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Assessing Solid Waste Management Practices and Health Impacts in Port Harcourt City, Nigeria

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Abstract: Solid waste management has recently posed urgent challenges to environmental sustainability and public health in emerging Sub-Saharan urban centers. This paper examines solid waste management in Port Harcourt, the rapidly growing city in Nigeria, with a focus on current solid waste management practices and its health implications. To do so we analyzed past academic papers and official documents. The Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) statement and its four-stage inclusion/exclusion criteria were utilized as part of a systematic literature review technique to identify papers related to solid waste management practices (Scopus and Google Scholar). In terms of policy documents, we focused on information about the implementation between 2014 and 2023. We found that the Rivers State Waste Management Policy and the National Policy on Solid Waste Management were the two most important documents to understand Port Harcourt's practices. Past studies, however, highlighted that residents continued to dump waste in drainages as they were largely unaware of the policies that encourage them to sort waste. The studies tend to blame the city of its lack of political commitment to monitoring waste sites. Another study highlighted inefficient waste collection practices, the absence of community participation and poor resident awareness of 3R practices. Government documents and past studies tend to agree that an increase in disorderly waste management practices and the emergence of vector-borne diseases (e.g., malaria, lassa fever, cholera) co-incided in Port Harcourt. This led to increased spending for healthcare for locals, particularly low-income households. This study concludes by making some remedial recommendations.

Keywords: health effects, solid waste management practices, environmental pollution, Port Harcourt

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