PREVALENCE AND ANTIMICROBIAL RESISTANCE OF SALMONELLA IN CHICKEN MEAT FROM POULTRY PROCESSING PLANTS IN CENTRAL REGION OF PENINSULAR MALAYSIA

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Salmonella is recognized as one of the major foodborne pathogens which caused a very serious public health problem in the world. The study determined the prevalence and antimicrobial resistance of Salmonella isolates that was recovered from raw chicken meat. One thousand and two hundred raw chicken meats were collected from 9 poultry processing plants in Central Region of Peninsular Malaysia (Selangor, Kuala Lumpur, Negeri Sembilan and Malacca) between February 2013 and November 2014. All the samples were analysed for the presence of *Salmonella*, serotyping and antimicrobial resistance testing. Salmonella was detected in 17% of the samples. Forty-one serotypes were identified with the most common were *Salmonella enteritidis* (40.7%), *Salmonella albany* (12%), *Salmonella gueuletapee* (7.1%), *Salmonella typhimurium* (6.2%) and *Salmonella corvallis* (6.2%). A total of 241 isolates of *Salmonella* spp. were tested for their susceptibility to 23 selected antimicrobial agents by the disk diffusion method, in accordance with the guidelines of the Clinical and Laboratory Standards Institute. High antimicrobial resistance rates were observed to ampicillin (81.9%), tetracycline (49.0%), carbenicilin (47.5%), doxycycline (43.6%), sulphonamides (40.7%), trimethoprim (34.8%), nalidixic acid (34.3%) and streptomycin (32.4%). Results of this study provides the baseline data on both prevalence and antimicrobial resistance of Salmonella in processed chicken meat from poultry processing plants in this region.