

Introduction

Construction on a new OR suite provided an opportunity to examine staff safety processes. Participation on the International Safety Center Stakeholder Group gave access to data to support the need to enhance our culture of safety by focusing on all sharps safety measures.

Methods

An educated, well-informed staff will be better able to prioritize safety strategies. We used a 4-prong approach based on AORN Guidelines for sharps safety best practice including blunt-tip suture needles, double gloving with a colored indicator underglove, use of a neutral zone for passing sharps and the use of safety devices such as retractable blades.

An analysis showed 2 of the strategies were being used where appropriate but staff did not routinely use a Safe Zone, and did not have an indicator glove system in place with routine double gloving as standard practice. Yet, this is the most evidence-based practice (EBP) strategy.

Figure 1: 4-prong approach



A LITERATURE SEARCH REVEALED

Blunt Tip Suture Needles

Compared to sharp, blunt needles have been shown to reduce the risk of glove perforations by 54%. This appreciably reduces the risk of contracting infectious diseases for surgeons and their assistants over a select range of operations.

Safety Scalpels

Evidence supporting safety scalpels was not found. Literature showed mechanical devices may provide varying degrees of protection. Their use would be dependent on team preferences.

Neutral Zone for Sharp Passing

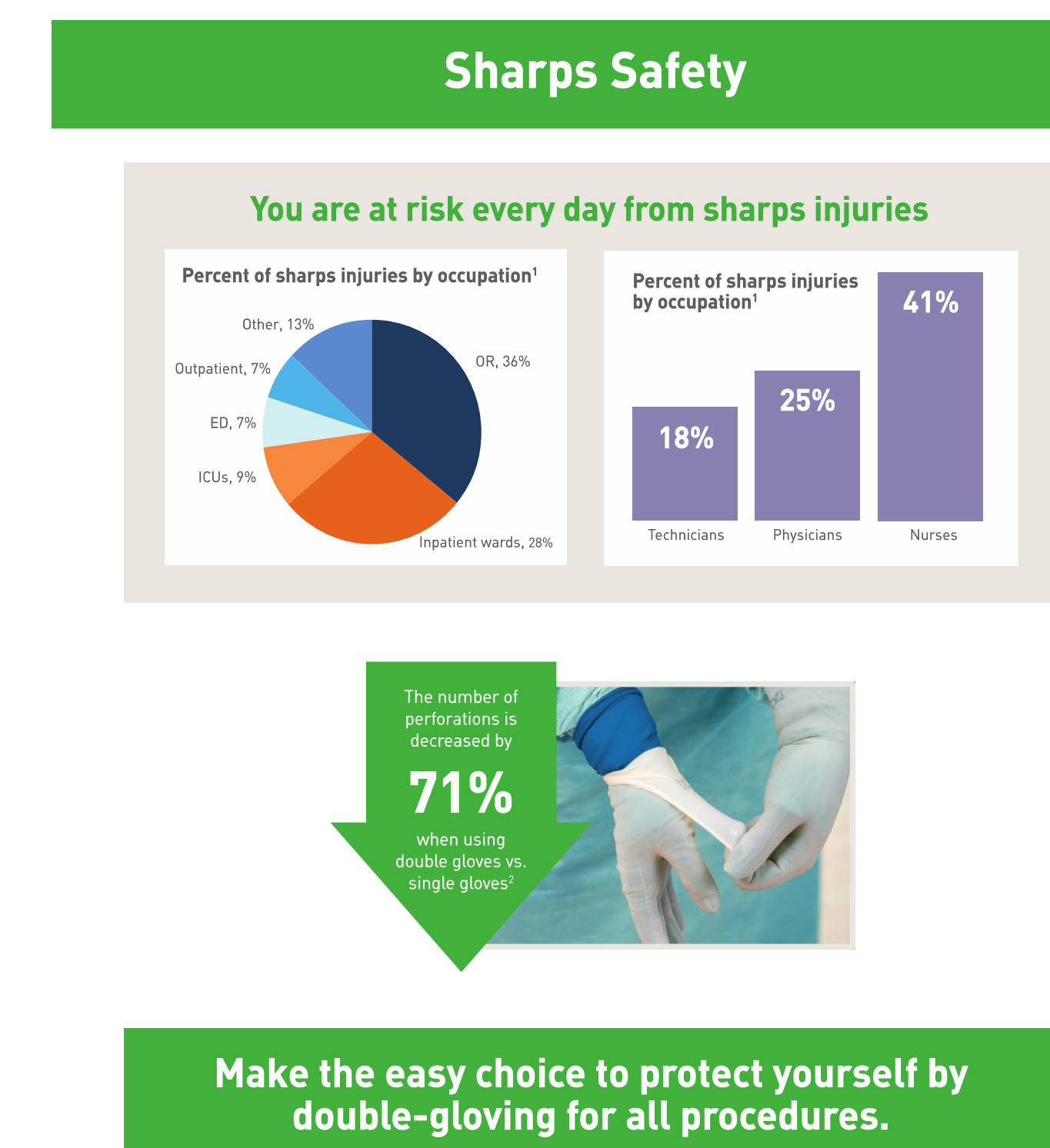
Literature on the use of a single-handed scalpel blade remover combined with Hands Free Passing Technique (HFPT) was reviewed. One large study reported lower percutaneous injury rates when a hands free technique was used at least 75 percent of the time.

Double Gloving with Indicator System

Double Gloving evidence was well supported. Studies showed a lower risk of exposure to patient blood by as much as 87 percent when an outer glove is punctured if an indicator glove is used. The volume of blood on a solid suture needle is reduced by as much as 95 percent when passing through two glove layers, thereby reducing viral load in the event of a contaminated percutaneous injury.

We took advantage of surgeon support and Affiliate Status in a hospital system to implement a glove change to only latex free options and double gloving with an indicator under glove. A sister hospital recently standardized to a single provider and company representatives partnered to educate and implement in both facilities.

Figure 2: Education



Summary of Results

Implementing the Neutral Zone and expanding our sharps safety program to include double gloving with indicator was the final piece of our initiative. Success was achieved with staff double gloving using a colored indicator glove. We also reduced our glove inventory. A Culture of Safety is based on lowering the risk of injury to both staff and patients.

Conclusion

Using EBP, perioperative nurses can and should lead efforts in process change for the safety of patients and team members because a mistake resulting in a sharp injury can change your life.

The goal was to educate, assess and reinforce current best practice and examine strategies not in use.