovery from tuberculosis and their progress in quitting smoking. If patients feel it is acceptable to ask questions and say honestly how they are progressing, they will usually find it easier to do so. Communicating well is part of helping them to quit.

For quick and easy reference, a copy of the poster 'ABC for TB' (see Figure 2.2) could be displayed on the wall so that health care workers can consult it while registering patients for tuberculosis treatment and delivering ABC for TB. The poster summarises each step of ABC for TB and has examples of brief advice messages and cessation support methods.

The NTP and the national tobacco control programme may have some educational materials for patients about the harm caused by smoking and exposure to smoking and about how to quit. If so, these could be included in the training for health care workers.

Conclusions

ABC for TB is a simple three-step intervention for helping tuberculosis patients to quit smoking and for encouraging those who are exposed to smoking inside their home to make their home smokefree. This patient-centred public health intervention is designed to fit in with the tuberculosis programme's routine care activities and existing human resources, and with the tuberculosis recording and reporting system. The three steps of ABC start when the patient begins tuberculosis treatment. They are repeated each time the patient comes to the tuberculosis services. Some questions and messages are standardised. Other messages and types of support are adapted to each patient's needs, questions and progress towards quitting. They are also adapted depending on the time, knowledge and skills of health care workers and the availability of resources.

Simple recording of status of smoking and exposure to smoking is done for all tuberculosis patients on the *Tuberculosis Treatment Card* at month 0 and at month 6/End. More detailed recording of ABC for TB is done for the cohort of new smear-positive patients at each of their sputum examination visits (month 0, 2, 5 End) on the *ABC Smoking Cessation Card*. ABC for TB recording allows health care workers to provide appropriate follow-up and see the results of their work. It also allows the intervention to be monitored and patient outcomes to be evaluated.

ABC for TB – smoking cessation and smokefree homes for TB patients

Ask

At each visit, ask all patients if they currently smoke and if anyone smokes inside their home.

For all patients, record whether they are current smokers (yes or no) and whether they are exposed to smoking inside the home (yes or no) at month 0 and month 6/End on the Tuberculosis Treatment Card.

For patients with an ABC Smoking Cessation Card, record at month 0, 2, 5 and End the status of smoking and of exposure to smoking inside the home.

Brief Advice

At each visit, give all patients *brief advice* to quit smoking or to continue not to smoke. Advise patients to make their home smokefree.

For patients with an ABC Smoking Cessation Card, record at month 0, 2, 5 and End whether advice was given or not (yes or no) during that visit.

Give general advice

- Smoking is very harmful for your health
- It is extremely important that you quit smoking as soon as possible
- Quitting smoking is one of the best things you can do to improve your health now and for the future
- Occasional or light smoking is still dangerous
- We can help you to quit smoking
- Breathing in other people's smoke is very harmful for your health
- We can help you to make your home smokefree.

Personalise the advice – link TB with smoking and exposure to smoking

- You need to quit smoking now so that you can recover properly from TB
- As soon as you quit smoking, your coughing and sputum will decrease and your breathing will become easier
- Quitting smoking will reduce your risk of getting TB again
- By making your home smokefree, you will reduce the risk of your family getting TB.

Benefits of stopping smoking

Stopping smoking is the best thing people can do to improve their current and future health. The earlier a smoker can quit the better, however it is never too late to quit.

TB patients who quit will benefit from:

- Getting better sooner
- Reduced risk of death
- Reduced risk of relapses of TB

TB patients who make their homes smokefree will benefit from:

- Getting better sooner
- Reduced risk of family members getting TB

All smokers who quit will benefit from:

- Reduced risk of dying before their time
- Reduced risk of developing lung cancer and other cancers related to smoking
- Reduced risk of heart disease and stroke
- Reduced risk of dying from chronic obstructive pulmonary disease
- Improvement in respiratory symptoms such as cough and shortness of breath
- Reduced risk of complications in pregnancy and childbirth
- Fewer days when they are too sick to work

Quitting also:

- Sets a good example for children and young people
- Improves the health of the children of smokers
- Saves money

