

## RES 390

High incidence of antibiotic resistance and biofilm formation among the bacteria isolated from wound infections at a tertiary care hospital of Nepal

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### Background

The acquisition of drug resistance by the pathogenic bacteria has posed a serious challenge for the optimal wound management leading to delayed wound healing. This study was conducted to determine the antimicrobial resistance among bacterial pathogens and biofilm formation.

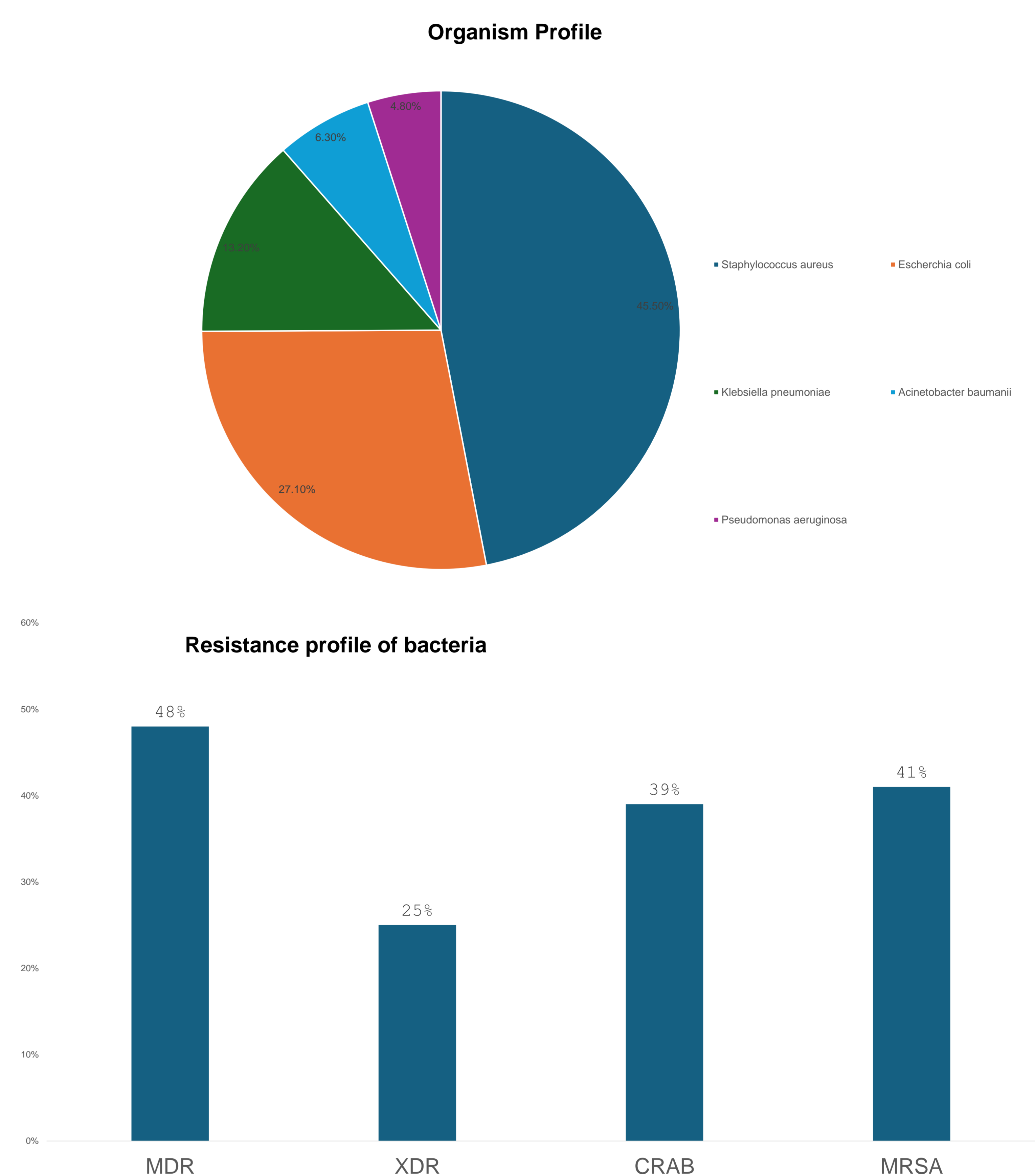
### Methods

1064 pus samples from wound infections cases were obtained in the Microbiology Laboratory. Bacterial identification, antimicrobial susceptibility testing and biofilm formation was done following ASM guidelines.

### Results

Out of 1064 pus samples, 664 samples yielded bacterial growth with culture positivity of 61%. *S. aureus* (45.48%) was the predominant organism isolated. Among WHO critical and high priority pathogens such as carbapenem resistant *Acinetobacter* accounted for 39%

and methicillin resistant *Staphylococcus aureus* accounted for 41%, respectively. A total of 35% of bacteria isolated from wound infections were biofilm formers.



### Conclusions

High-level antimicrobial resistance was observed with alarming incidence of MDR and XDR organisms.