



Distractions and Interruptions in the OR: Evidence for Practice

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Periodic clinicians are acutely aware that distractions and interruptions can and do occur on a regular basis. Limited evidence exists, however, to help clinicians understand the nature and frequency of interruptions and distractions. Furthermore, less is known about effective strategies to reduce interruptions and distractions and thus make clinical care safer.

Recently published research reports examine the nature and types of interruptions and distractions in the OR. These reports provide numerous insights about how to most effectively approach research questions related to interruptions and distractions. They also offer a starting point for categorizing the effects of interruptions and distractions on surgical team members' performance. This column provides a summary of these recent reports and describes their relevance to clinical practice.

INTRAOPERATIVE INTERFERENCE

Healey, Sevdalis, and Vincent¹ examined distractions and interruptions in the OR during surgery. Their observations occurred in a teaching hospital in Great Britain during 50 general surgical procedures, both laparoscopic and open. The researchers defined distractions as "a break in attention, evidenced by observed behaviour, such as orienting away from a task or verbal responding."^{1(p590)} An interruption was defined as a "break in task activity, evidenced by observed cessation of a task."^{1(p590)}

The researchers used a 9-point rating scale to record the effect of the interruption or distraction on surgical team members. A rating of "1" indicated that

the observed effects on the team were only potentially distracting, whereas "9" indicated that the observed effect interrupted the flow of the procedure. Each interruption and distraction was recorded and then rated for its effect on the team. Examples of distractions and interruptions included the telephone ringing, a beeper going off, communications with external staff members, communication difficulties, and equipment-related issues.¹

After observing 50 surgeries, these researchers found that distractions and interruptions occurred during every procedure, with a mean of 13.56 events during each surgery and a mean rate of 0.29 events per minute of surgery. The number of events per procedure ranged from a low of one event to a high of 39. Beepers going off, movement behind the video monitors, and nonprocedure-related conversation accounted for the highest frequency of interruptions. Surgeons, nurses, and anesthesia care providers all experienced distractions, but surgeons were the most frequently distracted. The researchers reported that many distractions were related to equipment, work environment, and procedural events.

The researchers concluded that the high volume of distractions and interruptions may have a negative influence on teamwork in the OR as well as on

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Researchers found that surgeons were the most likely initiators and recipients of case-irrelevant communications, such as “small talk” or discussions about other patients.

surgical outcomes. They also recommended that future research be conducted to examine the nature and types of distractions and interruptions and the effects on surgical teams and outcomes.¹

QUANTIFYING DISTRACTION

Healey, Primus, and Koutantji² recently published their findings of observations from 30 urologic day-case procedures in a London, England, hospital. These researchers defined a distraction as an “observed behaviour such as orienting away from a primary task”^{2(p136)} and they defined an interruption as a “distraction resulting in a primary break in primary task activity.”^{2(p136)} In this study, researchers used an 8-point scale to rate the effects of distractions with “1” only having a potential for distraction and “8” actually interrupting the surgical team’s work.²

These researchers found an average of 20.47 events during each surgical procedure, with a range from one to 89 and a mean frequency of 0.45 events per minute. They also reported that the OR doors opened at the rate of 1.08 times per minute. Major sources of interruption and distraction included conversation, work environment problems, telephone calls, and equipment problems, and these interruptions had the greatest effect on the work of surgical team members.

The researchers in this study concluded that significant numbers of distractions and interruptions occurred in the OR and resulted in work interference. They recommend that future research efforts focus on the relationship between distractions or interruptions and

patient safety. They also recommended an evaluation of team performance issues in surgery.²

DISTRACTING COMMUNICATIONS

Sevdalis, Healey, and Vincent³ studied distracting communications in the OR. The research study occurred at a large teaching hospital in Great Britain and focused on 48 general surgery procedures and case-irrelevant communications. The data used for this study were collected during the researchers’ observations recorded in the Healey, Sevdalis, and Vincent study.¹ The source and the recipient for each case-irrelevant communication were recorded as was a brief note of the content of the communication. Each event also was rated for its effects on the surgical team using the 9-point scale previously described.^{1,3}

