Treating Tobacco Dependency

Diagnosis and treatment of tobacco dependence

Many opportunities along life course to diagnose and treat tobacco dependence

Need the *right* training, *right* equipment and access to the *right* medication.

Darush Attar-Zadeh Pharmacist
On behalf of London Senate Helping Smokers Quit Delivery Team
Smoking is the largest cause of premature death.

- Smoking: 79,100
- Alcohol: 21,485
- Obesity: 34,100
- Suicide: 4,507
- Drug misuse: 1,812
- Traffic: 1,713
- HIV: 527
Disease that starts from childhood

Smoking in England

19% of adults in England smoke – over 8 million people

Smoking is concentrated in the more disadvantaged groups

Two thirds of smokers start before age 18

1 in 2 long-term smokers dies from a smoking-related illness
Londoners dying from smoking

‘This is population data... Public Health’s responsibility Not my problem.’

‘1 in 5 deaths due to smoking’
Smoking prevalence in England 18.4%

Variations across populations

- Male: 21.1%
- Female: 16.5%
- Routine & Manual: 28.9%
- Managerial & Professional: 12.7%
- South East: 17.3%
- North East: 22.3%
‘Premature’ deaths attributable to smoking
Stolen years +++

Adults with mental health problems .... smoke 42%* of all tobacco in England.

People with mental health problems ... die on average 16-25 years sooner than the general population.

High prevalence of tobacco dependence
Much higher proportion of high tobacco dependence
Why?

First do no harm?
24-40% COPD patients still smoke
Vulnerable patients
Highly tobacco dependent
Socially isolated
Significant deprivation
Pressure of discharge planning
Non specialist teams/inadequate support for colleagues

1 in 4 of all O2 related domestic fires result in death
1 in 3 result in serious injury
Pharmacotherapy plus behavioural support proven most effective

- Pharmacotherapy in combination with intensive behavioural support gives the optimum chance of success\(^1\)

<table>
<thead>
<tr>
<th>Successful quit rate</th>
<th>No treatment</th>
<th>NRT + brief advice</th>
<th>Support + drug treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3%</td>
<td>10%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Successful quit rate (%)
Why is it hard for your patient to stop smoking?

- Short half life of nicotine requires smokers to regularly smoke to maintain levels\(^2\)
- Reinforcing desired effects of nicotine with each cigarette soon becomes addictive\(^2\)

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How addicted are you to smoking?
The Fagerström Test for Nicotine Dependence

Score each of the following questions (the scores are given in brackets)

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How soon after you wake up do you have your first cigarette?</td>
<td>A. Within 5 minutes (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. 6-30 minutes (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C. 31-60 minutes (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D. After 60 minutes (0)</td>
<td></td>
</tr>
<tr>
<td>2. Do you find it difficult to refrain from smoking in places where it is forbidden, e.g., in church, the library, the cinema, etc?</td>
<td>A. Yes (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. No (0)</td>
<td></td>
</tr>
<tr>
<td>3. Which cigarette would you hate most to give up?</td>
<td>A. The first one in the morning (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. All others (0)</td>
<td></td>
</tr>
<tr>
<td>4. How many cigarettes do you smoke per day?</td>
<td>A. 10 or fewer (0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. 11-20 (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C. 21-30 (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D. 31 or more (3)</td>
<td></td>
</tr>
<tr>
<td>5. Do you smoke more often during the first hours after waking than during the rest of the day?</td>
<td>A. Yes (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. No (0)</td>
<td></td>
</tr>
<tr>
<td>6. Do you smoke even if you are so ill that you are in bed most of the day?</td>
<td>A. Yes (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. No (0)</td>
<td></td>
</tr>
</tbody>
</table>
Smoking makes stress worse!

1. Smoking delivers nicotine
2. Nicotine travels to the brain quickly
3. Dopamine released leading to a feeling of pleasure & calmness
4. Drop in dopamine leads to withdrawal symptoms of irritability and stress
5. Desire for another cigarette to release more dopamine to relieve withdrawal symptoms
Nicotine withdrawal can commonly be confused with side effects of drugs e.g. Champix

