New study protocol seeks to improve patient safety by decreasing medication administration interruptions

The impact of interruptions on hospital nursing activity is a known patient safety concern, especially during the important process of medication administration. Each year, it is estimated that 1.5 billion people in the U.S. are harmed by a medication error, according to the Institute of Medicine.

Now a study through the Center for Nursing Research and Innovation is hoping to shed new light on the factors contributing to errors made during the complex medication administration process.

“It’s clear that when nurses are interrupted or distracted, they are likely to make a mistake,” said Rebecca Saxton, Ph.D., RN, CNOR, CNE, Associate Professor, Director of Academic-Clinical Practice Partnerships at Research College of Nursing. While much has been reported on the considerable risk for harm during the medication administration process, this multi-site study seeks to address the gap in literature on the effect of ‘no interruption’ interventions on safety and efficiency.

Phase I of “The Impact of ‘No Interruption’ Interventions on the Safety and Efficiency of Medication Administration” protocol kicked off in December in select units at five sites. During this period, study data collectors observed 50 medication administration occurrences, including how many times a nurse was interrupted, the source of interruptions, and the amount of time it took to administer the medication.

Now underway, Phase 2 of the protocol involves the creation of “no interruption zones” on units where nurses are involved in the complex process of retrieval, preparation, and administration of medications. Various strategies to reduce interruptions are being implemented. Some sites are placing special signage and red duct tape around medication preparation areas to minimize interruptions. Others are also placing signage on patient room doors and inside the room to remind staff and visitors to eliminate interruptions while medication administration is in process. Nurses are also encouraged to use special scripting at the patient bedside to help them focus on the critically important task at hand: “Because your safety is our priority, please do not interrupt me when I’m administering your medication.”

Because nurses are trained to always be helpful and responsive, this change in protocol may require a cultural shift in thinking – with safety as the priority. “Our motto in this study is ‘It’s not no, it’s just not now,’” said Saxton.

At the conclusion of Phase II, study investigators will observe another 50 medication administration interactions, then compare it with Phase 1 data. These results, along with the rate of medication errors (collected separately) and patient satisfaction scoring on medication communication, will be compiled and evaluated.

“We know that if we can be intentional about decreasing interruptions, we can make patients safer,” said Saxton.