

# **DESIGN OF MOBILE – HEALTH ARTIFACT TO ENHANCE SURVEILLANCE SYSTEM FOR ARBOVIRUSES DISEASE: The case of Ubungo Municipal I Dar es Salaam.**

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## **ABSTRACT.**

Surveillance is the monitoring (observation from a distance or nearby through electronic equipment or by supervision, inspection with close watch kept over) of behavior, activities, or information for the purpose of influencing, managing or Arboviruses in Tanzania was done to improve the existing system which is paper-based. The existing system provided negligible timely feedback, delayed results, limited reporting, inaccurate data, and costly processing. Hence, information on the prevalence of Arboviruses remains largely unknown and infrequently updated.

The data collection includes questionnaires and interviews in order to assess the performance of the existing disease surveillance system to identify the likely key challenges for utilization of mobile–health technology by system users so as to propose the best design of mobile artefact to enhance Arboviruses disease surveillance.

A total of eighteen (18) health centers and two (2) hospitals were selected and interviewed. The study identified the existence of the disease surveillance team which has been working with the existing disease surveillance system faced several challenges, bundle prices, and a lack of trained personnel on the use of the system.

It was strongly recommended that the newly designed mobile-based Arboviruses surveillance system will be useful in providing near-to real–time data, with the potential for enhancing timely response in rural remote areas of Tanzania. The collected data on the mobile phone can be transferred to a database from different mobile phone modes of transmission or by storing data on the mobile/cellular phone and transmitting them later.

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