

RESEARCH ARTICLE

Prevalence of Kwashiorkor, Marasmus, Marasmic Kwashiorkor and Age wise Distribution of Malnourished Tribal Children of Town Dhadgaon, District-Nandurbar of Maharashtra State, India.

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ABSTRACT:

Malnutrition is consequently the most important risk factor for the burden of disease in developing countries. It is the direct cause of about 300 000 deaths per year and is indirectly responsible for about half of all deaths in young children. The risk of death is directly correlated with the degree of malnutrition. It was found that due to the high prevalence of malnutrition, PEM (Protein Energy Malnutrition) has became a serious health problem at the study site which is a remote, hilly and forest areas of the Satpuda Ranges. Therefore it was a genuine necessity to find out the specific prevalence of all three categories of malnutrition such as Kwashiorkor, Marasmus, Marasmic kwashiorkor and also to find out age wise distribution of the PEM ,So that these findings could help to design Nutritional Rehabilitation Policies by considering the category and age groups. In the first stage present study has focused on finding the prevalence of all categories of malnutrition and depending on these results in second stage have also tried to feed specially design therapeutic nutritional intervention to these enrolled malnourished children and monitored its efficacy. This was Open label prospective parallel group active comparator interventional study. After getting Institutional ethics committee permission, 105 test and 100 control SAM (Severe Acute Malnutrition) children without infection, of 1 to 5 years of age and either sex were randomly enrolled. The age and oedema of each subject was specially noted at the time of enrollment. The weight of each subject was measured as per WHO guidelines and weight for age %, was determined by using standard formula. Data was subjected to analysis by using SPSS S/W version -16. At the time of admission all the enrolled SAM children of both test and control groups have shown reduced weight. P values for weight, age and weight for age % were insignificant at the time of admission ($P<0.05$ considered as significant) suggestive of similar baseline characteristics at the time of enrollment. Depending on the results we conclude that the highest prevalence of Marasmic kwashiorkor 63% and maximum malnourished children of 2 to 3 years of age were present at the study site Dhadgaon, followed by kwashiorkor 24% and Marasmus 13% .Failure to the adoptive mechanism could be the main reason attributed for the high prevalence rate of Marasmic kwashiorkor.

KEYWORDS: Malnutrition, Prevalance, Marasmic kwashiorkor.

INTRODUCTION:

The World Health Organization (WHO)¹ defines malnutrition as "the cellular imbalance between the supply of nutrients and energy and the body's demand for them to ensure growth, maintenance, and specific functions."

Protein-Energy Malnutrition [PEM] is also defined by measurements that fall below² Standard Deviations under the normal weight for age (Underweight), height for age (Stunting) and weight for height (Wasting). Severe malnutrition, typified by wasting, edema or both, occurs almost exclusively in children. Marasmus is defined as severe wasting. Marasmic kwashiorkor is defined as severe wasting in the presence of edema and Kwashiorkor as malnutrition with edema^{2,3}.