

ERRORS IN MEDICATION SYSTEM FACTORS AND ITS ASSOCIATION WITH THE NURSES' DEMOGRAPHIC CHARACTERISTICS (2010)

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ABSTRACT

BACKGROUND OF THE STUDY

Medication administration is a complex and time-consuming task, occupying up to one-third of nurses' time. Because of the complexity of the medication administration process, there is much potential error. Hence, a more detailed look into the medication process and where errors occur is necessary for patient care safety.

OBJECTIVE

This study seeks to find out which factor in the medication process errors occur the most. It also seeks to associate the occurrence of this error with the nurses' demographic data.

METHODS

This study utilized descriptive-correlation as study design. The investigators utilized checklists that determined which factor contributed most to the occurrence of medication error. The factors include prescribing, order processing, dispensing and medication administration. The study utilized convenience sampling as sampling scheme. Participants were all nurses in the institution, excluding those in the Special Areas. The investigators also conducted chart reviews. Spearman's Rank, Kruskal-Wallis and Mann-Whitney U-test were the statistical tests used for the analysis of data.

RESULTS

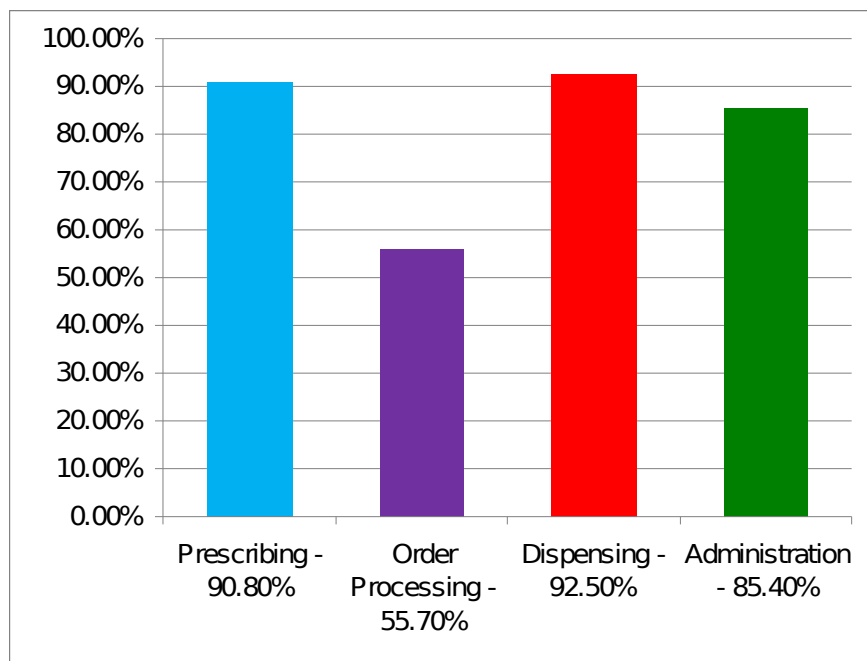


Figure 1. Frequency and Percentage Distribution of System Factors affecting Medication Error

A total of 56 nurses participated in the study from the 20 participating nursing units. A total of 184 charts were reviewed. Results showed that in the prescribing factor, medications ordered with no generic name had the highest percentage of error with 90.8%. In the order processing factor, the highest percentage of error was non-reporting of unavailable medication by the pharmacist with 55.7%. The failure of the pharmacist to provide information about intravenous administration related problem accounts for the 92.5% percentage error in dispensing. In administering factor, opened vials and ampoules that were not labeled got a percentage error of 85.4%. Lastly, ward assignment and working hours are greatly associated with the occurrence of medication error with a p-value of 0.042 and 0.043 respectively.