THE IMPACT OF THE USE OF PADDLE PAGERS ON FAMILY MEMBER ANXIETY DURING THE INTRAOPERATIVE PERIOD

Primary Investigator: Michael Tagadaya, RN, MS
NYU Hospital for Joint Diseases, New York, NY

Co-Investigators: Rosana Macapobre, RN; Ellen Rich, PhD, RN, FAANP; Joseph Bosco, MD

Introduction: A Perioperative Services Department can be a heavily trafficked unit. Due to space limitations and family members’ reluctance to wait in another area or floor, overflow of the waiting area is a common issue.

Identification of the Problem: This presents a challenge to communication and may increase family member anxiety during the intraoperative period.

Purpose of the Study: The purpose of the study was to identify the effect of using paddle pagers as a method of intraoperative communication on family member anxiety. A paddle pager is a device that vibrates when called. More commonly used in restaurants, it serves to communicate table availability for waiting guests.

Review of the Literature: Although not using pagers, Leske (1996) compared four types of communication with family members of surgical patients and reported significantly lower anxiety levels when in-person status reports were given. Tope, Walsh and Sanford (1998), conducted a pilot study to assess the effects of digital pagers on family members’ levels of anxiety, threat and activity during their relative’s surgery. Those receiving pagers had significantly higher activity, perceived threat levels were similar between groups, and anxiety levels were significantly higher in the pager group.

Methodology: The family member’s current level of anxiety was assessed preoperatively via a visual analog scale (VAS) and demographic data were obtained. Subjects were provided with paddle pagers on alternate days.

Design: A prospective, quasi-experimental design was used for the conduct of this study. The study was conducted in the ambulatory surgery waiting areas.

Results: Each group consisted of sixty family members: n=120. Mean anxiety scores for both groups were greater at the postoperative measurement. In the non-paddle pager group, the difference between the preoperative and postoperative anxiety scores was significant (p = .034) while in the paddle pager group, the difference was not significant (p=.187). There was no significant difference found between the two groups when their preoperative scores (p=.67) or their postoperative scores were compared (p=.94).

Discussion: An unexpected finding was that for all subjects, anxiety levels were higher at the postoperative assessment than the preoperative reading. We further examined the data and found that actual surgical duration in all cases exceeded planned surgical duration, which perhaps explains the increase in anxiety for both groups.
Conclusion: Those not receiving paddle pagers had a statistically significant increase in anxiety while family members with pagers did not.

Implications for Perianesthesia Nurses and Future Research: Although there were not highly significant differences in anxiety level between groups, this modality may be helpful for individuals awaiting news about their relatives. Limiting the sample to family members of individuals receiving the same type of surgery and measuring more variables related to family members’ waiting experience are suggestions for future research.