

ABSTRACT

Background: Reporting timeliness and completeness are two of the most important key functions of dengue surveillance system. While reporting guidelines are prepared and distributed, but the success of their implementation depends on the degree of acceptance among relevant staffs. This paper reports the impact of multimodal interventions towards the adoption of guideline through a participatory approach in order to scale up dengue surveillance system.

Methods: A before and after mixed method study was conducted within Participatory Action Research (PAR) approach to improve adoption of dengue reporting guideline, carried out using principles of the Stepwise approach to implementing interventions for quality improvement tool. This study was done in Indira Gandhi Memorial Hospital (IGMH) within a duration of four months (March 2017- June 2017). Quantitative sample size includes a total of 283 dengue cases, before 3 months (April-June 2016) and during implementation (April-June 2017). Timeliness was assessed by calculation the percentage of the report sent on time (within 24 hours) and completeness (data quality) was assessed by calculating the percentage of reports with complete records (100% completion of mandatory records) among reported forms of dengue cases. Additionally, 100 staffs knowledge were assessed pre and post interventions. Among them, 10 staffs were interviewed

Result: Timeliness of reporting improved significantly from 11% to 83% and completeness of recording improved from 63% to 87% during the intervention. It was a statistically significant improvement, $P < 0.05$ after the intervention. In addition, overall staff knowledge gained during the intervention. Besides the intervention package are useful for the adoption of guideline as well as improve staff performance.

Conclusion: Combined with adequate resources, ongoing staff education, provision of feedback and reminders are effective interventions towards the adoption of the guideline in order to improve dengue reporting system. Further, continuous monitoring of reporting system is crucial.

Keywords: Dengue, Guideline adoption, Timeliness, Completeness