

## COMPARATIVE STUDY ON MALNUTRITION IN UNDER 10 TRIBAL CHILDREN OF DIFFERENT INCOME GROUP MALE AND FEMALE IN SAURASHTRA REGION OF GUJARAT

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### Abstract

According to United Nations Report rural areas are poorer than urban areas. The report also showed that children suffer poverty more intensely than adults. To fight poverty, one need to know where poor live. Keeping this thought in mind researcher tried to tell importance of nutrition for under 10 tribal children. The data collected from 100 under 10 tribal children whose mother or father belongs to different income group of Saurashtra region of Gujarat state. Collected data analyzed using mean, SD and SED. t test is used for interpretation of result. Key Words: Malnutrition, under 10 tribal children, Malnutrition in under 10 tribal children, different income group, tribal children.

**Keywords:** malnutrition, tribal children, income, surashtra

### INTRODUCTION

In words Tubid, Deepak (2015) As tribal people have different life style, tradition, cultural norms. Malnutrition could be one of the reason for high number death amongst the tribal population. Undernutrition even has a long term effect on the socioeconomic and socio demographic condition of the people especially tribals. It could be one of the major factors responsible for their slow decade growth rate. As per the Global health report, Gujarat was the eighth worst performing state of India in terms of the burden of diseases pertaining to maternal and child nutrition. To overcome these challenges and a bid to make Gujarat one of a leader state in human development index and ensure and maintain nutrition level on children in the state. For this purpose Gujarat's Chief Minister Shri Vijay Rupani launched 'Gujarat poshanabhiyan 2020 -2022, a state - wide drive against malnutrition on January 23 from Dahod district. To make Gujarat a malnutrition free state with this two year nutrition campaign that will cover all the cities, towns and villages of the state. Malnutrition free campaign started from Dahod district of Gujarat because 74.3 % of the population is schedule tribe. According to the report of Ahmadabad mirror (2020) the highest range of malnutrition children found in Saurashtra region only. Banaskantha (28,265), Anand (26021) and Dahod (22,613). Our honorable Prime Minister Narendra Modi's nutrition campaign, which carries the slogan 'sahiposhan-deshroshan'

### OBJECTIVES

1. To identify level of income group of male.
2. To identify level of income group of female.
3. To compare malnutrition in under 10 tribal children of male and female of 1<sup>st</sup> income group.
4. To compare malnutrition in under 10 tribal children of male and female of 2<sup>nd</sup> income group.

5. To compare malnutrition in under 10 tribal children of male and female of 3<sup>rd</sup> income group.
6. To compare malnutrition in under 10 tribal children of male and female of 1<sup>st</sup> and 2<sup>nd</sup> income group.
7. To compare malnutrition in under 10 tribal children of male and female of 2<sup>nd</sup> and 3<sup>rd</sup> income group.
8. To compare malnutrition in under 10 tribal children of male and female of 1<sup>st</sup> and 3<sup>rd</sup> income group.

### REVIEW OF LITERATURE

- Sahu, Swaroop et.al. (2015) have made study on malnutrition among under 5 children in India and strategies for control.
- Warungboto, Soepomo(2016) have made study on the formation of high calories and rich-Fe biscuits for pregnant women with chronic energy malnutrition.
- Kendra, Carolyn (2018) studied that regional variation in child hood malnutrition associated with staple food consumption: evidence from Uganda.
- Narayan, Jeetendra (2019) have made study on malnutrition in India: status and government initiatives.
- Sinha, T. et.al.(2019) have made study on nutritional status of children under 5 years in tribal villages of Bastar, Chhattisgarh, India.
- Panda, Basant Kumar (oct. 2020) had studied about malnutrition in India: does the use of public distribution system matter?

### HYPOTHESES

- H<sub>01</sub>** There will be no significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 1<sup>st</sup> income group.
- H<sub>02</sub>** There will be no significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 2<sup>nd</sup> income group.
- H<sub>03</sub>** There will be no significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 3<sup>rd</sup> income group.
- H<sub>04</sub>** There will be no significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 1<sup>st</sup> and 2<sup>nd</sup> income group.
- H<sub>05</sub>** There will be no significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 2<sup>nd</sup> and 3<sup>rd</sup> income group.
- H<sub>06</sub>** There will be no significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 1<sup>st</sup> and 3<sup>rd</sup> income group.

