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## MOLECULAR DETECTION OF ACUTE VIRUS INFECTION IN CHILDREN HOSPITALIZED WITH DIARRHEA IN NORTH INDIA DURING 2014-2016

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**Background:** The viruses (eg: rotavirus, astrovirus, and adenovirus) are responsible for diarrhea in children, basically those are <5 years old. Detection of the entire virus is crucially important to the development of the effective cure. This study aimed to determine the prevalence of common viruses in children with <5 years old presented with diarrhea to the Lala Lajpat Rai Memorial Medical College (LLRM) centre(Meerut) North India, India.

**Methods:** Total 312 fecal samples were collected from diarrheal children (duration 3 years: in year 2014 (n=118), 2015 (n=128) and 2016 (n=66)) of <5 years of age who presented with acute diarrhea at the Lala Lajpat Rai Memorial Medical College (LLRM) centre(Meerut) North India, India. All samples were analyzed for the presence of rotaviruses, adenovirus and astrovirus using EIA/RT-PCR.

**Results:** In 312 samples from children with acute diarrhea, viral agent was found rotavirus A was the most frequent virus identified (57 cases; 18.2%), followed by astrovirus in 28 cases (8.9%), adenovirus in 21 cases (6.7%). Mixed infections were found in 14 cases, all of which presented with acute diarrhea (4.48%).

**Conclusions:** These viruses are a major cause of diarrhea in children <5 years old in North India. Rotavirus A is the most common etiological agent, followed by astrovirus. This surveillance is important to vaccine development of the entire population.

### Biography

Ali ilter Akdag is pursuing his PhD at Jamia Hamdard University since three years. His research area is Molecular Virology and Vaccinology. He works on acute gastroenteritis viruses, like rotavirus, adenovirus, astrovirus, norovirus, and sapovirus. He has completed MSc in Zoology (2013-2015) from Osmania University in Hyderabad, India. He won many certificates and awards. He has actively participated national and international conferences.

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