

ABSTRACT

A cross sectional descriptive study was carried out to study the Electronic Hospital Information System (EHIS) at the Outpatient Department (OPD) in District General Hospital (DGH) Trincomalee.

The study was conducted to describe the EHIS and its functioning at the OPD in DGH Trincomalee.

All the staff members operating the EHIS at the OPD in DGH Trincomalee were included in the study. An observation chart, a competency assessment test, a self administered questionnaire and focus group discussions were used in this study. Three undergraduates acted as examiners to carry out the competency assessment test. A self administered-questionnaire was used to describe socio-demographic characteristics of participants, the level of self assessed performance, factors affecting the functioning of the electronic hospital information system, level of satisfaction and self-admitted computer literacy.

The Multi Disease Surveillance (MDS) was the only software installed and used at the DGH Trincomalee but it has undergone several changes from MDS-1 to MDS-5. Regarding the availability of resources there were enough computers, power trees, printers for the staff except at the OPD registration counter. Regarding the general use of the EHIS medical officers (100%) used the EHIS to write prescriptions,(>70%)to get the patient's socio-demographic details, enter

patient's history to retrieve previous medical records, to obtain what drugs available and what drugs out of stock at the outdoor pharmacy, for notification of diseases and used less frequently to get the laboratory reports (50-70%) and radiological reports (50-70%), refer patients to other departments (50-70%) and to get the disease morbidity pattern at the OPD (50-70%). The system was used for 17 tasks out of 20 tasks and most unused tasks were write the diagnosis according to the ICD-10, to register code for diagnosis and to give written instructions to the patients about their illness. Nurses used the system less than half of the tasks for which the system was functional. The pharmacists/dispensers' use of the system was optimal. The use of the system by attendants was for about half of the tasks out of the tasks for which the system was functional. Most of the members of each category of staff agreed that the system was easy to use and most of them were satisfied with the system. Overall respondents' competency of using the system were high (>80%).

The majority of staff was competent to use the system even though their participation in the basic training program was less. Most of them were not satisfied with the training they received. Some medical officers were not aware about some functionalities of the system, and the reason might be the lack of training they had about the system. Majority of staff members had low level of computer literacy. Even though their computer literacy was low majority of them used the system successfully. The MDS software used in this hospital was very

much user friendly and easy to learn. The system provided confidentiality and security to patient information.

The recommendations at Policy level are to legalize the EHIS with acceptance of electronic records at the courts and EHIS to be integrated to the present process of development of health information policy. Recommendations at the Operational level are to strengthen the training program for the staff, combat several constraints and upgrade the system, entering lab reports to the system by MLTs, the hospital management should look into security and confidentiality issues, provide digital X-ray imaging and download them to CDs and improved to write the diagnosis according to the ICD-10.

The implementation of EHIS at the OPD in DGH Trincomalee is an example of the successful implementation.

Key words: Electronic Hospital Information System, Out Patient Department, Multi Disease Surveillance.