

Risk factors of childhood asthma in Bangladeshi children

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Background and Aims: Asthma is the most common chronic disease in children and is the leading cause of childhood morbidity. The risk for asthma development is associated with exposure to several environmental and genetic factors. The objective of this study was to determine the predictors or risk factors of childhood asthma.

Methods: This case-control study was conducted among 100 children aged 6 to 15 years in the Department of Pediatrics, BSMMU and Padda Diagnostic Center, Dhaka from the period of January 2012 to December 2012. 50 cases and 50 controls were interrogated in this study. Cases were asthma patients. Controls were 50 healthy siblings of hospitalized children suffering from other diseases besides asthma.

Each control was matched to each case by gender, age and residence. Parents were interviewed by means of a structured questionnaires included items concerning several risk factors or predictors.

Results: Family history of asthma (mother, OR=13.2, 95% CI= 9.25 lower, 19.61 upper; Sibling/relative, OR=8.12, 95% CI=0.57 lower, 14.37 upper), allergy (food, OR=13.67, 95% CI= 2.91 lower, 31.66 upper; Dust, OR= 42.67, 95% CI= 3.27 lower, 57.53 upper), H/O bronchiolitis (OR=32.55, 95% CI= 13.5 lower, 52.7 upper) H/O allergic rhinitis (OR=11.53, 95% CI= 0.52 lower, 19.74 upper) were significantly ($p < 0.001$) associated with asthma in logistic regression analysis.

Conclusion: In this study, family history, dust and food (commonly Hilsa fish, beef, egg, brinjal, and prawn) allergy, H/O bronchiolitis, allergic rhinitis were found as important risk factors of asthma.

Biography

Md. Atiar Rahman has completed his M.D. in Pediatrics from Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka, Bangladesh and fellowship in Pediatrics in 2008 from BCPS. He had also an opportunity to receive fellowship training in Pediatric Respiratory Medicine from Great Ormond Street Hospital for Children, London, UK and Italy. He is the associate Professor of Pediatric Pulmonology, Department of Pediatrics of BSMMU. He has published more than 10 papers in reputed journals and serving as a reviewer of reputed international Journals.

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