



## Enteroaggregative Escherichia Coli (EAEC) in South of Iran

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### **Introduction:**

The aim of the present study was to investigate the presence and the frequency of EAEC as etiologic agent of diarrhea in Shiraz. Enteroaggregative E. coli (EAEC) is increasingly recognized as a cause of often persistent diarrhoea in children and adults in both developing and developed countries, and have been identified as the cause of several outbreaks worldwide.

### **Materials and Method:**

A total of 715 stool samples were collected from patients with diarrhea in Shiraz. Diarrheagenic E. coli were isolated by biochemical tests and culture from 715 stool samples collected from different hospitals. Diarrheagenic E. coli strains isolated from diarrheal stool samples were examined for the detection of the aggR gene by Real time PCR and PCR method.

### **Results:**

In this study, a total of 101 (14.12%) diarrheagenic E. coli were isolated from 715 stool samples collected from different hospitals. Diarrheagenic E. coli were isolated much more frequently in the summer months than other season. Out of these 101 diarrheagenic E. coli identified, 5 were confirmed as EAEC in patient. The high prevalence of EAEC isolates was also found in watery diarrhea.

### **Conclusion:**

We therefore, recommend the routine isolation and identification of EAEC strains from patient with diarrhea in all the clinical laboratories and other pathotype diarrhoeagenic E. coli in Iran.

**Keywords:** Diarrhea, Enteroaggregative Escherichia coli (EAEC), Real-Time PCR.

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