CHAPTER 5

DISCUSSION, CONCLUSION, AND RECOMMENDATION

5.1 The objective of the study was to find out the prevalence of malnutritional status and the associated factors of nutritional status among the pre-school children in Dadhikot village development committee. Bhaktapur district of Nepal. Investigator had prefer to selected that community, because there were not shown any records of nutritional survey in that area since 1975.

The data were obtained by field survey. The study areas are 5 wards were determined by proportional sampling technique of the 248 house hold interviewed. Almost all the respondents are the mothers. The mean age of the mother are < 24 to 25 years.

There are many methods of nutritional status assessment such as weight for age, height for age, weight for height. In this research study investigator had selected weight for height nutritional status assessment, because birth records card was not available. If mother does not remember the correct age of the child, there may be more chance of serious error can occurs.

In this study weight for height Waterlow criteria have been applied for measuring the nutritional status. The result showed that the prevalence of malnutritional status was high (47.4 %) using Waterlow criteria based upon nepali standard) compared to national survey figure, which was (54.7) in 1975. This could be due to many reasons such as "in developing societies, the pre-school children are often weaned from breast feeding to predominantly starchy adult diet, and high morbidity mortality" stated by Ghai O.P. Chaudhari (1970).

In this study history of diarrhoea, fever, cough and breathlessness was found high along with other associated factors, which was shown statistical significant. First hypothesis stated that the prevalence of malnutritional status in the Dadhikot village might be more than 20 %, but it was found that prevalence of malnutritional status among under 5 years children in Dadhikot village was found (47.4 %) So the null hypothesis accepted and type one error occurs or α error.

Second hypothesis, the significant association between parent's occupation, education, income, mother job out side home which might be affected nutritional status among under 5 years children in Dadhikot village.

Result of the x² test revealed that age of the mother was shown statistical significant p.value was found 0.006, but which was not stated in the hypothesis. Popkin (1980) Wary and Agiurre (1969) reported that from their study, that the mother whose age below 35 years have found their children higher percentage of malnutrition.

There are relationship between mother occupation and the nutritional status, but it was controversy in father occupation. All type of occupation of mother was pooled in a one group as a earning mothers had shown statistical significance p. value 0.006. Mother works out side home regular and irregular was shown p. value significant. Mother is the main persons, who could able to take care. If she could not have time to take care her children, there is more chance of affected nutritional status of their children. Wary and Agiurre (1969) shows in their result of their study that maternal work, part time, full time, affect the nutritional status, Popkin (1980) reported from their study result that the absence affected the diet and child care as a result of poor nutritional status of children in rural village.

In this study the older children, (grand parents) look after his/her sibling while absenteeism of the mother. There were relationship between father illiterate, family income and the nutritional status, which was shown p. value significance such as illiteracy P= 0.04. Income P = 0.05. Father education it was 0.04, shown statistical significance but it was controversy in mother education in this study and the nutritional status. Father had low educational attainments had low production, business/land lord was found only (16.1%) and the rest of the father occupation are milk seller general farmer and service holder from the result of the study.

Mwampe 1976; Pellet 1972; Ifekwunime 1979; and Waterson (1983) stated that economic factors play significant role in the expenditure on food, Rao and Satyanarayana (1976) revealed that the proportion of person having one or more signs of nutritional deficiency was the highest in the low socioeconomic group. Another associated factors which was not stated in the hypothesis, there is relationship between age of the child 13-36 month and the nutritional status p. value was shown 0.01 and also the duration of breast feeding was found 12 to 18 month had p.value 0.01. In this study mother those who are earning members even the house wife mother also works irregular and regular work out side the home, and also those mother who weaned their children from breast at the age of 12 month onwards these age group of the children had found high prevalence of malnutritional status p.value was significant (Table 4.19).

Agiurre (1969) reported that there was less (PEM) in children receiving breast milk than those who do not receiving and the different was quite significant.

