

## ABSTRACT

### **Determinant Factors of Acute Diarrhea among Children 12-59 Month (A Case Control Study in Working Area of Puskesmas Tanah Grogot Paser Regency East Kalimantan, in Year of 2016)**

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**Background:** Poor sanitation include lack of clean water, mother behaviour dan premorbid factors of children are often found together with occurrence of childhood diarrhea. This study purposed to identify and explain any potential determinants of under five years diarrhea, and inform the proportion of rotavirus infection among childhood diarrhea in Tanah Grogot subdistrict, Paser regency, East Kalimantan.

**Methods:** An unattached 1:1 population based case control study conducted between 1<sup>st</sup> June until 31<sup>st</sup> August 2016 in Tanah Grogot subdistrict with 64 samples for each cases and control group. Data was collected by interviewing mother and observing the house.

**Results:** The proportion of rotavirus infection among childhood diarrhea was 8.82%. The study indicated that: having diarrhea in family ( $p=0.000$ ;  $OR=26.49$ ), having caregiver of child ( $p=0.000$ ;  $OR=3.89$ ) and treating water by boiling ( $p=0.001$ ;  $OR=4.32$ ) had significant relationship to childhood diarrhea. Consuming unboiled drinking water from improved water source had association with childhood diarrhea and increase the risk of diarrhea up to 6 times higher.

**Conclusions:** The childhood diarrhea in Tanah Grogot Subdistrict are related with inadequate clean water, consuming unboiled drinking water and lacking awareness of personal hygiene among citizen. Thus, increasing of clean water facilities, improving knowledge and hygiene practices in community would reduce childhood diarrhea morbidity in Tanah Grogot Subdistrict.

**Keyword:** diarrhea, under five, rotavirus, risk factors, Tanah Grogot