

PREVALENCE OF MALNUTRITION AND ITS EFFECT ON HAVING  
CLEFT LIP AND/OR PALATE PATIENT, MORANG  
CO-OPERATIVE HOSPITAL, BIRATNAGAR

By

**Kailash Khaki Shrestha**

Exam Roll No. 2180085/66

T.U. Regd. No. 7-1-32-911-96

A Thesis

Submitted to Health Education Department in the Partial Fulfillment of Requirements for  
the Master Degree in Health Education

JANTA MULTIPLE CAMPUS  
DEPARTMENT OF HEALTH EDUCATION  
FACULTY OF EDUCATION  
TRIBHUWAN UNIVERSITY  
ITAHARI, SUNSARI  
NOVEMBER, 2011

## APPROVAL SHEET

The thesis *“Prevalence of Malnutrition and its Effects on having Cleft Lip and/or Palate Patient, Morang Co-operative Hospital, Biratnagar, Morang, Nepal”* in the Partial Fulfillment of Requirements for the Master Degree in Health Education has been approved.

### Thesis Evaluation Committee

### Signature

1. Mr. Arjun Pandit  
H.O.D.  
Health Education Department  
Janta Multiple campus, Itahari, Sunsari

---

Chairman

2. Mr. Ramesh Regmi, Ass. Lecturer  
Health Education Department  
Janta Multiple campus, Itahari, Sunsari

---

Supervisor

3.

---

External Examiner

Date: 16, November, 2011

## **ACKNOWLEDGEMENT**

Every researcher owes a great deal to others and I am no exception. Many people have contributed in various ways to complete this thesis. I have completed this thesis with great inspiration and encouragement of my research guide, Lectures, colleagues, families and patient family of cleft child.

I am grateful to my thesis supervisor Mr Ramesh Regmi, Asst. Lecturer, Health Education Deparement, Janta Multiple Campus, Itahari, Sunsari for his critical suggestion, support, cooperation and supervision in this study. And also grateful thanks to Mr Arjun Pandit, Asst. Lecturer, Mr Manoj Kumar Chaudhary, Asst. Lecturer, and Mr Sanjiv Yadav, Asst. Lecturer for providing me oppertunuty for this thesis and support.

I am thankful to the all respondents for their information and support. I would like to offer my special thanks to Morang Co-operative Hospital Biratnagar, Who helped me for the data collection and other enumeration problem. I would like to thanks to Ms Himalshari Rai, Ms Mina Devi Limbu, Mrs Nilam Shrestha, Ms Binita Karki and my colleagues Mr Sewak Bajgain, Mrs Kusum Khatiwada, Ms Sarswati Basnet and my wife Nimna Kumari Shrestha for their co-operation in data collection, computer setting.

Kailash Khaki Shrestha

## **ABSTRACT**

The study was carried out entitled “Prevalence of Malnutrition and its Effects on having Cleft Lip and/or Palate children, Morang Co-operative Hospital, Biratnagar” in order to access the prevalence of malnutrition and its effect having cleft lip and/or palate and Specific Objectives were to find out the demographic structures, socio-economic status of patients family, to find out prevalence of malnutrition in cleft lip and/or palate, to identify level of malnutrition status in cleft lip and/or palate and to find out the effect of malnutrition in cleft lip and/or palate patient.

The study was gathering and analyzes the data which will be collect from the field of research area. The result of the findings interpreted in the logical order after the detail analysis of relevant data from the beginning to the conclusion. This was descriptive. It was explore the prevalence of malnutrition and its effect on cleft lip and/or palate.

Malnutrition is defined as a state in which the physical function of an individual is impaired to the point where he or she can no longer maintain natural bodily capacities such as growth, pregnancy, lactation, learning abilities, physical work and resisting and recovering from disease. A cleft is a birth defect that occurs when the tissues of the lip and/or palate of a fetus do not properly fuse very early in the pregnancy. A cleft lip, sometimes referred to as a harelip, is an elongated opening between the upper lip and the nose. It may involve one or both sides of the lip and may occur with or without a cleft palate. A cleft palate, in which the roof of the mouth abnormally opens into the floor of the nose, may also occur without a cleft lip. One of every 30 babies is born with some type of birth defect. Approximately one in 700 has a cleft, Twice as many boys as girls are afflicted with a cleft lip, both with and without a cleft palate. However, twice as many girls as boys are afflicted with a cleft palate without a cleft lip. Clefting occurs most often in Asians, Latinos, and Native Americans (one of 500 births) and least often in people of African descent (one of 1000 births).

Most of the patient having both problem i.e. cleft lip & cleft palate. It means patients who suffer this problem contain more cleft lip & cleft palate. Among the total patient low weight of patient was 41.7%, which was noticeable. Among the total patient of height, there was 21.7% were below normal height & 68.3% were above normal height. By mid upper arm circumference measurement (MUAC) the total severely malnourished patients were 6.7 and at risk were 8.3% respectively. ANC check-up during pregnancy was very good but there was also some people ie.5% not checked. ANC check-up during pregnant was 40% where there were 5% never checked which was remarkable. Iron tab taken were high but non taker were also present which was remarkable. Calcium taken in pregnant period was 61.7% but non taker were also high ie.38.3%.which was remarkable. Delivery places were home, hospital; clinic and other were 31.7%, 60%, 5% and 3.3% respectively. Where there were home delivery was remarkable.