Figure 2.2 'ABC for TB' poster

Cessation Support	
At each visit, provide all patients with <i>cessation support</i> to help them to quit smoking or to continue not to smoke. Support patients to make their home smokefree.	
<i>For patients with an ABC Smoking Cessation Card, record at month 0, 2, 5 and End whether support was provided or not (yes or no) during that visit.</i>	
Select one or more of the following:	
1. Give practical help with planning to quit smoking	Encourage patients to: <ul style="list-style-type: none"> – Tell family, friends and co-workers that they are quitting, and ask for understanding and support – Anticipate challenges to quitting and plan how to overcome them – Work out strategies to distract themselves from thinking about smoking – Avoid alcohol and being around others who smoke – Remove all cigarettes and smoking accessories from their home and workplace
2. Give advice on making a home smokefree	<ul style="list-style-type: none"> – Listen to how patients feel about making their home smokefree and suggest how they might overcome any obstacles – Give information about the TB-related risks of exposure to smoking so that patients can share this with family and friends – Suggest patients display ‘no smoking’ signs inside and outside their home (provide the signs if possible) – Suggest patients tell friends and neighbours that their home is now smokefree
3. Ask about previous attempts to quit smoking	<ul style="list-style-type: none"> – Ask patients what helped and what did not in previous quit attempts – Help them build on their past successes – Tell patients that successful quitting takes practice and encourage them to try again – Tell success stories of people who have quit or introduce them to someone who has quit
4. Emphasise the importance of complete abstinence	<ul style="list-style-type: none"> – Tell patients to aim for complete abstinence – Explain that this means having no cigarettes at all from the moment they quit, not even a puff
5. Give more information on the harm of smoking	<ul style="list-style-type: none"> – Give a set of simple messages about the harm of smoking – Be prepared to answer questions that patients might ask – Give patient leaflets, pamphlets or information sheets
6. Emphasise the benefits of quitting smoking	<ul style="list-style-type: none"> – Explain health benefits especially related to TB, for patients, their families, especially children – Tell patients about the immediate physical benefits of quitting, such as easier breathing – Mention financial benefits of quitting, i.e., money saved – Help patients to make their own list of benefits
7. Advise on coping with nicotine withdrawal	<ul style="list-style-type: none"> – Explain the symptoms patients might experience – Reassure them that symptoms will only be temporary – Help them to learn to anticipate or avoid situations that trigger or tempt them to smoke
8. Advise on dealing with weight gain	<ul style="list-style-type: none"> – Tell patients they may gain weight – Reassure patients that this will help them to recover from TB and regain their strength and good health
9. Recommend stop-smoking medications (if available and affordable)	<ul style="list-style-type: none"> – Explain how stop-smoking medications can increase quitting success – Explain which medications are available and affordable – If recommending nicotine replacement therapy (NRT), suggest patients use a combination of patches and a fast-acting NRT product such as gum or lozenges – Continue to provide non-medication strategies as well.
If feasible, provide intensive cessation support: <ul style="list-style-type: none"> • Take more time to talk with the patient • See the patient more frequently • Refer the patient for extra support, e.g., patient groups, telephone quitlines 	Write details of local cessation support services here: <hr/> <hr/>

Figure 2.2 (Continued)

Providing quality care for patients and communities: recording and monitoring ABC for TB

This chapter provides suggestions for recording, monitoring and improving the quality of care. It outlines how to use the 'ABC for TB' model forms: a modified *Tuberculosis Treatment Card* that includes information about smoking and exposure to smoking inside the home, an *ABC Smoking Cessation Card*, an *ABC Smoking Cessation Register* and quarterly report forms.

Why should the intervention be recorded and monitored?

Monitoring the process and the outcomes of the intervention is the best way to ensure that care is systematic, standardised, good quality and offered fairly to all patients. It also allows issues, such as operational problems, training needs and population needs to be identified and addressed.

How can quality be assured?

Collecting and evaluating information about the care of each patient is essential for monitoring the quality of the services. As explained in Chapter 2, more detailed recording and reporting of ABC for TB is done for new smear-positive patients who are smokers. The *ABC Smoking Cessation Card*, *ABC Smoking Cessation Register* and quarterly reports record and report their data, which are then used to monitor and evaluate the intervention and results. The cohort approach is used. This means that all new smear-positive patients who are current smokers at the beginning of their tuberculosis treatment (month 0) are recorded and become part of a cohort for that quarter of the year. Each patient's status is recorded right through to the end of treatment, then reported one year later as part of that

cohort. By determining if these patients quit smoking or make quit attempts, and make their home smokefree during their tuberculosis treatment, the tuberculosis services can evaluate patient outcomes as results of the intervention.

What are the elements to monitor?

Identification of smoking among tuberculosis patients

To find out if health care workers are identifying smokers or not, the indicator to monitor is the proportion of *Tuberculosis Treatment Cards* in which the answer to 'Patient is a current smoker of tobacco?' has been filled in.

Identification of exposure to smoking inside the home among tuberculosis patients

To find out if health care workers are identifying exposure to smoking inside the home, the indicator to monitor is the proportion of *Tuberculosis Treatment Cards* in which the answer to 'Patient is exposed to smoking inside the home?' has been filled in.

Process of delivering the ABC for TB intervention

The main indicators for monitoring the process include the proportion of:

- New smear-positive current smokers identified on the *Tuberculosis Treatment Card* who receive an *ABC Smoking Cessation Card* and are entered into the *ABC Smoking Cessation Register*
- Current smokers in the *ABC Smoking Cessation Register* who receive each step of the intervention (i.e., Ask, Brief advice and Cessation support) at month 0, 2, 5 and End of their tuberculosis treatment.

Outcomes of the intervention

The most important indicators are the proportion of:

- Current smokers among new smear-positive patients at month 0 who are quitters at the end of tuberculosis treatment

- Current smokers among new smear-positive patients at month 0 who are relapsed smokers at the end of tuberculosis treatment
- Current smokers among new smear-positive patients who were exposed to smoking inside their home at month 0 and are still exposed at the end of tuberculosis treatment.

