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SINUS INFECTIONS: UNPLUGGING THE DRAINS........6

Motivating smokers to quit the habit

hat are the key factors that influence the decision to stop smoking? A recent study in England explored issues relating to smoking behaviour and intention to quit that might be used to help develop cessation interventions. The researchers explored the average participant's knowledge of smoking related diseases, with a particular emphasis on Chronic Obstructive Pulmonary Disease (COPD).

Using focus groups and semistructured interviews, participants were allowed to express their feelings and experiences regarding strategies to stop smoking. The participants in the study were in smoking cessation programs. They found that their knowledge of COPD, a smoking-related disease, was limited. What knowledge they did have about COPD tended to be through the lived experience of friends or family members who had been diagnosed with the condition.

Smokers' concerns around risk of disease were influenced by their social context and were more focussed on how their smoking might impact the health of their family and friends, rather than how it might impact on them as individuals. Participants felt that genetic risk information would have a limited impact on motivation to quit. Genetic risk was considered to be a difficult concept to understand, particularly as it does not mean an individual will definitely develop a smoking-related disease.

In terms of cessation approaches, the use of visual media was consistently supported, as was the use of materials that

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Addressing the needs of the Canadian COPD patient



Chronic Obstructive Pulmonary Disease A brief history of COPD

n the past, physicians may have used different terms to describe what we now know as COPD. In 1679, Swiss physician Théophile Bonet referred to "voluminous lungs." In 1769, Italian anatomist Giovanni Morgagni reported 19 cases of "turgid" lungs. In 1814, British physician Charles Badham identified chronic bronchitis as a disabling health condition and part of COPD. He is believed to be the first person to use the term "catarrh" to describe the ongoing cough and excessive mucous that COPD produces.

In 1821, the inventor of the stethoscope, physician René Laënnec,

recognized emphysema as another component of COPD. Smoking during the early 1800s wasn't commonplace, so Laënnec identified environmental factors, like air pollution, and genetic factors as the principal causes of the development of COPD. (Today, cigarette smoking is the leading cause of COPD.)

In 1846, John Hutchinson invented the spirometer. This device measures vital lung capacity. Robert Tiffeneau, a French pioneer of respiratory medicine, built upon this invention about





A chronic obstructive pulmonary disease (COPD) exacerbation is an increase in the usual severity of symptoms of COPD. Exacerbations are often referred to as lung attacks or flare-ups. The signs of an exacerbation may include:

- An increase in frequency and severity of coughing
- Increased production of phlegm (sputum or mucus when coughing.
- A change in the appearance of the phlegm.
- Increased shortness of breath.

One should always seek prompt medical evaluation for signs of a COPD exacerbation. Without

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Motivating Smokers

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linked directly with life experiences. *Images of children inhaling second-hand smoke for example, had a particularly strong impact.* Risk to themselves as a smoker had little impact on a decision to change behaviour, but the impact of their behaviour on the risk of causing illness in others held much more weight.

Participants consistently reported that relationships with either their children, or with other family members were primary drivers in their decision to stop smoking or reduce the amount they smoked. Those who were exsmokers felt this had influenced their own smoking behaviour and could also be used as a lever to promote cessation in others. As well as being fearful of exposing children and family members to harm through second-hand smoke, participants were aware that smoking impacted negatively upon their ability to participate in family life.

It was also noted that finances acted as a key motivator in deciding to change smoking behaviour, which provides greater credence to large taxes on tobacco products. For some, the financial burden associated with smoking was the main factor that triggered a desire to quit, that health had very little bearing and that the decision to quit was a purely financial one.

Smoking cessation is an important focus of many healthcare systems and in some jurisdictions smokers wishing to quit can access support free-of-charge. Since the early 1990s, the University of Ottawa Heart Institute (UOHI) has been offering smoking cessation services to its patients through an outpatient program called the Quit Smoking Program (QSP). This program is available to smokers in the Ottawa area and can be accessed through clinician or self-referral. UOHI smoking cessation experts recognized the need to support hospital in-patients with their nicotine addiction resulting in the development of the Ottawa Model for Smoke Cessation: http://www.ottawamodel.ottawaheart.ca/density

Ask COPD Canada

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treatment, people may experience life-threatening breathing problems. Some COPD exacerbations require treatment in the hospital for a few days, while others can be safely treated in an outpatient setting. In severe cases, people with COPD exacerbations may need to be on a ventilator, or breathing machine, until their flare-up resolves.

More than half of exacerbation flares are caused by an infection in the lungs or airways, either viral or bacterial. Another 10% are triggered by air pollution. In 30 to 40% of cases, though, the cause can't be pinpointed. In addition, many other conditions affecting the heart and lungs share the symptoms of a COPD exacerbation flare. These include heart attacks, blood clots in the lungs, or heart failure. That's another reason it's always important to get an evaluation when anyone's COPD symptoms seem acutely worse.

