

DRUG INFO



UNIT FARMASI
HOSPITAL KOTA MARUDU

ISSUE:02/22

INTRODUCTION

- Cigarette smoking is one of the main causes of preventable death and disease globally where it leads people to be at risk of certain diseases such as lung cancer and heart disease.
- Recent data revealed that around 27,000 Malaysians die each year due to smoking-related illnesses.
- Quitting smoking has immediate and significant benefits, reducing the risks of diseases caused by smoking, thus improving both physical and mental health.
- However, quitting smoking can be difficult for many even if they voluntarily want to quit after understanding the harms caused by tobacco use.
- This is due to the nicotine content in cigarettes that makes them highly addictive causing both physical and psychological dependence.
- Although many who quit were able to do so successfully without any assistance but the smoking cessation interventions tend to help elevate the quit rates even more.

5A'S STRATEGY FOR BRIEF INTERVENTION

ASK	Identify and document tobacco use status or exposure to tobacco smoke
ADVISE	Advise in a clear, strong and personalized manner, urge every tobacco user to quit.
ASSESS	Is the tobacco user willing to make a quit attempt at this time? If the patient is unwilling to make a quit attempt, provide a motivational intervention built around the "5 R's": Relevance, Risks, Rewards, Roadblocks, and Repetition.
ASSIST	Assist in quit attempt for patients who are willing to make a quit attempt, use counselling with pharmacotherapy (when indicated) to help him or her quit. Apply STAR method in preparations for quitting.
ARRANGE	Follow-up should occur soon after the quit date, preferably during the first week. Subsequent follow-ups are recommended weekly within the first month, and then every two weeks for the 2nd and 3rd month, and monthly after that up to 6 months.

STAR METHOD FOR PATIENT'S PREPARATIONS TO QUIT

Set	Set a quit date. Ideally, the quit date should be within 2 weeks.
Tell	Tell family, friends, and co-workers about quitting and request understanding and support. Also, help patient obtain extra-treatment social support from self-help groups, if available.
Anticipate	Anticipate challenges to planned quit attempt, particularly during the critical first few weeks, including nicotine withdrawal symptoms. Discuss challenges/triggers and how to overcome them.
Remove	Remove tobacco products from the environment. Prior to quitting, avoid smoking in places where most of the time is spent (e.g., work, home, car).

5R'S APPROACH FOR PATIENTS WHO ARE UNWILLING TO QUIT

Relevance	Encourage the patient to indicate why quitting is personally relevant, being as specific as possible.
Risks	Ask the patient to identify potential negative consequences of tobacco use.
Rewards	Ask the patient to identify potential benefits of stopping tobacco use.
Roadblocks	Ask the patient to identify barriers or impediments to quitting and provide treatment that could address barriers.
Repetition	Repeat motivational intervention every time an unmotivated patient visits the clinic setting.

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	Nicotine Gum	Nicotine Inhaler	Nicotine Patch	Nicotine Lozenge	Nicotine Nasal Spray
Patient selection	1. First-line agent for smoking cessation to help control cravings and manage withdrawal symptoms. 2. Contraindication: Recent cerebrovascular accident, Non-smokers and occasional smokers, Pregnancy and lactation (FDA Category D) (except intermittent, short-acting NRT forms of gum and lozenge).				
Precaution	1. Pregnant smokers should be encouraged to quit first without pharmacologic treatment. Nicotine should be used during pregnancy only if the increased likelihood of smoking abstinence, with its potential benefits, outweighs the risk of nicotine replacement and potential concomitant smoking. Similar factors should be considered in lactating women. 2. Should be used with caution among certain cardiovascular patient (immediate post myocardial infarction period, serious arrhythmias, and serious/worsening angina pectoris).			DM, MI, severe dysrhythmia or CVA. Active oesophagitis, oral or pharyngeal inflammation, gastritis, gastric or peptic ulcer. Moderate to severe renal/hepatic impairment. Children	Inhaling nicotine into the nasal mucosa produces side effects, particularly nasal irritation, that have limited its tolerability.
	Avoid coffee, acidic drinks/ soft drinks for 1min before take gum.	May cause bronchospasm (not given with severe airway reactivity).	Do not leave the patch overnight (causes side effects of insomnia and vivid dreams).		
Side effects	Mouth soreness, hiccups, dyspepsia, and jaw ache (can be prevented using proper chewing technique).	Local irritation in the mouth and throat (declined with continued use).	Skin irritation (must rotate the site daily), Insomnia.	Nausea, vomiting, dyspepsia, upper abdominal pain ,headache, insomnia, pharyngitis.	Nasal and throat irritation, rhinitis, sneezing, and tearing
Dosage	First 6 weeks: Chew 1 piece of gum every 1 to 2 hours (max 24 gums/day), then; Gradually reduce use over the next six weeks, for a minimum treatment duration of three months.	First 8 weeks: 6 to 12 cartridges per day, then; 2 weeks: 3 to 6 cartridges per day, then; 2 weeks: reduce gradually to zero.	First 4 weeks: 1 piece of patch 15mg/16hours or 21mg/24hours per day; 2 weeks: 1 piece of patch 10mg/16hours or 14mg/24hours per day; 2 weeks: 1 piece of patch 5mg/16hours or 7mg/24hours per day.	First 6 weeks: suck 1 lozenge every 1 to 2 hours, then; 3 weeks: suck 1 lozenge every 2 to 4 hours, then; 3 weeks: suck 1 lozenge every 4 to 8 hours.	First 8 weeks: 1 to 2 doses per hour and increase the dose as needed with a maximum of 40 doses per day, then; 4 to 6 weeks: gradual reduction of the number of dose to zero.
Prescribing instruction	<ul style="list-style-type: none"> • Chew gum until the taste becomes strong, then rest it between the gums & the cheek. • When the taste fades, start chewing it again. • Repeat the chewing routine for 30 min. 	<ul style="list-style-type: none"> • Puff in short breaths or inhale into back of throat (not the lungs). • Twenty minutes of continuous puffing may yield the best effect, but patients may individualize dosing. • Nicotine in the inhaler is used up after 20 minutes of puffing. 	<ul style="list-style-type: none"> • Apply the patch on the skin, anywhere between the hand to neck, and hip. • Remove backing from patch and immediately press onto skin. Seal it tightly. • Leave it for 16 hours or 24 hours then remove it. • Apply a new one at a different site before going back to the same site (at least 5 days apart). 	<ul style="list-style-type: none"> • Place it between gum and cheek and suck slowly until it is fully dissolved (about 3 minutes). • It should not be bitten, chewed or swallowed whole. 	<ul style="list-style-type: none"> • Remove the cap. • Pump into tissue until the fine spray is seen. • Tilt your head back slightly. • Insert the tip of the bottle as far as you comfortably can into one nostril. • Pump the spray firmly and quickly one time. Don't sniff, swallow, or inhale while spraying.