<table>
<thead>
<tr>
<th>Nicotine Withdrawal (some common symptoms that may affect LTC’s e.g. depression):</th>
<th>Some common medications that interact with smoking (see notes below for each LTC):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irritability/aggression</td>
<td>Significant Interaction:</td>
</tr>
<tr>
<td>&lt; 4 weeks</td>
<td>Theophylline (Asthma - Nuelin SA, Slo-Phyllin, Uniphyllin)</td>
</tr>
<tr>
<td>best relieved by NRT, Zyban or Champix</td>
<td>Caffeine*</td>
</tr>
<tr>
<td>Depression (predicts relapse)</td>
<td>Olanzapine (Antipsychotic)</td>
</tr>
<tr>
<td>&lt; 4 weeks</td>
<td>Clozapine (Antipsychotic)</td>
</tr>
<tr>
<td>Restlessness</td>
<td>Moderate Interaction:</td>
</tr>
<tr>
<td>&lt; 4 weeks</td>
<td>Insulin (Diabetes)</td>
</tr>
<tr>
<td>Poor concentration</td>
<td>Warfarin (Anticoagulant)</td>
</tr>
<tr>
<td>&lt; 2 weeks</td>
<td>Chlorpromazine (Antipsychotic)</td>
</tr>
<tr>
<td>Increased appetite</td>
<td>Propranolol and other B-Blockers (anxiety, blood pressure)</td>
</tr>
<tr>
<td>&gt; 10 weeks</td>
<td>Smoking interacts with certain medications – NOT CHAMPIX</td>
</tr>
<tr>
<td>Light-headedness</td>
<td></td>
</tr>
<tr>
<td>&lt; 48 hours</td>
<td></td>
</tr>
<tr>
<td>Night time awakenings</td>
<td></td>
</tr>
<tr>
<td>&lt; 1 week</td>
<td></td>
</tr>
<tr>
<td>Cough</td>
<td></td>
</tr>
<tr>
<td>Respiratory tract infections</td>
<td></td>
</tr>
</tbody>
</table>

* Monitor caffeine in-take as blood levels will rise significantly if a person stops smoking and consumes high levels of caffeine.

LTC = Long Term Conditions
Effectiveness of smoking cessation

Prescribing medication

‘Support’ = specialist individual behavioural support

1. Smoking delivers nicotine

2. Nicotine travels to the brain quickly

3. CHAMPIX action 1: prevents nicotine binding to a receptor in the brain

4. CHAMPIX action 2: releases reduced level of dopamine vs. nicotine

5. Reduced cravings and withdrawal symptoms

6. Makes quit success more achievable

Reduces reward & reinforcing aspects of smoking if a person smokes while taking CHAMPIX — encouraging abstinence from smoking
Don’t Assume A Person Has Understood Your Advice!
Prescribing medication

Why and how to prescribe varenicline in hospital

Helping smokers quit in hospital - safe and effective treatment of tobacco dependence

Who is this information for?

Hospital doctors who are prescribers (doctors and nurses), pharmacists, and others who care for people who are smokers, i.e., tobacco dependents, who do not have much experience of prescribing varenicline in smoking cessation medication.

Why has it been provided?

Clinicians often have a number of concerns about varenicline, such as cost, availability, and efficacy. This information is provided to address those concerns and to promote the use of varenicline as a smoking cessation medication. Therefore, many clinicians have been trained, and do not have experience in prescribing nicotine replacement therapy.

What are some of the common clinician concerns about prescribing varenicline?

- How does varenicline compare with the other treatments available?
- Should varenicline be combined with nicotine replacement therapy?
- How can smokers be helped to quit smoking using varenicline?

 Prescribed Stop

How to use it

- Apply each morning to the lower part of the neck or underarm. Place the patch on a different site. Site toxicity should not be repeated for several days. Some patches are only applied for 4-16 hours.
- If you miss a patch, apply a new one as soon as possible.

Advantages and disadvantages

- Avoidance of nicotine withdrawal
- Higher quit rates
-Fewer withdrawal symptoms
- Not as likely to experience side effects
- Safer and more effective than nicotine replacement therapy

Disadvantages

- Cost
- Side effects such as nausea, headache, and dizziness
- Not for all smokers

Oral strips

- Nicotine 2.5mg
- Transdermal film
- Available in 15 and 60 mg

- 1 nicotine film every 1-2 hours in a 4-8 hour period.
- Place the film on the inner surface of the cheek.
- Do not chew or swallow.
- If the film is not absorbed, it should be cut in half and placed on the inner surface of the cheek.
- Claims to relieve cravings within 5-10 minutes.

Gastroesophageal reflux disease, heartburn, diarrhea, fatigue, headache, nausea, rash, stomach pain, vomiting.

Prescribing smokers QUIT

Adding value to every clinical contact by treating tobacco dependence

Appendix 2 -

- VSF 2015-16
- E-4007
- A-4007
- 13

January 2016

Why and how to prescribe varenicline in hospital - January 2016
Principles underlying treatment

To keep the motivation not to smoke above the motivation to smoke at all times

Resolve not to smoke

Urge/need to smoke

Maximise resolve:
- ‘Not a single puff’
- Ex-smoker identity
- Social contract
- Personal satisfaction

The right training for a conversation, not just a chat

The right and most effective medication

Minimise urge/need:
- Avoid cues
- Reduce physiological need
- Distraction/coping

Reproduced with kind permission from Prof Robert West rjwest.co.uk
Enabling conversations

Online training module
WWW.NCSCT.CO.UK/VBA

Very Brief Advice on Smoking
30 seconds to save a life

ASK
AND RECORD SMOOKING STATUS
Is the patient a smoker, ex-smoker or a non-smoker?

