

ABSTRACT

Background: Malnutrition has the biggest impact during pregnancy and early life (from conception to two years, or the first 1000 days). The Thriposha supplementary feeding programme was established in Sri Lanka in 1973 to eliminate child malnutrition under the age of five as well as pregnant women. In Sri Lanka, malnutrition is a major concern for public health. Lack of coordination among the multi-sectoral bodies involved in nutrition, ineffective supply chain management, difficulties in identifying the targeted Thriposha beneficiaries and concerns in monitoring and assessing the progress of the nutrition interventions are some of the major contributors to this public health problem. This research study aimed to assess the requirements, design and develop an electronic information system to streamline the Thriposha supplementary feeding programme for children under the age of five.

Method: The study was conducted into three main components. The first component at the national level was conducted as in-depth interviews with direct stakeholders from the Family Health Bureau and the Nutrition Division, Ministry of Health. The second component was conducted as a descriptive cross-sectional study at the grassroots level among public health midwives from all 28 health districts using a self-administered questionnaire to identify the need to streamline the TSFP for children under the age of five and pregnant women. The third component was based on these findings, a conceptual framework was designed and, by customising the District Health Information Software 2 (DHIS2) an electronic information system was developed to streamline the Thriposha supplementary feeding programme.

Results: According to this study, 60.8 % of the 401 participants preferred to streamline the TSFP through a web-based application system, 79.3 % thought it would increase data quality, and 72.6% believed that it would minimize the workload of public health workers. Computerising data at the individual level is preferred by 38.7% of participants and 55% of the participants felt that they are already familiar with similar electronic systems.

Conclusion: The developed web-based system for supplementary feeding programmes will capture the individual-level data on malnourished children under 5 years old to assess the usage, impact of Thriposha and reduce Thriposha wastage. This system will also help to identify, monitor Thriposha beneficiaries and make rapid decisions.

Keywords: Supplementary feeding programme, National Thriposha programme, DHIS2