### DE-LIMITATION

The sample for the present study was selected from under 10 tribal children of male and female of different income group of Saurashtra region of Gujarat.

### SIGNIFICANCE OF THE STUDY

This study lay stress on lower economic condition of male and female is responsible for malnutrition in under 10 tribal children. So, the policy maker ought to draw attention of the government that running development program for 2-3 years is not the permanent solution.

Government must make provision to enhance their income to overcome from the problem of malnutrition in under 10 tribal children permanently.

**METHODOLOGY**

The survey method was used in this research.

**SAMPLE**

The sample was selected from under 10 tribal children of different income group of Saurashtra region of Gujarat. Total 100 malnourished under 10 tribal children of male and female of were selected. Random sampling was used to select sample.

**Table 1: Income and group of male and female.**

S.no.	Different Income	group
01.	10550-13500 (more than 13500)	1 <sup>st</sup> Income group
02.	6550-10500	2 <sup>nd</sup> Income group
03.	5000-6500 (less than 6500)	3 <sup>rd</sup> Income group

**Table 2: Sample for malnutrition in tribal children of male and female of different income group.**

S.no.	Income group	tribal children of male	tribal children of female	Total
01.	1 <sup>st</sup> Income group	17	17	34
02.	2 <sup>nd</sup> Income group	17	17	34
03.	3 <sup>rd</sup> Income group	16	16	32
Grand total		50	50	100

**DATA COLLECTION**

The researcher personally visited to meet and collect data from participants. Researcher explained the purpose of study and they were requested to respond honestly. The completion of data collection work finished in 15 days.

**DATA ANALYSIS**

The analysis of data was done to compare that malnutrition in under 10 tribal children of male and female of different income group.

**STATISTICAL TECHNIQUE**

The obtained data were analyzed by using statistical device mean, SD(Standard deviation) , SED(Standard error of deviation), and ‘t’ test of significance for interpretation of result.

**RESULT AND FINDING**

**Table - 3: Significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 1<sup>st</sup> income group.**

Group	No.	Mean	SD	SE	MD	SED	t value	Level of significance	
								0.05	0.01
tribal children of male of 1 <sup>st</sup> income group	17	45.92	3.72	0.90	0.87	1.29	0.6744	Not significant	Not significant
tribal children of female of 1 <sup>st</sup> income group	17	45.05	3.84	0.93					

In the observation table - 3 calculated ‘t’ value 0.6744 is less than table value for df = 32 at 0.01 level is 2.75 and 2.04 at 0.05 level. So, the null hypothesis H<sub>01</sub> ‘There is no significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 1<sup>st</sup> income group’ is accepted.

**Table – 4: Significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 2<sup>nd</sup> income group.**

Group	No.	Mean	SD	SE	MD	SED	t value	Level of significance	
								0.05	0.01
tribal children of male of 2 <sup>nd</sup> income group	17	43.69	3	0.728	1.05	1.10	0.9545	Not significant	Not significant
tribal children of female of 2 <sup>nd</sup> income group	17	44.74	3.42	0.83					

In the observation table – 4 calculated ‘t’ value 0.9545 is less than table value for df = 32 at 0.01 level is 2.75 and 2.04 at 0.05 level. So, the null hypothesis H<sub>02</sub> ‘There is no significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 2<sup>nd</sup> income group’ is accepted.

**Table – 5: Significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 3<sup>rd</sup> income group.**

Group	No.	Mean	SD	SE	MD	SED	t value	Level of significance	
								0.05	0.01
tribal children of male of 3 <sup>rd</sup> income group	16	42.125	4.482	1.12	0.187	1.442	0.1296	Not significant	Not significant
tribal children of female of 3 <sup>rd</sup> income group	16	42.312	3.66	0.915					

In the observation table – 5 calculated ‘t’ value 0.1296 is less than table value for df = 30 at 0.01 level is 2.75 and 2.04 at 0.05 level. So, the null hypothesis H<sub>03</sub> ‘There is no significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 3<sup>rd</sup> income group’ is accepted.

