**ABSTRACT**

*Escherichia coli* known to cause food-borne illnesses worldwide that are closely associated with the consumption of contaminated poultry and egg products. This study was undertaken for cultural, biochemical and antibiotic sensitivity analyses of *E. coli* recovered from chickens in selected markets of Chittagong metropoliton area. Cloacal samples (n=120) were aseptically collected from broilers (n=60) and indigenous chickens (n=60). The samples were enriched in nutrient broth and streaked onto MacConkey (MC) agar and eosin methylene blue (EMB) agar for cultural characterization of the *E. coli* isolates. Culture-positive samples yielded characteristic colonies of *E. coli* with bright pink or red colonies on MC agar and metallic sheen on EMB agar. The *E. coli* isolates produced acid and gas by fermenting sugars (dextrose, sucrose, lactose, maltose and mannitol) and gave positive reaction to indole, methyl red (MR) and catalase tests, but were negative to Voges-Proskauer (VP) test. The prevalence of *E. coli* in broilers and indigenous chickens were 67 and 80%, respectively. The antibiotic sensitivity pattern demonstrated that *E. coli* isolates were mostly sensitive to ciprofloxacin, gentamicin, chloramphenicol and cephalexin, and resistant to streptomycin, tetracycline, amoxicillin and nalidixic acid. Data of this study suggested that intestine of chicken could be a major reservoir of antibiotic resistant *E. coli.*

**Keywords***: Escherichia coli*, Prevalence, Characteristics, Chickens, Antibiogram profiles

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