Community based nutrition counseling improves complementary feeding practices and growth of infants in rural Uttar Pradesh, India

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Abstract

Objective: To develop and assess the effect of a ‘Community-Based Nutrition Counseling (CBNC) approach’ on complementary feeding (CF) practices and growth of infants aged 6-12 months in selected rural households of Uttar Pradesh state, India.

Methodology: Study locale-six matched villages of 3 blocks of District Ghaziabad, Uttar Pradesh, India. A quasi-experimental research design- with one intervention and two comparison groups. Intervention included implementation of CBNC approach, with its strategic components being system strengthening, capacity building, Behavior Change Communication (BCC), Synergy with Local bodies and Child nutrition security at household level. CBNC involved appropriately designed nutritional counseling delivered through identified and trained community counselors in conjunction with already existing village level service providers using multiple channels of communication. Sample of 62, 63 and 64 mothers/caretakers of infants aged 4 months were followed till 12 months of age in intervention, comparison-I and comparison-II groups, respectively. CBNC approach was implemented in intervention group (data collection at 4, 6, 9, 12 months) with parallel data collection in comparison-I (4, 6, 9, 12 months) and Comparison-II groups (4, 6 12 months). At 12 months of age, impact of CBNC approach was assessed on CF practices and growth of infants. Standard descriptive univariate and bivariate statistical analysis was done using appropriate statistical tests in SPSS (version 13)

Results: Rates of timely introduction of complementary food at completion of 6 months of age were significantly higher in intervention infants as compared to both comparison groups (97% vs 6%, 6%, p<0.01). Intervention infants had better meal frequency (p<0.01) and dietary diversity scores (p<0.01) than both comparisons groups at 6, 9 and 12 months of age. Quality of CF as measured by high CFI scores was significantly better in intervention infants as compared to both comparison groups at 12 months of age (97% vs 0 and 2%, p<0.05). Twenty-four hour recall and Food Frequency Questionnaire showed significantly higher food and nutrient intake from CF for intervention infants as compared to comparison groups infants at 9 and 12 months of age (p<0.05). At 12 months, intervention infants were significantly heavier and longer as well as had better growth velocities between 8-12 months as compared to comparison groups I and II (p<0.001). As per WHO (2006) standards, fewer intervention infants as compared to comparison groups I and II infants were underweight (nil vs 36.5%, 53%), stunted (4.8% vs 67%, 65%) and wasted (nil vs 6.3%, 12.5%).

Conclusion: The CBNC approach showed positive outcome in the form of improved CF practices and improved growth of infants through its strategic interventions. Implementation of CBNC approach and the lessons learned build a strong evidence for use by other community based programmes on improving child survival and growth through improved infant feeding practices.

Biography

Aashima Garg completed her Ph.D from University of Delhi, India in the area of Public Health Nutrition in 2012. She is presently working as Nutrition Specialist with UNICEF, India Country Office in the state of Madhya Pradesh. She has an experience of over 8 years in nutrition research and programming. She has 5 research publications in peer review journals and book to her credit so far with 3 of them being from the formative phase findings of her Ph.D Research.