

Presented at the International Nutritional Anemia Consultative Group (INACG), Peru, November 2004:

Integrated programming, including homebased fortification using 'sprinkles', is an effective strategy for addressing anemia in Mongolian children

M Nyamsuren, C Emary, G Bat, S Gerein, S Zlotkin, M Chan. World Vision Mongolia, Nutrition Research Centre of Public Health Institute, Government of Mongolia, Ulanbataar, Mongolia, World Vision Canada, and The Hospital for Sick Children, Research Institute, Canada; Departments of Paediatrics, Nutritional Sciences, and Centre for International Health, University of Toronto, Toronto, Canada.

Problem: World Vision baseline surveys (BL) conducted in 2 different programming areas, BL1 (October 2000), and BL2 (October 2001) confirmed that anemia is a significant public health problem among Mongolian children under 5 years of age (U5). **Objectives:** To reduce the prevalence of anemia in children U5, a comprehensive nutrition program was implemented using the following strategies: 1. Prevention of anemia through home-based fortification to children 6 months to 3 years of age (40mg Fe/day, 15 months) using 'Sprinkles', a powdered micronutrient supplement. 2. Treatment of anemic children 3 to 5 years using iron syrup (25 mg/day, 3 months). 3. Capacity building. 4. Social marketing. **Design:** Baseline surveys were followed by a 3-year implementation period. Community based nutrition workers distributed 'Sprinkles', conducted household monitoring visits and facilitated community health and nutrition training. Iron syrup and iron/folate tablets were provided to anemic children 3 to 5 years of age and to pregnant/ lactating women through Government health structures. Capacity building of medical personnel was accomplished through training on the diagnosis/ treatment of anemia. Social marketing using multi-media campaigns raised public awareness of micronutrient deficiency. A follow-up survey was conducted in October 2003 in both baseline areas to evaluate program effectiveness. **Results:** Within BL1 and BL2 program areas respectively, the prevalence of anemia (Hb<11.5 g/dl) in children U5 decreased from 42.5% (n=1278) and 47.9%, (n=1155) at baseline to 24.2% (n=964) and 25.5% (n=909) at final survey (p=0.00). Ninety percent of eligible children in the intervention areas received 'Sprinkles' supplements for a mean duration of 13 months. **Implications:** Results indicate that program strategies, including home-based fortification using 'Sprinkles', are effective for addressing anemia in children U5.