Please explain the difference between chronic bronchitis and emphysema.

Bronchitis is the inflammation of the lining of the bronchial tubes. These tubes connect the windpipe with the lungs. When the tubes are inflamed less air is able to flow to and from the lungs and heavy mucous—or phlegm—is coughed up. This is bronchitis. Chronic bronchitis is defined by the presence of a mucous-producing cough most days of the month. Emphysema is a disease that affects the air sacs and/or the smallest breathing tubes in the lungs. Simply put, the lungs lose elasticity and that causes the affected areas to become enlarged. When lungs lose their elasticity, getting air into and out of the lungs becomes very difficult.

Does everyone with COPD need supplemental oxygen?

No. Oxygen therapy is most helpful to those people with an advanced-stage of the disease who have low levels of oxygen in their blood. Typically, the person's oxygen saturation (the per cent of oxygen in the blood) is less than 88%. This can be measured by an oximeter, a device that looks like a clip that is placed on end of the finger or toe. The oxygen level on an ABG (arterial blood gas) measurement, which is a type of blood test, is less than 55 millimeters of mercury (mmHg). ABG measurements are considered more accurate than external oxygen saturation measurements. Some people with COPD only develop low oxygen levels during exercise. In such cases, oxygen can be prescribed for use during those particular situations. A doctor must prescribe oxygen and specify the flow rate needed. Your doctor will likely be able to point you toward a medical equipment company that will supply the oxygen and related equipment.

We invite your questions. Please mail questions to: Ask COPD Canada, 555 Burnhamthorpe Rd., Suite 306, Toronto, Ont. M9C 2Y3—or you can e-mail questions to: AskCOPDCanada@gmail.com. General inquiries: COPD Canada Tel: 416–465–6995 E-mail: exec.copdcanada@gmail.com

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PULSE: News about COPD

Effectiveness of long-term use of statins in COPD

Lanzhou, Gansu, People's Republic of China/Researchers performed a general meta-analysis to assess the efficacy of long-term treatment of statins for COPD and to compare effectiveness of different statins. Pooled estimates were used to compare the effects on mortality, inflammation and lung function. Their study found that statins reduced the risk of all-cause mortality, heart-disease related mortality and acute exacerbation in COPD. In network meta-analysis, the higher cumulative probability in reducing C-reactive protein (CRP) in COPD patients was shown by fluvastatin (97.7%), atorvastatin (68.0%), and rosuvastatin (49.3%) vs. other statins. Fluvastatin and atorvastatin more effectively attenuated CRP and pulmonary hypertension (PH) in COPD patients. Overall, they concluded that statins can attenuate the risk of mortality, the level of CRP, and PH in COPD patients.

↓ ttps://tinyurl.com/y2z2og3w

Reviewing inhaler technique for older people with COPD can improve disease control

London, U.K./Educating older adults with COPD or asthma about the correct way to use their inhalers, as part of disease management, can reduce their risk of exacerbations, and either a demonstration using a placebo inhaler or written information appears effective. This review pooled the results of four trials, with a total of 1,225 participants. It found that a pharmacist or nurse intervention to improve inhaler technique for older adults can reduce exacerbations. People who experience exacerbations saw a reduction from 58% in the usual care group to 43% in the inhaler education group. However, there was no difference in quality of life or lung function. Proper and regular training in inhaler technique may also be cost effective if it reduces exacerbations requiring hospital admission. Inhaler technique should also be regularly assessed, particularly if the patient's condition is not under control and whenever the patient changes devices, medications or doses.

1. https://tinyurl.com/ycwdnxtk

Pulse: News about COPD

Surgeon General declares e-cigarette use among youth an epidemic

Washington, D.C./The U.S. Surgeon General has declared electronic cigarette use among America's youth "an epidemic" and called for new restrictions on the products. The action come after the release of a Monitoring the Future report, which confirmed that teen vaping nearly doubled in 2018, with one in five high school seniors reporting current use of e-cigarettes. More than 3.6 million teens in the U.S. regularly used the vaping products. Recommendations by Surgeon General Jerome Adams, MD, include banning vaping from establishments now covered by indoor smoke-free air policies, further restricting youth access to e-cigarettes in retail establishments, implementing new price policies, and banning marketing to youth. The FDA announced that it will restrict the sale of certain flavored e-cigarettes in a move to address the epidemic increase in use among teens. At that time, Gottlieb warned that the agency may go much further if the flavour ban did not lead to reductions in youth tobacco use.

