

IS SINUS DISEASE A PUBLIC HEALTH CONCERN?

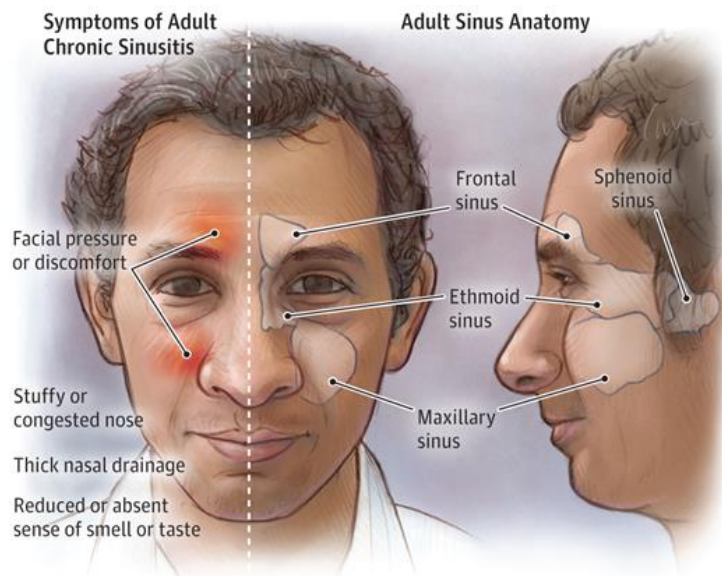
It is common to hear many Jamaicans complain about their sinuses. They may suffer with nasal congestion; excess mucus secretions and/or poor sleep quality, among other symptoms. Generally people with these sinus-related problems feel tired despite adequate sleep, and have difficulty functioning at their full mental and physical capacity. They may eventually find that their lungs aren't functioning as well as it used to. However, this experience is not unique to Jamaicans. A survey by Blackwell et al [from the Centers for Disease Control \(CDC\)](#) showed "sinusitis" as the ninth most common condition [among adults in the United States](#). Numerous epidemiological studies have found chronic sinusitis to affect up to 11-15% of the general population making it as common as diabetes in Jamaica.

Chronic respiratory disease (CRD) is an umbrella term for the non-communicable diseases (NCDs) affecting the breathing passages from the nose to the lungs. Commonly the public health authorities speak frequently of lower airway and lung disease e.g. Asthma and Chronic Obstructive Pulmonary Disease (COPD), however there is little acknowledgement of the tremendous deleterious impact of respiratory allergies and chronic sinusitis which primarily start in the nose and sinuses. Up to 80% of COPD and asthma sufferers report having sinonasal disease.

Chronic respiratory disease as a group represent the 4th leading cause of death worldwide resulting in as many as 4 million deaths a year, many of which are preventable. In Jamaica, CRD is recognized as one of the top four non-communicable diseases responsible for not only early preventable death, but also causing people to be less able to work or look after their families. It contributes to escalating drug costs, frequent visits to the doctor and hospitalizations. Unfortunately, these conditions have become a huge financial drain on personal and the country's health system resources.

Sinusitis is inflammation of the nose and sinus cavities. We have four pairs of hollow cavities (sinuses) in our head. There are two above, two below, two between and two

behind the eyes. Each sinus opens into the nose to allow for the free exchange of fresh air and clearance of mucus. Allergies, infections or narrowed nasal passages can result in inflammation and blockage of the opening to the sinuses trapping infected secretions and resulting in nasal congestion, thick nasal discharge, facial pressure and a poor sense of smell.



[Picture: Rudmik L, Soler ZM. Adult Chronic Sinusitis. JAMA. 2015;314\(9\):964. doi:10.1001/jama.2015.7892](#)

Generally, [acute sinusitis](#) lasts only for a few days and responds well to over-the-counter medications. Unfortunately some people get inadequate relief from their sinus symptoms despite being treated by their physician with antibiotics, nasal sprays and nasal decongestants. Their symptoms last any-where between 12 weeks and several years. These persons have chronic sinusitis, which has a proven negative impact on their sleep, mood, concentration and productivity at work. It worsens their asthma or COPD resulting in an overall significant reduction in their quality of life.

As our understanding of this disease has evolved, so too has our approach and capacity to effectively treat it. Once medicines have proved ineffective, endoscopic sinus surgery (keyhole surgery through the nostril) has emerged as the best way to treat chronic sinusitis. The procedure is done as same day surgery without any cuts or bruising to the face by precisely removing blockage and widening the opening of the sinuses, flushing out the inflamed/infected secretions with minimum discomfort and downtime. Thankfully, due to advances in technology, surgery is no longer a debilitating endeavor requiring lengthy hospitalization and painful recovery, the patient is able to go home the same day, and experiences relief almost immediately. Sinus surgery can be done while the person is either awake or asleep. However, there is a lack of awareness locally and regionally about the availability and benefits of surgery to treat people with chronic sinusitis in this way in Jamaica.

Several studies looking at the effectiveness of sinus surgery to treat chronic sinusitis showed a significant improvement in the individual's quality of life, with reduced absenteeism (missed work) and presenteeism (sick while at work). Sinus surgery improves asthma control and results in a reduction in the direct and indirect cost of health care for the individual and the health care system.

Chronic sinusitis tends to affect people between the ages of 30 and 60 years, their most productive work years. The impact of sinusitis on productivity is comparatively greater than for other chronic diseases such as arthritis, heart failure and back pain, which tend to impact most people after their most productive work years. Access to surgeons trained in the best techniques to deliver the outcomes mentioned above remains a challenge in middle-income countries such as Jamaica. The equipment and training are expensive to acquire, and with only approximately 15% of the Jamaican population having health insurance, access remains limited.

What is required is greater recognition by government and the private health insurance industry of chronic sinusitis as a treatable cause of reduced productivity and escalating

health care cost. Continued investment in training and acquisition of advanced technology is the way forward.



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