By establishing smoking cessation as an integral part of the tuberculosis service, it is possible to monitor trends over time, such as the proportion of tuberculosis patients who are:

- Current smokers when they start tuberculosis treatment
- Exposed to smoking inside the home when they start tuberculosis treatment.

To measure longer-term outcomes of the intervention, health services could undertake some operational research. They could extract the *Tuberculosis Treatment Cards* and *ABC Smoking Cessation Cards* for a subset of patients one or two years after the end of their treatment. Once these patients are located, their current smoking status and status of exposure to smoking inside the home could be recorded and evaluated. Subsets could be selected randomly. Alternatively, the selection of subsets could be purposive—in order to investigate specific population groups. For example, one could investigate their outcomes, their access to the intervention or the process of providing them with the intervention. Groups might be, for example, women or men, or based on geographical or socio-economic indicators.

What tools are used for monitoring?

For the patient's tuberculosis treatment folder, the following documents are used:

- *Tuberculosis Treatment Card* modified to include questions about smoking and exposure to smoking inside the home
- *ABC Smoking Cessation Card*.

For the health service records, the following documents are used:

- *ABC Smoking Cessation Register*
- *Quarterly Report on Smoking Case Finding* (filled out by the coordinator)
- *Quarterly Report on the Outcome of ABC Smoking Cessation* (filled out by the coordinator).

How do we inform and involve others?

Training in schools for health care workers

All of the country's medical and nursing schools should provide basic training in smoking cessation and the promotion of smokefree environments so that all health care workers are competent to assume the responsibility of patient management in smoking cessation and the promotion of smokefree homes. The ABC for TB training programme should be developed through consultation between the NTP, tobacco control and cessation experts and any relevant health authorities. It should respect the national guidelines for smoking cessation.

Training health care workers on the job

Ongoing training of health care workers involved in smoking cessation and in the promotion of smokefree homes is essential to ensure that patients are managed correctly. It can also be an effective way to capture feedback and suggestions from health care workers, who may also pass on valuable patient feedback. When ABC for TB is first introduced in a country, it is useful to select and train a few districts as pilot areas to launch the services. The introductory training programme (see also Chapter 2 and Table 2.3) would include:

- The scientific basis and best practice basis for the ABC intervention
- Organisational aspects of setting up and managing ABC for TB
- Practice implementing each step
- Training in face-to-face behavioural support strategies
- Training in the use of stop-smoking medications (if available and affordable)
- Practice using the recording and reporting system.

The most important element of ongoing training consists of regular supervision visits to ensure that patients are managed correctly and that data collection and analysis are being carried out correctly and used to identify problems and improve services. Regular (at least annual) meetings of the health care workers involved in smoking cessation should be organised to discuss progress made and problems encountered.

What should be adapted to local conditions and situations?

The smoking cessation card, register and reports should be adapted to the local situation in each country. In particular, the organisation of the

health services and national policies or recommendations should be taken into account. The adoption of a recording and reporting system, however, is fundamentally important for ongoing evaluation. The information system must always remain an integral part of the ABC for TB intervention. Any proposed adaptations should be carefully considered to see how they might affect the evaluation of outcomes. While the context, best practice experience and evidence base for the approach presented in this Guide focus on smokers of cigarettes, the intervention could be adapted for populations in which use of other forms of tobacco is prevalent.

As for any information system, health services need to remember that data collection should always be simple, clear and kept to the absolute minimum if it is to be feasible, sustainable and justifiable for routine reporting. Often it will be more appropriate to undertake small, short operational research projects to investigate topics that are interesting and relevant, but that do not justify being reported upon constantly for all patients by the entire tuberculosis programme.

Some adaptations should only be made once local evidence has been gathered and analysed systematically. To facilitate this, an intervention is always implemented in stages:

- 1 Implementation in a few pilot locations
- 2 Analysis of the results
- 3 Possible modifications of the intervention based on the analysis
- 4 Progressive expansion of the intervention into other localities, with ongoing analysis of the results
- 5 Scale-up to cover the entire population within a defined period of time
- 6 Routine monitoring, evaluation and operational research.

What is the role of research?

Research is an important aspect of all health services. Systematic, rigorous research provides insights into the ways health services can be improved. The advantage of building research into the health system through recording and reporting systems is that routine programme evaluation provides a steady and accessible flow of rigorous data. Data collection and analysis does not rely on ad hoc funding from inside or outside the country, and the data is managed by the local health services. Information collected in routine practice is used as the starting point and allows questions to be asked for which research must find the responses.

The International Commission on Health Research recommends that a fixed percentage (5%) of the budget of any health programme should be allocated to research. This recommendation is logical, as research provides new knowledge that is a powerful tool for change.

The most suitable approach in this context is operational research. This type of research involves the health care workers responsible for patient management, provides them with new knowledge and helps them to learn to resolve problems that they confront on a regular basis. The distribution of smoking in groups of patients at risk, in the community, the efficacy of various strategies and the cost-effectiveness of the different interventions are the most appropriate subjects for this type of research.

