

# A STUDY ON THE IMPACT OF MATERNAL STATUS ON CHILD NUTRITION AMONGST THE ANAL NAGA TRIBE OF CHANDEL DISTRICT, MANIPUR

**Dr.L.Khiloni**

Assistant Professor, Department of Anthropology, South East Manipur College, Komlathabi, P.O.Chandel, Chandel District, Manipur-795135

Received: July 07, 2018

Accepted: August 23, 2018

## ABSTRACT

*The present study was undertaken to understand the nutritional status of the Anal Children of 1-5 years of age and draw out the impact of maternal status on child nutrition. Data for the present study were randomly selected. The data comprised of 129 children of 1-5 years of age from 89 mothers. It is a cross-sectional study, consisting of the anthropometric measurements like height, weight, head circumference, mid-upper arm circumference, chest circumference and calculated BMI. Body Mass Index (BMI) of the women reveals that underweight mothers are of the highest percentage frequency of 36.0% and Obese-II mothers are the lowest (2.2%). Underweight mothers show the highest percentage frequency of children suffering from moderate to severe malnutrition (40.9%) and the least by obese-I mothers (7.4%). 74.4% of the Anal children suffer from mild to severe malnutrition .i.e. 48.1% of mild malnutrition, 20.9% of moderate malnutrition and 5.4% of severe malnutrition. The present study reveals that mother's nutritional status, educational status, occupational status and nutritional knowledge has an impact on the nutritional status of the Anal children of 1 to 5 years.*

**Keywords:** Anal Naga tribe, Chandel District, Child nutrition and Malnutrition,

## Introduction

The Anals are one of the Naga tribes of Manipur. They settled in various parts of the State but majority of them inhabited in Chandel District, Manipur. They are distributed in the sub-divisions of Chandel, Chakpikarong and Tengnoupal of Chandel District, Manipur. Some of them reside in Myanmar (Burma). The population of Anal according to 2011 census is 24,301 (census of India, 2011). The Anals belong racially to the Tibeto-Burman or Indo-Myanmar family of Mongoloid race (Kabui, 1985). The Anals have Mongoloid features. They are of medium stature and yellowish-brown skin colour. They have wavy to straight hair and black in colour. They have epicanthic eye-fold and prominent cheek bone. Rice is their staple food and their main occupation is agriculture.

Nutritional status plays a vital role in determining the optimal health and development of the children. That is nutritional status of children is an indicator of nutritional profile of the entire society. In the present world, nutritional status of the children is quite alarming and there needs to be a change. Hence there is an urgent need to know and understand the prevailing nutritional status of every society so as to necessitate urgent remedial measures. Various factors may be responsible for the causes of malnutrition in the society. Mothers are the first providers of primary care for their children. Their basic knowledge on nutrition and health measures strongly influences the care they provide. In the present study, an attempt is made to find out the effect of various maternal factors responsible for the prevalence of malnutrition amongst the children (1-5 yrs) of Anal Naga Tribe of Manipur.

## Materials and Methods

Data for the present study were collected from 129 Anal children (Male = 62, Female = 67) of 1 to 5 years of age with their 89 mothers. As for the data collection, interview schedule was formulated and applied. Door to door survey was conducted to collect the data. The interview schedule consists of questions relating to their name, age, sex, religion, nutritional status, educational status, economic status, knowledge on nutrition, anthropometric measurements like weight, height, head circumference, mid-upper arm circumference and chest circumference. Measurements were taken from the children of 1-5 years of age and their respective mothers. As for the data collection, three of the Anal villages namely Lambung village, Chandel Christian village and Chandel Khullen village were randomly selected to represent the Anal society.

**Results and Discussions:** The collected data were analysed and the findings are discussed as follows:

**Table1. Distribution of Body Mass Index classification of Anal Women**

BMI(Kg/m)	Classification(IOTF)	Anal Women	
		N	%
< 18.5	Underweight	32	36.0
18.5-22.9	Normal	20	22.5
23.0-24.9	At risk of obesity	18	20.2
25.0-29.9	Obese-I	17	19.1
≥ 30.0	Obese - II	02	2.2
Total		89	100.0

Table 1 represents the distribution of Body Mass Index classification of the Analwomen. Here it is found that, underweight mothers are of the highest percentage frequency of 36.0% and the lowest being represented by theObese-II mothers (2.2%).

