Introduction

- Surgical site infections (SSI), sepsis, and maternal sepsis are preventable post-operative infections that are targets for morbidity and mortality reduction.
- Understanding the risk factors associated with these complications can aid quality improvement projects in low- and middle-income countries.

Methods

- Data Source: Safe Surgery 2020
- Data: Every surgical/obstetric patient in 20 hospitals over 3 months
- Endpoint: Development of postoperative SSI, sepsis, or maternal sepsis
- We used univariate analysis to determine risk factors for SSI, sepsis, and maternal sepsis

Results

- There were significant differences in SSI, sepsis, and maternal sepsis rate based on wound class, with complications more likely in higher wound classes (p<0.001, p<0.01, p<0.01).
- Patients with SSI or sepsis were 2.63 and 3.52 times more likely to have a contaminated or dirty wound class.
- Patients with maternal sepsis were 5.44 times more likely to have contaminated wound class.
- The relative risk of SSI and maternal sepsis in patients without vaginal cleansing prior to caesarian section was 2.63 (p<0.05) and 5.80 (p<0.01), respectively.
- There was no difference in ASA class or age for the SSI, sepsis, or maternal sepsis cohorts.
- There was no difference in gender for the SSI or sepsis cohort.

Implications

- Wound class is an important factor in determining post-operative complications.
- Vaginal cleansing may be beneficial in reducing SSI and maternal sepsis after caesarian section.
- ASA score was not associated with complications.
- Post-operative complications are multifactorial, requiring more study and targeted interventions.