

**DEWORMING ADJUCNT MIRONUTRIENT SUPPLEMENTATION IN INCREASING
HAEMATOLOGIC INDICES AND ENHANCING NUTRITIONAL STATUS IN CHILDREN:
RECENT OBSERVATION FROM BANGLADESH**

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Background: Anaemia and Iron-deficiency(ID) often acts synergistically, while intestinal parasitosis (IP) augments in developing nutritional anemia and-iron deficiency(NAID) rampant in resource constraint countries. Since no such study was reported from Bangladesh yet, we conducted this community-based intervention-study in a disadvantaged rural-area.

Methodology: Total 168, children(mean age=6.86±2.33years) having intestinal parasitosis and anaemia, were subjected to fortnightly anthropometry and were randomized into 4 groups(Gp):Children from A1 & A2 were dewormed and B1 & B2 were not. Further, A1 and B1 were supplemented with micronutrient and A2 & B2 were not. Haematological indices/micronutrient assay were done for all at baseline. Post-intervened blood was re-tested to compare with baseline.

Findings: Prevalence of helminths(81.5%) and protozoa(12%)lowered down significantly after intervention in A1, than A2, B1 and B2(p< 0.001). Mean Hb increased in A1, than A2 (p>0.00), B1(p>0.005) and B2 (p>0.001). Mean *S. ferittin* increased in Gp.A1 than B1 (p< 0.03), and A2 than B1(p< 0.03) and Mean *Total Iron-Binding-capacity* increased in Gp A1 than A2(p< 0.03) and A2 than B2(p>0.04).

While no post-intervened increment in mean height-z-score was observed except in A1 than B2 (p< 0.04), Means weight-z-score was increased in A1 than A2(p< 0.02), B1 than B2 (p< 0.001), A2 than B1(p< 0.05) & A2 than B2 (p< 0.05).

Conclusion: Micronutrient supplementation helps parasitic and/or anaemic children in increasing haematological indices and gaining weight if dewormed in prior. It is particularly essential in underdeveloped low-health care budgeted countries in adopting better policies/strategies towards better child survival, through a cost-effective sustainable prevention /control programs against NAID.