Gis Application to Contain Cholera Epidemic in The City of Lusaka

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The purpose of this paper is to discuss the practical experiences of application Geographical information system (GIS) to contain cholera epidemic in the peri-urban settlements (squatter compounds in Lusaka, Zambia, for the period starting from November 2003 to February 2004). It also highlights the Cholera prevalence trends as well as the spreading patterns for the ten (10) selected compounds in Lusaka.

GIS application is proved suitable and convenient approach with proper integration of knowledge and easy interpretation of data to aid planning based on identified risk factors that influenced the spreading of cholera epidemic. It also helped to come up with effective intervention strategies that directly or indirectly provided diverse solutions to contain an epidemic and promote community participation. Therefore, several risk factors and indicators that influenced the rate at which cholera was spreading were examined. This includes the following: - Sociological and ecological factors such as social interactions, residence pattern of settlement, and livelihood. It also analyzed the personal hygiene practice, Climatic change as well as logistical aspect (technical planning).

Lusaka is the capital city of Zambia; a fast growing town in sub-Saharan Africa and the Population of Lusaka is estimated at 1.9 million. The peri-urban population ranges from 40% in small towns to 80% in cities, although local authorities regard these settlements as “illegal” or “squatter” compounds they continue to grow without planning controls.

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