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## Antibiotic susceptibility pattern of *Salmonella* and Pseudomonas species isolated from meat market and Ogoja road abattoir effluents in Abakaliki Metropolis

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This work was aimed at determining the antibiotics susceptibility patterns of *Salmonella* and *Pseudomonas* species isolated from abattoir effluents in Abakaliki Metropolis. A total of thirty (30) abattoir effluent samples (5 from each collection points viz; butchering point, rinsing point and discharging point) were collected and transported to the microbiological laboratory unit of Ebonyi State University for bacteriological analysis. Bacteria isolated were characterized using standard microbiological and biochemical techniques. A total of fifty (50) bacterial isolates (27 from meat market abattoir and 23 from Ogoja road abattoir) were isolated from both meat market and Ogoja road abattoirs. Out of the 50 bacterial isolates, 30 (60 %) were *Salmonella* species while 20 (40 %) were *Pseudomonas* species. A total of 15 *Salmonella* species and 12 *Pseudomonas* species were isolated from meat market abattoir, while a total of 15 *Salmonella* species and 8 *Pseudomonas* species were isolated from Ogoja road abattoir. Antibiotic susceptibility study on the organisms was carried out using Kirby Bauer disc diffusion method according to Clinical Laboratory Standards Institute, (CLSI, 2005). The *Salmonella* species were most sensitive to gentamicin (90 %), followed by meropenem (80 %), ceftriaxone (50 %), ofloxacin (30 %), cefuroxime (20 %) and caftazidime (10 %) while *amoxycillin* (0.0 %), cefotaxime (0.0 %) and clindamycin (0.0 %) showed the least activity against the bacteria. *Pseudomonas* species were more susceptible to meropenem (80 %), followed by gentamicin; (80 %), ofloxacin (60 %), ceftriaxone (20 %), ciprofloxacin (20 %), cefuroxime (20 %) and *amoxycillin* (20 %) while erythromycin (0 %), ceftazidime (0 %) cefotaxime (0 %) and chindamycin showed the least. The multiple antibiotics resistance (MAR) index of *Salmonella* was 0.73 from the two abattoirs while that of the *Pseudomonas* from meat market abattoir was 0.79 while that from Ogoja road was 0.82. This gave an indirect suggestion of the probable source(s) of the organisms. The presence of these multidrug resistant bacterial strains isolated from abattoir effluents could be a vehicle for the spread of antibiotic resistance gene to other bacteria. Hence, there is need for adequate treatment and safe disposal of abattoir effluent in Ebonyi State and also in Nigeria at large.