

## The Differences in Effectiveness of Synbiotic Compared to Probiotics in Children with Acute Diarrhea

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### Abstract

**Background.** The use of probiotics for the prevention and treatment of diarrhea has shown satisfactory results in developing countries. Synbiotics is a product that contains prebiotics and probiotics. Synergistic effect of prebiotics and probiotics is expected to be beneficial in management of acute diarrhea in children.

**Aim.** We conducted this study to compare the efficacy of synbiotics and probiotics in children with acute diarrhea in shortening the duration of diarrhea and increasing the faecal sIgA levels.

**Method.** An experimental study conducted among children aged 6-24 months with acute diarrhea at public health centers and district hospital in Padang. Sampling was done by consecutive sampling. Subjects received either synbiotics or probiotics while the control group received the standard treatment of WHO. The measured outcomes were duration of diarrhea and faecal sIgA levels

**Results.** A total of 60 subjects who met the inclusion and exclusion criteria included in the study. There was no significant difference in the mean duration of diarrhea between synbiotic, probiotic and control group,  $38.55 \pm 20.84$  hours vs  $41.50 \pm 20.96$  hours vs  $44.95 \pm 20.88$  hours, respectively ( $p=0,627$ ). Faecal sIgA levels in probiotic group were tend to increase than synbiotic group but the differences were not statistically significant.

**Conclusion.** We observed no significant differences in efficacy of synbiotic and probiotic in children with acute diarrhea.

*Keywords: acute diarrhea, probiotics, synbiotics*