'ABC for TB' forms

The forms for ABC for TB are provided in the Appendix. They have been prepared keeping in mind the heavy caseload characteristics of tuberculosis health care services in low- and middle-income countries. They represent the minimum of what could be used.

Tuberculosis Treatment Card

The modification to the treatment card (Appendix, Form 1) is to identify all current smokers and record exposure to smoking inside the home at month 0 and month 6/End.

- **Patient is a current smoker of tobacco?** Ask "Do you smoke? Have you smoked at all—even a puff—in the **last 3 months?**" At month 0, current smoker = has smoked in the last 3 months. Record yes or no. At month 6/End, current smoker = has smoked in the **last 2 weeks.** Record yes or no.
- **Patient exposed to smoking inside the home?** Ask "Does anyone smoke inside your home?" At month 0, record yes or no. At month 6/End, record yes or no.

ABC Smoking Cessation Card

Every new smear-positive patient with 'Yes' recorded for 'Patient is a current smoker of tobacco?' on their *Tuberculosis Treatment Card* needs an *ABC Smoking Cessation Card* (Appendix, Form 2). The card is filled out by the health care worker, kept at the health services with the patient's *Tuberculosis Treatment Card* and brought out at each sputum examination visit.

Top of the card

- **Name:** Patient's first and last name
- **Age:** Patient's age in years
- **Sex:** Male or female
- **Cessation registration no.:** Record the smoking cessation registration number sequentially as the patient is enrolled in the intervention
- **TB registration no.:** Record the registration number already given to the patient in the tuberculosis register
- **Name of treatment centre:** Record the name of the tuberculosis treatment centre.

Large table, columns from left to right

At start of TB treatment then at each sputum examination

ABC is done and recorded at 4 key routine visits during the patient's tuberculosis treatment. Month 0 is the visit when the patient is registered for tuberculosis treatment. Month 2, month 5 and End are the routine sputum examination visits. 'End' is at month 6 or whenever this last visit takes place.

- **Date:** Enter the date on which the visit takes place.

Ask

- **Do you smoke?**
For month 0: This box is pre-filled with an 'S' for current smoker (has smoked in the **last 3 months**, as determined on the *Tuberculosis Treatment Card*), since only current smokers receive an *ABC Smoking Cessation Card*.
- **Do you smoke? Have you smoked at all—even a puff—in the last 2 weeks?**
For months 2, 5 and End: Enter one of the following definitions:
 - S = current smoker: has smoked in the **last 2 weeks** before the visit and has not made any attempt to quit since the last visit (quit attempt = patient tried to quit and succeeded for at least 24 hours)
 - R = relapsed smoker: has smoked in the **last 2 weeks** before the visit but has made at least one quit attempt that succeeded for at least 24 hours since the last visit
 - Q = quitter: has not smoked at all in the **last 2 weeks** before the visit, not even a puff

D = died

L = lost to follow-up: did not attend their appointment.

Notes: Smoking status is recorded using a *point prevalence* approach. That means that the status of the patient at that particular point in time (i.e., at month 0, 2, 5 and End) is recorded. Patient status or outcome is not calculated in a cumulative manner. Since this is different from tuberculosis recording, it is important to explain this difference to health care workers. For example, patients may be relapsed smokers at one visit, since they have smoked within the last 2 weeks and made at least one attempt to quit since their last visit. However, if at their next sputum examination visit, they have smoked within the last 2 weeks and have not made any attempt to quit since their last visit, they are recorded as current smokers (they do not continue as relapsed smokers). Likewise, any quitters who come to their next visit and say that they have smoked within the last 2 weeks and have not made any quit attempts since their last visit will be recorded as current smokers.

It is acceptable to register a patient who is identified within a few weeks of month 0 as a current smoker in the month 0 box.

If any patients are identified late (that is, after month 0 at month 2, 5 or End), they should still be given an *ABC Smoking Cessation Card*. This case might arise if, at the start of tuberculosis treatment, they said they did not smoke, but at a subsequent sputum examination visit, they said they do in fact smoke. However, a line should be drawn through the month(s) when they did not have an *ABC Smoking Cessation Card*. These patients are **not** transferred into the register.

- **How soon after you wake do you usually have your first cigarette?** Enter '1' if patient smokes first cigarette within 30 minutes after waking; enter '2' if patient smokes first cigarette more than 30 minutes after waking. This is baseline data and collected at month 0 only.
- **Does anyone smoke inside your home?** Enter 'Y' (yes) or 'N' (no) at month 0, 2, 5 and End.

Brief advice

- **Given to patient:** Enter 'Y' (yes) if brief advice was given to the patient or 'N' (no) if not given. Enter this at month 0, 2, 5 and End.
- **Comments:** An optional field. Enter any notes that will help follow-up with the patient at the next visit, such as the patient's response to advice; any related diseases or conditions or any other ways used

to personalise the advice; anything the health care worker thinks is important and/or useful.

