Respiratory Care during COVID-19 Pandemic

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The COVID-19 pandemic is unlike anything that we've ever witnessed. In fact, the clock would have to be wound back more than a hundred years in order to witness a pandemic of this magnitude. As we begin to come to terms with the fact that we might have to live longer than anticipated with this virus, it would be pertinent to address certain issues that might be bothering patients with chronic respiratory illnesses like asthma and COPD. These cohorts of patients have been living with weakened and hyper-responsive airways and hence would be understandably weary of the SARS CoV-2 virus which is known to wreak havoc primarily in the respiratory system. Since health advice nowadays is primarily tailored to address COVID-19, there are certain issues and trepidations that need to be allayed among this subset of patients.

The global initiative on asthma (GINA), in their recently updated guidelines, decided to address the issue of noncompliance to maintenance therapy among asthmatics by advocating the use of long acting bronchodilators with fast onset of action in combination with inhaled corticosteroids. Backed by the 'SYGMA' trial, this revision was welcomed by respiratory physicians, who were of the opinion that this modification was long overdue. However, with the emergence of the COVID 19 pandemic, many apprehensions were voiced by the public and social media regarding the vulnerability of people on oral or inhaled steroid to the virus. GINA has stood by their decision and taken significant efforts to reiterate the safety and necessity of steroids among asthmatics. Hence, these medications should be adhered to by all asthmatics. Nowadays, since social distancing and staying at home is the norm, it would be prudent for asthmatics to have a written asthma action plan. This plan should address common issues likely to be faced by them and measures to be taken. Adherence to this plan along with the regular monitoring of their peak flow rates should enable them to manage most of the issues they face and hence minimise health care visits. General precautionary measures like avoidance of triggers, allergens and cigarette smoke should also be followed as always.

COPD patients are at an increased risk of acquiring severe infections due to COVID 19. Hence, adherence to general measures such as social distancing and hand hygiene and use of face mask is mandatory. Inhalers and other oral medications should be continued, even if they contain corticosteroids. A certain amount of stockpiling of medications and essential supplies can also be resorted to, in order to minimise the need to step outside of their houses. The use of oxygen concentrators, portable non-invasive ventilators and nebulisers should be continued if needed.

Patients using home nebulisers should do so with utmost caution. Nebulisation, being an aerosol generating procedure, can transmit infection to care givers and other persons living in close proximity. Thus, they should be done in isolation, in a room with open windows preferably with a table fan directed outwards to dissipate any aerosols generated to the atmosphere. Regular sterilisation of the equipment and other surfaces in this room should also be done to curtail the risk of infections and transmission via fomites.
Most people have made the erroneous assumption that hospitals are breeding grounds for the SARS CoV 2 virus. While it is advised to refrain from unnecessary healthcare visits, patients with medical emergencies shouldn't delay them either. This is important in view of the frequent exacerbations expected in COPD patients. Severe exacerbations fall under category of severe acute respiratory infections (SARI) and may mimic a COVID-19 episode. This pandemic, being a respiratory illness, has generated a certain amount of anxiety among patients with chronic respiratory diseases. Timely medical care in a hospitalized setting is mandatory for such patients. Most hospitals have systems in place to triage patients and avoid COVID-19 suspects from coming in contact with other patients.

There are however certain changes that may be viewed as a silver lining of the COVID-19 pandemic. The reductions in the levels of air pollution and an increase in the amount of quality time being spent indoors, being some of these. Most respiratory physicians have attributed these changes as the reason behind most of their patients doing reasonably well during these troubled time. Let's hope that this trend continues even after we see the end of this pandemic and that that day arrives sooner than later.