

**IMPACT OF OUTDOOR AND INDOOR AIR POLLUTION
ON PERSONAL EXPOSURE OF 5-8 YEAR OLD
CHILDREN LIVING IN LOW INCOME SETTLEMENTS
IN COLOMBO**

M.P. Senanayake¹ and R.P. Samarakkody²

¹Department of Pediatrics, University of Colombo

²Waste Management Authority, Western Province

Abstract

Indoor air pollution is a well recognized environmental public health hazard in many third world countries. The population segments most susceptible to air pollution i.e. young children, the sick and the elderly, spend the greater portion of their day indoors. Studies on quality of indoor air in Sri Lanka are limited. We carried out a study on indoor pollution in low income homes in Colombo.

Objectives:

1. To assess the indoor and outdoor concentration of oxides of nitrogen
2. To assess personal exposure of children to oxides of nitrogen and SO₂
3. To compare personal exposure with indoor and outdoor air pollution
4. To study the daily activity patterns of children.

Study design: Descriptive cross sectional study.

Study setting: Low income settlements in five locations in Colombo.(Fort, Maradana, Borella, Kirulapone, Mattakkuliya)

Method: 30 households (6 per location) were selected by cluster sampling in a street selected in each location and were serially visited to enroll thirty children between 5 to 8 years of age. Their health status