(ELECTRONIC TRANSMITTED VERSUS MANUAL PRESCRIPTION SYSTEM: A COMPARATIVE EFFICIENCY AND EFFECTIVENESS STUDY IN HOSPITAL UNIVERSITY SCIENCE MALAYSIA KUBANG KERIAN (OUTPATIENT DEPARTMENT))



DIPLOMA OF PHARMACY IN THE FACULTY OF PHARMACY, UNIVERSITI TEKNOLOGI MARA PULAU PINANG

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ABSTRACT

Prescription is the order made by physician for preparations and administration to the patients. There are two types of prescriptions available; electronic prescription and manual prescription. In Hospital University Science Malaysia Kubang Kerian, both types of prescription are used. This study is to determine the efficiency and effectiveness of the electronic transmitted prescriptions compared with the manual prescription system in aspects of patient waiting time and prescription error reported in HUSM Kubang Kerian. Random screenings on 1521 prescriptions received from December 2010 to February 2011 were performed. Only 320 of them which met the inclusion criteria were selected which consist of 160 were electronic transmitted prescription and 160 were manual prescription. The data that were analysed included; the average of time taken per week for prescription, filling, labelling and screening process, and number of prescription errors reported by both types of prescriptions. For the screening process, manual prescriptions are more effective than electronic transmitted prescription system but for the labelling process, electronic prescription shows more efficient. Prescription errors were divided into 5 types. There are confusion about the name of drug, wrong drugs strength, wrong direction to used, date of dispensing, and others. Most of the manual prescriptions have the greater frequency number of errors than electronic prescription in all types of errors. The study found that the electronic transmitted prescription has more efficacy and efficiency in the aspects of the average of patient waiting time and number of prescription error. So, the electronic transmitted prescription must be upgrade and must be used 100% at the pharmacy department of HUSM as soon as possible.

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