POSITION STATEMENT ON MANAGING NOISE AND DISTRACTION

INTRODUCTION

The International Society of Plastic and Aesthetic Nurses (ISPAN) supports reducing noise and distractions in all patient care areas to create a safe environment for patients and plastic and aesthetic team members.

A distraction is an occurrence that prevents an individual from concentrating on a particular task. There are many potential sources of distraction in the plastic and aesthetic environment. Distractions can be caused by sudden loud noises, prolonged high noise levels, nonclinical conversations and activities, and movement into or out of the room (Jenkins, Wilkinson, Akeroyd, & Broom, 2015). Distractions in the surgical setting have been found to occur every 1 to 3 minutes (Seelandt et al, 2014). Nurses are interrupted approximately 10 times per hour, or every six minutes (Speroni, Fisher, Dennis, & Daniel, 2013). In one study, the researchers found there was one interruption every five minutes during surgical procedures, with 81% of the interruptions affecting more than one team member, and a procedural time increase of 18.5 minutes as a result of the interruptions (Yoong, Khin, Ramlal, Loabile, & Forman, 2015).

The audible noise level in operating rooms has been found to average 77 decibels, with episodes of greater than 100 decibels (Stevenson, Schlesinger, & Wallace, 2013). Long or repeated exposure to sounds at or above 85 decibels can cause hearing loss (National Institute on Deafness and Other Communication Disorders, 2017). When noise levels in the plastic and aesthetic setting are high, team members are required to raise their voices to be heard and understood, which further increases noise levels (Plaxton, 2017). Extended exposure to noise hampers attention levels, as well as intellectual, psychomotor, and memory functions (Plaxton, 2017).

The aviation industry has recognized the importance of preventing interruptions and distractions during critical phases of flight, and has introduced the “sterile cockpit” rule prohibiting nonessential activity during critical phases of flight (i.e., take-off and landing) to ensure pilots are not distracted from their duties (Flight crewmember duties, 2011). Similar to flight crews, when plastic and aesthetic team members are distracted from their duties, the risk of error increases. Even minor interruptions can interfere with the performance of complex tasks and result in patient harm (Plaxton, 2017). Although it may not be possible to completely eliminate all noise and distractions from the plastic
and aesthetic setting, in order to optimize patient safety, ISPAN is committed to advocating for a controlled environment where noise and distractions that do not serve a clinical function are minimized as much as possible.

**RATIONALE**

Operative procedures and patient care activities require attentiveness, concentration, and situational awareness (Jorm & O’Sullivan, 2012). Distraction impacts situational awareness, which is essential for safe and effective practice in the medical setting (Jenkins et al, 2015). Distraction also interferes with the ability of the anesthesia professional to concentrate while performing technically challenging or time-sensitive procedures (Jenkins et al, 2015). Distraction negatively affects surgical team members’ concentration, particularly surgeons who are less experienced (Seelandt et al, 2014). Distraction has the effect of diverting the team member’s attention away from the task, which ultimately results in cognitive interference because the distraction draws on the same cognitive resources that are required for the task. As a consequence, the individual is less focused on the task and on the individuals with whom they are interacting when performing the task (Sergeeva, Aij, van den Hooff, & Huysman, 2016).

As team members simultaneously manage multiple tasks while subjected to time pressures, distractions, and interruptions, the likelihood of errors increase. (Kang, Massey, & Gillespie, 2015).

The plastic and aesthetic setting is an environment where patient safety and team member performance are heavily reliant on the accurate transmission of information (Christian et al., 2006). Noise and distraction contribute to miscommunication by interrupting communication and by reducing the team member’s ability to understand content and communicate effectively (Jorm & O’Sullivan, 2012; Jenkins et al, 2015). Noise and distracting stimuli can significantly impact plastic and aesthetic team members by disrupting patient care and surgical procedures, negatively impacting team members’ performance, increasing the risk for error, and potentially resulting in patient harm and adverse patient outcomes (Jorm & O’Sullivan, 2012; Feuerbacher, Funk, Spight, Diggs, & Hunter, 2012; Suh et al., 2010; Campbell, Arfanis, & Smith, 2013; Pluyter, Buzink, Rutkowski, & Jakimowicz, 2010; Persoon, Broos, Witjes, Hendrikx, & Scherpbier, 2011; Sergeeva et al, 2016). Noise and movement create the potential for auditory and physical distraction, which has been shown to have adverse effects on the physician’s ability to perform tasks correctly (Jenkins et al, 2015). In addition to disrupting patient care and surgical procedures, time is lost while the individual recovers from a distraction and returns to the primary task (McBride, 2015). Distraction also impacts an individual’s left-right discrimination. Confusing a patient’s right side with his or her left side increases the potential for serious adverse events and devastating consequences for the patient (McKinley, Dempster, & Gormley, 2015).

