Evaluation of Disease Surveillance System for early detection of Acute Diarrhoeal Disease in Karnataka – India

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Abstract

Background: Evaluation of integrated disease surveillance system in Acute Diarrhoeal Diseases (ADD) in Karnataka was carried out during (Please mention duration). The specific objectives of the evaluation were to describe the structure and to evaluate the attributes of system for surveillance of ADD.

Material and Methods: The study evaluated 7 attributes (Simplicity, Flexibility, Acceptability, Representativeness, Sensitivity, Positive Predictive Value and Timeliness) of the disease
surveillance system as per the modified updated CDC guidelines for evaluating Public Health Surveillance Systems. Data was collected from SSU, one DSU, Two PHCs and Two Sub-centres in Tumkur district of Karnataka.

**Results:** All 30 districts of Karnataka are reporting weekly to surveillance system. Number of “S form” reporting units per lack population varies from 3 – 35. P and L form reporting units per lakh population are uniform across the state however; the number can be increased by involving private medical practitioners, hospitals and laboratories. Health workers and officials associated with IDSP reported the current disease surveillance system simple and well accepted. All health workers do passive and more frequent reporting of cases during the outbreak. The system is flexible enough to incorporate any change or modifications in the current definitions and reporting pattern. Overall time spent on disease reporting in surveillance system is 1 – 2 days. Data at state and district level are representative of all districts and blocks respectively. Overall Sensitivity of the system is found to be 33.78% with inter-district variation. District Bangalore urban has sensitivity 7% while district Ramanagara has sensitivity 74%. Out of all reported cases of ADD <1 percent were subjected to laboratory investigation. The PPV of lab investigated cases for detecting Cholera was very low. Overall consistency of reporting units was 97.85%.

**Keywords:** IDSP, Acute Diarrhoeal Disease, Surveillance, Sensitivity, Specificity, PPV.

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1. Involving and capacity building of Private Medical Practitioners, Institutions and facilities as reporting units

**References**


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