

## Smart Inhalers: An Overview

Evanjali Pradhan\*

*Department of Microbiology, Utkal University, Bhubaneswar, Odisha, India*

### BRIEF REPORT

An inhaler (also known as a puffer, pump, or allergy spray) is a medical device that uses a person's breathing to deliver drugs into their lungs. This permits medicines to be given to and absorbed in the lungs, allowing for more targeted medical therapy in this area of the body and a reduction in the negative effects of oral medications. Inhalers come in a number of shapes and sizes, and they're used to treat a variety of medical disorders, the most frequent of which being asthma and chronic obstructive pulmonary disease (COPD).

Meter-dosed inhalers, dry powder inhalers, soft mist inhalers, and nebulizers are some of the most prevalent forms of inhalers. Each device has benefits and drawbacks and can be chosen based on the patient's individual needs, as well as their age, coordination, and lung function. Proper inhaler training is necessary to guarantee that inhaled medication has the desired impact on the lungs. Inhalers are devices that use a person's own breathing to deliver medication directly to the lungs. This may assist a patient by delivering pharmaceuticals directly to illness sites, allowing medications to have a higher effect on their intended target and reducing medication side effects due to targeted treatment. Inhalers are used to treat a range of medical disorders, the most prevalent of

which are diseases of the lungs and respiratory system. These disorders are treated with drugs that reduce airway inflammation and blockage, making breathing easier and less strenuous. Antibiotics have even been created for use in inhalers, allowing for direct delivery of antibiotics to infection sites within the lungs. Asthma and chronic obstructive pulmonary disease are two of the most frequent illnesses that require inhaler therapy. Asthma is a disorder in which inflammatory processes in the lungs cause intermittent airway blockage. Inhaled medicines are utilized to relieve the airway obstruction by calming down the inflammation in the lungs.

Inhaled medicines such as salbutamol, corticosteroids, and salmeterol are commonly used to treat asthma. These drugs help patients feel better by reducing inflammation and relieving symptoms of airway blockage. COPD, or chronic obstructive pulmonary disease, is caused by long-term damage to the lungs' airways. Long-term damage causes the airways to be unable to open correctly, resulting in airway obstruction. Patients should expect to notice improvements in their symptoms as well as improved daily function with inhaled medicines. Ipratropium, salmeterol, and corticosteroids are some of the most often utilized inhaled medicines in COPD patients.

**Correspondence to:** Evanjali Pradhan, Department of Microbiology, Utkal University, Bhubaneswar, Odisha, India, E-mail: eva.p@gmail.com

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