

## **THE IMMUNIZATION AND NUTRITIONAL STATUS AMONG CHILDREN AGED UNDER FIVE IN A MAJOR DISTRICT IN INDIA**

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### **ABSTRACT**

Children in rural areas in India die due to infectious and communicable diseases. This study was carried out to know the immunization status, nutritional status and to assess the levels of the mother's knowledge regarding immunization and nutritional diet. A sample of 300 eligible mothers from Thuraiyaur Taluk of Trichy District in Tamil Nadu was studied. For those mothers who were well aware of the immunization and nutritional programmes, the children's height and weight were well correlated against the mothers who were not aware of these programmes, whose children's height and weight did not show significant correlation. The results showed that 16% of the children were under malnutrition. The knowledge regarding immunization does not seem to influence the family size.. The size of the family does not seem to be influenced by knowledge regarding immunization and nutritional diet given to the mothers during pregnancy and lactation period. The results showed that 85% of the eligible mothers having children under five years of age know about the six major killer diseases, which could be prevented by immunization. It is observed that from the eligible mothers having children under five years of age started weaning in the 4<sup>th</sup> month (mean 141 days  $\pm$  sd 32 days). It was concluded that strategies might be evolved to educate the women in the study area to have greater awareness regarding the immunization programmes and also the use of proper nutrition to the children.

## INTRODUCTION

At present every 6<sup>th</sup> second a child dies or becomes disabled from a disease which could have been prevented by immunization of the child. The National immunization scheduled administers vaccine against the main infectious diseases of childhood namely TB, Measles, Diphtheria, Tetanus, Whooping-cough and Polio are driving force in the cycle of malnutrition. Given the fact that immunization can play such a vital part in protecting growth, this study covers the immunization and the level of nutritional status among the children under five years of age in this area. It has been reported that many children have died in this district due to infectious and communicable diseases, and therefore it is important to know the immunization status, nutritional status and assess the levels of mothers' knowledge on immunization and nutritional diet. This study has been undertaken with the following objectives :

1. To identify the immunization status of the children under five years of age in the study area.
2. To identify the nutritional status of the children under five years of age in the study area..
3. To identify the awareness and knowledge of mothers on immunization.
4. To identify the awareness and knowledge of mothers on nutritional status.
5. To find the extent of effectiveness of different immunization programmes in the block.
6. To educate the mothers about the importance of immunization so that children can be prevented from major killer diseases.
7. To educate mothers about non-formal health education to improve the status of the children in nutrition and to have 100 % healthy children in future.

## METHODOLOGY

The present study was carried out in Thuraiyur taluk at Trichy District of Tamil Nadu, India. In the two major panchayat unions namely Thuraiyur and Uppliyapuram, the total population is found to be 2,15,043. In the Uppliyapuram panchayat union, the total population is found to be 77,420, consisting of 38,935 males and 38,485 females. In the Thuraiyur panchayat union, total population is found to be 1,37,623, out of which 68,785 are

males and 68,838 are females. The sampling design used is the multistage sampling technique. First a panchayat union is selected as the first stage unit. The village panchayats were selected from the panchayat union as the second stage unit, and then the total numbers of villages were identified from the selected village panchayats. Out of a total of 54 villages, a sample of 10 villages is chosen by Simple Random Sampling (SRS). Samples were selected proportional to the size of the children. Information is enumerated from 300 eligible mothers having 378 children in the age group up to 60 months.

## **RESULTS**

Among 300 eligible mothers the number of children was found to be more in the age group between 12 to 36 months. According to Indian standard ( weight for age and growth chart) it was observed that 16 percent of the children were malnourished. The size of the family was not influenced by knowledge regarding immunization and nutritional diet given to the mothers during pregnancy and lactation period. The mothers' knowledge about six major killer diseases prevented by immunization seem to depend on the family size. It was also noted that 85 % of the eligible mothers knew about the 6 major killer diseases, which are prevented by immunization. A large proportion of children received the vaccines BCG, OPV, DPT, Hepatitis B at right time is the same for different age group. The proportion of children receiving the MMR vaccine at right time is also same under different groups in various categories (Mothers with one child, mothers with two children, mothers with three children). The proportion of children receiving the typhoid vaccine is not the same under different groups (Mothers with one child, mothers with two children, mothers with three children) as this vaccine was administered on payment basis. Using Gomez' classification and Waterlow's classification the nutritional status of the children were assessed in the study area. The mean and standard deviation of weaning period are 141 and 32 days respectively. The average number of days for starting the weaning food is not the same among the number of children possessed by the mothers. Strategies may be evolved to educate the women in the study area to have greater awareness regarding the immunization programmes and also the use of proper nutrition to the children. The respondents had full knowledge about the pulse polio programmes for immunization against polio and measles.

## **RECOMMENDATIONS**

1. This study is useful in getting additional information regarding the immunization status and nutritional level in the rural villages of Southern India.

2. These programmes can also be extended to many areas of the state where social and economic inequalities are observed.
3. The inter regional comparison can give guidelines for carrying out immunization programme in an appropriate manner in the different parts of the country.
4. It is quite likely that if the respective government have awareness program for improving nutritional diet to the mothers who are on pregnancy and lactation period, there will be greater care to the children.

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PDF | Background: Under-nutrition is a major cause of ill health and childhood mortality in India. So far, little attempt has been made to assess | Find, read and cite all the research you need on ResearchGate. 81. ORIGINAL ARTICLE. Inequalities in nutritional status among under five children in Haryana state, India: Role of social determinants. Shankar Prinja<sup>1</sup>, Atul Sharma<sup>2</sup>, Jaya Prasad Tripathy<sup>3</sup>, Saroj Kumar Rana<sup>4</sup>, Arun Kumar Aggarwal<sup>5</sup> Nutritional status among 1-3 years old children was assessed by computing weight for age and grading the children using the IAP classification. Children were weighed using salter weighing machines 12. Association of nutritional status with gender, maternal education, father's occupation and birth order was determined. 9. Tandon BN, Gandhi N. Immunization Coverage in India for areas served by the Integrated Child Development Services programme. Bull World Health Organ. 1992; 70(4): 461-5. Indian children are being diagnosed with adult diseases such as hypertension, chronic kidney disease and pre-diabetes. The data states that children under the age of five years are affected by micronutrient deficiencies. While every fifth child under the age five is vitamin A deficient, one in every third baby has vitamin B12 deficiency and two out of every five children are anemic. Food consumption patterns in India reveal that child diets are largely starved of proteins and micronutrients and are influenced by household (adult) food choices. Over the decades, despite growing incomes, protein-based calories remain low and unchanged, and the calorific share of fruits and vegetables has declined. The report said globally 77% of processed food sales are controlled by just 100 large firms. Among the children, one third of the wealthiest children are actually over-nutrient and 1/2 of the children under 3 years old are underweight. The people are so poor that they are unable to feed themselves. India has 46.6 million stunted children. Nearly half of all under-5 child mortality in India is because of undernutrition. India or any other country cannot aim to attain social and economic justice and development goals without addressing the issue of malnutrition. Poor nutritional status among tribal preschool children observed in different regions of West Bengal as well as India. Nutritional status of tribal preschool children especially Bhumij children of West Bengal has not been investigated more. In India, under-nutrition among the poor children imposes greater burden in rural areas. Particularly rural children are more vulnerable to malnutrition because they receive foods having low nutritional values along with discriminatory distribution of food within the household. Also in early childhood due to lack of appropriate care they suffer from recurrent infections and multiple diseases either causing delayed development or fatal effect. The demographic and socio-economic factors influence the nutritional status and neuro-development of the vulnerable children. Methods.