

ICCN Poster Presentations

Food and the child

Factors contributing to academic achievement among a sample of Indian and Malay school children in Malaysia

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The relationship between health and nutrition and academic achievement of the school age population in less developed countries has been of interest to many researchers. This is due to the frequent observation that many children do not complete primary school and those who have completed, do not do as well as children in developed countries. Thus, the aim of this study was to determine the factors that contribute to academic achievement among primary school children. The study was conducted in Hulu Selangor district which was randomly selected from 9 districts in the state of Selangor. A total of 6 schools which satisfy the criteria of A school (population > 1000 students) and/or have majority Malay and Indian students were randomly selected from a list of 34 schools in the district. The sample consisted of 332 children (Indians – 209 and Malays – 123) in standard 2 (8-9 years old). The children were measured for their heights and weights and their parents were interviewed to assess dietary, demographic and socioeconomic information and their involvement in children's education. Stool and finger-prick blood samples were obtained from the children to determine the presence of worm and hemoglobin levels, respectively. Final examination results for four subjects (Mathematics, English and Malay language – comprehension and composition) were obtained from the schools and the scores were reported as percentage of total score (% TS). All statistical analyses were done using SPSS 11.0. Preliminary analyses indicated that %TS correlated significantly with several demographic (number of children), socioeconomic (household income, income per capita, food and non-food expenditures and food security status) and nutrition (hemoglobin levels and height-for-age) indicators. A multiple regression analysis will be conducted to obtain a combination of factors that best predict academic achievement among this sample of school children.