The total no. of family member was higher in family size (4-6) but there was also having > 9 size which was remarkable. Main income of patients family were farming, it means most of the patients lives in village and Economic sources for their lives was low. Child feeding practice was rice and bottle feeding were most, where as breast feeding practice was least. The patients having cleft-lip and/or palate have feeding problem. The feeding problem is great deal for the nutritional status of child. In cleft Lip and/or Palate child common feeding problems are most of child feeding problem was nasal regurgitation i.e. 50% , Sucking Problem 15%, Others 11.7 % and lowest was choking and 18.3% were no any problems. General food habit during pregnant was 35% i.e. same % mother were not take any additional food. Health education programs should be conducted for mothers group, traditional faith healers community leaders and school teachers.

## **TABLE OF CONTENT**

	<b>Page No.</b>
<b>APPROVAL SHEET</b>	<b>i</b>
<b>ABSTRACT</b>	<b>ii</b>
<b>ACKNOWLEDGEMENT</b>	<b>iv</b>
<b>TABLE OF CONTENT</b>	<b>v</b>
<b>LIST OF TABLE</b>	<b>vii</b>
<b>LIST OF FIGURE</b>	<b>viii</b>
<b>ABBREVIATIONS</b>	<b>ix</b>
<b>CHAPTER – I INTRODUCTION</b>	<b>1-8</b>
1.1 Background of the Study	1
1.2 Statement of the Problem	4
1.3 Objective of the Study	5
1.4 Significance of the Study	5
1.5 Delimitation of the Study	6
1.6 Definition of the Important Terms	6
<b>CHAPTER – II LITERATURE REVIEW</b>	<b>9-11</b>
<b>CHAPTER – III RESEARCH METHODOLOGY</b>	<b>12-13</b>
3.1 Research Design	12
3.2 Sources of Data Collection	12
3.2.1 Primary Source	
3.2.2 Secondary Source	
3.3 Population of the Study	12
3.4 Sampling Size / Procedure	12
3.5 Data Collection Tools / Instrument	13
3.6 Standardization/Validation of the Tools	13
3.7 Data Collection Procedure	13
3.8 Methods of Data Analysis and Interpretation	13

<b>CHAPTER – IV</b>	<b>ANALYSIS AND INTERPRETATION OF DATA</b>	<b>14-31</b>
4.1	Age of the Patient	14
4.2	Age for weight of the Patient	14
4.3	Sex of the Patient	15
4.4	Caste of the Patient	16
4.5	District of the Patient	16
4.6	Zone of the Patient	18
4.7	Educational Status of Respondents	18
4.8	Relation of Respondents with Patients	19
4.9	Types of Problems/Diagnosis	19
4.10	Weight of Patients	20
4.11	Height of Patients	21
4.12	MUAC of Patients	21
4.13	Family Size Status	22
4.14	Main Income Source of Patients Family	22
4.15	Economic Status Enough for Annum	23
4.16	Child Feeding Practices	23
4.17	Child Feeding Problems	24
4.18	Mothers Food Habit in Pregnancy	25
4.19	Congenital Defect in Family	25
4.20	Harmful Substance Used by Mother During Pregnancy	26
4.21	Health Seeking Behavior of Patent Family	27
4.22	Problems to Cleft Child	27
4.23	ANC Check-up in Pregnancy	28
4.24	ANC Check-up Frequency in Pregnancy	29
4.25	Iron Tab in Pregnancy	29
4.26	Calcium Taken During Pregnancy	30
4.27	Delivery Places	31

<b>CHAPTER –V</b>	<b>SUMMARY, FINDINGS, CONCLUSIONS AND</b>	
	<b>RECOMMENDATIONS</b>	<b>32-35</b>
5.1	Summary	32
5.2	Findings	32
5.3	Conclusions	34
5.4	Recommendations	35

**BIBLIOGRAPHY**

**APPENDIXES**



## LIST OF TABLE

<b>Table no.</b>	<b>Description</b>	<b>Page No.</b>
1	Age of the Patient	14
2	Age for Weight of the Patient	15
3	District of the Patient	17
4	Zone of the Patient	18
5	Relation of Respondents with Patients	19
6	Weight of Patients	20
7	Height of Patients	21
8	MUAC of Patients	21
9	Main Income Source of Patients Family	23
10	Economic Status Enough for Annum	23
11	Child Feeding Problem	24
12	Mothers Food Habit in Pregnancy	25
13	Harmful Substance by Mother in Pregnancy	26
14	Problems to Cleft Child	28
15	ANC Check-up in Pregnancy	28
16	ANC Check-up Frequency in Pregnancy	29
17	Calcium Taken During Pregnancy	30
18	Delivery Places	31

## LIST OF FFIGURE

<b>Figures no.</b>	<b>Description</b>	<b>Page No.</b>
1	Sex of the Patient	15
2	Caste of the Patient	16
3	Educational Status of Respondents	18
4	Types of Problems/Diagnosis of Patients	20
5	No. of Family Member	22
6	Child Feeding Practice	24
7	Congenital Defect in Family	26
8	Health Seeking Behavior of Patent Family	27
9	Iron Tab in Pregnancy	30

## **ABBREVIATION**

CBR	=	Community Based Rehabilitation Centre
CBS	=	Central Bureau Survey
FRCS	=	Fellow of Royal College Surgeon
MUAC	=	Mid Upper Arm Circumstance
NDHS	=	Nepal Demographic and Health Survey
NGO	=	Non Governmental Organisation
URTI	=	Upper Respiratory Tract Infection
WHO	=	World Health Organization