

THE EFFECTS OF A SURGICAL VIRTUAL TOUR ON ADULT PREOPERATIVE ANXIETY AND UNDERSTANDING OF THE SURGICAL PROCESS

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Introduction: Current research supports that high levels of preoperative anxiety have unfavorable effects on patient outcomes. A literature search identified 60 articles supporting the use of multi-media technology in reducing preoperative anxiety: less than 20% were found to focus on the adult preoperative population's anxiety and knowledge of the surgical process.

Identification of Problem: Current standards of preoperative education incorporate personal instruction and printed teaching materials. The use of video technology in the adult preoperative population examines a non-traditional alternative to this traditional preoperative education. Watching a "Surgical Virtual Tour" video during the pre-admission testing (PAT) office visit could be an innovative, informative, and usable tool in decreasing adult preoperative anxiety and increasing self-reported knowledge of the surgical process.

Purpose: To determine if watching a "Surgical Virtual Tour" video during the pre-admission office visit can decrease adult preoperative anxiety and increase self-reported understanding of the surgical process. The efficacy of the intervention will also be evaluated.

Methodology: A descriptive single-group, pretest-posttest design was utilized to measure preoperative anxiety, contributing factors, knowledge about the surgical process and effectiveness of the technology. A convenience sample of 150 PAT patients tested (power=.08, $\alpha=.05$). Demographic information regarding prior surgery, age, gender, and type of surgery was obtained. Patients completed a pre-video questionnaire (PROMIS® tool), watched the "Surgical Tour" video, and immediately completed a post-video questionnaire.

Results: Preoperative anxiety and contributing factors had statistically significant decreases post intervention ($p<0.001$) with a 39.8% overall increase in self reported knowledge regarding surgical process. Females had 3.9% greater decrease in anxiety than males. Study revealed 98.6% acceptance of video technology and 74% preferred alternate viewing times.

Discussion/Conclusion: Multi-media technology has been shown to be useful, informative and an acceptable method of preparatory familiarization with the surgical process. Efforts to reduce adult preoperative anxiety should remain multi-faceted.

Implications for perianesthesia nurses and future research: The data supports inclusion of virtual tour video technology in standard adult preoperative education. Future research should focus on other uses of technology in the perioperative setting.