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Non-nicotine based: Varenicline, Sustained Release (SR) Bupropion, & Nortriptyline

	VARENICLINE	SR BUPROPION	NORTRIPTYLINE
Patient selection	<ul style="list-style-type: none"> Appropriate as a first-line pharmacotherapy for smoking cessation Contraindicated: Pregnant or breastfeeding women (FDA Category C) & people under the age of 18 	<ul style="list-style-type: none"> Appropriate as a first-line pharmacotherapy for smoking cessation Contraindicated: History of seizure disorder, eating disorder, severe hepatic cirrhosis, concomitant used of MAO inhibitor in the past 14 days 	<ul style="list-style-type: none"> Second-line agent for smoking cessation (more effective than placebo, but did not offer any additional improvement when combined with NRT) Contraindicated: Pregnant or breastfeeding women (FDA Category C) & people under the age of 18
Precautions	<ul style="list-style-type: none"> Care should be taken in patients with a history of psychiatric illness and patients should be advised accordingly At the end of treatment, discontinuation of varenicline was associated with an increase in irritability, urge to smoke, depression, and/or insomnia in up to 3% of patients. The prescriber should inform the patient accordingly and discuss or consider the need for dose tapering. 	<ul style="list-style-type: none"> Pregnancy Category (FDA Class C) & lactating women (FDA Class B): used only if the increased likelihood of smoking abstinence, with its potential benefits, outweighs the risk of bupropion SR treatment and potential concomitant smoking Excessive use or abrupt discontinuation of alcohol or sedatives. Patients with a recent history of MI or unstable heart disease. False positive urine immunoassay screening tests for amphetamines. 	<ul style="list-style-type: none"> The efficacy of nortriptyline appears to be independent of its antidepressant effects, and is not restricted to people with a history of depression or depressive symptoms, during smoking cessation
Side effects	<p>Nausea, abnormal dreams and sleep disturbance. More serious adverse events (but uncommon); cardiovascular events, depression, suicidal ideation and suicide</p>	<p>Insomnia; dry mouth; rarely (1:1000) seizures and perhaps psychiatric problems. May affect ability to drive or operate machinery.</p>	<p>Dry mouth, constipation, nausea, and sedation</p>
Dosage	<p><u>Days 1-3: 0.5 mg OD; Days 4-7: 0.5 mg BD; Day 8-end of treatment: 1 mg BD</u> <u>Severe renal impairment</u> (CrCl <30ml/min): 0.5mg OD for first 3 days, increased to MAX of 0.5mg BD @ 1mg OD Patients should be treated for 12 weeks</p>	<p>Patients should begin with a dose of 150 mg OM for 3 days, then increase to 150 mg BD for 7-12 weeks following the quit date. Max: 300mg daily <u>Maintenance therapy:</u> 150 mg BD for up to 6 months <u>Renal impairment:</u> 150mg OD</p>	<p>Initially 25 mg per day is taken and this may be increased up to 75 mg over ten days to five weeks as adverse effects allow. The maximum dose should be taken for eight to twelve weeks and tapered down at the end to avoid withdrawal symptoms</p>
Prescribing instruction	<ul style="list-style-type: none"> Tablets should be swallowed whole with water, can be taken with or without food If someone using varenicline experiences changes in mood or behaviour, advise them to stop taking varenicline and contact health care provider immediately 	<p>Start treatment at least one week before their quit date and use it for at least 7 weeks. Scheduling of dose: if insomnia is marked, take the PM dose earlier (in the afternoon, at least 8 hours after the first dose) may provide some relief. Avoid alcohol</p>	<p>Start nortriptyline at least one week before their quit date and use it for 12 weeks. The dose should be tapered at the end of treatment to avoid withdrawal symptoms that may occur.</p>

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