

Distributing Complementary Food Supplement - Yingyangbao Reducing the Anemia in Young Children in a County of Sichuan Province after Wenchuan Earthquake

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Abstract : Backgrounds and Objective: This study aimed to evaluate the impact of highly nutrient-dense complementary food supplement-Yingyangbao, at the time of 3 months after Wenchuan earthquake, on the anemia of young children in a county in Sichuan province. Methods: The young children aged 6-23 months in the county were fed one sachet Yingyangbao per day. Yingyangbao were distributed for 15 months for free. The children entering 6 months age would be included. The length, weight and hemoglobin of the children aged 6-29 months were assessed at baseline (n=257) and Yingyangbao intervention for 6 (n=218) and 15 months (n=253) by cluster sampling. Growth status has not been described in the paper. The analysis was conducted based on 6-11, 12-17, 18-23 and 24-29 months. Results: It showed that the hemoglobin concentration in each group among the 4 groups increased by 4.9, 6.4, 8.0, 9.5 g/L after 6 months and 12.7, 11.4, 16.7, 15.7 g/L after 15 months compared to the baseline, respectively. The total anemia prevalence in each group was significantly lower after 6 and 15 months than the baseline ($P<0.001$), except the 6-11 months group after 6 months because of fewer Yingyangbao consumption. Total moderate anemia rate decreased from 18.3% to 5.5% after 6 months, and kept decreasing to 0.8% after another 9 months. The hemoglobin concentration was significantly correlated with the amount of Yingyangbao consumption ($P<0.001$). The anemia rate was significantly different based on the Yingyangbao compliance ($P<0.001$). Conclusion: It was concluded that Yingyangbao which contains quality protein, vitamins and micronutrients intervened 15 months could be effective for the improvement of anemia of young children. The study provides the support that the application of the complementary food supplements to reduce the anemia of young children in the emergency of natural disaster.

Keywords : young children, anemia, nutrition intervention, complementary food supplements, Yingyangbao

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