

## Comparative Study the Profile of Antibiotic Resistance Between Different Enteropathogenic Bacteria Which Isolated from Same Sources

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**Background & Objectives:** The increase in the number of resistant and multi resistant strains of bacteria is a major concern of health officials worldwide, Enteropathogenic bacteria have an important role in transitions and increasing of drugs resistant. Almost zoonotic transmissions from domestic ruminant to humans have been reported in the literature, the association of these pathogenic organisms with diseases in humans has increased the importance of epidemiological studies. The two objectives of this study were to identify patterns of antimicrobial agent resistance in different bacteria (*Salmonella* spp, *Escherichia coli* spp) which isolated from domestic ruminant (same source) and (ii) to compare these antimicrobial agent resistance patterns.

**Methods:** In 2011, a total number of 200 samples were from different source (industrial slaughterhouse and farms) were cultured on routine bacterial media for isolation of Enteropathogenic bacteria. After culture, isolation and characterization in routine culture media, antimicrobial resistance pattern of Enteropathogenic bacteria (*Salmonella* spp, *Escherichia coli* spp) isolate was determined by disc diffusion Methods of Kirby-Bauer.

**Results:** From all tested antimicrobial agents, all *Escherichia coli* spp strains were resistant to colistin, cloxacilin and erythromycin. In other hand all salmonella spp were resistant to cloxacilin and erythromycin. All of above bacteria had hi level of sensitivity to Chloramphenicol, gentamicin and Ceftriaxone.

**Conclusion:** overall the studies summarized above show that ruminant are main source and reservoir for resistant bacteria. Healthy and sick animals can carry wide range of Enteropathogenic bacteria and can be a source of contamination and infections throughout the animal's food production systems. Resistance evolution has seriously undermined our ability to control many important diseases, with substantial economic and public-health costs. In other hand our result show there is a significant and bilateral relationship between patterns of antimicrobial agent resistance in different bacteria and the agent's types and quantities of agents used and isolations source.

**Keywords:** Antibiotic Resistance Profile; Enteropathogenic Bacteria; Zoonosis