ABSTRACT

The Influence Of Zinc And High-Dose Vitamins A Supplementation For Third Semester of Pregnant Women With Chronic Energy Deficiency On The Levels Of Breast Milk Retinol And Zinc In Bojonegoro Regency Of East Java, Indonesia

Zinc and high-dose Vitamin A supplementation for third semester of pregnant women could increase the levels of retinol and Zinc in breast milk. This research applied an experimental design of double blind randomized tests (pre-test and post-test) on two groups (treatment and control groups) to analyze the effect of the supplementation of Zinc and high-dose Vitamin A. Variables of interest were measured three times: pre-test, post-test 1 and post-test 2. Data were collected through questionnaire-based interviews, food recall, anthropometry, laboratory tests of blood samples and breast milk. Based on the inclusion criteria a sample of 32 pregnant women was selected. The sample was randomly assigned to two groups, treatment and control groups. Based upon t-tests, the effects of the supplementation were analyzed. The results showed that there was no significant differences in the levels of breast milk retinol between pre and post-tests within control group (p value = 0.197) and treatment group (p value = 0.172). With regard the levels of breast milk Zinc in control group, the results indicated that there was no significant differences in between post 1 and post 2 (p value = 0.41). While in treatment group, there were significant differences in the levels of breast milk Zinc between post-test 1 and post-test 2 (p value = 0.024). Conclusion: there was no difference on the levels of breast milk retinol between the control and treatment groups but there were significant differences on the levels of breast milk Zinc between two groups. This results suggested that the supplementation of Zinc influence the levels of breast milk Zinc.

Keywords: Zinc supplementation, high-dose Vitamin A, breast milk retinol, breast milk Zinc