CHARACTERISTICS OF WORK INTERRUPTIONS DURING MEDICATION ADMINISTRATION

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PURPOSE

To document characteristics of nurses’ work interruptions (WIs) during medication administration.

MATERIAL AND METHODS

A descriptive observational study design was used along with a sample of 110 medication administration rounds.

Data were collected on 11 medical unit using a unit dose distribution system during February 2016.

Data collection on WIs relied on direct structured observation.

The following WI characteristics were recorded: source, secondary task, location, management strategies, and duration.

RESULTS

79 WIs were observed over 25 hours 22 minutes of medication administration and preparation time (3.16 WI/hr).

PROCESS (Figure 1)

WIs occurred:
• during the preparation phase (n=45; 56%),
• during administration phase (n=34; 43%).

SOURCE (Figure 2)

During the preparation phase.
Nurse colleagues (n=22; 27%), followed by phone (n=18; 22.8%) were the most frequent source of WIs.

During the administration phase.
The most frequent sources of WIs were: self-initiation (n=14; 17.7%), patients (n=20; 25.3%).

SECONDARY TASK (Figure 3)

Nurses were interrupted during the preparation phase mostly:
• to solve system failures (missing medication or equipment) (n=19; 24%) for care coordination (n=15; 19%).

The most frequent secondary task undertaken during the administration phase was direct patient care (n=45; 56.9%).

DURATION (Figure 4)

WIs lasted 2 min 52 s on average, and were mostly handled immediately (n=75; 94.9%).

LOCATION (Figure 5)

The most frequent location was the hallway (n=43; 55%), patient room (n=43; 44%) and medication room (n=1; 0.01%).

CONCLUSION

The process of medication administration is not protected against WIs, which poses significant risks.

Interventions to reduce WIs during the medication administration process should target nurses and system failures to maximize medication administration safety:
• developing « the management of processes, activities support tools, signalization of interruption-free areas as safety zone, and continuous education of the staff to qualify both those being interrupted and those who are doing the interrupting,
• controlling interruptions, and considering the priorities and times with a greater risk of harming the work process and patient safety an area exclusively dedicated to prepare medications;
• promoting use by the nurse responsible for administering medications of a yellow vest with the following words on it “Please, do not interrupt, I am administering medications”; and the use of educational strategies.

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