

Community Based Surveillance in Somaliland: Analysis of the Functionality and Effectiveness using the CBS Platform Nyss

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Purpose

Community Based Surveillance (CBS) is the systematic detection and reporting of events of public health significance within a community-by-community members.

The Somali Red Crescent Society (SRCS) and the Norwegian Red Cross (NorCross) implemented CBS in Somaliland in 2018. This retrospective study analyses the functionality and effectiveness of the CBS programme using data from the innovative, custom created software platform Nyss. Nyss enables real-time CBS data collection and notifications, as well as management and analysis of reports submitted via SMS by community volunteers.

Methods & Materials

Aggregated and anonymous data from routine CBS activities between March and December 2020 of Togdheer region in Somaliland were the basis for the descriptive analyses. 199 registered SRCS volunteers sent SMS reports for potential health risks in the community to Nyss for rapid detection of epidemic prone diseases to prevent large scale outbreaks.

CBS indicators of completeness and accuracy of reporting, data quality, timeliness of verification, and effectiveness were evaluated. Analyses were done directly in the CBS platform Nyss or Excel.

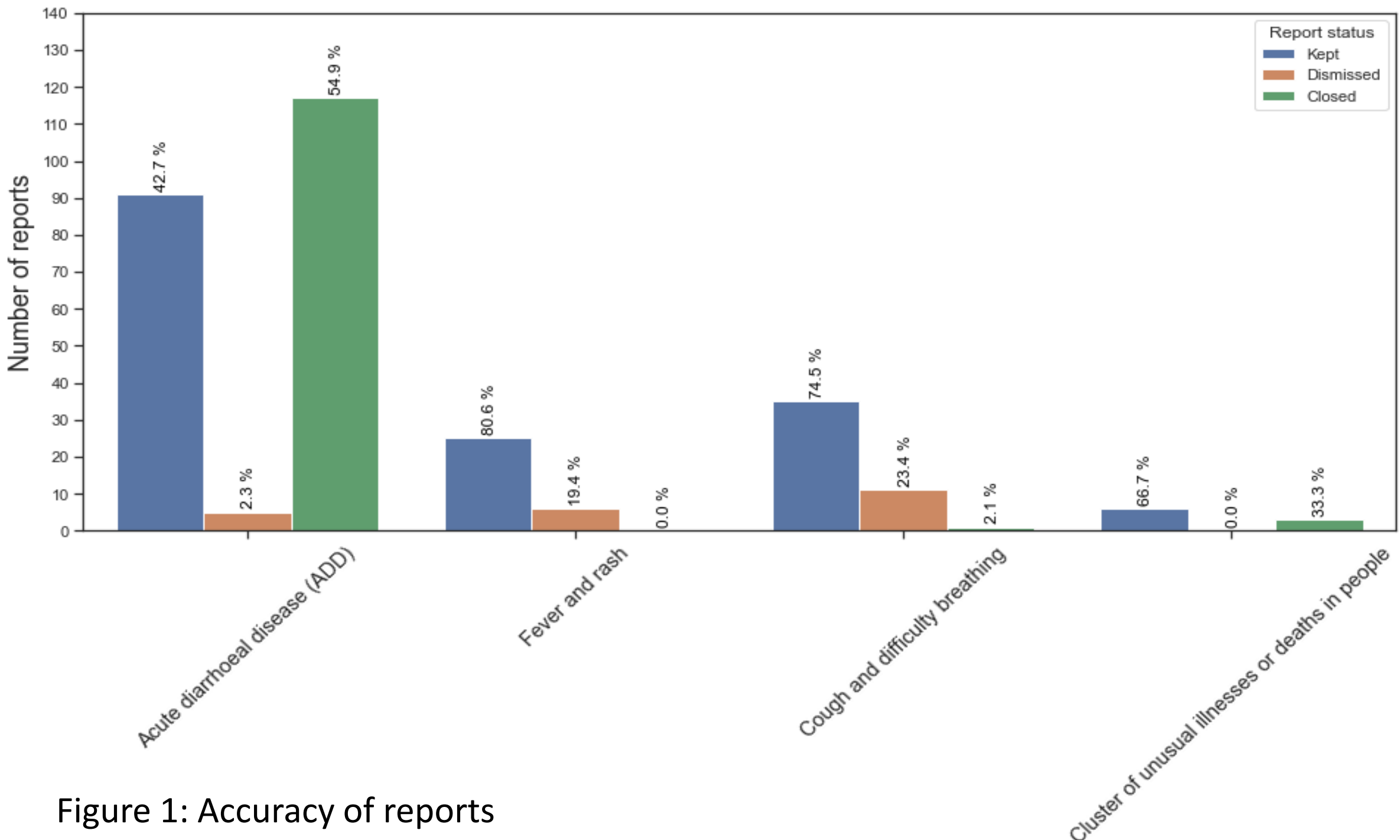


Figure 1: Accuracy of reports

Results

In average per month, 90% of the targeted 60 villages were covered by SRCS volunteers reporting on CBS at least once per month.