Ring tones and alarms from medical equipment and electronic devices and the use of personal electronic devices may distract team members from focusing on the patient
and providing safe patient care (Papadakos, 2014). The use of portable electronic devices can be a source of distraction and a temptation for clinicians to conduct personal business during patient care. There have been reports of surgical team members reading and responding to texts and email, accessing the Internet, visiting social media sites, talking on the phone, and being distracted during surgical procedures (McBride, 2015). The use of portable electronic devices increases the risk for patient health care violations related to patient privacy and these devices also harbor bacteria, placing the patient at risk for infection (Fillipo & Fencl, 2016).

Noise and distraction have been linked to poor team member performance and are also associated with job dissatisfaction, irritability, tachycardia, anxiety, fatigue, illnesses, stress, emotional exhaustion, burnout, and injury (Joseph & Ulrich, 2007; Mazer, 2005; Oliveira & Arenas, 2012; Juang, Lee, Yang, & Chang, 2010).

**ISPAN RECOMMENDATIONS**

The plastic and aesthetic registered nurse should

- Implement an interdisciplinary team approach to reduce the level of noise and distractions and create a safe environment for patients and plastic and aesthetic team members.
- Minimize noise and distractions not related to patient care.
- Prohibit nonprocedure-related conversation and activities during critical phases of plastic surgical and aesthetic procedures.
- Minimize noise and distraction created by the following:
  - Portable communication devices (e.g., cell phones, pagers, personal digital assistants);
  - Fixed communication devices (e.g., overhead pages and announcements, telephones, computers);
  - Electronic music devices (e.g., radios, digital audio players);
  - The environment (e.g., heating, ventilation, air conditioning systems, pneumatic tube systems);
  - Medical equipment and devices (e.g., smoke evacuators, powered surgical instruments, metal instruments);
  - Electronic activities (e.g., e-mail, texting, social media [e.g., Facebook, YouTube®, Twitter®, Snapchat] Internet, games); and
  - Behavioral activities (e.g., nonessential and extraneous conversations, personnel movement in and out of the room).
- Turn off, place on vibrate or silent mode, or leave portable communication devices at a common location outside of the procedure room unless directly required for job performance.
- Limit use of fixed communication devices to essential communication and leave them at the lowest volume setting possible.
- Set the volume level of electronic music low enough to allow communication among
team members.

- Ensure essential verbal communications are audible above competing environmental noise.
- Set medical device alarms and activation sounds intended for safety purposes (e.g., to alert the user that the device is engaged) at a level that is audible above competing environmental noise.

The health care facility should establish policies and procedures for the use of mobile communication devices that includes

- Use of personal devices,
- Use of facility-owned devices,
- Locations or prohibited locations for use,
- Information that may be conveyed by the device,
- Required level of encryption and security controls, and
- Device cleaning protocols.

*Note:* Recommendations adapted with permission from the Association of periOperative Registered Nurses (AORN) Guideline for a Safe Environment of Care, Part 2 (Burlingame & Conner, 2018).

**REFERENCES**


**DISCLAIMER**

These clinical practice guidelines and/or recommendations and/or other guidance published herein are provided by the International Society of Plastic and Aesthetic Nurses to assist practitioners in clinical decision-making. The information should not be relied upon as being complete and should not be considered inclusive of all proper treatments, methods of care, or as a statement of the standard of care. All guidelines and recommendations require periodic revision to ensure that clinicians utilize appropriate procedures, and that the materials encompass the recent critical review of literature and expert opinion. The reader must realize that clinical judgment may justify a course of action outside of the recommendations contained herein.

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