

EFFECTS OF BREATHING EXERCISES ON QUALITY OF LIFE IN ASTHMA PATIENTS: A SYSTEMATIC REVIEW

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ABSTRACT

Background: Asthma is a respiratory condition that causes airways to narrow and swell and can result in increased mucus production. Symptoms can significantly impact quality of life, participation in daily activities, and performance at school or work. **Objective:** The aim of this systematic review was to evaluate the effects of breathing exercises on the quality of life in patients with asthma. **Methods:** An article search was conducted using PubMed and Embase databases on October 30, 2020. Search terms related to patients with asthma, breathing exercises, and quality of life were used. The following filters were applied: English, publication within the last 10 years, clinical trials, and RCTs. All articles were screened for quality using the PEDro database. **Results:** Seven randomized control trials were included in this review. Six of the seven articles revealed statistically significant improvements in quality of life within the intervention groups and/or between intervention and control groups. **Conclusion:** The findings of this review support that breathing exercises could be added to the treatment of patients with asthma to positively impact their quality of life. Possible limitations of this review are the varying breathing techniques used in the intervention groups and varying measures of quality of life.

Keywords: asthma, quality of life, breathing exercises, Pranayama, Buteyko

INTRODUCTION

Asthma affects approximately 330 million people worldwide [1]. This respiratory condition is marked by reversible obstruction and inflammation of the airways and occasionally results in hyperresponsiveness to various irritants [2]. Symptoms of asthma can range from mild to more severe. While mild symptoms may have minimal to no effect on an individual's quality of life, more severe symptoms can have a direct and significant impact on one's quality of life. An asthma diagnosis can cause significant and justified concern due to the association of weakened lung function and a decrease in patient quality of life [1].

Historically, management of asthma has been focused on symptom reduction and prophylaxis against the onset of asthma attacks [3]. Although pharmacological interventions are commonly used to help with the management of asthma, medical care for these patients should be multifaceted to optimize preventative strategies to improve their quality of life. Part of this multifaceted approach increasingly includes breathing retraining with a focus on combating poor exhalation patterning or dysfunctional breathing. Specific techniques, such as Buteyko and Pranayama, have been widely implemented in an attempt to reduce the need for pharmacological intervention, to improve spirometry volumes, and to increase quality of life by addressing dysfunctional breathing patterns. The “Buteyko Breathing Technique” was developed