

## Development and Implementation of E-Disease Surveillance Systems for Public Health Southern Africa: A Critical Review

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**Abstract :** The manifestation of 'new' infectious diseases and the re-emergence of 'old' infectious diseases now present global problems and Southern Africa has not been spared from such calamity. Although having an organized public health system, countries in this region have failed to leverage on the proliferation in use of Information and Communication Technologies to promote effective disease surveillance. **Objective:** The objective of this study was to critically review and analyse the crucial variables to consider in the development and implementation of electronic disease surveillance systems in public health within the context of Southern Africa. **Methodology:** A critical review of literature published in English using, Google Scholar, EBSCOHOST, Science Direct, databases from the Centre for Disease Control (CDC) and articles from the World Health Organisation (WHO) was undertaken. Manual reference and grey literature searches were also conducted. **Results:** Little has been done towards harnessing the potential of information technologies towards disease surveillance and this has been due to several challenges that include, lack of funding, lack of health informatics experts, poor supporting infrastructure, an unstable socio-political and socio-economic ecosystem in the region and archaic policies towards integration of information technologies in public health governance. **Conclusion:** The Southern African region stands to achieve better health outcomes if they adopt the use of e-disease surveillance systems in public health. However, the dynamics and complexities of the socio-economic, socio-political and technical variables would need addressing to ensure the successful development and implementation of e-disease surveillance systems in the region.

**Keywords :** critical review, disease surveillance, public health informatics, Southern Africa

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