

Asthma Self monitoring, Behaviour Modification and Medication Compliance in Comparison to Patients with Hypertension / High Cholesterol and link to Asthma Hospitalisation Profile.

**Dr Amy E L Stebbings, MB, Ch B, MRCP (UK), FAMS, FRCP (Edin) Shahana
Shereene D/O Shahul Hameed**

**Chest and Internal Medicine Clinic Mount Elizabeth Novena Specialist Centre
Singapore 329563**

Aim: The aim of our study was to determine the prevalence and compliance of self monitoring and lifestyle modifications of patients with asthma versus hypertension/high cholesterol. Hospitalised asthma patient profile was assessed. **Methods:** We conducted a study via questionnaire of self monitoring and lifestyle modifications of patients in a general respiratory medicine and renal clinic over a period of 2 months from May to July 2014 . **Results:** 98 out of 117 questionnaires were answered. **Demographics:** Male 48% (n=47), Age (years) : < 21 (n=9, 9.2%), 21 – 30 (n=7 , 7.1%), 31 – 40 (n=21, 21.4%), 41 – 50 (n=26, 26.5%), 51 – 70 (n=28, 28.6%), 70 & Above (n=6, 6.1%).(1 non responder). **Education level :** Primary (n=4, 4.1%), Secondary (n=12, 12.2%), Tertiary (n=36, 36.7%), Post-Graduate (n=41, 41.8%) (5 non responders). **Race :** Chinese (n=29, 29.6%), Malay (n=1, 1%), Indian (n=11, 11.2%), Caucasian (n=41, 41.8%), Others (n=14, 14.3%) (9 non-responders). **Income :** < \$20 000 (n=13, 13.3%), \$20 000 - \$50 000 (n=11, 11.2%), \$50 000 - \$100 000 (n=16, 16.3%), >\$100 000 (n=29, 29.6%), (29 non-responders). **Observations:** asthmatic group (n = 38), only 23.7% (n = 9) monitored their peak flow. 23.7% (n = 9) were compliant with their preventive inhalers. 73.7% (n = 28) practiced allergen avoidance (dust n=17, pet n=11, food n=14). 13 (34.2%) were hospitalised for asthma of which 10 (76.9%) did not do home peak flow monitoring, 8 (61.5%) were non-compliant with their medication. All 13 (100%) practised allergen avoidance. In the hypertensive group, (n = 24), 66.7% (15) monitored their high blood pressure at home. 37.5% (9) were compliant with their blood pressure medication. 62.5% (15) changed their diet to low salt. In the high cholesterol group % (n=26), 30.8% (8) were compliant with medicines, 65.4%(17) changed their diet to low fat. All groups exercised : asthma 60.5%, hypertensive 54.2%, high cholesterol 57.7%. **Conclusion:** Hospitalised asthmatics were non-compliant (61.5%) and did not monitor peak flow (76.9%). Overall, peak flow monitoring for asthmatics was low (23.7%). They practised mainly allergen avoidance (73.7%). In contrast, 66.7% of hypertensives practiced blood pressure monitoring. Compliance to medication was poor in all three groups [asthmatic (23.7%), hypertensive (37.5%) high cholesterol (30.8%)]. This was despite a high level of education of tertiary and above educated respondents (78.6%) and income level (45.9%) of \$50,000 and above. More resources and education should be provided to asthmatics and improved compliance regimes adopted.