

ABSTRACT

Management of information system is an integrated effort to collect, process, report and use health information for decision and policy-making. It allows decisions to be made in a transparent and evidence-based manner. The main source of hospital based operational health information in Sri Lanka is the Indoor Morbidity and Mortality Report (IMMR). However, it has been reported that the major aspects of the quality of the IMMR such as coverage, timeliness, completeness and accuracy are poor in Sri Lanka. Therefore, it is timely and appropriate to design a study to appraise the quality of IMMR in Sri Lanka.

A descriptive cross sectional study was carried out in the district of Kandy to describe the coverage, timeliness, completeness and accuracy of IMMR in 2009 and describe the affect of designation, training and experience of preparing officers and some selected factors on the quality. The coverage and timeliness was assessed using all IMMRs (n=212) received at the Regional Director of Health Service (RDHS) office and the medical statistical unit (MSU) while the completeness and accuracy were assessed using a 25% sub sample of IMMRs (n=53) received in 2009. It was selected from hospital groups proportionate to their number in the district. Data were collected by separate checklists. In the second component, officers in charge of medical recording offices were selected from all 53 hospitals in the district and data were collected by a self-administered questionnaire.

While the district coverage of the IMMR was adequate (88%), it was the poorest (69%) in Teaching and District General Hospitals. The overall timeliness was 20% while the same was 69% in type-B Divisional Hospitals and 6% in Teaching and District General Hospitals. Completeness of the IMMR for the district was adequate (75%). The highest completeness of 90% was recorded for type- B Divisional Hospitals. But there was no statistically significant difference of completeness among hospital groups. IMMR in 91% of hospitals demonstrated accuracy above 75%. About 90% studied IMMRs were accurate above 75%. Accuracy was highest in Teaching and District General Hospitals. There was no single report below 50% accuracy and no statistically significant difference of accuracy among hospital groups.

There was a statistically significant relationship between designation of preparing officers and the timeliness of IMMR. Ninety five percent of reports which were prepared by MROs and only 1.5% of reports prepared by AMO/RMO were received timely. The relationship between designation and completeness was not statistically significant. The relationship between accuracy of reports and work experience of preparing officers, training on ICD-10, adequacy of information in BHTs and legibility of BHT was assessed. But there was no statistical relationship between accuracy and other above factors. No one was trained on health information and information technology.

Majority of officers reported that they have separate places, adequate storage facilities, adequate resources and adequate number of supportive staffs in their hospitals in preparing the IMMR. Supervisions, feedbacks of their performances and in-service training opportunities were inadequate for them to improve their performances.

It is recommended that authorities should take actions to improve timeliness of IMMR in the district. Close monitoring is needed to improve all quality indicators in Teaching and District General Hospitals. Training opportunities, supervisions, feedbacks are suggested for improving the quality of IMMR.

Not assessing the accuracy of entries in the IMMR with the front page diagnosis in the BHT, accuracy of coding, using a 25% sub sample for appraisal of completeness and accuracy of IMMR and not auditing the adequacy of available facilities and resources for record keeping (IMMR) were limitations of the study.