1. https://www.medpagetoday.com/primarycare/smoking/77000

Adding low dose theophylline to ICS does not reduce exacerbations

London, U.K./Taking low-dose theophylline tablets in addition to inhaled corticosteroids did not significantly reduce chronic obstructive pulmonary disease flare-ups (exacerbations). This NIHR—funded study found that people taking the combination and those taking an inhaled steroid had the same number of exacerbations—just over two per year. People who experience frequent exacerbations are often prescribed steroid inhalers to reduce inflammation of the airways. Theophylline also helps open up the airways, but the amount needed to be effective can produce unwanted side effects. Some earlier evidence suggested that low-dose theophylline might improve the anti-inflammatory effects of inhaled steroids and therefore could be useful for those who continue to experience exacerbations and hospital admissions. However, the results of this study confirm guideline recommendations that, for the majority of people, the combination of oral theophylline plus inhaled steroid is not useful.

₩ https://tinyurl.com/ybvhhcav

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100 years later, creating a more complete diagnostic instrument for COPD. The spirometer is still the essential tool in the diagnosis of COPD today. In 1959, a gathering of medical professionals called the Ciba Guest Symposium helped define the components that make up the definition and diagnosis of COPD as we know it in 2019.

Years ago, COPD was referred to by names such as "chronic airflow obstruction" and "chronic obstructive lung disease." Dr. William Briscoe is thought to be the first person to use the term "chronic obstructive pulmonary disorder." He introduced the term at the 9th Aspen Emphysema Conference in June, 1965. In 1976, Charles Fletcher, a physician who devoted his life to the study of COPD, linked smoking to the disease in his book *The Natural History of Chronic Bronchitis and Emphysema*. Along with his colleagues, Dr. Fletcher discovered that stopping smoking could help to slow the progress of COPD and that continuing to smoke would accelerate the progression of the disease. His work provides the scientific basis for smoking cessation education in people with COPD today.

Until fairly recently, two of the most common treatments for COPD weren't available. In the past, oxygen therapy and steroid treatment were considered dangerous for people with COPD. Exercise was also discouraged because it was thought to put a strain on the heart. Inhalers and mechanical ventilators were introduced in the early 1960s. The concept of pulmonary rehabilitation and home care for people with COPD was introduced at the 9th Aspen Emphysema Conference. Oxygen therapy was first trialed in the mid-1960s by a group of researchers at the University of Colorado Medical Center in Denver, and further developed in the early 1980s. The 1990s saw a surge in the use of medications to manage the symptoms of COPD and restore pulmonary function.

A major push in COPD education meant that smoking cessation and clean air awareness became primary focuses of self-care treatment. Today, it's known that a healthy lifestyle can help people with COPD to manage and improve their symptoms. Healthcare professionals stress the importance of diet and physical exercise as part of a pulmonary rehabilitation program.

Over the years, physicians have done much to help us understand the causes, diagnosis, and progression of COPD. The earlier that chronic obstructive pulmonary disease is diagnosed, the better the longterm prognosis. Although there's no cure for COPD, symptoms can be managed, and people with the condition can improve their overall quality of life.

The history of COPD. Int J Chron Obstruct Pulmon Dis 2006; 1(1):3–14. For more information: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2706597/

Coughing away mucous

COPD patients produce an excessive amount of mucous, which causes you to cough, and excessive coughing can tire you out.

Coughing is the natural way to remove substances from your lungs and learning some important coughing techniques can help you remove mucous from your lungs. The techniques outlined below will assist you to cough more effectively, using the least amout of energy:

• Sit and support your abdomen.

• Take in a slow, deep breath using diaphragmatic breathing. This builds up a volume of air behing the mucous to make it easer to propel it toward yout mouth.

Hold the deep breath for two seconds.
Cough twice with your mouth slightly open. The first cough loosens the mucous and the second cough moves it.
Pause.

• Inhale by sniffing gently. If you take a big breath right after coughing it may cause you to cough again and it will drive the mucous back into your lungs.

• Rest.

Helpful Tips:

- A drink of water can be helpful.
- Coughing is easier when you are sitting with your head slightly forward.

• Controlled, effective coughing should make a hollow sound.

• In general drink six to eight glasses of water each day to keep mucous thin, unless your doctor has restricted the amount of fluid you should have.



Understanding sinus infections

inus infections can make life miserable. The drainage of the sinuses is often neglected when doctors and patients try to address the issue of sinus infections. You might picture sinuses as large openings or "caverns" in the facial bones with small orifices that allow drainage of natural fluids into the nasal passages. These small openings are sufficient when people are healthy but if the nasal mucosa or nasal lining is swollen by allergies or a viral infection,

the orifice for the sinus will close and the sinus will no longer drain.

