

THE PREVALENCE AND FACTORS ASSOCIATED WITH ALLERGIC RHINITIS AMONG ASTHMA PATIENTS 3 TO 18 YEARS ATTENDING THE CHEST CLINICS AT MULAGO HOSPITAL

 $\mathbf{BY}$ 

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## **ABSTRACT**

## **Introduction:**

Allergic rhinitis is the most common allergic respiratory disorder globally. It constitutes a public health problem with a prevalence of 10% - 40%. The trend is increasing, affecting 19% of the general population in Europe, 8.8% - 16% in the United States of America (USA), 30.4% to 38.5% in Southern Africa and 40% in North Africa.

Asthma and rhinitis are often co-morbid conditions. This coexistence results in severe clinical presentations and higher treatment costs. Treatment of rhinitis may improve asthma control, and early treatment of allergies may prevent the development of asthma

**Objective:** To assess the prevalence and determine the factors associated with allergic rhinitis among asthma patients, 3-18 years attending the chest clinics at Mulago Hospital.

**Methods**: This was a cross-sectional study involving 100 patients with physician-diagnosed asthma, in the chest clinics at Mulago Hospital. This study was done over a three-month period between March and May, 2015. Consecutive enrolment was used until sample size was achieved after obtaining informed consent from caretakers and assent from those 8 years and above. Data was collected using a pre-tested coded questionnaire and entered into Epidata then analysed using STATA version 12.0.

**Results**: One hundred (100) patients with asthma were recruited, giving a participation rate of 100%; 43 (43%) were male and 57 (57%) were female. The prevalence of allergic rhinitis among asthma patients was 79%. The median (IQR) age of those with allergic rhinitis was 8 years (6-11). Family history of allergic rhinitis (aOR 87.13(CI 8.431-900.446) and having associated history of itchy watery eyes (aOR 0.033(CI0.004-0.254) were risk factors for AR among asthmatics. However, presence of other allergic conditions, place of residence plus second hand smoking didn't predict AR in multivariate analysis.

**Conclusion:** This study revealed a high prevalence of allergic rhinitis among asthma patients. We therefore propose increased vigilance in assessing asthma patients for allergic rhinitis.