

ABSTRACT

Identification of Norovirus Genogroup and Its Clinical Manifestation in Children and Adult Patients with Acute Diarrhea in Jambi, 2019

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Background: Diarrhea is one of the most important global health issues because of its high morbidity and mortality. Ministry of Health of Indonesia reported 91,857 cases of diarrhea in Jambi province, with the prevalence about 4.8%. Norovirus is a leading cause of acute gastroenteritis worldwide in all age group. Norovirus infection is clinically characterized by diarrhea, vomiting, fever, and abdominal pain in a relatively short duration. This research aimed to determine the frequency of Norovirus infection and distribution of Norovirus genogroup, and analyze clinical manifestation that occurred in children and adult patients with acute diarrhea in Jambi. **Material and Methods:** This is a cross-sectional design study. Stool samples were collected from 3 hospitals in Jambi city from February to April 2019. Norovirus was identified by RT-PCR in Institute of Tropical Disease, Universitas Airlangga. Clinical manifestation data were taken from medical record. **Results:** There were 18 stools (13.3%) infected with Norovirus from total 135 samples, with Norovirus GI and GII were identified in 8 samples (44.4%) and 10 samples (55.6%), respectively. Clinical manifestation that commonly observed in this study were diarrhea with mushy stool (55.6%), vomiting (61.1%), fever (66.7%), abdominal pain (50%), and mild/moderate dehydration (50%). There was correlation between Norovirus infection with abdominal pain and dehydration. **Conclusion:** Norovirus infection in Jambi, 2019 was low prevalence and causing diarrhea with abdominal pain and dehydration.

Key words: Norovirus, genogroup, clinical manifestation, acute diarrhea, Jambi