

## Breathe healthy oxygen with portable ventilators & air purifiers

02 March 2021 | Views

### **Ventilators with oxygen concentrators are an effective way to process oxygen through water**

We all dread the heat and often find ways to manage ourselves in the scorching sun. We install heavy machines that consume too much power to breathe purified air. We then dread the bills we need to pay to manage the pollution in India. This year we can consider the newest invention - a portable ventilator and air purifier with an oxygen concentrator.

Commonly, ventilators are made in a way that an oxygen concentrator needs to be separately attached. They provide an assuring amount of oxygen on a per-minute system. As promising as this sounds, it could be a good idea for polluted cities in India to use this technique, but in portable air purifiers. Imagine a place like Delhi where the air is impure, but your ventilator gives you the necessary oxygen. The recent novel coronavirus outbreak raises many respiratory issues. It was learned that the virus has a direct influence on the lungs, resulting in a reduction of oxygen levels in the blood.

To help people tackle this concern, portable mini ventilator-cum-air purifiers have been developed by the industry. It also has an inbuilt oxygen concentrator. As a water-based pure oxygen concentrator, the mini ventilator provides 200mm hg of oxygen per minute. All that one needs to do is put water inside the ventilator and rest - it will process on its own.

The mini ventilator creates pure oxygen through the water, similar to other oxygen concentrators in the market. They are all based on Normal PSA (Pressure Swing Adsorption). They consist of a pressure exhaust mechanism that draws oxygen from the air with the zeolite process. Zeolite is the process that purifies the air and removes other gases into a compressor.

Ventilators with oxygen concentrators are an effective way to process oxygen through water. The consumption of this air for 15-minutes shows an increase in oxygen level, flow rate, PI (Perfusion Index) level, and other bodily functions in the body. It is also known to help treat health problems like Alzheimer's, diabetes, and toxicity etc. These types of ventilators work as

oxygen concentrator, compressed oxygen, and mini ventilator.

Having a portable ventilator and air purifier in one product allows rich oxygen gas to enter the body. It can be humidified with the help of regular humidifiers before used by a patient, if necessary. Portable air purifiers are a handy way of breathing oxygen-rich air from any place we desire. It is a very useful device that is best for casual use as well.

Invasive ventilators can be stressful for patients and the family. It can also cost the family to continue with such treatment, unless very necessary. Handy oxygen concentrator ventilators give long term support to patients not requiring consistent and deliberate medical assistance. These devices prove very handy and helpful for patients with pneumonia and during events such as the recent COVID-19 pandemic. Portable oxygen concentrator ventilators can be a phenomenal alternative.

Portable ventilators can be used by medical staff, respiratory therapists and people in general.

*Ashutosh Verma, Founder, Exalta, New Delhi*