

# Chronic Obstructive Lung Disease

## Introduction

- I have chosen to write a fact sheet about chronic obstructive lung disease (COLD) because I am surrounded by individuals who appear to suffer from some type of lung condition. Many of the people in my family smoke, and I know that smoking is the culprit of many lung diseases and disorders. I believe that if I could find some information that correlates with the effects of smoking, then I could have their full attention on the subject matter. My family members are very stubborn and behave ignorantly whenever someone tries to negatively address their deadly habit. When people learn that there are health compromising effects of smoking other than lung cancer, then they are more likely to take the information seriously. Many individuals know that one of the biggest excuses of a smoker is, "I have been smoking for over twenty years, or I know someone who has been smoking for over twenty years and they never got lung cancer!"
- Another reason why chronic obstructive lung disease was a personal choice for me is because of my grandmother. She has been suffering from a terrible cough for as far back as I could remember her. I remember having sleepless nights whenever I would spend the night with her because she would stay awake coughing for hours. I also remember that she was an active member in her church and she would often have to leave service because her cough was so distracting to the service. I would love to learn more about her cough, so I decided that this was a good topic to research. Perhaps I could help her find out if there is anything that can be done to relieve her of this chronic cough.

## Section 1: Background and Problem Statement

- **National Heart Lung and Blood Institute:**
- **[http://www.nhlbi.nih.gov/health/dci/Diseases/Copd/Copd\\_All.html](http://www.nhlbi.nih.gov/health/dci/Diseases/Copd/Copd_All.html):**
- **Background Information:**
  - **This Web site was chosen as my primary background information site because Healthy People 2010 did not have any information on this particular topic. The National Heart Lung and Blood Institute addresses chronic obstructive lung disease as a progressive disease that makes it hard to breathe. They define it as progressive because the disease gets worse over the course of time. Chronic obstructive lung disease is a major problem because the symptoms develop slowly and many people who have the disease do not know until much irreversible damage has been done to their lungs. This disease can become severe enough to affect your daily lifestyle routine.**
- **Emedicine:**

- <http://emedicine.medscape.com/article/297664-print>
- **Background Information:**
  - In the Middle Ages chronic obstructive lung disease was most common among the poor. The reason is because the disease is associated with repeated infections of the bronchioles. Many people during that time, especially the poor were exposed to high levels of irritants that could have caused this to occur. There are a number of tests that can be used to diagnose the disease like: Pulmonary function tests, computed tomography scanning, and chest radiography.
- **Medline Plus:**
- <http://www.nlm.nih.gov/medlineplus/print/ency/article/000091.htm>:
- **Background Information:**
  - According to this Web site, chronic obstructive lung disease is one of the most common lung diseases and there are two main forms of the disease: Chronic bronchitis and emphysema. However, there are individuals that have a combination of both of these forms. There are numerous factors that contribute to the cause of COLD. These causes include, but are not limited to, exposure to certain gases and fumes in the workplace, exposure to heavy amounts of secondhand smoke and air pollution, frequent exposure to cooking gas without the proper ventilation, and the leading cause of COLD is smoking. There is NO cure for COLD, but treatment that consists of medication does exist.

## Section 2: Research

- **CHEST Official publication of the American College of Chest Physicians:**
- [http://www.chestjournal.chestpubs.org/content/102/3\\_Supplement/243S](http://www.chestjournal.chestpubs.org/content/102/3_Supplement/243S):
- **Summary of the research:**
  - Research shows that along with smoking and air pollution, childhood infections are a major risk factor of COLD. There have also been findings that suggest that those with severe hereditary deficiency in alpha-antitrypsin are also at risk for developing COLD. Epidemiologic research, which is research on the control of risk factors, has been conducted on COLD. The findings confirm that cigarette smoking is an absolute risk factor in the development of COLD. The findings also show that there are some factors that medical intervention cannot control, and those are: Age, sex, and genetic predisposition. One of the controversies that this research has yet to discover is not everyone who smokes will develop this disease.
- **American Journal of Respiratory and Critical Care Medicine:**
- <http://171.66.122.149/cgi/content/full/157/5/1418>:
- **Summary of the research:**
  - A study called Effect of Exacerbation on Quality of Life in Patients with Chronic Obstructive Pulmonary Disease was conducted by the

