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Abstract:

According to the U.S. Agency of Health Care Policy and Research in 2005, there are 46 million Americans who smoke or 21% of the U.S. population. As a result of solid evidence demonstrating the numerous detrimental effects of smoking and the rising national healthcare costs, research have focused on finding new ways to aid in smoking cessation. Varenicline was recently approved by the FDA in 2006 for smoking cessation and is covered by most insurance plans including Medicaid and Medicare. Therefore, patients and providers alike need a readily available tool to use in clinics to guide management and decision-making. This pamphlet is designed for patients who are motivated to quit smoking and want to learn more on different smoking aid therapies, especially about the differences between the two oral medications, Bupropion and Varenicline. The pamphlet also includes useful, reliable websites and the national quitline phone number for the patient who is seeking more counseling, detailed information on nicotine replacement therapies, and self-help strategies to quit smoking. (The nicotine replacement therapies are listed in order of risk of addictiveness with patches at least risk and nasal spray at most risk.)

This document was created by a medical student enrolled in the Primary Care Clerkship at the University of Minnesota Medical School as part of the course project. The aim of the project is to present information on a medical topic in the format of a patient education handout. It does not necessarily reflect the views of the University of Minnesota Medical School physicians and faculty. These materials are provided for informational purposes only and are in no way intended to take the place of the advice and recommendations of your personal health care provider. The information provided may no longer be up to date since it has not been reviewed since the date of creation. The information provided should not be used to diagnose a health problem or disease, or as a means of determining treatment. In the event of a medical emergency, immediately contact a doctor or call 911.

Smoking Cessation – Different Approaches

There has been a tremendous amount of research on the benefits of quitting smoking. Treatments that eliminate withdrawal symptoms can make quitting easier. Talk to your doctor today!

Where can I get self-help information?:

Toll-free national quitline number
(Created by the U.S. Dept of Health):

1-800-QUIT-NOW (1-800-784-8669)

Info on Nicotine Replacement Therapies:
http://www.fda.gov/fdac/features/1997/797_smoke.html

American Cancer Society:
http://www.cancer.org/docroot/PED/content/PED_10_13X_Guide_for_Quitting_Smoking.asp

National Cancer Institute:
www.nci.nih.gov/cancertopics/tobacco/quitting-and-prevention

American Heart Institute:
<http://www.americanheart.org/presenter.jhtml?identifier=3018961>

American College of OB/GYN:
http://www.acog.org/departments/dept_web.cfm?recno=13

Surgeon General:
<http://www.surgeongeneral.gov/tobacco/>

Quit Net:
<http://www.quitnet.com>

QuitSmokingSupport:
<http://www.quitsmokingsupport.com>

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New Medicines to Help You Stop Smoking



Beyond Nicotine Patches and Gum

When trying to quit smoking, it is common to experience withdrawal symptoms, such as **craving** for tobacco, **irritability**, **anxiety**, and **difficulty concentrating**. Many people end up smoking again because these symptoms can be unbearable. Nicotine replacement treatments help to quit twice as better than “cold turkey” by preventing withdrawal. Another way is using oral pills. There are 2 kinds of pills available for smoking cessation: Varenicline (Chantix) and Bupropion SR (Wellbutrin SR).

FAQ'S: Varenicline vs. Bupropion

1. How do the pills work?

Nicotine in tobacco overstimulate certain brain receptors, releasing too much of a substance, resulting in dependence and withdrawal. Bupropion keeps a little bit of the substance in the system to reduce the severity of withdrawal. Varenicline blocks the brain receptors from nicotine and partially stimulate them to reduce withdrawal/cravings.

2. How long would I have to take the pills?

Both pills require a 12 week course, starting with a pill once a day and ending with a pill twice a day.

3. How effective are the pills in smoking cessation?

Varenicline increased the odds of successfully quitting three-fold compared to placebo or no medicines. A few studies have found more people quit smoking using Varenicline than Bupropion, with Varenicline having less severe side effects (see side box).

4. How much do they cost?

Varenicline costs \$363.00 for 12 week course, while Bupropion costs \$203.51. Most insurance plans, including Medicaid and Medicare, cover either pill because they have shown to work. But, Varenicline may have higher co-pays than Bupropion, up to 50-75%, because it is a newer drug and non-generic. Medicare requires 75% co-pay.

5. How long have these drugs been around?

Varenicline was developed in the U.S. in 1997 and approved by the FDA 2006. Bupropion was approved as an antidepressant since 1985 then was approved in 1997 for smoking cessation.



**Don't give up
giving up.**

On average, most smokers attempt to quit smoking four or five times before quitting is successful.

Nicotine Replacement Treatments (NRT)

- Patch
- Inhaler (prescription only)
- Lozenges
- Gum
- Nasal Spray (prescription only)

Research shows a combination of patches with another type of NRT or with a pill work better than any one treatment alone. **Don't combine Varenicline with NRT.*

Common Side Effects:

Bupropion can cause insomnia, dry mouth, mood changes, rash. Varenicline cause mainly nausea, but also insomnia and headaches.

Safety:

Bupropion cannot be used if have seizures, anorexia or bulimia, heavy alcohol use, & already using bupropion or monamine oxidase inhibitors. Varenicline cannot be used with kidney problems. Both not recommended in pregnancy, breastfeeding, and ages younger than 18 years-old.