

ORS usage in the management of diarrhea among children under age of 5 years old in Balikpapan, Indonesia

ABSTRACT

Introduction: Diarrhea is a preventable disease, but it remains the second leading cause of death (after pneumonia) among children aged under-five years worldwide. Diarrhea diseases are caused by viruses, bacteria or protozoa and transmitted through faecal-oral transmission. In Indonesia, diarrhea has been a public health problem, as reflected in the high rates of morbidity due to diarrhea, whereby in 2012, the morbidity of diarrhea among children under 5 years old was 900 per 1000 population. ORS is simple and effective treatment for diarrhea among children. The aims of the study are to determine the practices among mothers and factors influencing use of ORS in management of diarrhea at Balikpapan, Indonesia.

Methodology: A cross-sectional study was conducted in South Balikpapan District of East Kalimantan. A total of 450 children under-five years of age attending health clinics in South Balikpapan District were randomly selected for the study. All children had history of diarrhea for last two weeks. Mothers accompanying the child were interviewed as respondents of the study using questionnaire developed for the study. The Statistical Package for Social Science (SPSS) version 22 was used for data analyses.

Results: 403 or 90% mothers completed the questionnaires. 278 (69%) of the mothers reported gave ORS treatment for their children who having diarrhea, while 125 (31%) were not used the ORS. All mothers reported gave home remedies such as black tea (32%), guava leaf water (21%), plain mineral water (20%), rice water (18%), coconut water (7%), and fruit juice (2%) to children having diarrhea. The study also showed mothers had good knowledge on diarrhea among children and about the usage of ORS. Majority mothers showed negative belief on ORS; 54.6% mothers belief ORS cause diarrhea and 60.1% belief ORS only for mild diarrhea. Health service factors such as distance and waiting time, and cost of ORS among others factor influencing use of ORS among under-five years of age attending health clinics in South Balikpapan District of Kalimantan.

Conclusion: The usage of ORS was found to be satisfactory (69%) for children under 5 years old in Balikpapan, Indonesia. The proportion of mothers not using ORS also still high (31%) most likely due to negative belief on ORS.

Keyword: ORS usage; Diarrhea; Children; Balikpapan Indonesia