# [OS1-88] Implementation of an Operating Room Checklist at the Children's Block of the Korle Bu Teaching Hospital in Accra, Ghana

[1]Crawford J, [1]Trigg D, [2]Mensah K, [1]Murray D, [2]Sarpong P, [1]Sharma A, [1]Ben Abdullah A, [1]Cox T
[1]Washington University School of Medicine , St Louis , MO, USA; [2]Korle Bu Teaching Hospital , Accra , Greater ac, Ghana

---

Background: Our partnership with the Korle Bu Teaching Hospital (KBTH) in Accra, Ghana, where sepsis is a major cause of mortality, provided an opportunity to collaborate on the timely administration of antibiotics. According to World Health Organization (WHO) Guidelines for Safe Surgery, surgical site infections account for 37% of hospital acquired infections in surgical patients.1 In a recent study, the implementation of a surgical safety checklist in a diverse group of hospitals in 8 different countries decreased mortality (1.5% to 0.8%, P=0.003) and overall complications (11.0% to 7.0%, P<0.001).2 The appropriate administration of antibiotics was increased (56.2% to 82.6%, P<0.001). The goal of this project was to develop and introduce a checklist that would focus on the timely administration of antibiotics.

Methods: In the pediatric operating theatres at KBTH, most of the providers identified a need for antibiotic prophylaxis. Based on discussions and our observations, there was no standardized protocol regarding the timing or dosing of antibiotics. Physicians from both institutions collaborated to create a checklist to standardize timing of antibiotic administration. Research has suggested that the attitudes of the senior physicians are one of the most important factors in checklist compliance.3 Therefore, a presentation describing the items on the checklist with the supporting evidence was given by trainees from Washington University and KBTH to the Anesthesiology Department at KBTH. The local experts assisted with distribution of the checklists to the three pediatric operating theatres. Trainees assigned to the pediatric theatres are reminded to complete the checklist for each case.

Results: Our collaboration resulted in an initial checklist consisting of the patient's name, weight, allergies, and scheduled procedure. Practitioners record if perioperative antibiotics were given and if so, the dose and time of administration as well as the time of surgical incision. The initial checklist was kept brief and focused on a high-impact intervention in order to achieve early buy-in and promote compliance. We also implemented a process for data collection recording compliance with completion of the checklist itself, as well as timing of antibiotic administration.

Conclusion: Our partnership with the anesthesia colleagues at KBTH yielded a perioperative checklist focused on the potentially high-impact administration of preoperative antibiotics. Future international efforts to promote the use of perioperative checklists may consider initial implementation of brief checklists focused on a high-impact intervention in order to ensure early adoption and high compliance.

References: 1. WHO Guidelines for Safe Surgery 2009 © WHO at www.who.int.
2. Haynes AB, et al. A surgical safety checklist to reduce morbidity and mortality in a global population. NEJM 2009;360:491-9
3. Thomassen O, et al. Checklists in the operating room: help or hurdle? A qualitative study on health workers' experiences. BMC Health Services Research, 2010;10:342

---