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PRM158

The Impact of Severe Asthma on the Quality of Life: A Systematic Review

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INTRODUCTION

- Asthma is one of the most common long term medical condition, with around 300 million people affected world wide[1]
- Asthma is an important contributor to the burden of illness and people with asthma experience poor life satisfaction and require a range of health services to manage their condition[2]
- Dependence on medication, regular hospital visit, and inability to fully integrate with peers are aspects that could negatively influence the quality of life (QoL)[3]
- Health-related quality of life (HRQoL) instruments used in clinical trials and longitudinal studies to measure the impact of asthma on QoL fall under two categories: disease-specific and generic[4]

OBJECTIVES

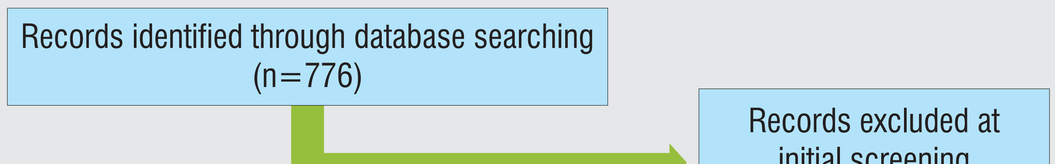
What is the impact of severe asthma in symptoms and well-being of adults and children?

- What is the overall impact in HRQoL?
- How is this impact distributed by the different dimensions of HRQoL?

METHODOLOGY

- Literature search was conducted for publications in Embase and Medline databases. Retrieved citations and full texts were screened according to the following inclusion criteria:
- Disease: Severe asthma (both allergic and non-allergic asthma)
- Patient population: Both adults (≥18 years) and children (6-17 years)
- Study designs: Both randomized controlled trials (RCTs) and observational studies
- Outcomes: Baseline QoL data either measured on generic scale or disease-specific scale

RESULTS



- AQLQ was the most frequently used scale among the included studies, assessed in 13 studies followed by St George's Respiratory Questionnaire (SGRQ) in six studies
- Higher proportion of adult patients were receiving inhaled corticosteroids (ICS) + Long-acting beta-agonists (LABA) (35.4% - 100.0%) followed by ICS (74.4% - 84.0%), anti-leukotrienes (4.6% - 86.3%), Rapid-acting beta agonists (RABA) (42.4% - 77.0%), and Short-acting beta-agonists (SABA) (24.1% - 45.1%)
- Most common pharmacological treatments prescribed in children were ICS (100%) followed by LABA (87.0% - 96.0%) and anti-leukotrienes (71.0% - 100.0%)

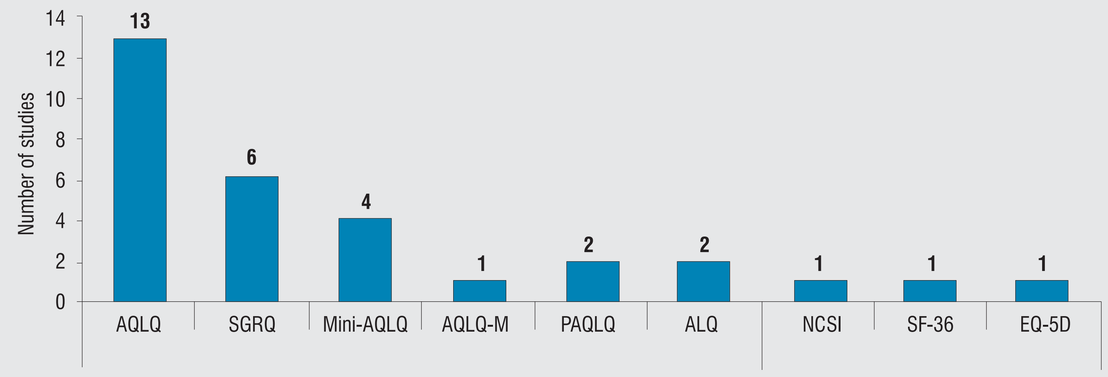


Figure 2: Types of disease-specific and generic scales assessed in the included studies

- Four studies compared AQLQ scores based on different severities of asthma[6, 7, 10, 12]. Of these, three studies were conducted in adults while one study assessed children
- Data also suggested that patients with severe asthma have rapid deterioration in overall health status as compared to patients with mild-moderate asthma

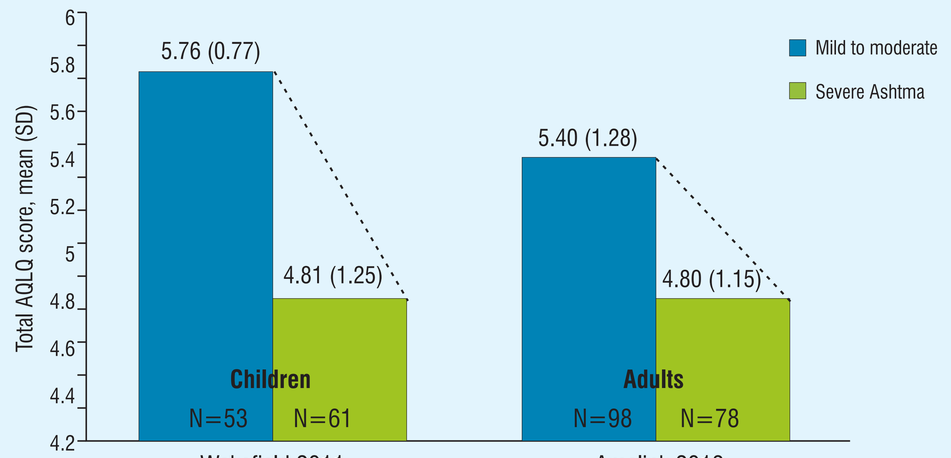


Figure 4: Total AQLQ scores according to different severities of asthma

LIMITATIONS

- Of the included studies, seven studies had low sample size (<50 patients)
- Heterogeneity existed in the included studies with respect to the different point estimates and variance measures employed in these studies for assessing the QoL scores
- Findings may not be generalized due to large variations observed in settings, patient populations and scales assessed

CONCLUSIONS

- Patients with severe asthma had lower total QoL scores as assessed through different scales, indicating worse QoL
- Symptoms and activity limitations are the two main domains that potentially affect the QoL in patients with severe asthma
- Patients with severe allergic asthma have poor QoL as compared to patients with severe non-allergic asthma
- QoL is largely impaired in children with severe asthma than adolescents
- Poor asthma control status has a profound negative impact on the QoL in patients with severe asthma
- Based on severity, patients with severe asthma have rapid deterioration in overall health status as compared to those with mild-moderate asthma

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