

Assessing the Application of Geo-Spatial Medicine in Managing Infectious Diseases Within Nairobi Metropolitan Area

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Key words: geospatial medicine

SUMMARY

This study projects looks at the extent of application of the emerging field of geospatial medicine as a sub-discipline of conventional medicine that emphasizes the importance of a patient's place history in the diagnosis and treatment of infectious diseases within the Nairobi Metropolitan area, the diseases of focus are all waterborne and airborne diseases. Unlike conventional medicine, Geospatial Medicine uses GIS technologies like remote sensing, satellite imageries, crowd-sourcing, geospatial data modelling technologies like R. and Python are designed to work with GIS software like Arc GIS and QGIS to provide results that be input for public health warnings or flags to help health community of practitioners to take notice of environmental or geo-locational factors that could be contributing to the patient's symptoms. This study intends to also to determine the extent to which Geospatial medicine provides physicians with precise clinical understanding about where patients live, work, and play, and how a patient's movement and place history influence exposure to environmental as well as social hazards that jeopardize human health. The study findings will be used as a framework for public health governance in relation to Geo-medicine in Nairobi Metropolitan area as well as other areas at initial stages of understanding the application of geospatial medical technologies. Similarly, the study findings will be shared to the universities and research institutions for the purpose of learning and enhancing knowledge on application of Geospatial information science in public health governance.

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