

# Allergic rhinitis and its associated co-morbidities among patients attending the ENT department at Kilimanjaro Christian Medical Center in Northern Tanzania: Cross sectional study.

Kenneth Mlay<sup>1</sup>, Gasper Temba<sup>1</sup>, Adrian Matasha<sup>1</sup>, Pendaël Mzonge<sup>1</sup>, Denis Katundu<sup>1</sup>, and Desderius Chussi<sup>1</sup>

<sup>1</sup>Kilimanjaro Christian Medical University College

March 07, 2024

## Abstract

**Background:** Allergic rhinitis is the specific inflammation against allergen by immune defense cells on nasal mucosa, which can lead to chronic nasal symptoms such as sneezing, itching, runny nose, and nasal congestion. It is associated with high morbidities including sinusitis, asthma, otitis media, hypertrophied inferior turbinate and nasal polyp. Despite its complications, it remains poorly recognized and tracked. **Methods:** A cross-sectional hospital based study was done, a total of 221 patients received ORL services at Kilimanjaro Christian medical Centre during study period were interviewed all patients with a clinical diagnosis of allergic rhinitis were captured; Data was collected using a pre-tested coded questionnaire (SFAR) The data was then analyzed by SPSS version 22. **Results:** A total of 221 patients with clinical diagnosis of allergic rhinitis were approached in Six (6) months study period, 111 (50.2%) were females, 140 (63.4%) were residing in urban areas. The prevalence of allergic rhinitis was 23.9%. Factors such as age OR 0.12, 95% C.I (0.03; 0.40), education OR 0.13, 95% C.I (0.04; 0.44), occupation OR 3.75, 95% C.I (1.36; 10.32), Adenotonsillar hypertrophy OR 4.66, 95% C.I (2.21; 9.80) and OME OR 4.11, 95% C.I (1.32; 12.83) ( $p=0.009$ ) was found to be significantly associated with allergic rhinitis. 60.4%, Inferior turbinate hypertrophy was the leading co-morbidity of allergic rhinitis which accounts 64.7%. **Conclusion:** Allergic rhinitis is among the common health problems affecting Tanzanians. It is a commonly seen disorder in younger age (<15 yrs) which is in correlation with other studies done in Africa and worldwide.

## Hosted file

manuscript -Kenny, wiley.docx available at <https://authorea.com/users/508899/articles/708482-allergic-rhinitis-and-its-associated-co-morbidities-among-patients-attending-the-ent-department-at-kilimanjaro-christian-medical-center-in-northern-tanzania-cross-sectional-study>