Title:
Prevention of Retained Surgical Items: Practice of Surgical Counts in Rwandan Operating Rooms

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Prevention, Resource poor country and Retained Surgical Items

References:


**Abstract Summary:**
Retained surgical items are a safety concern for all surgical team members. They affect patients, families, and healthcare providers and hospitals. Surgical-count protocol remains a cornerstone to prevent this event. Related research studies are needed to provide a benchmark for improvement in Rwanda.

**Learning Activity:**

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
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<tbody>
<tr>
<td>The learner will be able identify the importance of preventing retention of surgical items</td>
<td>RSI is serious adverse event and may include sponges, sharps, and instruments. An RSI is never-event resulting from unintentional occurrence in which surgical item is left in a patient during the course of surgical or invasive procedure and is associated with serious negative patient surgical outcomes that may end in death</td>
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<tr>
<td>The learner will be able to identify areas where surgical count mismanagement can occur</td>
<td>1. When the circulating nurse is out of the operating suite for bringing additional supply which was not initially prepared. 2. Communication breakdown during counting, where some team members continue talking or listen to loud music during counting 3. Inaudible counting 4. Non display of surgical items counted. 5. Non counting for each and every surgical/invasive procedure including surgical procedure with risk of RSI. 6. Non counting during cavity closure 7. Counting done only for sponges.</td>
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**Abstract Text:**

**Introduction**

Patient safety is a global healthcare challenge, and surgery, in particular, is a dangerous procedure to human health (Andrew Howard, n.d.; Carvalho et al., 2015). Worldwide, annually, over 234 million surgical operations are performed with an average complications rate of 3–16%. This rate is not only a
major cause of morbidity and mortality, but also a major financial burden for both the patients and their families. This also affects the healthcare facilities and their personnel (Melekie & Getahun, 2015).

Prevention of surgical retained Item (RSI) is an important responsibility of a surgical team. RSI prevention results in positive surgical outcomes and prevent unnecessary cost and long hospital stay. (Norton, Martin, & Micheli, 2012). RSI is serious adverse event and may include sponges, sharps, and instruments. An RSI is never-event resulting from unintentional occurrence in which surgical item is left in a patient during the course of surgical or invasive procedure and is associated with serious negative patient surgical outcomes that may end in death (Steelman, Schaapveld, Perkhounkova, Storm, & Mathias, 2015; Spruce, 2016).

Among others RSI prevention strategies, surgical count remains the most accessible and reliable way to avoid unintentional retention of surgical item. This high risk and high frequency operating room exercise requires multidisciplinary team involvement and attention to guiding police and procedure (Edel, 2012). The surgical count consists of counting the instruments, sponges, sharps, and other supplies used during a surgical procedure. Failure of performing this very crucial task to patient safety is associated with many complications after surgery(Moss, Kneedler, Pfister, & Major, 2014). This paper is a report from the one month experience of the Peri Operative students of the MSN program in operating rooms in Rwanda, with emphasis on surgical count.

Purpose

The purpose of this paper is to study the current practice in operating rooms of Rwandan hospitals to better understand surgical count in Rwandan context in order to improve the vital element of surgical patient safety. Studies such on adherence to recommended count practice procedure, nature and incidence of breakdown in surgical count, effect of standardizing surgical count documentation, impact of available resources such as policy and supply may enlighten the surgical count situation in Rwanda and improve the safety of the surgical patient.

Method

Six Peri Operative track students of the MSN program along with their supervisor spend a month in the operating rooms in Rwanda and undertook the project of recording their experience in relation to the practice of surgical counts in the operating rooms. The students spent ten hours for 3 days in a week with an hour for lunch break. They were posted in the Reception, Holding area, Induction room, PACU and Scrub room.

Based on the clinical experience in different operating rooms in Rwandan hospitals and reflecting on how the surgical count should be as per recommended practice, the students were able to come up with recommendations for further in-depth study in the prevention of retained surgical items in operating rooms in Rwanda.

Conclusion

Surgical count remains the vital intervention for prevention of RSI. WHO, AORN, American college of surgeons and Joint commission recommend to use the surgical count protocol for all surgical procedure with risk of RSI. Though there is some technological advancement toward prevention of RSI, manual counting is still the key intervention for RSI prevention.

Current practice in ORs of Rwandan hospitals reveals necessity to better understand surgical count in Rwandan context in order to improve the vital element of surgical patient safety. Studies such as adherence to recommended count practice procedure, nature and incidence of breakdown in surgical count, effect of standardizing surgical count documentation, impact of available resources such as policy
and supply may enlighten the surgical count situation in Rwanda and improve the safety of the surgical patient.

Reducing inconsistency in surgical count practice requires health institutions to develop clear and concise policies and procedures to guide OR surgical teams on this. Furthermore, OR surgical team members should benefit OR safe practice teaching sessions that include among others; surgical count, teamwork and communication.