ADVISE
ON THE BEST WAY OF QUITTING
The best way of stopping smoking is with a combination of medication and specialist support.

ACT
ON PATIENT'S RESPONSE
Build confidence, give information, refer, prescribe. They are up to four times more likely to quit successfully with support.

REFER THEM TO THEIR LOCAL NHS STOP SMOKING SERVICE

NHS Centre for Smoking Cessation and Training
A short training module on how to deliver very brief advice on smoking.
Visit Training Module
Cheap ~ £150
Quick - easy to use
Diagnostic:
Smoking contributing
Tobacco dependence
Motivational tool
Outcome measure

Using CO monitor readings

<table>
<thead>
<tr>
<th>CO (ppm)</th>
<th>% CO Hb</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 and above</td>
<td>3.04%</td>
</tr>
<tr>
<td>18</td>
<td>2.68%</td>
</tr>
<tr>
<td>17</td>
<td>2.72%</td>
</tr>
<tr>
<td>16</td>
<td>2.56%</td>
</tr>
<tr>
<td>15</td>
<td>2.40%</td>
</tr>
<tr>
<td>14</td>
<td>2.24%</td>
</tr>
<tr>
<td>13</td>
<td>2.08%</td>
</tr>
<tr>
<td>12</td>
<td>1.92%</td>
</tr>
<tr>
<td>11</td>
<td>1.76%</td>
</tr>
<tr>
<td>10</td>
<td>1.60%</td>
</tr>
<tr>
<td>9</td>
<td>1.44%</td>
</tr>
<tr>
<td>8</td>
<td>1.28%</td>
</tr>
<tr>
<td>7</td>
<td>1.12%</td>
</tr>
<tr>
<td>6</td>
<td>0.96%</td>
</tr>
<tr>
<td>5</td>
<td>0.80%</td>
</tr>
<tr>
<td>4</td>
<td>0.64%</td>
</tr>
</tbody>
</table>

Highly Dependent
Almost certainly smoking
- 10-20ppm

Moderate Dependence
Possibly smoking
- 5-9ppm

Light Dependence
Non-smoker
- 1-3ppm
### Clinical Checklist: Pre-quit assessment (Session 1)

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Assessing current readiness and ability to quit</td>
<td></td>
</tr>
<tr>
<td>• Informing the client about the treatment programme</td>
<td></td>
</tr>
<tr>
<td>• Assessing current smoking</td>
<td></td>
</tr>
<tr>
<td>• Assessing past quit attempts</td>
<td></td>
</tr>
<tr>
<td>• Assessing nicotine dependence</td>
<td></td>
</tr>
<tr>
<td>• Explaining &amp; conducting carbon monoxide (CO) monitoring</td>
<td></td>
</tr>
<tr>
<td>• Explaining the importance of abrupt cessation &amp; the ‘not a puff’ rule</td>
<td></td>
</tr>
<tr>
<td>• Informing the client about withdrawal symptoms</td>
<td></td>
</tr>
<tr>
<td>• Discussing medication</td>
<td></td>
</tr>
<tr>
<td>• Setting the quit date</td>
<td></td>
</tr>
<tr>
<td>• Prompting a commitment from the client</td>
<td></td>
</tr>
<tr>
<td>• Discussing preparations and providing a summary</td>
<td></td>
</tr>
</tbody>
</table>

*This checklist can be found at the back of the Standard Treatment Programme, which is available to download from the Training Resources Section at [www.ncsct.co.uk](http://www.ncsct.co.uk)*
Responding to patients exercise

1. I’ve cut down my smoking already
2. I’ve tried absolutely everything and nothing seems to work
3. I’m going to find it really hard as my partner still smokes
4. I’m currently using e-cigarettes
5. Have you ever smoked?
6. I’m really going to miss that first cigarette in the morning with a cup of tea
Resources

http://www.londonsenate.nhs.uk/helping-smokers-quit/
Changing how we think about smoking

As a clinician ....

My key roles and responsibilities are diagnosis and treatment
I diagnose and treat other addictions/dependence eg alcohol
I ‘look after’ many patients who are sick because of smoking and are tobacco dependent

It is therefore my responsibility as a clinician to diagnose and treat tobacco dependence in every patient I see.

‘Smoking’ is tobacco/nicotine dependence
Smoking cessation is THE treatment for tobacco dependence
Smoking cessation as treatment has a very strong evidence base

Words from a wise clinician
Any Questions?

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