There were association between food preservation and food availability information in some subitems questionnaires, respondents p.was significant (table 4.18) (WHO, Geneva 1976 technical report) had shown that food preservation can solve the food availability of certain food during off seasons. The food supplementary information, screening physical examination and Health information and food habit information was not associated with nutritional status of the pre-school children. Logistic regression model was used in spsspc+ program to test the strength of association between criterion and predictors. At first the indicators which was already p.value significant was choose and fitting into logistic regression model, by deleting the non significant items, in the model at the end result that was shown into table 4.19. The main objective of the logistic regression was to find out the how much strength of association between dependent and independent variable and to make the end of analysis process and to predict the possible factors of malnutritional status.

5.2 Conclusion

In this research study, At first the investigator focused on the prevalence of malnutritional status of the under 5 yrs children in the Dadhikot village Bhaktapur district of Nepal. Secondly the investigator tried to define the relationship of potential factors which was associated with nutritional status of the children. The sample in the study were 248 and youngest children in the families whose age were under 5 years children in the sample. The prevalence of malnutrition was measured by using classification proposed by Waterlow criteria weight for height developed by the save the children fund project in Nepal (SCF). This classification which is using widely in Nepal since 1975. In this study same classification has been used to test the relationship between potential associated factors and nutritional status of the children. The conceptual frame work used in this study was rather fundamental, when all the possible factors which may influence the nutritional status of under 5 yrs children was considered as independent variable and nutritional status as a dependent variable. This study was revealed that the prevalence of malnutrition in the study area was 47.4 % based upon Waterlow classification. The prevalence of malnutrition in the study area was found about very close to the national nutritional survey in nepal 1975 (54.7 %)

Association between independent and dependent variable was performed by using x^2 test the test has revealed that age of the mother, occupation of the mother, education of the father, duration of the breast feeding, and food preservation and food availability information, family income has shown statistical significant to the nutritional status of the under 5 yrs children. At last logistic regression analysis was done all of the variable described in the objective and hypothesis except age of the mother, occupation of the mother had showed on strong relationship with nutritional status of under 5 yrs children in the studies area. Mothers age < 25 yrs have odds of 2.14 times higher risk of malnutrition than if mother age increased > 26 years old. S2 Occupation of mother, earning mother have odds of 57 percent higher risk of having malnutrition their children than non earning mother. Rest of the independent variable was not shown association between independent variables and nutritional status. it may be due to homogeneity of information.

> ศูนยวิทยทรัพยากร งุฬาลงกรณ์มหาวิทยาลัย

5.3 Recommendation

Various aspects which are lacking in this study should be used for further studies, are listed as follow:

1 Assessment of nutritional status:

weight for age is age dependent indicator though it is considered as most sensitive for assessing recent/acute malnutrition. Therefore, the accurate age should be approximated by reminding various events which relate to the age of children. If a mother can not remember the date of birth serious error may occur. In addition to this, other indicators such as height for age and weight for height are also needed to explain various aspects of maltrition. That is why various indicators should be included, for the future studies.

Family planning and other health care program:

Family planning program and integrated maternal and child health services should be implemented to welfare the health of both mother and child.

Recommendation for implementation of nutrition program:

* For proper nutritional assessment from time to time nutritional survey should be conducted in the community. The collected information should be analyzed using proper methods and different statistical tools. Subsequently, all these gathered information should be disseminated to the particular community for future improvement of the nutritional status of the children.

- * Result of this research study recommends to the different level of health professionals, and communities to implement future program in the following aspects:
- * Government level: Nutrition education program should be implemented by the governmental and the non-governmental organization to impart knowledge to mothers to improve the child care and nutritional status of children.
- * Community level: To conduct nutritional education program for traditional health workers and different professionals in the community including mothers.
- * Any nutritional program which has been implemented or going to be implemented should be based on the need of the community. The future nutrition program should be pragmatic economically viable and sustainable.

Therefore it has been recommended for all responsible district health personnels, to conduct nutritional education program to achieve "Health for all by the year 2000 through primary health care".