

Dumke College of Health Professions

# ANNIE TAYLOR DEE —— SCHOOL OF NURSING

## **ABSTRACT**

Wrong-site surgery includes surgery on the wrong patient, body part, or laterality of the patient. Wrong-site surgery (WSS) due to human error has yet to be eliminated as one of the risks of surgery. This project is an overview of the standard precautions taken before surgical incisions. Implications of this review are to heighten awareness of WSS protocols preoperatively and before incisions for surgeries that carry an increased risk of WSS. Additionally, this paper will discuss the procedures, sites, and specialties involved in many WSS to heighten staff awareness during such operations.

# PICO QUESTION

How does the creation of a nurse-led education program for registered nurses in the operating rooms improve knowledge and evidence-based practice for wrong-site surgery prevention as compared to no education?

#### LITERATURE REVIEW

Education for wrong-site surgery:

- Prevention benefits patients, nurses, and providers'(2).
- Emotional, reputational, and settlement costs can be severe.
- Surgical timeouts-reduced mortality rates (3).
- Timeouts consist of patient identifiers, surgery description and other pertinent information.
- Pre-procedure verification-name, date of birth, surgical site, procedure type (4).
- Laterality of patient procedure identification prior to procedure.
- Surgical site marking by surgeon.
- Verified by nurse and other staff
- Reasons for wrong site surgery-marking, consent, wrong patient, scheduling, communication (5).
  - marking, consent, preparation/positioning, measurement, and anesthesia, notes and xrays, work pressures, and communication

# Education for the Prevention of Wrong-Site Surgery

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## PROJECT METHODOLOGY

Wrong-site surgery can have a devastating effect on patients, physicians, and clinical staff (1).

This project hopes to increase awareness of and prevent such never events from happening. This project utilizes a mixed-methods approach that uses a combination of both qualitative and quantitative data gathered through evidence-based research to educate operating room staff about standard procedures, specialties associated with, and occurrences of wrong-site surgery.

# Plan and Development

- Implementation of the project will begin with a meeting between the MSN student, the operating room manager, and the educator to discuss the MSN project implementation process and outcomes for the project.
- The nurse leader will disseminate deliverables in a PowerPoint presentation, copies of the literature review, handouts, and an evaluation to operating room staff.
- The cooperation between the nurse educator and nurse manager within the unit will be critical in disseminating and distributing the materials in this review.

# **Evaluation**

- An informal survey regarding WSS facts and prevention and direct caregiver feedback will guide the evaluation of the project.
- The nurse leader will administer the study after the initial two months of information dissemination.
- Based on assessing the amount of information retained, there may be followup dissemination and display of materials.
- The nurse leader will measure the project's impact on the occurrence of wrong-site surgery in the following months and years.
- The event of WSS and WSS near misses will serve as a partial indicator of the overall effectiveness of WSS prevention education.

