Do probiotics affect the course of acute watery diarrhea in children?

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Rapid rehydration, zinc and realimentation remain the cornerstone of management of acute diarrhea. However, researchers have tried other interventions like probiotics for better management as the standard therapy does not significantly reduce the duration of diarrhea. We studied the efficacy of *Saccharomyces boulardii* as an adjunct to standard therapy in reducing the duration of diarrhea and hospital stay. Efficacy of *S. boulardii* is attributed to a direct inhibitory effect on growth of pathogenic strains, anti-secretory effect by specifically binding toxins to intestinal receptors and trophic effect on enterocytes with stimulation of enzymatic activity and non-specific anti-infectious mechanisms. This was an open labeled randomized control trial enrolling 100 cases of acute diarrhea aged 2-60 months. Informed consent was taken from caregivers of child before enrolment. Child with acute watery diarrhea with no dehydration was enrolled at admission. Child with some/severe dehydration was enrolled after dehydration correction. Enrolled subjects had undergone simple randomization through serial numbered opaque sealed envelopes. 50 patients were treated with *S. boulardii*, 250 mg twice daily for 5 days with ORS and zinc (group A) and 50 were given ORS and zinc alone (group B). Duration of diarrhea and consistency and frequency of stools were recorded every morning. Diarrhea was considered to have stopped when child passed <3 stools/day or stool with a formed consistency only. We found that the difference in mean no. of stools and mean duration of diarrhea between the two groups was statistically significant (p value=<0.001). The mean difference in duration of diarrhea of 37.8 hours and the mean difference in duration of hospitalization between the two groups of 38.4 hours was also statistically significant (p value=<0.001).

Biography
Anand Prakash Dubey is working as a Professor of Pediatrics at ESI-PGIMSR, New Delhi. His career in pediatrics spans over 35 years. He served as an Honorary Lecturer in Pediatrics at University of Sheffield, UK for one year. He was awarded Commonwealth Medical Fellowship in Pediatric Hemato-oncology at the Children’s Hospital, Sheffield, UK and also Trainee Fellowship of Indian Academy of Pediatrics. For his outstanding services, Delhi Government has awarded him State Doctors Award for the year 2010-11. He has been Executive Editor of *Indian Pediatrics* (official medical journal of IAP), Convener and Chairperson of Immunization Committee, Secretary and Chairperson of subspecialty chapter of Nutrition. He has over 90 publications in national and international journals and many chapters in text books. He has attended many national and international conferences and presented papers.

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