By Andrew Scanlon RN, MRCNA

Nursing and the 5As guideline to smoking cessation interventions

Introduction

There should be no argument among all health professionals that tobacco smoke is the leading cause of preventable morbidity and mortality in Australia. The burden both tangible and intangible that smoking related disease places on the Australian community is estimated in the billions of dollars per year (Callins et al 2004). Yet despite this universal understanding nurses, especially those in acute care settings, are either reluctant to or have little knowledge of how to provide brief, specific, evidence based counselling for patients in their care. The following clinical update outlines how the nationally endorsed 5As model for smoking cessation may be implemented.

What to do?

International studies and best practice indicate that even brief interventions from health professionals can increase a patient's ability to quit smoking (Joanna Briggs Institute for Evidence Based Nursing and Midwifery 2001). Acute care nurses are in a unique position to provide counselling on health related issues as they not only comprise the vast majority of professionals within the health care workforce but also provide a 24-hour, seven days a week service. Patients within the acute care setting are often physically vulnerable and usually contemplating (on some level) or actively seeking advice on how they can improve their health (such as smoking cessation) (Wolfenden et al 2004). However evidence demonstrates that acute care nurses lack the knowledge, skills and confidence to be effective when providing smoking cessation interventions (Nagle et al 1999).

Currently similar smoking cessation guidelines for all health professionals are promoted and endorsed by agencies around the world including the US Department of Health and Human Services (Fiore et al 2000), United Kingdom’s National Health Service (West et al 2000) and by the Australian Government Department of Health and Ageing (Department of Health and Ageing and Ministerial Council on Drug Strategy 2005) which requires all health professionals to follow a minimal set approach when caring for patients with tobacco addiction. This approach is called the 5As (4As in the UK). Nationally the recommended 5As for all health care professionals are Ask (about current and past Tobacco use), Assess (nicotine dependence), Advise (all smokers to quit), Assist (all smokers to quit) and finally Arrange (a follow up contact from an appropriate support service).

The 5As for smoking cessation

1. ASK

Despite being the most fundamental of all the 5As it is probably an intervention not done frequently. Asking a patient about their smoking status identifies it as a real concern. Questions involved in the first stage determine a patient’s smoking history, possible side effects and factors that contribute to their continued smoking (see table 1). All of which allows insight to the individual's addiction and possible strategies for breaking the cycle.

2. ASSESS

The nationally endorsed 5As differs from the USA and New South Wales Health Department recommendations only in the sequence of the 5As (Advise rather than Assess). Authors of the nationally endorsed guidelines felt that assessment of a patient’s dependence would provide insight to their addiction or dependence and help tailor the advice, planning and referral process in latter stages (Zwar et al 2005).

The first component of this phase is to assess the patient's willingness to quit by simply asking three questions (table 2A). These questions are adapted Prochaska and DiClemente Stages of Change model (Prochaska and DiClemente 1983). The Stages of Change model identifies an individual's point of transition during a life-changing event. If the individual is not ready to quit (pre-contemplation) they may not see the immediate need to quit smoking and may resist counselling. If they are unsure (contemplation) they may be considering quitting but require further information or counselling to assist with their decision. If the individual is ready (preparation) they may still be smoking and willing to stop but require further assistance in developing a plan to help them quit. Those that have or are in the process of stopping (action) may still need reinforcement of their decision as the risk of relapse is a problem in the early stages of the process. Those who have stopped for more than six months (maintenance) will require ongoing support to ensure they do not relapse.

The next assessment stage is the Fagerström Test for Nicotine Dependence...
The American Psychological Association's *Diagnostic and statistical manual of mental disorders: DSM-IV-TR* criteria for nicotine withdrawal (table 2C) (American Psychiatric Association 2002) allows insight and criteria for nicotine disorders: *DSM-IV-TR* Diagnostic and statistical manual of mental disorders. The American Psychological Association's organisation allows a non-confrontational approach to the subject of tobacco addiction. It provides some leeway with patients for more open and reasonable discussion of the issue, as some may think it is an arbitrary rule imposed individually rather than a policy of the institution.

Advice from this stage would be tailored to the individual patient but should include the effects of smoking on themselves and their loved ones as well as the potential benefits of quitting (Table 3A and 3B).

3. ADVISE

Advising is applicable to all present and past patients who smoke. Advising the patient about the ‘Smokefree policy’ of the organisation allows a non-confrontational approach to the subject of tobacco addiction. It provides some leeway for patients to more open and reasonable discussion of the issue, as some may think it is an arbitrary rule imposed individually rather than a policy of the institution.

