Introduction

• In Vietnam, antibiotic resistance is on the rise and can contribute to worsened patient outcomes due to rendering antibiotics less effective.

• Carbapenem resistance, which occurs among gram-negative bacteria is a particular concern.

Objective of the Study

What factors contribute significantly to the survival of patients infected with a blood disease in the Vietnam National Hospital of Tropical Disease?

Methods

• I used the R language to analyze a dataset of 362 patients.

• Descriptive statistics were used to prepare the summary table.

• Univariate and multivariate logistic regression were used to explore correlations.

Results

• On the right is a summary table detailing the proportion of patients who survived or died based on different variables, including gram-negativity versus positivity of pathogen, carbapenem resistance, age, sex, days between admission and specimen collection, ICU or non_ICU, and presence of MRSA.

• Univariate logistic regressions demonstrated the positive significance of number of days between admission and specimen collection in the likelihood of death.

Discussion

• Carbapenem resistance is positively correlated with death.

• Carbapenem resistance is worsened by creating environments where patients are unnecessarily given combinations of antibiotics.

• Diagnosis of antibiotics should be monitored.

Questions

• Further research could explore the relationship between MDR resistance and patient outcome.

Conclusion

• Carbapenem resistance and MRSA significantly increase the likelihood of death in patients with blood infections at the National Hospital of Tropical Disease.

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