Pengaruh Pemberian Sirup Besi, Vitamin C dan Vitamin A terhadap Kadar Hb Balita dengan Anemia Penelitian Eksperimental di Kabupaten Buleleng

Abstrak:

The aim of this study was to investigate whether there were differences in the effects of supplementation of iron in anemic under five children aged 3–5 years old supplemented with vitamin A and vitamin C. It’s an experimental research using pretest posttest control group design and double blind treatment. The subjects of this study were 34 under five children aged 3–5 years old who lived in Pancasari village, Buleleng Regency and randomly selected with a hemoglobin concentration of 7.0–10.0 gr%. The subjects were assigned to two treatment groups, consisting of a sample size of 17 subjects per group. The first group was supplemented with ferrous syrup and vitamin A while the second group was supplemented with ferrous syrup, vitamin A and vitamin C. Supplements were given 3 times/week for 8 weeks. A week before supplementations were given, subjects were given a single 500 mg dose of mebendazole. Hemoglobin concentrations were measured by the cyanmethemoglobin method at the beginning and the end of the treatment. There results of this study showed that there is a difference between both groups in the increase of Hb concentrations and in group treatment before and after the treatment (p = 0.000). There were no differences among the groups in the consumption levels of calories, protein, iron, vitamin A and vitamin C (P > 0.05). The hemoglobin concentrations will be higher when supplemented with ferrous syrup combined with vitamin A and 100 mg of C than supplemented with ferrous syrup with vitamin A only. Statistical testing has shown significant results. The difference in the increase of Hb concentrations might be due to treatment and not due to the food consumed by the subjects. Therefore, the supplementation of ferrous syrup combined with vitamin A and C is highly recommended for those who want to increase the Hb concentrations significantly.

Keyword:

under five children, anemia, vitamin A, vitamin C