

**LEVEL OF ASTHMA CONTROL AND FACTORS INFLUENCING ASTHMA
CONTROL AMONG ASTHMA PATIENTS PRESENTING TO THE CHEST
CLINIC AT MULAGO HOSPITAL**

SUBMITTED BY:

Dr. SERUGENDO NSEKEYABANZI ALBIN, MBChB (UCB)

SUPERVISORS:

Dr. OKOTNWANG MARTIN, MBChB, M.MED (MAK)

Dr. KIRENGA BRUCE, MBChB, M.MED (MAK)

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ABSTRACT

Introduction: Asthma is one of the most common chronic non-communicable diseases globally and currently affects approximately 300 million people worldwide. Asthma management guidelines emphasize achievement and maintenance of good symptom control. To this end, accurate classification of the level of asthma control is necessary to maintain or adjust treatment. To assess the level of asthma control, one of the reference tools is GINA classification which encompasses clinical criteria plus spirometric measurements. However validated questionnaires like ACT are available and can be easily used to assess and monitor the level of asthma control.

Aims: (1) To determine the level of asthma control among patients attending the Chest Clinic at Mulago Hospital; (2) to explore selected factors influencing asthma control; and (3) to determine the accuracy of ACT compared to GINA in assessing asthma control.

Methods: In this descriptive cross-sectional study, asthma patients presenting to the Chest Clinic were recruited consecutively. Initial clinical evaluation was done and spirometry was performed. After consenting or assenting for the study, patients were interviewed using a standardised questionnaire. Sociodemographic characteristics, factors likely to lead to poor asthma control, and GINA-defined asthma control components including spirometric measurements were recorded. Also ACT questionnaire was administered and scores recorded.

Results: From October 2011 to February 2012, 88 asthma patients were enrolled.

The median age of the study participants was 34 (range: 12-85), and 36 (41%) were > 40 years old. Fifty nine patients (67%) were female.

Seventy six patients (86%) had inadequately controlled asthma. Fifty nine (67%) were uncontrolled, 17 (19%) partly controlled and 12 (14%) well controlled.

Sixty nine (78%) reported nasal congestion, 66 (75%) had a controller medication, 41 (47%) had heart burn, 26 (30%) were adherent to their medications, 22 (25%) were overweight/obese, and 13 (15%) reported exposure to cigarette smoking.

Nasal congestion was significantly associated with poorer asthma control (OR 3.2; 95% CI 0.87-11; p=0.031).

ACT, compared to GINA as the reference standard, had a sensitivity of 95%, specificity 92%, positive predictive value 99%, and negative predictive value 73%.

Conclusion and recommendations: Asthma is inadequately controlled among our asthma patient population. Nasal congestion is associated with poorer asthma control.

ACT should be used to assess the level of asthma control and monitor asthma control.