SYNOPSIS

KEY POINT SUMMARY

OBJECTIVES

To identify and measure the prevalence of medication errors in 3 different healthcare facility types and sizes: Accredited, non-accredited, skilled nursing facilities.

DESIGN IMPLICATIONS

This study highlights the incidence of medication error rates in different types and sizes of healthcare facilities. Although the authors did not find any significant differences in error rates w.r.t the type or size of the facility, the study highlighted the discrepancy in the error rates among facilities in different states and highlighted the association of the Joint Commission accreditation of the healthcare facilities and the impact on error rates.

Medication Errors Observed in 36 Healthcare Facilities

Barker, K. N., Flynn, E. A., Pepper, G. A., Bates, D. W., Mikeal, R. L.
2002 | Archives of Internal Medicine
Volume 162, Issue 16, Pages 1897-1903

Key Concepts/Context

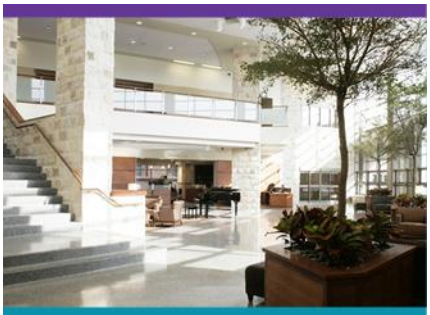
The authors in this study aimed to measure and compare the medication error rates at 36 healthcare facilities in Georgia and Colorado. Three different facility types were randomly stratified and included in the study; Joint Commission accredited hospitals, Joint Commission non-accredited hospitals and skilled nursing facilities. The main aim was to observe if the medication error rates in these healthcare settings differ by facility type (by bed size) or by State.

Methods

The data was collected using observation method; wherein the observer shadowed the nurses in the study setting, during their administration rounds. The observed data was later reconciled with the physician's orders; and any discrepancy in what was administered versus ordered was classified as an error. An expert panel of physicians further determined the clinical significance of each of the identified errors.

Findings

The study found an overall error rate of 19% for all the study settings (n= 605/ 3216). The most frequent errors were wrong time (43%), omission (30%), wrong dose (17%), and unauthorized drug (4%). The expert panel of physicians judged about 7% of the errors to be clinically significant; i.e., errors with potential for harm, also known as adverse drug events. The authors found no significant differences in the error rates among the three types of healthcare facilities (P= .82) or by facility size (P= .39). But they did observe that error rates were significantly higher for facilities in Colorado compared to those in Georgia



The Center for Health Design: Moving Healthcare Forward

The Center for Health Design advances best practices and empowers healthcare leaders with quality research providing the value of design in improving patient and performance outcomes in healthcare facility planning, design, and construction, optimizing the healthcare experience and contributing to superior patient, staff, and performance outcomes.

Learn more at www.healthdesign.org

Limitations

The authors indicated the following limitations of the study:

1. Potential observer effect on the observed
2. Sampling inadequacies, as facilities from only two states were selected for the study, hence might not be generalizable to other states
3. Convenience sampling of the doses observed, hence might not be representative of the doses administered at the facilities
4. Errors that the observer might have made during the observation process.