

Title:

An Investigation of the Most Common Interruptions During Medication Pass

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Keywords:

Interruptions, Medication and Medication-Pass

References:

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2. Williams T, King, MW, Thompson JA, Champagne MT. Implementing evidence-based medication safety interventions on a progressive care unit. *American Journal of Nursing*. 2014;114(11):53-62.
3. Pape T.M. Applying airline safety practices to medication administration. *MedSurg Nurs*. 2003;12(2):77-93.

Abstract Summary:

Nurses commonly experience high levels of interruptions over the course of their shift which can result to adverse events affecting patients. This study was conducted to identify the most common interruptions to implement changes that can decrease the interruptions during this critical time.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
To identify the types of interruptions that occur in Medical/Surgical units.	Medication interruptions that were identified in the study were face to face communication, supplies, and phone interruptions.
To identify clinical implications of interruptions during a medication pass.	Adverse medical errors can occur as a result of interruptions during a medication pass.

Abstract Text:**Purpose:**

Research shows that interruptions during medication pass lead to medical errors which can compromise patient safety and quality. This research is a replication study by Pape (2003) that investigates the most common interruptions through observation during medication pass time. The research also investigates the frequency of each type of interruption utilizing a direct observation method.

The theoretical framework of this research is based upon the review of two instrumental engineering theories relevant to health care situations. The theories include the Heinrich Domino theory and Eindhoven's Causation model. Heinrich's Domino theory explains the impact of social environment, in the case of healthcare distractions, using the analogy of dominos pushing each other over as each incident occurs. On the other hand, Eindhoven's Causation model is different because it views the environment as

a circle of outside influences rather than Heinrich's linear view of causation. By reviewing these models of accident causation, a framework for the study was established.

Methods:

For the purpose of this study, interruptions during medication administration is defined as any external factor causing the cessation of product activity before a current task is complete. Such interruptions will include, but are not limited to, phone calls, missing supplies, call lights, malfunctioning equipment, alarms and face-to-face care-related interruptions.

The study employed an observation method. Nurses were observed during a medication pass time. The collection time was set over 4 hour blocks from 8am to 12pm. The observers comprise of a dual team of a Registered Nurse and an Advance Practice Nurse. Using a tally sheet and floor plan designs, the observers remained 4-6 feet away ensuring patient privacy. Guidelines were established to answer any inquiries about the details of the study.

Results:

There were 49 observations, with 24 participants. Majority of the participants had 0-4 years experience. There was no dominant age group identified. The top three most common interruptions identified were face-to-face verbal communication (48.6%), supplies (18.3%), and phone interruptions (13.9%). Equipment failure, order clarification safety, change in patient status and other accounted for less than 10% for each interruption.

Conclusion:

With these results, three interventions were chosen to be implemented to reduce interruptions during a medication pass. The first intervention would be to educate the hospital staff, patients, and visitors about the extent of this problem. The second intervention is to triage phone calls during medication pass times. The last intervention is to use signage all throughout the hospital especially medication rooms. Effectiveness of the interventions will be performed after implementation of the interventions.