Advice from this stage would be tailored to the individual patient but should include the effects of smoking on themselves and their loved ones as well as the potential benefits of quitting (Table 3A and 3B).

4. ASSIST

Non-Pharmacological

Assist formulates a quit plan for the patient using the information gained from other phases (see table 4). Assist could be seen as a form of motivational interviewing whereby the counsellor/nurse discusses the patient’s ambivalence to an issue and allows the patient to come to an appropriate decision for themselves. It incorporates such techniques as weighing up the pros and cons of smoking, opened ended questions relating back to specific advice that has already been given (Are you aware that when you are stressed or worried you smoke? What strategies have you used in the past to cope when cigarettes were not available to you?).

Literature available from local, state and federal governments as well as QUIT organisations around the country are an invaluable resource that are appropriately funded specifically with this in mind.

The 4Ds is a controversial smoking cessation method for coping with cravings however it is still widely used (Bittoun 2003). The method is meant to distract the potential smoker from succumbing to the urge to smoke. The 4Ds are:

- delay the urge to smoke as much as possible
- deep breaths
- drink water, and
- do something else

Pharmacological

Although it is beyond the scope of this *Clinical Update* to fully inform nurses on pharmacological options to assist patients to quit it is reasonable to discuss these briefly. Depending on the scope of practice, it may or may not be possible to nurse initiate Nicotine Replacement Therapy (NRT) as this differs from state to state. NRT comes in various forms such as patch, gum, inhaler and lozenge. All can assist in decreasing withdrawal symptoms associated with quitting smoking and have been clinically proven to at least double the success rate for those quitting (Silagy et al 2004).

These preparations can also be combined for heavily nicotine addicted patients but as with all medications they should only be initiated after consultation with and ongoing supervision by the patients treating doctor.

Another medication worth noting is the weak antidepressant Bupropion that has been widely advocated as first line of treatment for those in which it is not contraindicated. It is believed to aid smoking cessation through the inhibition of various neurochemicals normally activated in the brain by smoking (Roddy 2004).

5. ARRANGE

The final stage encourages further ongoing interaction with the patient in relation to their smoking. This may entail referral to a relevant smoking cessation or QUIT services. Referrals require the consent of the patient as they may be unwilling to seek such a service. Encouragement to attend or participate in the program is essential as the patient may feel it is not worthwhile or that they can quit on their own. These services can help those who want to quit as well as those who have found quitting through counselling on relevant strategies for the individual. An example of how this could be achieved is documented in table 5.

**Conclusion**

As indicated earlier it is an expectation that all health care professionals, especially nursing staff follow the nationally endorsed 5As model for smoking cessation. This consistent and evidence based approach has been shown to increase patients ability to overcome tobacco addiction and as demonstrated is relatively easy to implement. Therefore the 5As guidelines for smoking cessation interventions should be a part of any acute care admission as well as ongoing patient care.

**References**


**Table 1: Ask**

Do you smoke?
If no,
- Have you ever smoked?
- When did you quit smoking?

How old were you when you started smoking?

How many quit attempts?

Why did you fail?
ie: stressful event, peer pressure, withdrawal symptoms, boredom, fear of failure, weight gain, peer pressure etc. Specify.

Any smoking related disease?
ie: CHD, PVD, stroke, emphysema, hypertension, cancer etc. Specify.

Do you plan on smoking when you return home?

**Table 2B: Assess**

**Fagerström Test for Nicotine Dependence (FTND)**

<table>
<thead>
<tr>
<th>Questions</th>
<th>Answers</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How soon after waking do you smoke your first cigarette?</td>
<td>Within 5 minutes</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>6 - 30 minutes</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>31 - 60 minutes</td>
<td>1</td>
</tr>
<tr>
<td>2. Do you find it difficult to abstain from smoking in places where it is forbidden?</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>3. Which cigarette would you hate to give up?</td>
<td>The first one in the morning</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Any other</td>
<td>0</td>
</tr>
<tr>
<td>4. How many cigarettes a day do you smoke?</td>
<td>10 or less</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>11 - 20</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>21 - 30</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>31 or more</td>
<td>3</td>
</tr>
<tr>
<td>5. Do you smoke more frequently in the morning than in the rest of the day?</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>6. Do you smoke even though you are sick in bed for most of the day?</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>0-2 very low dependence, 3-4 low dependence, 5 medium dependence, 6-7 high dependence, 8+ very high dependence</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 2A: Assess**

