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ABSTRACTS

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22

POSTER PATHWAY 7: P5.7 Nutrition in children and adolescents

5.7.28 EFFECT OF DIETS OF DIFFERENT LEVELS OF PROTEIN ON THE RECOVERY OF KWASHIORKOR AND MARASMIC KWASHIORKOR CHILDREN

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The effect of diets of different levels of protein on the recovery of kwashiorkor and marasmic kwashiorkor children was studied for 3 weeks in Pakistan. Sixty kwashiorkor and marasmic kwashiorkor children of less than 5 years age were grouped into 4, each group was having 15 children. For each group, two diets, one for early recovery and the other for catch up growth, were prepared from fresh buffalo milk, banana, soybean oil and glucose. The basal (reference) and test diets for early recovery and catch up growth had constant calories and variable amounts of protein. The basal diets and test diets were assigned to group 1, 2, 3 and 4 respectively. The early recovery diets were fed for the first 5 days and the catch up growth diets were fed for the remaining duration. The recovery of the children was measured in terms of weight gain and weight was taken weekly. The combined average intake/day of the early recovery and catch up growth diets were calculated. The average caloric intake of groups 1, 2, 3 and 4 were 140 ± 19 , 133 ± 22 , 133 ± 16 and 153 ± 8 Kcal/Kg body weight/day respectively. The average protein intake of groups 1, 2, 3 and 4 were 2.7 ± 0.4 , 2.9 ± 0.4 , 3.2 ± 0.4 and 3.6 ± 0.2 g/Kg body weight/day respectively. The groups of test diets gained more weight than the group of basal diet, however, the results were not significant at $p < 0.05$. The data revealed that that diet that provided 133 ± 22 Kcal/Kg body weight/day and 2.9 ± 0.4 g protein/kg body weight/day was better for the recovery of kwashiorkor and marasmic kwashiorkor children.

5.7.29 MALNUTRITION IN THE FACE OF PLENTY: AN ASSESSMENT OF THE FACTORS RESPONSIBLE FOR THE HIGH LEVELS OF CHILDHOOD MALNUTRITION IN UGANDA

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Introduction: Despite its favorable natural and human resource capacity, under-nutrition remains a major health & welfare problem in Uganda. Increased prevalence of under-nutrition in Uganda has occurred despite appreciable reduction in overall Poverty levels over the years. Moreover, Uganda is food secure at national level and is considered by many as the "food basket" of the region. **Main objective of the study:** To determine the factors responsible for high levels of childhood malnutrition in Uganda and find sustainable strategies and programmes for their address and subsequent solution.

Methodology The study was a cross-sectional survey. Multi-stage random sampling was used to select the study areas. Four hundred households with children below 5 years were studied. A Semi-structured Questionnaire was administered and Anthropometric data collected. Bivariate and Multivariate analyses were carried out using SPSS and Epiinfo 2000.

Findings: Almost half of the children studied (46%) were stunted while more than one quarter (28%) were underweight. Significant multivariate variables for Stunting were Access to information on child care, Safe drinking water and Preparation of special foods for the child while significant multivariate variables for Underweight were Household size, Age of introduction of complementary foods and again Information on child care.

Conclusions: The factors responsible for the high levels of childhood malnutrition in Uganda using the Western Region as a case study coincide with the UNICEF model with all the factors; Immediate, Underlying and Basic, playing major roles.

Recommendations: Combined effort is needed to address the problem of childhood malnutrition in Uganda. Emphasis needs to be put on community nutrition education, family planning services and information and communication.

5.7.30 DETERMINANTS OF INFANT AND CHILDHOOD MALNUTRITION IN KABAROLE DISTRICT, WESTERN UGANDA

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Objectives: Assess the nutritional status of children under five years of age, identify their feeding habits and constraints to proper feeding. **Methods:** It was a cross sectional descriptive survey using both qualitative and quantitative methods of data collection. A sample of 103 children between the ages of 0-5 years and their caretakers were visited. Children's anthropometric data as well as demographic, socio-economic and feeding habits of the selected households were taken. A focus group discussion was also carried out to give a general picture of the community's perception of the causes of malnutrition. Data was entered using EP-INFO 2003 and analysed by the Statistical Package for Social Scientists. Associations were done using chi-square and a p-value of less than 0.05 considered as significant. **Results:** Stunting was the most prominent indicator of malnutrition (41.6%), while under-weight and wasting were 15.7% and 3.4% respectively. The relationship between the level of child stunting of and selected factors showed significant relationships with households which had less than 10,000Ushs (less than 6 dollars) monthly household expenditure ($p=0.035$), caretakers lacking information on proper nutrition requirements ($p=0.009$) and time of introduction of complimentary foods to the children ($p=0.031$). Knowledge on possible causes of malnutrition ($p=0.08$) and sex of the child ($p=0.082$) showed no significant relationships with level of stunting. However, children above two years of age were significantly ($p=0.03$) more stunted than young children, while households with more than seven people also had significantly ($p=0.038$) more stunted children than smaller households. **Conclusion:** Malnutrition levels especially stunting are high in the area (41.6%).

Recommendation: The area officials should collaborate with policy makers so as to win their support for nutrition activities

5.7.31 GENDER AND SOCIO-DEMOGRAPHIC FACTORS INFLUENCING LONGITUDINAL DIETARY CHANGE FROM ADOLESCENCE TO ADULTHOOD: THE ASH30 STUDY

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Eating habits are influenced by multiple factors from an individual's internal and external environment. The Ash30 study provided quantitative evidence of dietary change and observed the influence of gender and socio-demographic factors on dietary change over 20 years from adolescence to adulthood. Longitudinal dietary data (two x 3-day food diaries) were obtained in 1980 and 2000 from the same 198 respondents (mean age 11.6 and 32.5 years respectively) in Northumberland, North East England. Foods consumed were assigned to one of the five food categories as defined in The Balance of Good Health (BGH). Demographic information and social class information were obtained in both 1980 and 2000. Over 20 years patterns of food intake by male and female respondents had changed differently; men increased their food intake from meat, fish and alternatives and decreased their intake of milk and dairy foods significantly more than female respondents ($p=0.003$ and $p=0.019$). Living arrangements in 2000 were significantly related to change in intake ($p=0.028$); individuals who were living with their parents decreased their intake of foods containing fat and/or sugar the least, while those living with their partner only, decreased their intake of this group the most between 1980 and 2000. Respondents who had moved away from the Northumberland area showed a greater increase in intake of fruit and vegetables compared with those who remained local ($p=0.010$). Individuals who had moved down in social class increased their intake of bread, other cereals and potatoes ($p=0.040$). These findings help to explain the complex process of dietary change from adolescence to adulthood, which is influenced by interrelated multiple factors, including gender, living arrangements, location and social class.