Cessation support

- **Provided to patient:** Enter 'Y' (yes) if cessation support was provided to the patient or 'N' (no) if not provided. Enter this at month 0, 2, 5 and End.
- **Comments:** An optional field. Enter any notes that will help follow up with the patient at the next visit, such as the number of cigarettes smoked per day or per week; patient's concerns, reasons, successes, difficulties related to quitting; strategies for quitting and dealing with withdrawal and urges to smoke; whether there are other smokers at home; and, anything the patient and/or health care worker thinks is important and/or useful.

Small table, lower right of page

Stop-smoking medication (if available and affordable)

- **Nicotine replacement therapy:** If given to the patient, enter the strength and number recommended per day, then enter the date or dates on which it was given to the patient and the dates on which it should start and be completed.
- **Other:** If any other stop-smoking medication was given, enter the dose, then enter the date or dates on which it was given.

ABC Smoking Cessation Register

Each patient registered at month 0 on an *ABC Smoking Cessation Card* should be entered into the register (Appendix, Form 3). All the information required for the register comes from this card.

- **Date registered:** Date of registration (day, month and year)
- **Cessation reg. no.:** Record the registration numbers sequentially. Note: This number is the same as that on the *ABC Smoking Cessation Card*.
- **TB registration no.:** Record the TB registration number. This number has already been copied onto the *ABC Smoking Cessation Card*.
- **Name:** Patient's name
- **Sex:** M for male, F for female
- **Age:** Patient's age, in years
- **Time after waking to first cigarette:** Enter '1' for ≤ 30 minutes or '2' for > 30 minutes.

- **Status of smoking:** Enter the smoking status as it was recorded for each of the 4 visits in the column 'Do you smoke?' on the card.
- **Status of exposure to smoking inside the home:** Enter the exposure status as it was recorded for each of the 4 visits in the column 'Does anyone smoke inside your home?' on the card.

Quarterly Report on Smoking Case Finding

This quarterly report (Appendix, Form 4) presents the following data for all patients that were registered in the *ABC Smoking Cessation Register* at month 0 in the preceding quarter:

- Number of **new smear-positive cases**—take total of 'New smear-positive cases' from the tuberculosis quarterly case finding report
- Number of **current smokers**—count cases marked as 'S' in column 'month 0' for 'Status of smoking' from the register (note: this is the number of patients registered at month 0 in ABC)
- Number of **current smokers with high level of addiction**—count cases marked as '1' in column 'Time after waking to first cigarette' from the register
- Number of **current smokers who are exposed to smoking inside the home**—count cases marked as 'Y' in column 'month 0' for 'Status of exposure to smoking inside the home' from the register.

The following percentages are then calculated: % of new smear-positive cases who smoke and % of new smear-positive cases who are current smokers and exposed to smoking inside the home.

Quarterly Report on Outcome of ABC Smoking Cessation at one year

The first two tables on this form (Appendix, Form 5) reproduce the point prevalence data (at month 0, 2, 5 and End) from the *ABC Smoking Cessation Register* for a cohort one year after registration.

The first table **Status of smoking** transfers from the register the number of patients for each smoking status at months 0, 2, 5 and End. The second table **Status of exposure to smoking inside the home** transfers from the register the number of patients who were exposed to smoking inside the home at month 0 and still exposed at End.

Outcome at the end of TB Treatment: For all patients who started as current smokers at month 0, percentages are calculated for smoking status

outcomes. For all patients who started as current smokers and as exposed to smoking inside the home at month 0, the percentage of those still exposed at the end of treatment is calculated.

Scenarios of asking about and recording the smoking status of tuberculosis patients

Generally the health care worker should ask all the questions needed to determine smoking status first, then give brief advice, then cessation support. However, sometimes the health care worker may feel it is appropriate to give a positive reaction or some brief advice immediately, for example, when patients report that they have quit or tried to quit. In that case, the health care worker gives some brief advice, then comes back to any questions needed to clarify the smoking status of the patient.

Scenario 1

Month

0 The health care worker (H) is filling out a *Tuberculosis Treatment Card* for a new smear-positive patient (P).

H: "Do you smoke?"

P: "Yes, but I don't smoke every day."

H: "Have you smoked at all in the last 3 months?"

P: "Yes, I usually smoke a couple of cigarettes a day. But not on the weekend."

The health care worker records 'yes' for the question "Patient is a current smoker of tobacco?" on the *Tuberculosis Treatment Card*. The health care worker starts an *ABC Smoking Cessation Card* for the patient. **Category = S for current smoker.** This category is pre-marked 'S' for month 0, since only current smokers receive a card.

2 H: "Do you still smoke?"

P: "No."

H: "Have you smoked at all in the last 2 weeks?"

P: "The last 2 weeks? I had one cigarette a while back. But only one."

H: "When did you have that last cigarette? Can you remember?"

P: "I think about 3 weeks ago. Yes, it was when the village celebrations were on."

H: "And you have had no cigarettes since then, not even a puff?"

P: "No, I haven't smoked at all since then."