**Readiness to quit question:**
Are you ready to quit smoking?

**Answers**

Not ready
(Within the next 6 months)

Unsure
(Considering within the next 6 months)

Ready
(Within 30 days)

**Table 2C: Assess**

**Nicotine Withdrawal Symptoms**

Cravings

PLUS four or more of the following:
- depressed mood
- anxiety
- irritability, frustration or anger
- increase appetite or weight gain
- restlessness
- insomnia
- difficulty concentrating
- decrease heart rate

**Table 3A: Advise**

**Smokefree Policy**

Inform the patient that your health service has a smokefree policy and that smoking is prohibited everywhere except in designated smoking areas located...

While I respect that it is your decision to smoke, I strongly advise you to stop smoking.

**Health Effects of Smoking**

**Central Nervous System**
- stroke
- eyes: macular degeneration
- Gastrointestinal System
  - stomach: ulcers/cancers
  - mouth & pharynx; cancer
  - gum disease
  - pancreas: cancer
  - blocks insulin uptake
- Dermological
  - hair loss
  - wrinkles
  - wound infection

**Cardiovascular System**
- congestive heart disease
- peripheral vascular disease
- hypertension
- REN/UR/GYNAE
  - bladder cancer
  - men: impotence
  - women: cervical cancer, early menopause, irregular & painful periods
- Pregnancy
  - premature birth
  - miscarriage
  - low birth rate

**Respiratory System**
- emphysema
- pneumonia
- lung Cancer
- MUS/SKEL
  - osteoporosis

**Environmental tobacco smoke**

Children:
- SIDS
- respiratory infections such as bronchitis
- middle ear infections
- meningococcal infections
- asthma attacks

Adults:
- lung cancer
- heart disease

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Table 3B: Advise

Advice must also be accurate and honest

Health Benefits of Stopping Smoking
12 hours: Almost all the nicotine has been metabolised
24 hours: Blood levels of carbon monoxide have dropped dramatically
5 days: Most nicotine by-products have been removed. Sense of taste and smell improve
6 weeks: Risk of wound infection after surgery substantially reduced
3 months: Cilia begin to recover and lung function improves
10 years: Risk of lung cancer is less than half that of a continuing smoker and continues to decline
15 years: Risk of coronary heart disease the same as a non-smoker
10 to 15 years after quitting the all-cause mortality in former smokers declines to the same level as people who have never smoked

Other benefits
Pregnancy: Women who quit before or in the early months of pregnancy have the same risk of having a low birth weight baby as women who have never smoked
Improved appearance of skin and fitness
Saves money

Withdrawal Symptoms
Resolves over 10-14 days but can last up to 4 weeks.
The association (not physical withdrawal) that causes a person to think about smoking can persist for years and may never go away.

Alcohol
As there is a high correlation between use of alcohol and relapse to smoking it is recommended that alcohol be avoided or at the very least decreased, especially for the first two weeks of a cessation attempt.

Caffeine
Continuous caffeine consumption with smoking cessation has been associated with more than doubled caffeine plasma levels. It is therefore recommended that caffeine consumption be reduced during a cessation attempt.

Table 4: Assist

Formulate a Quit plan
Advise all smokers to quit using information from relevant sources.

Admission diagnosis/past history
How does this relate to smoking now or in the future?

Ask
Review past periods of abstinence to determine what helped and what hindered Identify future problems and make a plan to deal with them (problem-solving)

Assess
Readiness to quit, level of dependence and severity of current nicotine withdrawal symptoms

Advise
Reinforce the following by relating it again back the patient present admission, past history and potential future presentations

Table 5: Arrange

Follow up

Discharge letter
(Ensure that patient’s smoking status, strategies implemented and referrals made are documented for GP)

Quitline referral
(Patient sighted and signed Quit referral if willing)

Smoking cessation referral
(specify service)

Document in Patients Notes
1. Patient’s smoking history (ASK)
2. Readiness to quit, nicotine dependence score and nicotine withdrawal symptoms (ASSESS)
3. General education was given on the effects of smoking and the benefits of quitting (ADVISE)
4. Specific education tailored to the individual and pharmacotherapy commenced for patients whilst admitted (ASSIST)
5. Any referral made on the patients behalf (ARRANGE)

Useful links
World Health Organization Tobacco Free Initiative www.who.int/tobacco/en/

ASH Australia www.ashaust.org.au
QUIT www.quit.com.au

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