

## **ABSTRACT**

### **Introduction**

Childhood bronchial asthma is a global health problem. It is associated with suboptimal control for which knowing the risk factors would be worthwhile.

### **Objectives**

To determine the risk factors for poor control of bronchial asthma among five to ten years children attending to Lady Ridgeway Hospital for Children of Sri Lanka.

### **Methods**

Case control study was carried out among 75 cases, who had poor control of bronchial asthma and 150 controls, who had good control of bronchial asthma. Cases and controls were divided using validated asthma therapy assessment questionnaire. Systematic sampling was used. For data collection interviewer administered questionnaire was used. For data analysis SPSS 21<sup>st</sup> version was used and to evaluate risk and statistical significance odds ratio and chi square were used.

### **Results**

This study identified that being a female child (OR=2.66; 95% CI=1.5-4.71), age between 5 to 7 years (OR=2.34; 95% CI=1.31-4.18), exposed to passive smoking (OR =3.11; 95% CI=1.39-6.99), exposed to pets (OR=2.65; 95% CI=1.12-6.24), sleep disturbance associated with wheezing (OR =16.9; 95% CI=6.62-43.16) , inadequate cleaning of dust in furniture (OR = 4.82 95% CI=2.51-9.24), having bronchial asthma for less than one year duration (OR = 1.96; 95% CI=1.12-3.45) and incorrect inhaler technique (OR = 5.4; 95% CI=1.9-14.8) were significant risk factors for the development of poor control in bronchial asthma. Whereas inadequate changing pillow cases (OR = 0.53; 95% CI=0.3-0.94) and bedsheets (OR = 0.9; 95% CI=0.22-0.71) were found to be significant protective factors.

**Conclusion and recommendation**

It is recommended that educate the parents/caregivers regarding the inhaler technique in each clinic visit. Future studies are needed to be focused on community setting to assess the risk factors for the level of control of bronchial asthma.

Key words: Childhood bronchial asthma, control, risk factors