

A Comparative Study on Antimicrobial Susceptibility of *Campylobacter* Spp. Isolates from Fecal Samples of Domestic Animals and Poultry in North and South of Iran

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Background & Objectives: During the past decade *Campylobacter* has been shown to be responsible for enteritis in human and animal. The natural habitats of most *Campylobacter* species are the intestines of birds and other warm-blooded animals. These organisms may enter the environment, including drinking water, through the feces of animals, birds or infected humans. Fecal samples of domestic animals and poultry were subjected to survey frequency of occurrence of pathogenic *Campylobacter* spp. in North (Mazandaran Province) and South (Fars Province) of Iran. Antimicrobial susceptibility of the isolates was assessed to evaluate the rate of antibiotic resistant of *Campylobacter* in both areas.

Methods: The methods for isolation of pathogenic *Campylobacter* spp. was Kapandis Baseri (prêt-KB) and for antimicrobial susceptibility of the isolates was disk diffusion and E-test.

Results: A total of 28 and 37 *Campylobacter* spp. were isolated in North and South, respectively. All pathogenic *Campylobacter* spp. isolates were sensitive to Ciprofloxacin, however, varied responses to other antibiotics have been observed among the isolates. In addition, lowest MIC values were found for Ciprofloxacin and Gentamicin and highest MIC values were found for Erythromycin, Chloramphenicol and Tetracycline.

Conclusion: Overall, based on our observations, domestic animals and poultry should be considered as reservoirs of *Campylobacter* spp. in both areas. Although, frequency of existence of antibiotic resistance *Campylobacter* in North was relatively high, Ciprofloxacin resistant *Campylobacter* were isolated neither from North nor South.

Keywords: *Campylobacter*; Domestic Animals; Poultry; Antibiotics