

## ABSTRACT

Synergism has been used to treat infections caused by *Pseudomonas aeruginosa*. In this study, the combined anti-pseudomonal agent and aminoglycosides were tested using Kirby-Bauer test. Monotherapy of each antibiotic was also determined. The inhibition was interpreted based on the Zone Diameter Interpretive Standards for Different Antibiotics. Results showed that ceftazidime exhibited the widest zone of inhibition among all the antibiotics against Multi-drug resistant *Pseudomonas aeruginosa* (MDRPA). It has an average zone of inhibition of 27mm compared to 20.5mm demonstrated by gentamicin. In the combination therapy, T<sub>6</sub> (tobramycin and ceftazidime) present the widest range of inhibition against the cultured organism with a  $p < 0.05$ . It is verified that strong antibiotic like, ceftazidime and cefepime when combined with other group of antibiotics, produce a greater effect than when they are used alone. Thus, synergism among aminoglycosides and anti-pseudomonal agents against MDRPA can be observed. It is inferred that infections due to resistant *Pseudomonas* strains could possibly be treated by synergistic combination of these drugs.