Category = Q for quitter. Patient has not smoked at all, not even a puff, in the last 2 weeks before the visit.

5 H: "Are you still not smoking?"

P: "I started again. I've been smoking on and off since I last saw you."

H: "So you have been smoking in the last 2 weeks?"

P: "Yes."

H: "Did you try to quit completely again at any stage since the last visit?"

P: "Well yes, but I could only ever manage to stop for a few days."

Category = R for relapsed smoker. Patient has smoked in the last 2 weeks, but has made at least one quit attempt (that succeeded for at least 24 hours) since the last visit.

End H: "Are you smoking now? Have you smoked at all in the last 2 weeks?"

P: "Yes."

H: "Have you tried to quit again, since the last visit?"

P: "No, I haven't."

Category = S for current smoker. Patient has smoked in the last 2 weeks and has not made any attempt to quit since the last visit.

Scenario 2

Month

0 The health care worker (H) is filling out a *Tuberculosis Treatment Card* for a new smear-positive patient (P).

H: "Do you smoke?"

P: "Yes, I do."

H: "So, you have been smoking over the last 3 months?"

P: "Yes, I usually smoke about 10 cigarettes a day."

The health care worker records 'yes' for the question "Patient is a current smoker of tobacco?" on the *Tuberculosis Treatment Card*. The health care worker starts an *ABC Smoking Cessation Card* for the patient.

Category = S for current smoker. This category is pre-marked 'S' for month 0, since only current smokers receive a card and the main ABC intervention.

- 2 The health care worker is filling out the patient's *ABC Smoking Cessation Card*.

H: "Do you smoke?"

P: "Yes, I still smoke."

H: "So, you have been smoking over the last 2 weeks?"

P: "Yes, but I've cut down. I smoke a lot less now."

H: "Have you tried to completely quit smoking since the last visit, when you started on your TB treatment? When I say completely quit, that means having no cigarettes at all, not even a puff of a cigarette."

P: "Well, no, I haven't tried that. I didn't think I would be able to do it."

Category = S for current smoker. Patient has smoked in the last 2 weeks and has not made any attempt to quit since the last visit.

- 5 H: "Do you still smoke?"

P: "Yes, I do. But I have tried to stop a few times."

H: "Have you smoked at all in the last 2 weeks?"

P: "Yes."

H: "Tell me about the times when you tried to stop. Did you try to stop completely and have no cigarettes at all? Not even a puff?"

P: "Yes, and one time I managed to go for 5 days without any cigarettes."

Category = R for relapsed smoker. Patient has smoked in the last 2 weeks, but has made at least one quit attempt (that succeeded for at least 24 hours) since the last visit.

- End H: "Are you still smoking?"

P: "No, I've given up. I haven't had a cigarette for a long time now."

H: "Have you smoked at all in the last 2 weeks? Have you had a puff of a cigarette?"

P: "No, nothing at all."

Category = Q for quitter. Patient has not smoked at all, not even a puff, in the last 2 weeks before the visit.

References

- Bullen C, Walker N, Whittaker R, McRobbie H, Glover M. Smoking cessation competencies for health workers in New Zealand. *NZMJ* 2008; 121: 48–56.
- El Sony A, Slama K, Salieh M, Elhaj H, Adam K, Hassan A, Enarson DA. Feasibility of brief tobacco cessation advice for tuberculosis patients. A study from Sudan. *Int J Tuberc Lung Dis* 2007; 11: 150–155.
- Fiore MC, Bailey WC, Cohen SJ, et al. Treating tobacco use and dependence. Clinical practice guideline. Rockville, MD, USA: US Department of Health and Human Services, Public Health Service, June 2000.
- Fraser T. Tobacco-free healthcare: A tobacco-free futures action guide. International Union Against Tuberculosis and Lung Disease, 2009.
- Hughes JR. Clinical significance of tobacco withdrawal. *Nicotine Tob Res* 2006; 8: 153–156.
- Kadowaki T, Watanabe M, Okayama A, Hishida K, Okamura T, Miyamatsu N, Hayakawa T, Kita Y, Ueshima H. Continuation of smoking cessation and following weight change after intervention in a healthy population with high smoking prevalence. *J Occup Health* 2006; 48: 402–406.
- Lancaster T, Fowler G. Training health professionals in smoking cessation. *Cochrane Database Syst Rev* 2000; (3): CD0000214.
- Lancaster T, Stead L. Physician advice for smoking cessation. *Cochrane Database Syst Rev* 2004; (4): CD000165.
- Leffondré K, Abrahamowicz M, Siemiatycki J, Rachet B. Modeling smoking history: A comparison of different approaches. *Am J Epidemiol* 2002; 156: 813–823.
- McRobbie H. Current insights and new opportunities for smoking cessation. *Br J Cardiol* 2005; 12(1): 37–44.
- Ministry of Health. New Zealand smoking cessation guidelines. Wellington: Ministry of Health 2007.
- Ministry of Health. Literature review for the revision of the New Zealand smoking cessation guidelines. Wellington: Ministry of Health 2007.
- Ministry of Health. Monitoring tobacco use in New Zealand: A technical report on defining smoking status and estimates of smoking prevalence. Wellington: Ministry of Health 2008.
- NHS Stop Smoking Services: service and monitoring guidance 2010/11. United Kingdom: Department of Health 2009.
- Raw M, Regan S, Rigotti NA, McNeill A. A survey of tobacco dependence treatment services in 36 countries: Research report. *Addiction* 2008; 2443.
- Raw M, Regan S, Rigotti NA, McNeill A. A survey of tobacco dependence treatment guidelines in 31 countries: Research report. *Addiction* 2009; 2584.
- Raw M, McNeill A, Murray R. Case studies of tobacco dependence treatment in Brazil, England, India, South Africa and Uruguay: Practical business of treatment. *Addiction* 2010; 3043.
- Salieh M, Bashir S, Elmouse HK, Enarson DA, Mustafa N, Dahab ZSE, El Sony A. Participating in global tobacco research: the experience of a low-income country, Sudan. Paris, France: International Union Against Tuberculosis and Lung Disease, 2009.

