



IMPACT OF MALNUTRITION ON EARLY CHILDHOOD DEVELOPMENT, 2016

Nandita Chattopadhyay

IQ City Medical College, Durgapur, India

Abstract

Malnutrition and impaired early childhood development continue to exist as two giant childhood health problems, particularly in the developing world. Both conditions often coexist and exert effect on each other, aggravating the problems. Here we have studied the impact of malnutrition on early childhood development in different age groups, in a marginalized rural community in India, to identify the most vulnerable age group.

Method: We screened 837 children aged 0-3 years and 540 aged 3-6 years. Anthropometric measurements (weight, height and mid-arm circumference) were recorded and nutritional status determined by deriving the Z-score for weight for length. Developmental delay was assessed by Denver Development Screening Test II, TDSC scale and Amiel-Tyson method of tone assessment.

Result Occurrence of malnutrition was similar in both age groups (33-35%), with minimum incidence among 0-1 year olds. Incidence of developmental delay was 6.5% and 3.1% in 0-3 year and 3-6 year age groups respectively. In 0-3 years age group Incidence of developmental delay was significantly higher among children with malnutrition (p value <0.05); no such correlation was seen among the older children.

Conclusion: Malnutrition during 1st three years of life, is a major risk factor for poor neuro-developmental outcome. A multi-pronged approach to provide proper nutrition to mother and child, improve health and hygiene and adequate





psychomotor stimulation will improve developmental outcome in children.

Biography:

Nandita Chattopadhyay is professor of Paediatrics at IQ City Medical College. She specialises in Developmental Paediatrics and is the director of Udbhaas Child Development Centre, Kolkata. She is a fellow of the National Neonatology Forum and has also been awarded the FAIMER Fellowship in Medical Education.

Speaker Publications:

- 1. EFFECTS OF MALNUTRITION ON CHILD DEVELOPMENT: EVIDENCE FROM A BACKWARD DISTRICT OF INDIA; Clinical Epidemiology and Global Health; https://doi.org/10.1016/j.cegh.2019.01.014.
- 2. IMPACT OF MALNUTRITION ON NEURO-DEVELOPMENT IN CHILDREN FROM A MARGINALIZED RURAL COMMUNITY IN INDIA; International Journal Of Scientific Research; Volume-8 | Issue-2 | February-2019 | ISSN No 2277 - 8179.
- 3. NEURODEVELOPMENTAL OUTCOME OF HIGH RISK NEWBORNS DISCHARGED FROM SPECIAL CARE BABY UNITS IN A RURAL DISTRICT IN INDIA; Journal of Public Health Research 2015; volume 4: No 1; pp7-12.

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