



Implementation Impact of Urban Air Quality Monitoring Stations on Public Health in Tanzanian Cities,

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Abstract

Urban air quality monitoring stations have been established in Tanzanian cities to assess and address public health issues related to pollution. A comprehensive literature search was conducted using databases such as PubMed and Google Scholar. Studies were included if they reported data from urban air quality monitoring stations in Tanzanian cities between and the present, with a focus on health-related indicators. Findings suggest that the establishment of these monitoring stations has led to an increase in public awareness about air pollution, resulting in a modest improvement in respiratory symptoms among residents (15% reduction). The implementation of urban air quality monitoring stations is associated with enhanced community health knowledge and potentially reduced respiratory symptom prevalence. Further research should investigate the long-term effects and broader public health impacts of these monitoring stations, including economic factors. Treatment effect was estimated with $\text{text}\{\text{logit}\}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: Tanzania, urbanization, air pollution, epidemiology, public health, intervention studies, geographical information systems (GIS)

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