

Abstract:

Introduction and Objectives:

School Health Programme of Sri Lanka is implemented by Medical Officers of Health (MOH) through by the Public Health Inspectors. Current paper based school health information system consisted of eleven different forms with a total of twenty-five copies to be filled at different levels. Existing system has issues in data accuracy, timeliness, completeness and increased work load for field level health care workers.

Objective of this study was to Design, Implementation and Evaluation of an Electronic Health Management Information System to Capture School Health Data for Family Health Bureau, Ministry of Health, Sri Lanka in view of transforming paper-based school health information data flow in compatible with electronic school health data management.

Methods:

Several Focus group discussions were carried out with all the stakeholders involved in school health programme. Existing data flow was examined and data entry forms were modified accordingly. After design electronic data sheets pilot projects were implement in Anuradhapura and Kegalle districts. All the health care workers involved in school health activities in above districts were trained. One month after establishing electronic data flow evaluation was done with Individual questionnaire with the System Usability Scale (John Brooke SUS).

Results:

Three forms were modified (H 1014, H1015A, and H1247) in order to prevent data duplications and to improve user friendliness. Form size of all three forms were reduced while maintain all data elements of the existing system. Number of forms need to be filled reduced to eight forms of total fourteen copies. None of existing data elements were removed from data collecting system. There were 91 participants from both districts and majority of them were males (n=66, 72.5%). Mean age of the participants were 41.3 years of age where majority (n=38, 41.8%) of participants were in 31- 40 years age category. Majority of trainees attended to user training programme were PHIs where all the participants had minimum of GCE advanced level educational qualification. Majority of users attended to the training programme, 54(59.3%) were found to be accepted the system at SUS evaluation. System usability scale (SUS) average score of all users attended to the programme was 70.5 (SD=13.6). Score of 70 and above is considering as system acceptability. But 49 (53.8%) of them agreed with the statement that they need to learn more before get going with system like this. Within 3 months after implementation, system reporting rate summery shows excellent data completeness in both districts

Conclusion:

Revised school health management data flow has reduced manual workload by reducing number of forms to be filled and reducing the size of each form while maintaining the captivity of all data elements in the paper-based information system and Anuradhapura and Kegalle district eRHMS users have accepted the School Health electronic health information management system, but they need more learning opportunities to get going with electronic information management systems