

## Clinico-epidemiology of shigellosis in children suffering from diarrhea in district lahore (Pakistan)

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**Background:** Shigellosis, a leading public health concern in developing countries causing high morbidity and mortality in younger children.

**Objective:** To study the descriptive epidemiology of shigellosis in children admitted in tertiary care hospitals and to evaluate the spectrum of antibiotic resistance in *Shigella*, causing gastroenteritis in children.

**Materials and Methods:** A total of 126 rectal swabs were collected from children suffering from diarrhea/dysentery at Emergency Department of Mayo and Children Hospitals Lahore during February 2012 to April 2012. The samples were inoculated on XLD and MacConkey medium and the growth of the suspected colonies were identified conventionally by biochemical tests.

**Statistical Analysis:** Data were analyzed using software SPSS 16.0.

**Results:** A total of 126 stool samples were examined during February to April 2012. Out of these diarrheic samples *Shigella* accounted for 5.5% (7/126), *Enterobacter* 10.3% (13/126), *Klebsiella* 11.9% (15/126), *Salmonella* 16.6% (21/126) and *E.coli* 18.2% (23/126). *Shigella* was mostly isolated from children with age group of 1-6 months and 19-24 months. Incidence was highest in the warmer month of April (57.2%) followed by March (28.6%) and February (14.3%). Feeding to children and routinely daily practices by mothers were significantly associated with shigellosis. *Shigella* isolates showed high resistance to Methicillin (85.71%) and Vancomycin (85.71%) followed by Doxycycline hydrochloride (57.14%), Gentamycin (57.14%), Amikacin (42.85%), Azithromycin (42.85%), Kanamycin (42.85%), Ciprofloxacin (28.57%), Cefexime (14.28%) and Ceftriaxone (0%).

**Conclusion:** Shigellosis remained underestimated in developing countries due to lack of proper diagnosis and trend of symptomatic treatment. A careful attention should be given and further studies may be conducted to control the upcoming epidemics.

**Keywords:** *Shigella*, Shigellosis, Dysentery and Pakistan.

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