INTERRUPTIONS IN PREANESTHESIA NURSING WORKFLOW:  
A PILOT STUDY OF PEDIATRIC PATIENT SAFETY  
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Introduction:  Preanesthesia care represents a high risk system where interdependencies and interdisciplinary coordination is important to workflow, communication patterns, and information needs. Minimizing distractions is one method that may decrease errors.

Identification of Problem:  One unexplored factor is the assessment of interruptions occurring during the preanesthesia assessment (PAA).

Purpose:  1) Describe the number of interruptions occurring during the PAA nursing assessment;  2) evaluate the effectiveness of a no interruption zone (NIZ) on the number of interruptions and 3) determine if the NIZ improves patient safety in the preoperative phase by reducing the number of interruptions.

Methodology:  This pre and post, quasi-experimental pilot study, using observational methodology was conducted in a 23 bed pediatric perianesthesia unit within an academic medical center. After IRB approval, event observation training was conducted using a specified protocol with 90% inter observer agreement. Observations were conducted in two hour blocks of time. After 44 baseline observations, an NIZ was created in a designated geographical location within the unit. Following a two-week run-in, 34 post NIZ observations were conducted. Pre and post NIZ, each PAA was approximately 22 minutes.

Results:  There were a total of 389 pre NIZ interruptions and 217 post NIZ interruptions (p<.001). The mean number of pre NIZ interruptions per observation was 8.82 and was significantly different than the mean number of interruptions post NIZ (6.38; p = .011). Of the pre NIZ observations, 57.6% occurred within intervals of one minute which decreased to 38.7% post NIZ. Pre NIZ, nurses did not return to their original task 15.2% of the time versus 8.9% post NIZ.

Discussion:  Data suggests that the frequency of interruptions leads to disruption in the nurses’ concentration during preoperative workflow.

Conclusions:  The use of an NIZ decreased the number of interruptions occurring during the PAA thereby minimizing distractions.

Implications for Practice:  Decreasing the number of interruptions has the potential to improve patient safety by enhancing the quality of information the nurse obtains during the PAA by decreasing breaks in attention and maintaining focus for the task at hand.