"Dietary Behavior and Nutritional Status of Mentally Retarded Children"

A Minor Research Project

Submitted to

University Grants Commission,

Principal Investigator
Dr.Aruna Palta

Co-Investigator
Mrs. Rachna Saxena

October-2016

Summary of the Project

Mental retardation is a serious and lifelong disability that places heavy demands on society and the health system. The most common problems associated with malnutrition in disabled children, are inadequate nutrient intake either due to feeding problems or poor feeding knowledge among care takers (**Suzuki et al 1991**). Understanding children's eating attitudes and behaviour is important in terms of children's health. Evidence also indicates that dietary habits acquired in childhood persist through to adulthood (**Kelder et al 1994**). Disabled people are often assumed to have poorer nutrition than their nondisabled counterparts; they are also vulnerable to poor nutritional care (**Mallory et al 1993).**

The present study was conducted on 200 subjects of Raipur and Bilaspur districts of Chhattisgarh state with an objective to assess their Nutritional Status and to study their Dietary Behaviour . The Dietary Behaviour and Nutritional Status of Mentally Retarded children living in institutes and living with parents was also compared.Both purposive & random sampling procedures were adopted while selecting the sampling sites and the samples. Mentally Retarded children of both the sexes with and without having any associated physical and mental problems were selected. Samples were selected from different schools specially meant for these children from Raipur and Bilaspur of Chhattisgarh state. Fifty institutionalized and fifty non institutionalized Mentally Retarded children were selected from various institutes of Raipur city. Similar sampling was done from Bilaspur city also. Thus the total sample size was of 200 children.

Anthropometric Measurements like height & weight were recorded of all the subjects **Diet Survey** was conducted on pretested schedule as described by ICMR. Calories, Proteins, Fats, Calcium & Iron were calculated using food composition tables of the ICMR and compared with RDA. **Dietary Behaviour Survey** was administered among the parents and caretakers of the Mentally

Retarded children covering the broad areas: MealtimeBehaviour, Practice of Personal Hygiene at Mealtime, Handling skills for Table Utensils and Common Eating Problems.

It was found that children with lower degree of retardation were showing more appropriate and better behaviour than the children with higher degree of retardation. Along with this it was also observed that the type of behaviour shown by these children depends upon the presence of associated physical and mental disability. Behaviour like moving around during meal time was observed in 50% Autistic children which was the highest among all. Similarly the highest 66.7% was found in children with Cerebral Palsy for the aggressive behaviour during meal time. The data indicated that 68.7% Autistic, 7.4% Cerebral Palsy and 40.9% Down syndrome children were handling the table utensils as directed by their caretakers during meal time.

It was also found that all the Autistic and Down Syndrome children and 63.0% children with Cerebral Palsy were washing their hands before meals. The presence of drooling was found to be higher in severely retarded children and children with Cerebral Palsy. The problem of Gastroesophegeal Reflux was observed in 12% mildly retarded, 7% moderately retarded and 50% severely retarded children.

The comparison between the children living in institutes and living with parents showed that mealtime behavior and handling skills for table utensils was found more appropriate in children living in institutes. When a comparison for the nutrient intake was made between the children living in institute and children living with parents, a significant difference in calorie and calcium intake at .05 level and protein and fat intake at .01 levels was found. The difference in iron intake was found to be not significant.