

Home-Based Care with Follow-Up at Outpatient Unit or Community-Follow-Up Center with/without Food Supplementation and/or Psychosocial Stimulation of Children with Moderate Acute Malnutrition in Bangladesh

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Abstract : Objective: To assess the effect of community-based follow up, with or without food-supplementation and/or psychosocial stimulation, as an alternative to current hospital-based follow-up of children with moderate-acute-malnutrition (WHZ < -2 to -3) (MAM). Design/methods: The study was conducted at the ICDDR,B Dhaka Hospital and in four urban primary health care centers of Dhaka, Bangladesh during 2005-2007. The efficacy of five different randomly assigned interventions was compared with respect to the rate of completion of follow-up, growth and morbidity in 227 MAM children aged 6-24 months who were initially treated at ICDDR,B for diarrhea and/or other morbidities. The interventions were: 1) Fortnightly follow-up care (FFC) at the ICDDR,B's outpatient-unit, including growth monitoring, health education, and micro-nutrient supplementation (H-C, n=49). 2) FFC at community follow-up unit (CNFU) [established in the existing urban primary health-care centers close to the residence of the child] but received the same regimen as H-C (C-C, n=53). 3) As per C-C plus cereal-based supplementary food (SF) (C-SF, n=49). The SF packets were distributed on recruitment and at every visit in CNFU [1 packet/day for 6-11 and 2 packets/day for 12-24 month old children. Each packet contained 20g toasted rice-powder, 10g toasted lentil-powder, 5g molasses, and 3g soy bean oil, to provide a total of ~ 150kcal with 11% energy from protein]. 4) As per C-C plus psychosocial stimulation (PS) (C-PS, n=43). PS consisted of child-stimulation and parental-counseling conducted by trained health workers. 5) As per C-C plus both SF+PS (C-SF+PS, n=33). Results: A total of 227 children (48.5% female), with a mean \pm SD age of 12.6 \pm 3.8 months, and WHZ of -2.53 \pm 0.28 enrolled. Baseline characteristics did not differ by treatment group. The rate of spontaneous attendance at scheduled follow-up visits gradually decreased in all groups. Follow-up attendance and gain in weight and length were greater in groups C-SF, C-SF+PS, and C-PS than C-C, and these indicators were observed least in H-C. Children in the H-C group more often suffered from diarrhea (25 % vs. 4-9%) and fever (28% vs. 8-11%) than other groups ($p < 0.05$). Children who attended at least five of the total six scheduled follow-up visits gained more in weight (median: 0.86 vs. 0.62 kg, $p=0.002$), length (median: 2.4 vs. 2.0 cm, $p=0.009$) than those who attended fewer. Conclusions: Community-based service delivery, especially including supplementary food with or without psychosocial stimulation, permits better rehabilitation of children with MAM compared to current hospital outpatients-based care. By scaling the community-based follow-up including food supplementation with or without psychosocial stimulation, it will be possible to rehabilitate a greater number of MAM children in a better way.

Keywords : community-based management, moderate acute malnutrition, psychosocial stimulation, supplementary food

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