Initially, normal and uninfected secretions will build up in the nondraining sinus. This can

become painful but there may not be an actual infection that requires antibiotic treatment. If the buildup of fluid persists long enough, a bacterial infection can develop.

Consider drainage before antibiotics

At various stages in this process, doctors are quick to prescribe antibiotics but one should consider the drainage question. There is little sense in giving antibiotics if the infected fluid is not drained.

Patients with allergies should use their nasal

corticosteroid spray (a prescription medication) regularly if allergic swelling has closed off the sinus. If patients have a viral respiratory tract infection, the short-term use of a nasal decongestant can be helpful but some caution is needed. Nasal decongestants can increase the blood pressure transiently which might be a problem for some patients who already have high blood pressure. As well, these non-prescription nasal decongestants can lead to some habituation so

" the short term use of a nasal decongestant can be helpful"

that when patients try to stop using them after several days there may be rebound congestion. A safe rule of

thumb is to avoid regular use of nasal decongestant sprays beyond five days. In addition to these nasal sprays, nasal saline rinses (available without a prescription) can be helpful. Patients often experience dramatic relief of pain and pressure when the nasal decongestant is used to open the sinus and a nasal saline rinse helps wash away previously trapped sinus fluid.



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OPD people Sherry Wolfson

Sherry was born and raised in Toronto and attended Vaughan Road Collegiate. When she was 17, she came down with a terrible case of pneumonia. Her grandparents were so concerned that they took her to Florida to convalesce. They had a home there and Sherry ended up in boarding school while staying with them for a year. When she returned home, she attended the University of Toronto for certification as a nursery school teacher. She taught nursery school for 10 years. Sherry has two sons who both have successful careers. One is in sales, selling radio and TV time. The other runs a youth counselling service, Blake Boultbee Youth Outreach. When her kids were older, she was encouraged by a friend who was in the advertising business to leave teaching and join his firm. She was hired there as a production coordinator working on commercials for a couple of years. From there, she moved into the motion picture business. Sherry was a second assistant director in feature films, and her first movie in Canada was produced by Ivan Reitman. She knew right away that he was going to go far. Someone suggested that because she knew Toronto so well, she should become a locations manager, which she did for the next 25 years. She was diagnosed with COPD in 2004.

How did you discover there was something wrong with you?

henever I got a cold it would turn into bronchitis and then often into pneumonia. My friends and I had been rock-climbing. We were in Nevada near Las Vegas when I got sick. Fortunately, it was at the end of the trip. When I got home it was determined that I had pneumonia again.

What did your doctor do?

My doctor sent me for some scans. She called me at home later that night and asked me if I was still smoking. I hadn't smoked in 25 years. She told me I have COPD. I had never even heard of COPD.

How were you diagnosed?

I had a chest X-ray that detected hyperinflation in the lungs. That led to further testing. They determined that I had COPD.

Did anyone in your family smoke?

My dad was in the air force. He came back from England after the war and smoked three packs a day. He died of emphysema. I believe my exposure to second-hand smoke while I was a child was how it started. I was also married to a man who smoked two packs a day. The first 33 years of my life was spent living in second-hand smoke. I've never smoked around my kids.

Do you take extra precautions to protect your health?

I won't touch elevator buttons with my bare hands. I use my house or car keys, never my finger. I will not grab the poles in subway cars. I never touch bannisters going up and down stairs. I avoid contact with public surfaces as much as possible. Fortunately, my balance is still good. I think my rock-climbing helps. the work.

You're still rock-climbing?

What I like about rock-climbing is that it's not competitive so you can take as much time as you want.

How high do you get?

About 35 feet. Indoors we have a harness on. My last outdoor rock-climbing trip was at Rattlesnake Point but I think the outside stuff has come to an end. I'm also a sailor and have sailed out of the National Yacht Club in Toronto for years. Sailing has been a very important part of my life. I have many friends at the club and enjoy cruising with them in the summer. In 2002 I sailed the south of France, which was fantastic.

Do you travel?

My next trip will be to Cannes for a couple of weeks with a girlfriend. We have a close friend who has a home there. We'll be met in Nice. I feel better when I'm by the water. My muscles don't ache as much and my breathing is better.

Were you adventurous in your youth?

I backpacked on my own through Asia. I started in Burma, then went to Bangkok and Phuket in Thailand. I travelled to Bali, then Penang in Malaysia. I sailed a lot back then. I've sailed in Greece, the British Virgin Islands and the Grenadines. I've also visited Guadalupe and Martinique. My dad was British so growing up I was back and forth to London more times than I can count.

Your favourite place?

Penang is beautiful but I really love the south of France.



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