American Journal of Respiratory and Critical Care Medicine. An exacerbation is a worsening in the severity of the disease. The findings discovered in this study show that exacerbations occur commonly in individuals who suffer from COLD. However, factors that affect the severity and frequencies of the exacerbations are still unknown. The study diagnosed these exacerbations as patients who experienced two or more of the three major symptoms of COLD. Those three major symptoms are: Dyspnea, sputum purulence, and increased sputum volume. The patients diagnosed with exacerbations also experienced any one of the major symptoms in conjunction with any of the following minor symptoms: Wheezing, nasal discharge, sore throat, cough or fever. These symptoms would also have to last for two or more consecutive days to be diagnosed as an exacerbation.

- The New England Journal of Medicine:
- <http://nejm.highwire.org/cgi/content/full/340/25/1948>:
- Summary of the research:
  - A double-blind placebo-controlled study was conducted to see what effects inhaled glucocorticoid budesonide had on patients diagnosed with mild COLD who continued to smoke. The study was conducted over the course of three years and used 1,277 subjects with a mean age of 52 years. Subjects were either given 400 micrograms of the glucocorticoid budesonide or a placebo twice daily. The findings of the study revealed that individuals who inhaled the budesonide had a small one-time improvement in lung function. However, the budesonide did not have an effect on the overall long term progression of this disease.

### Section 3: Statistics

- National Women's Health Information Center:
- <http://www.womenshealth.gov/faq/lung-disease.cfm>:
- Summary of the statistics:
  - Lung disease overall is a common health problem and statistics show that 64,000 women die from COLD each year. More than twice as many women are diagnosed with chronic bronchitis than men every year in the United States. In 2003, more than 7.2 million women had COLD. Ever since 2000 more women have died from COLD than men. The problem is getting worse, because since 2004 the rate of American women with emphysema has increased by 5 percent, and in 2003 about 1.4 million women had emphysema.
- Connecticut Department of Public Health:
- [http://www.ct.gov/dph/lib/dph/hisr/hcqsar/mortality/riskfactorsreport/SectionIV\\_E.pdf](http://www.ct.gov/dph/lib/dph/hisr/hcqsar/mortality/riskfactorsreport/SectionIV_E.pdf):

- **Summary of the statistics:**
  - The statistical information from the summary of male and female mortality show the leading causes of death and premature mortality in Connecticut residents from 1989 to 1998. The statistics show that during that time the death rates of black male residents due to COLD decreased significantly. On the other hand, the death rates among all female (black, Hispanic, and white) residents due to COLD increased significantly. These statistics show that the disease is getting worse in women.
- **Centers for Disease Control and Prevention:**
- <http://www.cdc.gov/nchs/fastats/copd.htm>:
- **Summary of the statistics:**
  - The source of these statistics come from the Summary Health Statistics for U.S. Adults: National Health Interview Survey, 2008, tables 3, 4. The statistics show that there were 9.8 million non-institutionalized adults with diagnosed chronic bronchitis; 3.8 million non-institutionalized adults have ever been diagnosed with emphysema. The statistics also show that out of a total of 225,227 people, 3,121 men had chronic bronchitis and 1,769 men had emphysema while 6,711 women had chronic bronchitis and 2,020 women had emphysema. Statistics also show that the rates of individuals with each ailment still remain highest among whites.

