

Comparison of Anthropometrical Indicators between Malnourished Children Admitted to a Nutrition Rehabilitation Unit and Their Counterparts in a Community

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Objective: Relate z-scores of malnourished children treated in a Nutrition Rehabilitation Unit (NRU) with that of their counterparts in a community.

Methodology: The Matlab MCH-FP Programme regularly measures mid-upper arm circumference (MUAC) to detect severe malnutrition in a community. An NRU was established to rehabilitate children detected as severely malnourished (MUAC <120 mm), and to involve mothers in the process. The z-score values (ANTHRO) of the admitted children were compared with those for their counterparts selected randomly in a community, using normal test comparisons for continuous variables.

Results: During a five-year period, 548 malnourished children aged less than five years from the intervention area were admitted for a mean (SD) of 19.1 (17.1) days. Admission was highly seasonal, particularly high during the pre-harvest period; 3.3% of the children were admitted twice during the study period; 32% of the admitted patients were infants, and 75% were aged less than two years. Mean weight gain was linear over time till the 5th week of admission when it reached a plateau. The weight-for-age and weight-for-height values, but not height-for-age, improved significantly among patients at the NRU. The admitted children were both stunted and wasted. Five hundred community children from a neighbouring non-intervention area were significantly less stunted and wasted than those admitted in the NRU. The malnourished comparison children had a higher weight-for-height score ($z=-11.5$, $p<0.0001$) and weight-for-age score ($z=-9.5$, $p<0.0001$) than those recorded for children from the intervention area when admitted to the NRU, and had also a significantly higher weight-for-age score than that recorded on children when discharged from the NRU ($z=-4.8$, $p<0.001$).

Conclusion: The results of the study showed that children rehabilitated in an NRU improved significantly in terms of their nutritional status, but their z-score values on discharge were still comparable to those of the malnourished children living in the community. Community-based rehabilitation programmes may be required to continue caring for the still fragile children at risk of morbidity and mortality.

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Birth Weight in Rural Bangladesh

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Objective: Study the feasibility of recording birth weight in a rural community, and examine factors associated with the patterns of birth weight.

Methodology: Data were collected from a population of 60,000 throughout Bangladesh over a 3-year period, where BRAC provides health and nutrition education. In this study, 2,516 village women who had given birth to singleton liveborn infants were identified, registered, and followed up through their pregnancy. Information on their age, parity, occupation, education, receipt of antenatal care (ANC) services, etc. was obtained using