

Nutritional Intervention and its Impact on the Height of Children Among the B40 Group in Selangor

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ABSTRACT:

Introduction: A number of children suffer from malnutrition with visible stunting due various factors such as food insecurity and household income. The address of nutritional intervention promotes healthier outcomes especially engagement through population with greater risks, those with low income of B40 groups in Selangor being the most populous state, thus accelerating health policy makers in making differences in public health strategies. Nutritional status is a significant measure for the anthropometric development of the children population. Therefore, this study aims to measure the impact of nutritional intervention on the height of children aged 1 to 6 years old among the population.

Methods: A cross-sectional study was done in Selangor State involving 500 children aged 1 to 6 years old randomly selected among the B40 group. A nutritional intervention that involved the supply of specialized formula milk totalling 2kg and 30 tablets of multivitamin with lysin were given for each month. Nutritional counseling was also given. Anthropometric measurements were taken using (barang) and were monitored using WHO AthroPlus software. The height is categorized into moderately stunted and severely stunted defined by WHO height-for age Z score. Descriptive data was analyzed using IBM SPSS version 25.

Results: 500 total respondents participated in the 5-month course. There were equal numbers of gender 50% and the majority of the respondents were aged 3 years old. For all ages, the baseline height results showed 15.0% were moderately stunted and 3.3% were severely stunted. For each month, there was an increase in mean of height, where the highest in the second month follow up, increase in mean of 1.89m, followed by 0.63m, 0.53m and 0.48m increase in height on the third, fourth and fifth month respectively. The fifth month has the lowest percentage of moderately stunted children 5.0% compared to the first month with 15%.

Discussion: Here, by giving nutrient supplementation, it helps to improve the height of these children. Initially, children may develop stunting not as easily as being underweight. Stunting is needed more attention compared to other undernutrition anthropometric; underweight and wasting as each varies in severity, speed and onset of its retardation.

Conclusion: Access to nutrition security throughout the 5-months-programme improves the stunting problems, thus the growth and health outcomes in up to aged 5 children. Therefore, other efforts of environmental sanitation, primary health care and control infections for the children are also recommended.

KEYWORDS: Malnourished, stunted, childhood nutrition.