Impact of Implementing a Surgical Sponge Counting Stand on Counting Time, Discrepancies, and Operating Room Staff Satisfaction: A Quality Improvement Study

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ABSTRACT

Introduction: Most retained items in patients' bodies are surgical sponges. They have disastrous consequences for patients, healthcare providers, and medical centers. Therefore, this study investigated the impact of using a new version of the surgical sponge counting stand on the time taken to count, counting errors, and staff satisfaction with the counting process.

Methods and Materials: In this quasi-experimental pre-post single-group study, 44 operating room staff members at a large general hospital in Isfahan were selected using a census method. Data regarding the time taken to count, discrepancies in counting, and staff satisfaction with counting process before and after the implementation of the surgical sponge counting stand were collected from 37 surgeries. All open surgeries performed in the abdominal, pelvic, and thoracic regions were included in this study. The data were then analyzed using descriptive-analytical tests at a significance level 0.05.

Results: Although no significant difference was observed in the duration of surgery before and after the implementation of the stand, its use did reduce the time spent on sponge counting during tissue closure, skin closure, and overall counting process (p = 0.001). Prior to using the stand, seven counting errors were recorded during tissue closure, whereas these errors were not observed after its implantation (p = 0.01). Additionally, staff satisfaction with the counting process significantly improved the use of the stand (p = 0.001).

Conclusion and Discussion: Using a new version of the surgical sponge counting stand has resulted in fewer counting errors, reduced time spent on counting, and increased staff satisfaction in specific surgical fields. Therefore, this updated sponge counting stand is recommended for implementation in additional surgical areas to enhance the counting process.

Keywords: Personnel satisfaction, Operating room, Surgical sponges

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