**Table2. Distribution of Weight for Age of the Anal Children (1-5) years.**

Grades of Malnutrition	Weight for Age percentage of the reference population	Anal Children	
		N	%
Normal	80	81	62.8
Grade-I	70-80	29	22.4
Grade-II	60-70	16	12.4
Grade-III	50-60	02	1.6
Grade-IV	50	01	0.8
Total		129	100.0

The given table 2 reveals the weight for age of the Anal children of 1 to 5 years of age.Here it is observed that normal children are of the highest percentage frequency of 62.8% followed by children of Grade-I(22.4%) then by Grade -II (12.4%) and Grade-III (1.6%). The lowest percentage frequency being shown by the children of Grade-IV (0.8%).The finding is similar to that of the Moyon children of 1-5 years of age i.e., normal is higher to that of the other grades of malnutrition (Khiloni,2018)

**Table3. Distribution of Height for Age of the Anal Children of 1-5 years.**

Grades of Malnutrition	Height for Age percentage of the reference population	Anal Children	
		N	%
Normal	95	81	62.8
Grade-I	90-95	29	22.5
Grade-II	85-90	11	8.5
Grade-III	80-85	04	3.1
Grade-IV	80	04	3.1
Total		129	100.0

Table 5 shows the distribution of height for age of the Anal children of 1 to 5 years of age. Here it is also found that normal children are of the highest percentage frequency (62.8%) then by Grade-I(22.5%), Grade-II (8.5%), Grade-III (3.1%) and Grade-IV (3.1%) respectively. The result is also similar to that of the Moyon children of 1-5 years i.e, normal is higher to that of the other grades of malnutrition (Khiloni, 2018)

**Table 4. Distribution of Mid Upper Arm Circumference (MUAC) of the Anal Children of 1-5 years**

Mid Upper Arm circumference(MUAC)	Anal Children	
	N	%
>13.5 cm	33	25.6
12.5-13.5cm	91	70.5
<12.5	5	3.9
Total	129	100.0

Table 4 reveals the distribution of the Mid Upper Arm Circumference (MUAC) of the Anal children of 1-5 years of age. From the table it is found that children of MUAC 12.5 to 13.5 cm are of the highest percentage frequency i.e. 70.5% followed by children of MUAC, >13.5 cm(25.6%) and the least being shown by children of MUAC<12.5 cm(3.9%).

**Table 5. Sex wise Distribution of the Analchildren (1-5) years by Nutritional Status (Gomez Classification).**

Nutritional Status	Male		Female		Total	
	N	%	N	%	N	%
Normal>90	17	27.4	16	23.9	33	25.6
Mild Malnutrition(75-90	28	45.2	34	50.7	62	48.1
Moderate Malnutrition(60-75)	13	20.9	14	20.9	27	20.9
Severe malnutrition(<60)	04	6.5	03	4.5	07	5.4
Total	62	100.0	67	100.0	129	100.0

The given table 5 reveals the sex wise distribution of the Anal Children of 1-5 years of age by nutritional status. Here it is found that mild malnutrition is of the highest percentage frequency in both the male and female children i.e. 45.2% and 50.7% respectively. Severe malnutrition is of the lowest percentage frequency (Male = 6.5% and Female = 4.5%). Combining both the male and the female children, it is found that 48.1% of the children suffer from mild malnutrition, 20.9% suffer from moderate malnutrition and 5.4% suffer from severe malnutrition. Thus 74.4% of the Anal children of 1 to 5 years suffer from mild malnutrition to severe malnutrition. The distribution of malnutrition amongst the Anal children is mild malnutrition > moderate malnutrition > severe malnutrition. The findings are in conformity with that of the findings of Mittal et al, 2007, Gupta et al, 2016 and Khiloni, 2018)

**Table 6. Distribution of Anal children (1-5) years suffering from moderate/severe malnutrition (Gomez classification) by Mother's nutritional status (Weissell, C.R. 2002).**

Mother's Nutritional Status	Children suffering from moderate/severe Malnutrition		Total Number Of Children	
	N	%	N	%
Underweight <18.5	18	40.9	44	100.0
Normal 18.5-22.9	05	15.2	33	100.0
At risk of obesity 23.0- 24.9	08	34.8	23	100.0
Obese -I 25-29.9	02	7.4	27	100.0
Obese - II ≥ 30.0	01	10.0	10	100.0
Total	34	26.4	129	100.0

Table 6 shows the distribution of Anal Children (1-5) years suffering from moderate/severe malnutrition by mother's nutritional status. The highest percentage frequency of the children suffering from moderate/severe malnutrition is shown by the children of underweight mothers i.e. 40.9%. Obese-I mothers have the lowest percentage frequency of children suffering from moderate/severe malnutrition (7.4%). Thus one can say that nutritional status of the Anal mothers play a vital role in the nutritional status of their children. The finding is similar with that of the Moyon community i.e. underweight mothers tend to have higher percentage frequency of children suffering from moderate/severe malnutrition (Khiloni, 2018).

**Table 7. Distribution of Anal children suffering from moderate/severe malnutrition (Gomez classification) by mother's educational status.**

Mother's Educational Status	Children suffering from moderate/severe Malnutrition		Total Children	
	N	%	N	%
Illiterate	02	40.0	05	100.0
Primary	05	38.5	13	100.0
Middle	03	30.0	10	100.0
High School	06	26.1	23	100.0
Higher Secondary	09	23.7	38	100.0
Graduate & above	09	22.5	40	100.0
Total	34	26.4	129	100.0

Table 7 reveals the distribution of Anal Children suffering from moderate/severe malnutrition by mother's educational status. Here it is found that illiterate mothers have the highest percentage frequency (40.0%) of children suffering from moderate/severe malnutrition and the lowest being shown by the children of Graduate & above mothers (22.5%). There is a decrease in the percentage frequency of the children suffering from moderate/severe malnutrition as the educational status of the mother increases.

