

Effect of Anthelmintic/Anti Protozoal Treatment on the Nutritional Status of School Children in a Sub Urban Area of Orissa, India

G.P. Chhotray, M.R. Ranjit and H.K. Khuntia

Regional Medical Research Centre, (Indian Council of Medical Research), Chandrasekharapur, Bhubaneswar 751 023. Orissa, India
Fax: 0674-440974, E-mail: icmrrcbh@ren.nic.in

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ABSTRACT Intestinal parasitic infestation is one of the multiple aetiologies of malnutrition amongst school children in India. To determine whether successful deworming treatment improves physical growth, 297 school children (aged 4-15 years) in a suburban area were followed for one year. No other intervention programme was instituted during this period. Height and weight were measured at the baseline and one year after the study. Growth was measured in terms of change in weight-for-age and height-for-age. Stool samples were examined at the baseline and subsequently at one month interval. Metronidazole, 600 mg daily in three divided doses for 7 days and/or mebendazole, 100 mg twice daily for 3 consecutive days was administered to the infected individuals depending on the species of parasite found. The prevalence of various intestinal parasitic infestation at the baseline was 81.1 percent; protozoa, 41.7 percent; helminthes 19.5 percent and both protozoa and helminth, 19.5 percent and both protozoa and helminth, 19.9 percent. Two hundred and forty-one children who revealed various parasitic infestations were given appropriate treatment. The de-worming treatment significantly reduced parasitic infestations to 25.9 percent; Protozoal to 17.5 percent; helminthic to 5.7 percent and combined infection to 2.7 percent. Successful removal of intestinal parasites did not cause any significant improvement in the growth of treated children which is similar to their untreated counterpart in terms of the change in SD-score of weight-for-age and height-for-age.