**Table – 6: Significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 1<sup>st</sup> and 2<sup>nd</sup> income group.**

Group	No.	Mean	SD	SE	MD	SED	t value	Level of significance	
								0.05	0.01
tribal children of male and female of 1 <sup>st</sup> income group	34	45.5	3.78	0.64	1.27	1.20	1.0583	Not significant	Not significant
tribal children of male and female of 2 <sup>nd</sup> income group	34	44.23	3.27	0.56					

In the observation table – 6 calculated ‘t’ value 1.0583 is less than table value for df = 66 at 0.01 level is 1.67 and 2.00 at 0.05 level. So, the null hypothesis H<sub>04</sub> ‘There is no significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 1<sup>st</sup> and 2<sup>nd</sup> income group’ is accepted.

**Table – 7: Significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 2<sup>nd</sup> and 3<sup>rd</sup> income group.**

Group	No.	Mean	SD	SE	MD	SED	t value	Level of significance	
								0.05	0.01
tribal children of male and female of 2 <sup>nd</sup> income group	34	44.23	3.27	0.56	2.03	1.29	1.573	Not significant	Not significant
tribal children of male and female of 3 <sup>rd</sup> income group	32	42.2	4.09	0.72					

In the observation table – 7 calculated ‘t’ value 1.573 is less than table value for df = 64 at 0.01 level is 1.67 and 2.00 at 0.05 level. So, the null hypothesis H<sub>05</sub> ‘There is no significant difference

between the mean score of malnutrition in under 10 tribal children of male and female of 2<sup>nd</sup> and 3<sup>rd</sup> income group' is accepted.

**Table - 8: Significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 1<sup>st</sup> and 3<sup>rd</sup> income group.**

Group	No.	Mean	SD	SE	MD	SED	t value	Level of significance	
								0.05	0.01
tribal children of male and female of 1 <sup>st</sup> income group	34	45.5	3.78	0.64	3.3	1.372	2.1865	Significant difference	Significant difference
tribal children of male and female of 3 <sup>rd</sup> income group	32	42.2	4.09	0.72					

In the observation table - 8 calculated 't' value 2.1865 is more than table value for df = 64 at 0.01 level is 1.67 and 2.00 at 0.05 level. So, the null hypothesis H<sub>06</sub> "There is no significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 1<sup>st</sup> and 3<sup>rd</sup> income group' is rejected.

### DISCUSION

Mean score of table -3 revealed that malnutrition in under 10 tribal children of male of 1<sup>st</sup> income group is greater than female of 1<sup>st</sup> income group.

Mean score of table -4 revealed that malnutrition in under 10 tribal children of male of 2<sup>nd</sup> income group is less than female of 2<sup>nd</sup> income group.

Mean score of table -5 revealed that malnutrition in under 10 tribal children of male of 3<sup>rd</sup> income group is less than female of 3<sup>rd</sup> income group.

Mean score of table -6 revealed that malnutrition in under 10 tribal children of male and female of 1<sup>st</sup> income group is more than male and female of 2<sup>nd</sup> income group.

Mean score of table -7 revealed that malnutrition in under 10 tribal children of male and female of 2<sup>nd</sup> income group is more than male and female of 3<sup>rd</sup> income group.

Mean score of table -8 revealed that malnutrition in under 10 tribal children of male and female of 1<sup>st</sup> income group is less than male and female of 3<sup>rd</sup> income group.

### CONCLUSION

It can be concluded that there was no significant difference between the mean score of malnutrition in fewer than 10 tribal children of male and female of 1<sup>st</sup> income group. There was no significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 2<sup>nd</sup> income group. There was no significant difference between the mean score of malnutrition in fewer than 10 tribal children of male and female of 3<sup>rd</sup> income group. There was no significant difference between the mean score of malnutrition in fewer than 10 tribal children of male and female of 1<sup>st</sup> and 2<sup>nd</sup> income group. There was no significant difference between the mean score of malnutrition in under 10 tribal children of male and female of 2<sup>nd</sup> and 3<sup>rd</sup> income group. There was significant difference between the mean score of malnutrition in fewer than 10 tribal children of male and female of 1<sup>st</sup> and 3<sup>rd</sup> income group. So, the researcher wants to draw the attention of the policy maker. If government run enormous program for eradication of malnutrition. The government that running eradication of malnutrition program for 2-3 years is not the permanent solution. Government must make

provision to enhance their income to overcome from the problem of malnutrition in under 10

tribal children permanently. Government is collaborating with UNICEF, Asha worker and anganbadi to overcome from problem of malnutrition. Government should give opportunity to take initiative step by NGO's and provide research projects to the college going students including one mentor for continuous study. To find authentic data and according to the available data steps should be taken to eradicate problem of malnutrition.

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