

Addressing the Silent Killer: The Shift in Local Governance to Combat Air Pollution

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Abstract : Kolkata, one of the fastest-growing metropolises in India, has been suffering from air pollution for many decades. Mismanagement of government and an increase in automobiles have been fuelling this problem. The study aims to portray the quality of air along with the influence of traffic flow and vehicular growth and the effects on human health. It further shows the correlation between the emission of pollution during weekdays and weekends with the help of a scatter diagram and trend line. An assessment of Kolkata air quality is done where the listed pollutants' (RPM, SPM, NO₂, and SO₂) annual average concentrations are classified into four different categories. Our observed association between childhood Acute Respiratory disorder and early life exposure to traffic-related air pollutants is biologically plausible. The period of in utero and the first year of life is critical in the development of the immune and respiratory systems and potentially harmful effects of toxic pollutants during this period might result in the long-lasting impaired capacity to fight infections and increased risk of allergic manifestations. Up-to-date knowledge about the seasonal and spatial variation of asthma and studying the air quality of the area is done through Geographical Information System (GIS). Steps are taken by the government to control air pollution by alternative public transport like the metro and compulsory certification of period-driven vehicles which test for Carbon mono oxide.

Keywords : air pollution, asthma, GIS, hotspots, governance

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