CHILDHOOD ASTHMA: AN ASSESSMENT OF ASTHMA CONTROL IN PRIMARY SCHOOL CHILDREN

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Introduction
Assessment of asthma control is an integral part of asthma management. Children with uncontrolled asthma have a high risk of poor health outcomes with frequent exacerbations, repeated emergency visits and hospitalisations.

Objectives
To assess the level of asthma control in primary school children with reported asthma.

Methodology
This is a two-phased cross-sectional study involving 6441 school children in six primary schools in the Port Dickson District, Negeri Sembilan, Malaysia. In Phase 1, self-administered questionnaires were used to identify children with physician-diagnosed asthma reported by parents. In Phase 2, asthma control was assessed using GINA 2009 guidelines. Data on socio-demography, health care utilisation and medicine use were collected.

Results
A total of 448 (8.9%) children were reported to have asthma. Of these, 311 (69.4%) parents agreed to participate in Phase 2. There were 214 (68.8%) Malay, 89 (28.6%) Chinese and 8 (2.5%) of them were other ethnicities. Only 161 (51.8%) children had good control, 99 (31.8%) had partial control and 51 (16.4%) had uncontrolled asthma in the past one week. In the past one year, 157 (50.5%) children had asthma exacerbations, 216 (6.8%) had hospitalisations and 104 (33.4%) visited emergency room for asthma. Only 108 (34.7%) asthmatic children had regular follow up. Controller medications were underutilised (12.2%) compared to reliever medications (35.0%). There was significant association found between ethnicity and asthma control.

Conclusion
Asthma control was poor in primary school children surveyed in the Port Dickson district. Only one third of them had regular follow up and controller medications were underutilised indicating a need to optimize asthma management and reinforce asthma education.