96 alerts were generated in the platform during the reporting period for Cough & difficulty breathing, fever & rash, acute diarrheal disease (ADD) and unusual events.

Weekly completeness of reporting was at 47% in average. Most reports were sent in the correct format (95%). Health risk reports were accurately matching the community case definition with an average of 88% (see Figure 1).

Verification of 62.5% of the alerts were done by the supervisors within 6 hours. The mean was 2 days and 21 hours.

Seventy eight percent of the alerts were notified to the public health authorities within 24 hours, the mean was at 2 days and 21 hours. Actions were taken in 91% of the escalated alerts (see Figure 2).

Conclusion

The Nyss platform has demonstrated to support early warning of potential health risks to SRCS and MoH staff as well as regular surveillance of the health situation in the community and monitoring of the CBS programme. Further efforts need to be taken to understand how Nyss is used in the field and to improve the reporting strategy and documentation to better support, monitor and analyse the programme implementation. The results are beneficial for CBS in Somaliland and other settings. Further development of M&E indicators and the CBS platform Nyss are required.

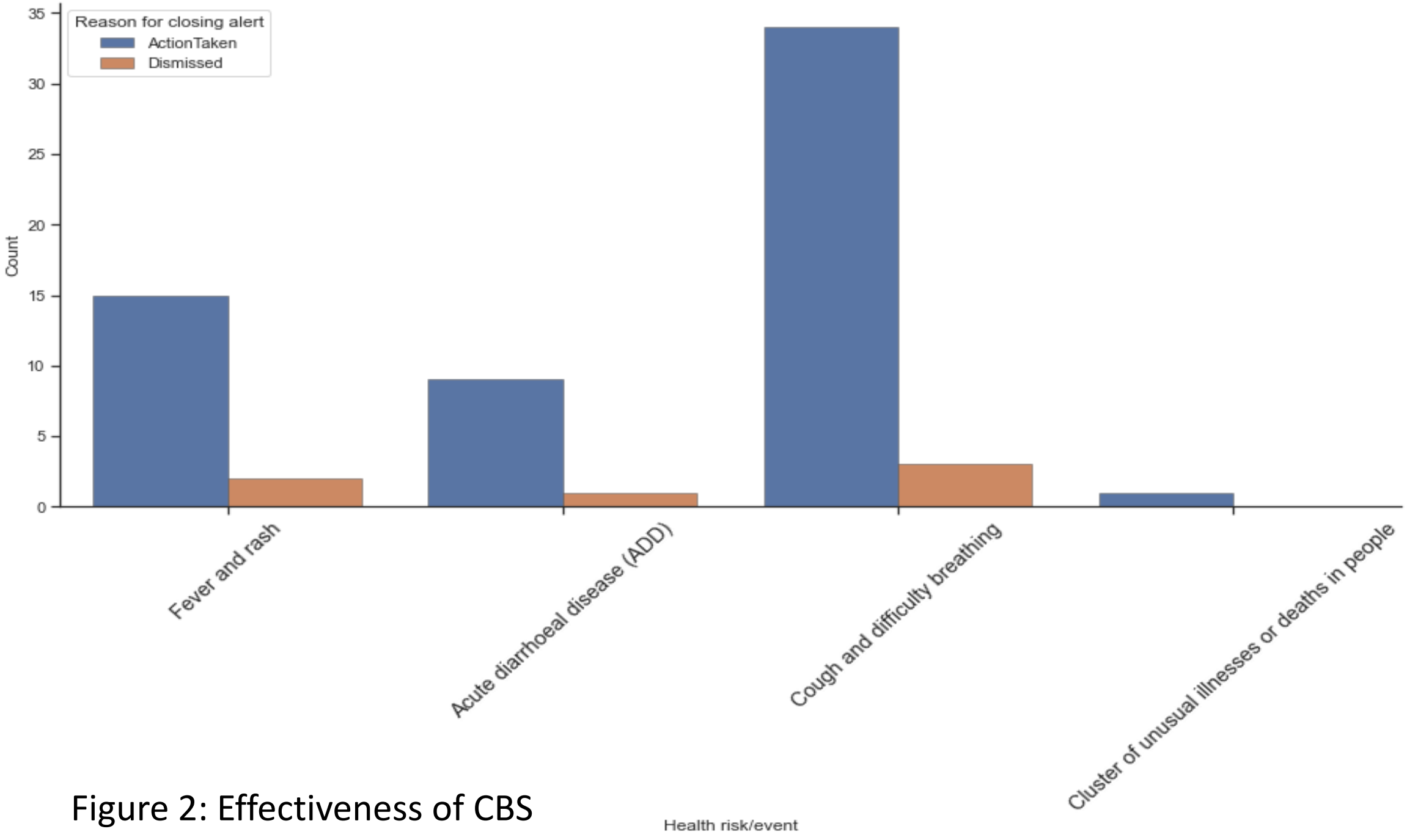


Figure 2: Effectiveness of CBS

