

Surgical Site Infection among Patients Undergone Orthopaedic Surgery at Muhimbili Orthopaedic Institute, Dar es Salaam, Tanzania.

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Background: *The aim of this study was to determine prevalence and factors associated with surgical site infection at Muhimbili Orthopedic Institute.*

Method: *This was a cross-sectional study conducted at Muhimbili Orthopaedic Institute (MOI) in Dar es Salaam, from August, 2015 to October 2015. Convenience sampling technique was used to recruit postoperative patients for this study. Standardized questionnaires were used to obtain demographic, social, and clinical information from respondents. Determination of the relationship between outcome and exposure variables was done using chi square test. Multivariate logistic regression was used to measure the association after controlling for confounders. Odds ratio corresponding to 95% confidence interval with a p value of ≤ 0.05 was considered significant.*

Results: *Out of 300 study participants 75(25.0%) had surgical site infection. This was highly determined by more than 2 hours length of surgical procedure (AOR= 1.4; 95%CI 1.14-6.69; P value=0.05), none prophylactic use of antibiotics (AOR= 3.4; 95%CI 1.6-7.78; P value=0.03), more than one week stay before surgery (AOR=3.3; 95%CI 2.24-3.34; P value =0.00).*

Conclusion: *The overall prevalence of surgical site infection at Muhimbili Orthopedic Institute was high. This was associated with more than 2 hours length of surgery, lack of prophylaxis use, and pre-operative hospital stay.*