The researchers reported an average of 3.48 case-irrelevant communications per surgical procedure. They reported that about 49.7% of all case-irrelevant communications consisted of “small talk,” whereas 25% of these communications concerned another patient and 20% involved coordination and organization. Surgeons were the most likely initiators and recipients of case-irrelevant communications. The researchers concluded that further study is required to examine the effects of case-irrelevant communication on patient safety and communication effectiveness.³

APPLYING THE EVIDENCE

These three studies contribute to knowledge about the nature of distractions and interruptions that occur in the OR. They also describe research methodologies that could be used to conduct similar research projects in other hospitals and ambulatory surgical settings. Perhaps the best place to start is for nurses to examine their own clinical settings, regardless of whether a formal research project is planned.

Every perioperative clinician should be alert to the sources of distractions and interruptions and assess the effect that they have on the clinical team. The priority should be to minimize unnecessary distractions and interruptions and to attempt to eliminate those that have the most effect on surgical team function. This will

increase the reliability of patient care and enhance patient safety. Clinicians must serve as the first line of defense to minimize the inherent safety risks from interruptions and distractions. To learn more about these topics, nurses should read one or more of these research reports and stay alert for future research reports on this very important topic. — **AORN** —

REFERENCES

1. Healey AN, Sevdalis N, Vincent CA. Measuring intra-operative interference from distraction and interruption observed in the operating theatre.

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3. Sevdalis N, Healey AN, Vincent CA. Distracting communications in the operating theatre. *J Eval Clin Pract*. 2007;13(3):390-394.

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Deadline Extended for Continuing Education Article

AORN has extended the deadline for receiving continuing education contact hours for the January 2004 *AORN Journal* article "Assertiveness training to prevent verbal abuse in the OR." The deadline for taking the examination and submitting an answer sheet to earn 3.0 contact hours is now December 31, 2007.

This article can be accessed online at <http://www.aornjournal.org>. Access the web site, log in, and search for the article by entering the article title in

the search box in the upper right hand corner of the page. Print the article and the examination, answer sheet, and learner evaluation, available in two PDF files. After reading the article, complete the answer sheet and learner evaluation and submit them with the appropriate fee by mail to AORN Customer Service c/o *AORN Journal* Continuing Education, 2170 S Parker Rd, Suite 300, Denver, CO 80231-5711 or send them via fax with credit card information to (303) 750-3212.

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AORN is now accepting submissions of poster presentations for display at the 2008 AORN Congress, which will take place March 30 to April 3, 2008, in Anaheim, California. In addition to the Clinical Improvement/Innovation and Research/Evidence-Based Practice Poster categories from previous years, a new Informational Poster category has been added for Congress 2008. Informational posters describe a chapter or hospital activity that is performed with or for the community or facility staff members but that does not have

a direct relationship to patient outcomes.

Submissions for poster presentations should be in the form of an abstract of 200 to 250 words on a clinical improvement/innovation, research/evidence-based practice, or informational topic. For more information or to submit an abstract, visit <http://www.aorn.org/Education/EducationEvents/CallForAbstractsPosters/>. The deadline for poster abstract submissions for Congress 2008 is October 1, 2007. Submissions received after the deadline will be considered for Congress 2009.

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Nominate yourself or a colleague for an individual award or showcase the successes of your AORN chapter by submitting a chapter award packet. The Awards Program will be completely new for the 2008 Congress. The Awards Committee has modified the application process, increased the recognition for award winners, and included recognition for non-winning applicants. In addition, the committee is designing an entirely different Awards Event titled "Sweet Success."

The deadline to apply or nominate someone for

an individual award is November 15, 2007; chapter award packets are due to AORN by January 18, 2008. For more information and to access award packets, visit <http://www.aorn.org/Community/AwardsRecognition/>. More information about the completely redesigned Awards Event will be posted in the coming months on the 2008 Congress web site at <http://www.aorn.org/Education/EducationEvents/Congress/>. Contact Ingrid Bendzsa at (800) 755-2676 x 328 or ibendzsa@aorn.org if you have any questions.