



Efficacy of Respiratory Care Bundle Onbronchial Asthma Among Patients at Selected Hospitals in Gonda Dist, Uttar Pradesh

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INTRODUCTION

Bronchitis symptoms include airway hyperresponsiveness, mucosal edoema, and increased mucus production. For people with bronchial asthma who have difficulty breathing, inhalers, bronchodilators, and alternative therapies such as breathing exercises, yoga, and meditation may be required. The respiratory care bundle comprises dental care, deep breathing exercises, and incentive spirometry to reduce the degree of dyspnea in asthmatic patients. This non-pharmacological technique has the potential to be applied in respiratory rehabilitation.

According to the World Health Organization (WHO), the hallmark symptoms of asthma include shortness of breath and wheezing, which was designated as a serious noncommunicable disease in April 2017. Those suffering from the illness experience symptoms on a daily or weekly basis, and they may worsen after physical activity or at night. During an asthma attack, the bronchial tubes enlarge, restricting the airways and reducing the amount of air that can enter and escape the body. Asthma flare-ups can cause sleep disruption, daytime tiredness, decreased activity levels, and absences from school and work. When compared to other long-term conditions, asthma has a low mortality rate.

According to Suzane C. Smeltzer (2008), an Incentive Spirometer is a medical device that helps patients improve the efficiency of their lungs. It is frequently administered to patients who have undergone cardiac or other surgery that demands long-term in-bed rehabilitation, as with any treatment that could potentially compromise respiratory function, such as a lung transplant. Patients recovering from pneumonia or rib injuries may also be given a spirometer as an incentive to help prevent fluid buildup in the lungs. Wind instrument players may benefit from utilising it to improve their air flow as well.

The patient inhales slowly and deeply from the device before holding his or her breath for 2–6 seconds. As a result, the alveoli break open, causing back pressure. It's the same effect as when you yawn. An indication, for example, reveals how well the patient's lung or lungs work by displaying a sustained inhalation vacuum, which indicates how effectively the patient is breathing. A gauge is used to track the patient's progress while he or she performs a certain number of repetitions per day.

By gently exercising the lungs, incentive spirometers can assist in maintaining them as healthy as possible. The device helps retrain the lungs to take deep, leisurely breaths. The use of an incentive spirometer improves both lung capacity and patient breathing. Spirometry incentives offer a number of benefits. The use of an incentive spirometer helps to keep the lungs' tiny air sacs (alveoli) inflated while also exercising the lungs and evaluating how well they fill with air. maintain suitably inflated and functioning alveoli in the airways to aid the lungs in their oxygen and carbon dioxide exchange.

Methodology

J. M. Kenny's Open System Model served as the foundation for the study's conceptual framework (1999). The research was quasi-experimental in nature, with a control group before and after the pretest. A rigorous strategy was used to select the study samples. A total of 30 individuals with bronchial asthma were divided into two groups: experimental and control. The information was gathered during a six-week period. For three days, patients with bronchial asthma received a respiratory care bundle that comprised dental care, deep breathing exercises, and incentive spirometry. The baseline and post-test levels of dyspnea were determined using the Modified Borg's Dyspnea Scale. To study and understand data, research objectives and hypotheses are used. Inferential statistics (paired and unpaired "t" tests, as well as the chi-square test) were used, as well as descriptive statistics (frequency, percentage, mean, and standard deviation).

The Results of the study were

Asthma patients in the experimental group experienced mild to moderate breathlessness, but those in the control group experienced none. Compared to the control group, the experimental group had much reduced dyspnea. Individuals with bronchial asthma who got the respiratory care bundle reported less dyspnea as a result. The amount of dyspnea among bronchial asthma patients was found to be linked with the demographic variables chosen in the experimental group. Patients with bronchial asthma benefit from the respiratory care bundle because it alleviates dyspnea symptoms. Patients suffering from bronchial asthma found the respiratory care bundle to be straightforward to use and incredibly cost-effective.

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