Healthcare Waste Management and Climate Change in Uganda: An Intricate Nexus

Dr. Diana Atwine
Ministry of Health-Uganda, Kampala, Uganda

Dr. Herbert Nabaasa
Ministry of Health-Uganda, Kampala, Uganda

Dr. Didacus Namanya
Ministry of Health-Uganda, Kampala, Uganda

Abstract

Context: Climate change is a globally recognised public health threat largely attributable to anthropogenic factors. The health sector contributes 5% of global GHG emissions arising from its supply chain, energy intensive and sometimes poor waste management practices, such as open waste burning and landfilling. Uganda has several healthcare waste management (HCWM) methods, including incineration, landfilling, autoclaving, use of placenta pits, and ash pits. However, open burning and crude dumping remain prominent and grossly contribute to GHG emissions through combustion and decomposition.

The Climate Change and Healthcare Waste Management Nexus: The climate change and HCWM nexus is bi-directional. Healthcare waste management contributes to climate change through driving GHG emissions, while climate change also affects HCWM. Climatic events such as flooding affect the transportation of waste to management facilities and damage HCWM infrastructure. Additionally, warm, humid conditions catalyse the decomposition of waste. Poor waste management also results in environmental pollution, which is a key driver of less desirable population health outcomes, such as increased morbidity. Climate change exacerbates disease burden, which in turn affects waste management in the health sector. For instance, poor water and air quality, and climate-related disasters increase demand for health services, driving waste generation.

Ongoing Efforts

- Dissemination and implementation of the H-NAP, HCWM Guidelines, and Strategy.
- Establishment of five regional climate-smart healthcare waste management incinerators.
- Private-Public-Partnerships to strengthen HCWM.
- Regular assessments and mentorships to improve HCWM practices, especially segregation.

Conclusion: The climate change and healthcare waste management nexus is complex and bi-directional. However, Uganda has made progress towards building a climate-resilient HCWM system and reducing GHG emissions attributed to poor healthcare waste management. Continued investment is crucial to protect public health and mitigate climate change.