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Replication Study: Assessing the Reduction of Surgical Site Infections Following WHO Surgical Safety Checklist Implementation in Addis Ababa Referral Hospitals, 2010

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Abstract

The WHO Surgical Safety Checklist is a standardised tool to enhance patient safety in operating theatres. Its role in reducing surgical site infections, a significant cause of postoperative harm, is established globally. However, its specific effect within Ethiopian referral hospitals requires further investigation. This replication study aimed to assess the change in surgical site infection rates following the implementation of the WHO Surgical Safety Checklist in major urban referral hospitals in Ethiopia. A pre-post intervention study was conducted across five referral hospitals in Addis Ababa. Surgical site infection rates were monitored for periods before and after the formal introduction of the checklist, which was supported by staff training. Data were extracted from patient records using standardised definitions and analysed statistically. A reduction in surgical site infection rates was observed following checklist implementation. The overall incidence decreased by approximately 18% across the hospitals studied. The findings replicate earlier international studies, indicating an association between the systematic use of the WHO Surgical Safety Checklist and a reduction in surgical site infections in this setting. Sustained and mandatory use of the checklist for all applicable surgeries is recommended. This should be supported by ongoing training, supervision, and formal integration into hospital quality assurance programmes to maintain compliance and benefits. Surgical Safety Checklist, surgical site infection, patient safety, replication study, Ethiopia, quality improvement This study provides locally relevant evidence for Ethiopian policymakers and hospital administrators, supporting the scale-up of the WHO checklist within national surgical safety strategies.

Keywords: *Surgical Safety Checklist, Surgical Site Infection, Replication Study, Sub-Saharan Africa, Patient Safety, Postoperative Complications, Implementation Research*