



Nursing's Impact on Reducing Surgical Site Infections in Orthopaedics

Leroy Keller*

Department of Nursing, University of Montreal, Montreal, Canada

DESCRIPTION

Orthopaedic surgery encompasses a wide range of procedures aimed at restoring mobility, function and quality of life for patients with musculoskeletal conditions. While these surgeries have transformed the lives of many, the occurrence of postoperative wound infections remains a persistent concern. Surgical Site Infections (SSIs) not only pose a threat to patient well-being but also strain healthcare resources. Nursing interventions in the operating room have the potential to reduce wound infections and improve patient outcomes. Surgical site infections are among the most common healthcare-associated infections, accounting for a significant proportion of nosocomial infections. In orthopaedic surgery, SSIs can lead to implant failure, delayed wound healing, sepsis and prolonged hospitalization. The financial burden of treating SSIs is substantial, with increased costs for antibiotic therapy, additional surgeries and extended hospital stays.

Nursing interventions in the operating room

Nurses play a critical role in preventing SSIs through meticulous implementation of evidence-based practices during the perioperative period. Several key nursing interventions within the operating room have demonstrated effectiveness in reducing the risk of wound infections in orthopaedic surgery patients:

Aseptic technique and hand hygiene: Rigorous adherence to aseptic technique and proper hand hygiene is fundamental to preventing SSIs. Nurses must ensure that sterile instruments and supplies are utilized and they must follow recommended hand hygiene protocols to minimize the introduction of pathogens into the surgical site.

Surgical attire and personal protective equipment: Proper attire, including sterile gowns and gloves, creates a barrier between the surgical team and potential contaminants. Nurses should ensure that all members of the surgical team are correctly dressed and that personal protective equipment is utilised regularly.

Skin preparation: Preoperative skin preparation involves the use of antiseptic agents to reduce microbial load at the surgical site.

Nurses must apply these agents according to established protocols, considering patient allergies and sensitivities

Draping techniques: Effective draping techniques isolate the surgical site from nonsterile areas, minimizing the risk of contamination. Nurses should assist the surgical team in achieving optimal draping to create a sterile field.

Infection control measures: Proper management of environmental factors such as temperature and humidity can contribute to infection prevention. Nurses should collaborate with the surgical team to maintain an environment conducive to reducing the risk of SSIs.

Antibiotic prophylaxis: Timely administration of prophylactic antibiotics is essential in preventing SSIs. Nurses should ensure that antibiotics are administered within the appropriate timeframe, considering factors such as patient weight and allergies.

Wound care: Postoperative wound care including appropriate dressing changes and monitoring for signs of infection falls within the realm of nursing responsibilities. Nurses play a vital role in assessing wound healing and identifying potential complications.

Challenges and implementation barriers

Supporting the effectiveness of nursing interventions in preventing SSIs, several challenges and barriers to implementation persist such as:

Compliance and education: Ensuring consistent adherence to established protocols can be challenging due to variations in practice and gaps in education. Ongoing education and training for nurses are essential to reinforce best practices.

Multidisciplinary collaboration: Successful infection prevention requires collaboration between various healthcare professionals including surgeons, anesthesiologists and nurses. Overcoming communication barriers and fostering a culture of teamwork is vital.

Resource constraints: Limited availability of resources including staffing and supplies can hinder the implementation of infection

Correspondence to: Leroy Keller, Department of Nursing, University of Montreal, Montreal, Canada, E-mail: lryklr@gmail.com

Received: 03-Jul-2023, Manuscript No. JPC-23-22596; **Editor assigned:** 06-Jul-2023, PreQC No. JPC-23-22596 (PQ); **Reviewed:** 20-Jul-2023, QC No. JPC-23-22596; **Revised:** 27-Jul-2023, Manuscript No. JPC-23-22596 (R); **Published:** 03-Aug-2023, DOI: 10.35248/2573-4598.23.9.242

Citation: Keller L (2023) Nursing's Impact on Reducing Surgical Site Infections in Orthopaedics. J Pat Care. 9:242.

Copyright: © 2023 Keller L. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited.

prevention measures. Adequate resource allocation is essential for achieving optimal outcomes.

CONCLUSION

Nursing interventions within the operating room are integral to preventing wound infections in patients undergoing orthopaedic surgery. By meticulously implementing aseptic techniques,

adhering to infection, prevention protocols and collaborating effectively with the surgical team, nurses can significantly reduce the risk of SSIs. The evidence strongly supports the positive impact of nursing interventions on patient outcomes, emphasizing the importance of continued education, interdisciplinary collaboration and resource allocation.