

Abstract

Background

Sri Lanka has a well-established National Blood Transfusion Service that provides quality assured blood service. However, the information flow is inefficient and less utilized for evidence-based decision-making. The statistics unit of National Blood Centre is unable to produce Annual Statistics Report timely due to the difficulty in analysing and making reports manually utilizing the considerable amount of data collected throughout the year. In this situation, the electronic Health Information Management System was proposed as a solution for the inefficiency of the data flow for statistical purposes.

Method

A Monthly Statistics Reporting System was designed and developed using DHIS2, which is a Free and Open Source Software (FOSS) to fulfil the requirements of the National Blood Transfusion Service. To evaluate the new system, a qualitative study was conducted using semi-structured interviews amongst a selected study population of 17 participants within the NBC Cluster, which includes 11 blood banks in Colombo area. The gathered data was analysed using a thematic analysis techniques and the emerging categories and themes were used in the subsequent discussions.

Results

Problems of calculation, usability, reliability, utilization of data and availability of reports were identified in the paper-based system. Results shows that the new electronic system has high usefulness, ease of use, ease of learn, satisfaction and cost effectiveness with accepted enhanced features of the interface. According to the interviews, participants expressed that the likelihood of using this system in the future is high.

Conclusion

Almost all the participants in this research readily accepted new electronic information management system. Therefore, it will assure the sustainability of the new system. Because of the real time updated dashboard, it will help most of the blood bank functions by facilitating administrative decision-making efficiently.