## **Section 4: Consumer Information**

- **National Heart Lung and Blood Institute:**
- [http://www.nhlbi.nih.gov/health/dci/Diseases/Copd/Copd\\_All.html](http://www.nhlbi.nih.gov/health/dci/Diseases/Copd/Copd_All.html):
- **Summary of the information:**
  - Someone with COLD has difficulty breathing because there is less air flow in to and out of the airways. This can happen due to a number of reasons that include: The walls between the air sacs are destroyed, the walls of the airways become thick and inflamed, the airways are clogged because the airways make more mucus than usual, and the airways and air sacs lose their elastic quality. This Web site informs the public that COLD has many different names. Some of these names are chronic obstructive pulmonary disease (COPD), chronic obstructive airway disease, chronic bronchitis, and emphysema. Most individuals are over the age of 40 when their symptoms arise, so if someone is a smoker who falls into that age category and begins to notice difficulty in their breathing, then they should be very concerned.
- **Mayo Clinic:**
- <http://www.mayoclinic.com/health/copd/DS00916>:
- **Summary of the information:**

- According to this Web site, COLD is also a leading cause of death and illness worldwide, not just in the United States. This is because the leading cause of COLD is long-term. The best way to prevent COLD is not to smoke, or if you do smoke you should stop immediately. There is no cure for COLD, but there are a number of treatment options available. However, an individual should not solely rely on treatment for relief from the symptoms. The reason for this is because damage to the lungs is irreversible. Therefore, the more the disease has progressed, the worse the symptoms and exacerbations will be. To avoid having to go through this, an individual should take the best preventive measures against getting the disease. Avoiding cigarettes and second hand smoke is far easier than having to deal with some of the side effects of COLD which include: Respiratory infections, high blood pressure, heart problems, and lung cancer.
- WebMD:
- <http://www.webmd.com/lung/copd/features/copd-sex>:
- Summary of the information:
  - This Web site gives advice about sex and physical intimacy to those who suffer from COLD. This is important for consumers to know because there are many individuals who are concerned about their sex life and may be too ashamed to consult with their health care provider. The site lists nine helpful strategies and tips for sex and intimacy:
    - 1) Get fit
    - 2) Pick the right time
    - 3) Rid your bedroom of irritants
    - 4) Get a fan
    - 5) Take your medicine before sex
    - 6) Consider using supplemental oxygen
    - 7) Don't be afraid to experiment
    - 8) Take a break
    - 9) Remember your goal

## Section 5: Solutions to the Problem (or Issue)

- The Global Initiative for Chronic Obstructive Lung Disease:
- <http://www.goldcopd.com/AboutUs.asp?|1=6&|2=0>:
- Summary of the information:
  - The Global Initiative for Chronic Obstructive Lung Disease (GOLD) is a non-profit organization that started in 1997. They are in collaboration with the National Heart, Lung, and Blood Institute, National Institutes of Health, USA, and the World Health Organization. This Web site states the objectives of the GOLD:
    - 1) Recommend effective COLD management and prevention strategies for use in all countries.

- 2) Increase awareness of the medical community, public health officials and the general public that COLD is a public health problem.
- 3) Decrease morbidity and mortality from COLD through implementation and evaluation of effective programs for diagnosis and management.
- 4) Promote study into reasons for increasing prevalence of COLD including relationship with environment.
- 5) Implement effective programs to prevent COLD.

- **Global Alliance against Chronic Respiratory Diseases:**
- <http://www.who.int/gard/en/index.html>:
- **Summary of the information:**
  - **The Global Alliance against Chronic Respiratory Diseases (GARD) is an alliance that started in 2006. The GARD works together with other organizations and agencies to reduce the global burden of respiratory diseases.**
  
- **COPD Solutions Program Overview:**
- <http://www.bcbsal.org/providers/disease/COPDOverview.pdf>:
- **Summary of the information:**
  - **This Web site provides information about the For Your Health Care Management program for COPD. This program is designed to educate patients about their condition regarding COLD. The program was started by the American Blue Cross Blue Shield. The program is directed by physicians and enables the patient to be a part of the health care team by allowing them to manage their care plan.**

**Conclusions:**

I have learned a great deal of information that will help me in my attempts to get my family members to lead a healthier lifestyle. I hope that my readers will not take offense to the information provided, but take this as an initiative to make better choices regarding their long term health. It should be evident at this point that by taking preventtive measures against COLD is beneficial to society in general and not just the individual.

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