That is, mother’s educational status has an impact on the nutritional status of the children. Similar findings are also reported by Jyothi, et al 2003, Sufiyan et al, 2012, Gupta et al, 2016 and Khiloni, 2018

**Table 8. Distribution of Anal children suffering from moderate/severe malnutrition (Gomez Classification) by mother’s occupational status.**

Mother’s Occupational Status	Children suffering from moderate/severe malnutrition		Total children	
	N	%	N	%
Cultivator	14	37.8	37	100.0
Business	03	25.0	12	100.0
Govt. Employee	05	21.7	23	100.0
House wife	11	20.4	54	100.0
Private teacher	01	33.3	03	100.0
Total	34	26.4	129	100.0

Table 8 shows the distribution of Anal children suffering from moderate/severe malnutrition by mother’s occupational status. The table reveals that mothers who are cultivators have the highest percentage frequency of children suffering from moderate/severe malnutrition with 37.8%. It is followed by children of mothers who are private teacher with 33.3%. The lowest percentage frequency of children suffering from moderate/severe malnutrition is shown by mothers, who are housewives (20.4%). In the present study, it is found that occupational status of the Anal mothers are playing an important role in the nutritional status of the children. It is possible that mothers who are cultivators have less time to take care of their children’s health as they are fully engaged in the field. On the other hand, mothers who are housewives are more likely to stay with their children and could take care of their children’s health in time.

**Table 9. Distribution of Anal Children suffering from moderate/severe malnutrition (Gomez classification) by mother’s nutritional knowledge.**

Mother’s Nutritional Knowledge	Children suffering from moderate /severe malnutrition		Total Children	
	N	%	N	%
Poor	19	29.2	65	100.0
Average	10	25.0	40	100.0
Higher	05	20.8	24	100.0
Total	34	26.4	129	100.0

The given table 9 reveals the distribution of Anal Children suffering from moderate/severe malnutrition by mother’s nutritional knowledge. Here it is found that mothers who have poor knowledge on nutrition reveals the highest percentage frequency of children suffering from moderate/severe malnutrition (29.2%) followed by children of mothers who have average knowledge on nutrition (25%). The lowest percentage frequency of children suffering from moderate/severe malnutrition is shown by mothers having higher nutritional knowledge (20.8%). Thus one can say that mother’s nutritional knowledge is correlated with the nutritional status of the children. Similar findings are also related by Jyothi, et al, 2003, Sufiyan et al, 2012, Gupta et al, 2016 and Khiloni, 2018.

**Conclusion**

Nutrition is an important feature in the life of all human being .To keep a healthy life is very much necessary for all mankind. Children of 1-5 years being more nutritionally vulnerable are to be checked so as to eradicate malnutrition. Research on nutrition is very much necessary in the life of man in order to live a healthy life. Keeping in mind the value of nutrition, the present study is undertaken to understand and find out the nutritional status of the mothers and how does it affects the nutritional status of their children. The present study reveals that, nutritional status, educational status, occupational status and nutritional knowledge of the mothers play an important role in the nutritional status of their respective children. Thus there is a need to educate the mothers about their importance in keeping a healthy life of their children and eradicate malnutrition amongst the Anal population in particular and the State as well as the Country in general.

**Acknowledgements**

The present study is sponsored by the University Grants Commission (UGC), New Delhi under Research Award for College teachers. Hence I would like to express my deep sense of gratitude to the

University Grants Commission for financially assisting me to complete my Post-Doctoral research work. I would also like to thank the villagers of Lambung, Chandel Christian and Chandel Khullen for their help and co-operation in providing me the required data and complete my work in time.

### References

1. Census of India (2011), Paper 1 to 2018, Language India, State and Union Territories (Table C-16), Registrar General, India, New Delhi.
2. Gupta, R., Chakrabarti, S. and Chatterjee, S.G. (2016). A study to evaluate the effect of various maternal factors on the nutritional status of under-five children. *Indian Journal of Nutrition*. Vol.3, Issue 2.
3. Jyothi, L.A., Khyrunnisa, B., Saraswathi, G. and Jamuna, P. (2003). Nutritional status of rural preschool children- mediating factors. *J Fam Welfare* 49:45.
4. Kabui, G. (1985), Anal: A transborder Tribe of Manipur. *Mittal Publications*. Delhi
5. Khiloni, L. (2018). Impact of Maternal Status on Child Nutrition Amongst the Moyon Naga Tribe Chandel of District, Manipur, *The Research Journal of social sciences*, 9(9):104-109
6. Mittal, A., Singh, J. and Ahluwalia, S.K. (2007). Effect of maternal factors on nutritional status of 1-5 year old children in urban slum population. *Indian J community Med* 32: 264-267.
7. Sufiyan, M.B., Bashir, S.S. and Umar, A.A. (2012). Effect of maternal literacy on nutritional status of under 5 years of age in the Babban-Dodo community Zaria city, North West Nigeria. *Ann Nigerian Med* 6: 61-64.