

WEB-ENABLED POINT-OF-CARE SYSTEM: GATEWAY TO PHARMACEUTICAL CARE

NOUR HANAH OTHMAN, RAHMAT AWANG,
MOHAMED IZHAM MOHAMED IBRAHIM, ZULHAM HAMDAN
National Poison Centre, Universiti Sains Malaysia, 11800 USM, Penang, Malaysia

Information technology has advanced from using software packages to the Internet for patient care management. The use of Web-enabled systems has the advantage of integrating healthcare providers and patients, by providing direct and remote online access. This would allow for continuous and seamless care, as the capacity for data storage is unlimited, data retrieval is prompt and information is accessible from anywhere. The objective of the study was to develop a prototype pharmaceutical care information system that utilises the Internet for the integration of care between pharmacists and patients in the ambulatory care settings and to assess pharmacists' perceptions of the system. An extensive literature review, browsing of health portals and computer-decision support systems was performed to determine the structure and content of the system. We modified and incorporated the Subjective, Objective, Assessment, and Plan (SOAP) format. A comprehensive format was designed and then translated into a series of databases, which were integrated to allow customisation. The system was demonstrated at a seminar and 26 pharmacists made a preliminary assessment on it. The system was developed to provide complete documentation, standardisation, counselling and monitoring capacity. It has capabilities for education, reminders, and decision-making. In the assessment, the system was considered user-friendly (62%), quite effective in documentation (58%), has the potential to enhance patient counselling (50%), and enhance pharmacists' (65%) and patients' (62%) knowledge. It is possible to develop a system that can provide a productive interaction between the pharmacists and patients, which would enable the pharmacists to enhance their role in the healthcare system. The initial assessment of pharmacists' perceptions on the system was positive and encouraging.

Keywords: Information technology, Pharmaceutical Care, Internet, Customisation