Surveillance of Sanitation Practices and their Effect on Surgical Site Infections

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The most frequent complication for surgical patients is surgical site infections (SSIs), which are significant contributors to morbidity and mortality rates, leading to prolonged hospital stays that cost billions. Despite being preventable, the first global effort to provide SSI prevention guidelines was recently published in 2016 by the World Health Organization (WHO) and only included general recommendations. The purpose of this study was to compare the sanitation practices and SSI rates from a private hospital in the United States to that of a public hospital in Croatia to see if either country had established practices that resulted in lower SSI rates. Observations were conducted in the operating room over a seventy-hour period in both Croatia and the United States using the WHO recommendations for SSI prevention as a guide, which included the state of the operating room, pre-operation procedures, and the state of personnel. These observations were compared to the Centers for Disease Control and Prevention and the European Centre for Disease Prevention and Control databases where global SSI rates are reported. This study was unable to reveal any clear conclusions about whether Croatia or the United States were seeing fewer SSIs. However, there were notable differences in how the operating rooms were set-up and how hygiene standards were employed by nurses and anesthesia technicians. This study highlights the importance of requiring updated reports that are maintained within a central database for hospitals to share information globally and provide a more unified effort in eliminating SSIs in the future.