- Shiffman S. Reflections on smoking relapse research. *Drug Alc Rev* 2006; 25: 15–20.
- Slama K, Chiang C-Y, Enarson DA. Tobacco cessation interventions for tuberculosis patients. A guide for low-income countries. Paris, France: International Union Against Tuberculosis and Lung Disease, 2008.
- US Department of Health and Human Services. Treating Tobacco Use and Dependence. Rockville, MD, USA: US Department of Health and Human Services, Agency for Healthcare Research Quality, 2000.
- US Department of Health and Human Services. Reducing Tobacco Use: A report of the Surgeon General. Atlanta, GA, USA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2000.
- Vega S, Stolarek I. Smoking cessation education increases interventions in a New Zealand hospital: World No Tobacco Day revisited. *NZMJ* 2010; 123: 35–40.
- Vilicer WF, Prochaska JO. A comparison of four self-report smoking cessation outcome measures. *Addictive Behaviors* 2004; 29: 51–60.
- World Health Organization. A WHO/The Union monograph on TB and tobacco control: Joining efforts to control two related global epidemics. Geneva, Switzerland: WHO, 2007.

Appendix

- Form 1 Tuberculosis Treatment Card (modified)
- Form 2 ABC Smoking Cessation Card
- Form 3 ABC Smoking Cessation Register
- Form 4 Quarterly Report on Smoking Case Finding
- Form 5 Quarterly Report on Outcome of ABC Smoking Cessation

Tuberculosis Programme

Tuberculosis Treatment Card

TB No.: _____

Name: _____

Disease site (tick one):

Age: _____ Sex: M F Date of registration: _____

Pulmonary Extra-pulmonary Site (specify) _____

Address (and Tel): _____

Category of patient (tick one):

Basic Management Unit (BMU): _____

New Treatment after failure
 Relapse Treatment after default
 Transfer in Other (specify) _____

Treatment Unit: _____

I. INITIAL INTENSIVE PHASE

For patients on retreatment, former TB No. *: _____

Prescribed regimen and no. of tablets (or grams)

New	Retreatment
RZHE	S RZHE

Month	Date	Lab no.	Smear result	Weight (kg)	Date of next appointment
0					
2					
5					
End					

TB-HIV	
Date	Result [†]
	HIV test
	CD4
	CPT start
	ART start

Cotrimoxazole 480 _____ 960 _____

Patient is a current smoker of tobacco? Month 0: Yes No

At month 6/End: Yes No

Patient exposed to smoking inside the home? Month 0: Yes No

At month 6/End: Yes No

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Month																															

Enter X on day when drugs were swallowed under direct observation, and Ø on day when the patient doesn't come for treatment.

* Attach the previous card.

[†] HIV results: P = Positive; N = Negative; I = Indeterminate; ND = Not done; HIV-positive patients should be referred to the HIV clinic;

CPT = cotrimoxazole preventive therapy; ART = antiretroviral treatment.

Please turn over

II. CONTINUATION PHASE

Regimen and number of tablets:

New cases (daily)	{RH}
4 months	

Retreatment (daily)	{RH}
6 months	

CTM 480	
CTM 960	

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
Month																																	

Enter X on day of observed administration or when drugs are collected. Draw a horizontal line —●— through the number of days supplied Ø = drugs not taken

Remarks: _____

Treatment outcome Date of decision: _____

Cure
 Treatment completed
 Treatment failure
 Died
 Default
 Transfer out; BMU name _____

ABC Smoking Cessation Card

For new smear-positive patients who are current smokers at month 0

Name _____ Age _____ Sex M F Treatment Centre _____ Cessation Registration no. _____
 TB Registration no. _____

At start of TB treatment then at each sputum examination visit:	Ask		Brief advice 30 seconds–1 minute Comments	Cessation support 1–3 minutes Comments		
	Month Date	Do you smoke?*		How soon after you wake do you usually have your first cigarette?	Does anyone smoke inside your home?	Given to patient
0		S	1 = ≤30 min or 2 = >30 min	Y = yes N = no	Y = yes N = no	
2						
5						
End						

Definitions for status of smoking

For month 0, S for current smoker (has smoked in the last 3 months)
 For months 2, 5, End, enter one of S, R, Q, D or L:
 S = current smoker: has smoked in the last 2 weeks before the visit and has not made any quit attempt since the last visit (quit attempt = patient tried to quit and succeeded for at least 24 hours).
 R = relapsed smoker: has smoked in the last 2 weeks before the visit but has made at least one quit attempt of at least 24 hours since the last visit.
 Q = quitter: has not smoked at all in the last 2 weeks before the visit, not even a puff.
 D = died.