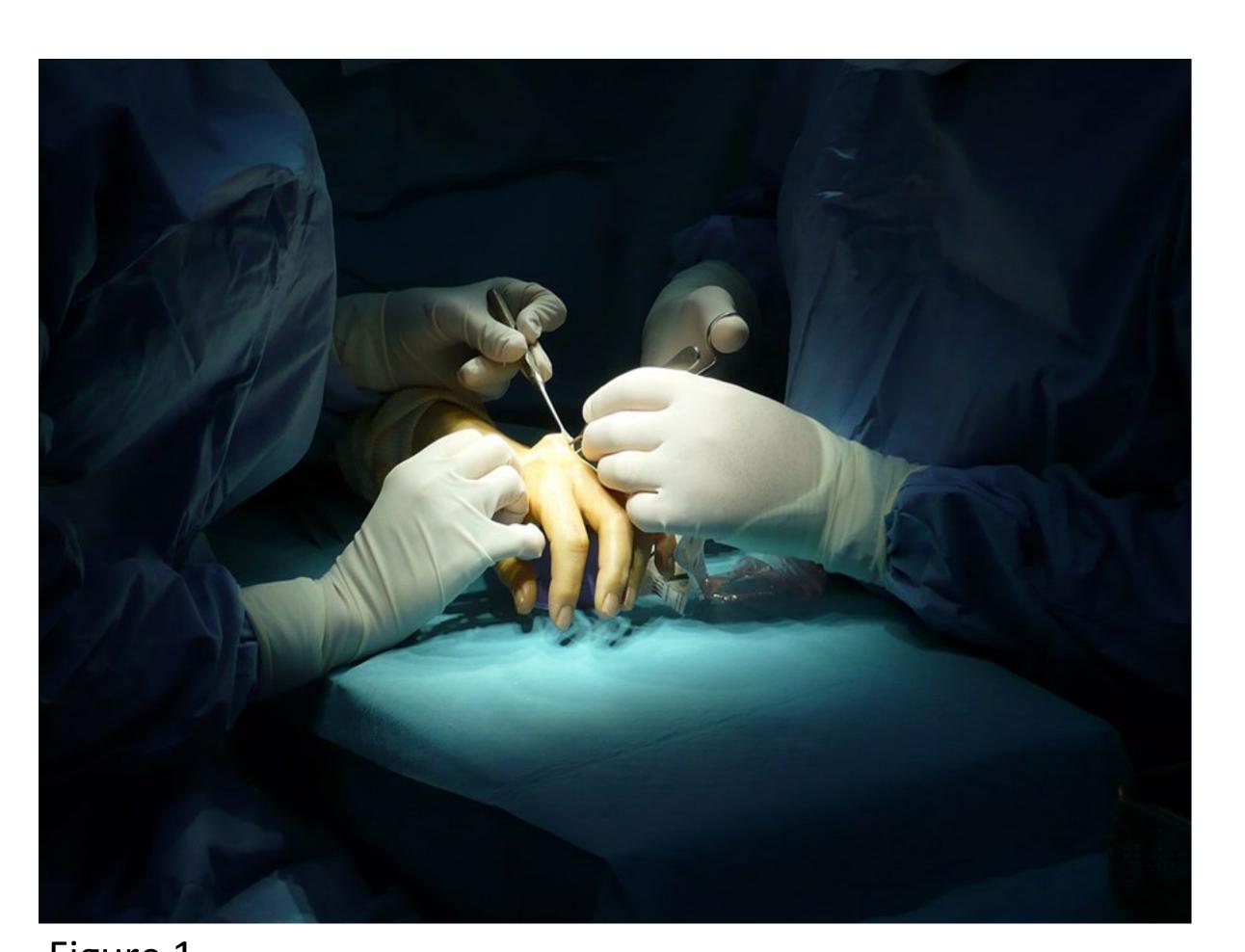


Figure 1

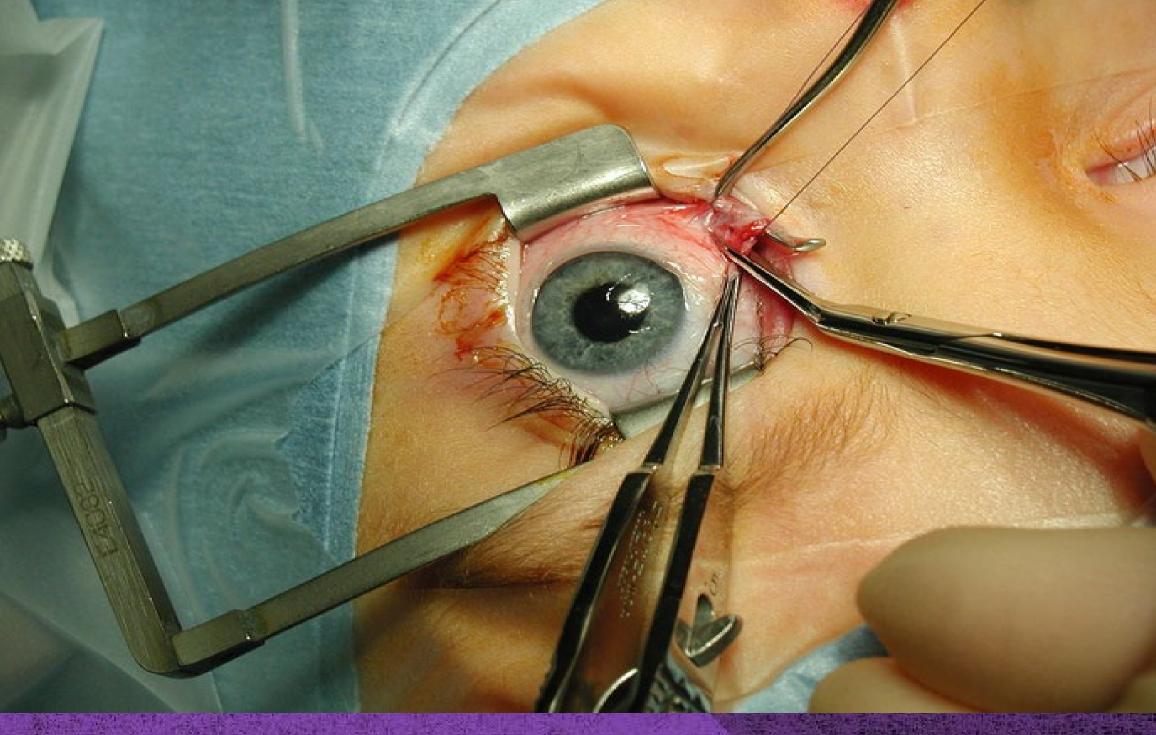


Figure 2

#### THEORETICAL FRAMEWORK

This project utilized the Johns Hopkins Nursing Evidence-Based Practice Model (JHNEBP). There are three steps involved in The Johns Hopkins Nursing Evidence-Based Practice Model (6).

- A research question (PICOT) is developed based on an observed gap in knowledge.
- Evidence is gathered, synthesized, appraised, evaluated, and applied to the topic's information. Last,
- Researchers consider and translate evidence to create a plan of action and the project's findings are disseminated utilizing various modes of media for the project implementation.

#### CONCLUSIONS

Protocols developed by the Joint Commission for WSS prevention have significantly decreased the frequency of WSS occurrences. This project highlights some of the specific details involved in WSS surgery occurrences to further inform operating room personnel about information surrounding WSS. This project aims to reduce events of WSS through this further education. The gap in knowledge of operating room personnel regarding specialties, sites, and circumstances surrounding WSS has been diminished by this project. Lastly, this MSN project will prepare operating room staff with a broadened knowledge about information surrounding occurrences of WSS.

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# Figures

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