L = lost to follow-up: did not attend their appointment.
Note: If a patient is registered after month 0, draw a line through the month(s) when patient was not registered.

If available and affordable:

Stop-smoking medication	Type(s) and dose (e.g., patches, gum etc.)	Date(s) given
Nicotine replacement therapy (NRT)		
Other:		

ABC Smoking Cessation Register

Include all cases registered with an ABC Smoking Cessation Card

Centre:

Year:

Date registered	Cessation Reg. No.	TB Reg. No.	Name	Sex M/F	Age	Time after waking to first cigarette 1 = ≤30 min or 2 = >30 min	Status of smoking* (S, R, Q, D or L)				Status of exposure to smoking** inside the home** (Y or N)								
							Month 0	2	5	End	Month 0	2	5	End					

* For each month, enter the letter that was recorded for that month in column 'Do you smoke?' on the ABC Smoking Cessation Card.

** For each month, enter the letter that was recorded for that month in column 'Does anyone smoke inside your home?' on the ABC Smoking Cessation Card.

Quarterly Report on Smoking Case Finding

Cases registered in the ABC Smoking Cessation Register in the preceding quarter

Name of Centre: _____ Centre Coordinator: _____

Cases registered in _____ quarter of (year) _____ Signature: _____ Date: _____

<p>A. Number of new smear-positive TB cases: _____</p>	<p>Take total of 'New smear-positive cases' from the tuberculosis quarterly case finding report</p>
<p>B. Number of current smokers: _____</p>	<p>Count cases marked as 'S' in column 'Month 0' for 'Status of smoking' from the ABC Smoking Cessation Register</p>
<p>C. Number of current smokers with high level of addiction: _____</p>	<p>Count cases marked as '1' in column 'Time after waking to first cigarette' from the ABC Smoking Cessation Register</p>
<p>D. Number of current smokers who are exposed to smoking inside their home: _____</p>	<p>Count cases marked as 'Y' in column 'Month 0' for 'Status of exposure to smoking <u>inside</u> the home' from the ABC Smoking Cessation Register</p>
<p>E. % of new smear-positive cases who are current smokers: _____</p>	<p style="text-align: center;">$\frac{B}{A} \times 100$</p>
<p>F. % of new smear-positive cases who are current smokers and exposed to smoking inside their home: _____</p>	<p style="text-align: center;">$\frac{D}{A} \times 100$</p>

Quarterly Report on Outcome of ABC Smoking Cessation

Cases registered in the ABC Smoking Cessation Register in the quarter ending 12 months prior to reporting date

Name of Centre: _____ Centre Coordinator: _____

Cases registered in _____ quarter of (year) _____ Signature: _____ Date: _____

Status of smoking				
Current smoker (S)	Relapsed smoker (R)	Quitter (Q)	Died (D)	Lost to follow-up (L)
0				
2				
5				
End				

Status of exposure to smoking inside the home (for current smokers at month 0)	
	Yes (Y)
0	
End	

Outcome at the End of TB treatment	
% of current smokers at month 0 who were current smokers at End	$\frac{S^{End}}{S^0} \times 100 =$ _____
% of current smokers at month 0 who were relapsed smokers at End	$\frac{R^{End}}{S^0} \times 100 =$ _____
% of current smokers at month 0 who were quitters at End	$\frac{Q^{End}}{S^0} \times 100 =$ _____
% of current smokers at month 0 who had died or were lost to follow-up at End	$\frac{D^{End} + L^{End}}{S^0} \times 100 =$ _____
% of current smokers exposed to smoking inside the home at month 0 who were still exposed at End	$\frac{Y^{End}}{Y^0} \times 100 =$ _____

About The Union

Founded in 1920, the International Union Against Tuberculosis and Lung Disease (The Union) is dedicated to bringing innovation, expertise, solutions and support to address health challenges in low- and middle-income populations. With nearly 10,000 members and subscribers from over 150 countries, The Union has its headquarters in Paris and offices serving the Africa, Asia Pacific, Europe, Latin America, Middle East, North America and South-East Asia regions. Its scientific departments focus on tuberculosis, HIV, lung health and non-communicable diseases, tobacco control and research. Each department engages in research, provides technical assistance and offers training and other capacity-building activities leading to health solutions for the poor.

For more information, please visit www.theunion.org

