

# **CHAPTER – 8**

## **Result – 5**

### **Association of socio-economic, demographic characteristics and self reported morbidity status with nutritional status of the children of studied areas**

**8.1: Association of socio-economic, demographic characteristics and self reported morbidity status with nutritional status of the children in nonindustrial area**

**8.2: Association of socio-economic, demographic characteristics and self reported morbidity status with nutritional status of the children in industrial area**

### **8.1: Association of socio-economic, demographic characteristics and self reported morbidity status with nutritional status of the children in nonindustrial area**

Table 8.1.1 shows that association between nutritional status and parental socio-economic characteristics of nonindustrial area. It is also clear that higher prevalence of anthropometric failure was found in upper primary level of fathers' educational status than other educational level. But the higher prevalence (31.75%) of anthropometric non failure children was found in secondary fathers' education in comparison to anthropometric failure (22.76%). Significant association ( $\chi^2 = 6.79$ ,  $p < 0.05$ ) was found between parent's ( $\chi^2 = 12.10$ ,  $p < 0.01$ ) education and nutritional status. In these categories over all higher prevalence of anthropometric failure among children was found in upper primary mothers' educational level than other categories.

Table 8.1.2 presents association between nutritional status and family structure. This table is also showed association between nutritional status and demographic characteristics. 3.25% children were suffered for single and multi anthropometric failure. They were living in rental house. This association was statistically significant ( $\chi^2 = 8.36$ ,  $p < 0.01$ ). No of living room was also significantly ( $\chi^2 = 5.71$ ,  $p < 0.05$ ) associated with nutritional status. 55.56% anthropometric non failure children were living in 2 no (2 to 4 rooms) categories of living room. That prevalence was higher than failure categories. Maximum (51.49%) anthropometric failure children were living in single room. Sanitary condition was also associated with child nutrition. 9.76% anthropometric failure children used poor sanitary condition. Sanitation and nutritional condition was significantly ( $\chi^2 = 8.21$ ,  $p < 0.01$ ) associated. Fuel condition for cooking was also significantly ( $\chi^2 = 4.94$ ,  $p < 0.05$ ) associated with child nutrition.

Table 8.1.3 represents association between nutritional status and disease, illness and hospitalization. This table is clearly represented that no significant association between type of disease, hospitalization and nutritional status except time period of illness ( $\chi^2 = 6.99$ ,  $p < 0.05$ ). 37.70% non failure children were suffered for different type of disease within 6 months. This prevalence was higher than other categories. Those children were suffered for different type of disease within 2 to 5 months, they were suffered for one or multi anthropometric failure. This prevalence was also higher than non failure categories.

## **8.2: Association of socio-economic, demographic characteristics and self reported morbidity status with nutritional status of the children in industrial area**

Table 8.2.1 represents association of socio-economic characteristics with child nutrition of industrial area. Significant association was found between nutritional status and socio-economic characteristics except mothers' occupation. Significant association was found between nutritional status and fathers' education ( $x^2 = 12.06$ ,  $p < 0.01$ ) and family expenditure ( $x^2 = 9.54$ ,  $p < 0.001$ ). Mothers' education ( $x^2 = 16.11$ ,  $p < 0.001$ ), family income ( $x^2 = 16.11$ ,  $p < 0.001$ ) and fathers' occupation ( $x^2 = 11.80$ ,  $p < 0.001$ ) were also significantly associated with child nutrition.

Table 8.2.2 shows that association between nutritional status and demographic characteristics. This table is also clearly presented that house type was significantly associated ( $x^2 = 4.19$ ,  $p < 0.05$ ) with nutritional status. Number of living room was also significantly associated ( $x^2 = 17.32$ ,  $p < 0.001$ ) with child nutrition.

Table 8.2.3 presents association between nutritional status and illness, disease, hospitalization. All these factors were not significantly associated with child nutrition.

### **Summary of Results**

The important results of this chapter are summarized below

- Fathers' ( $x^2 = 6.79$ ,  $p < 0.05$ ) and mothers' ( $x^2 = 12.10$ ,  $p < 0.01$ ) education were significantly associated with child nutrition in nonindustrial area. Rental house ( $x^2 = 8.36$ ,  $p < 0.01$ ) and number of living rooms ( $x^2 = 5.71$ ,  $p < 0.05$ ) were also significantly associated with nutritional status. Significant association was observed between sanitation and child nutrition. Fuel types was significantly ( $x^2 = 4.94$ ,  $p < 0.05$ ) associated with nutritional status in nonindustrial area. Significant ( $x^2 = 6.99$ ,  $p < 0.05$ ) association was found between illness and nutritional status in nonindustrial area.
- Significant association was found between nutritional status and parental education ( $x^2 = 12.06$ ,  $p < 0.01$ ,  $x^2 = 16.11$ ,  $p < 0.001$ ) as well as monthly income and expenditure ( $x^2 = 16.11$ ,  $p < 0.001$ ,  $x^2 = 9.54$ ,  $p < 0.001$ ). Fathers' occupation ( $x^2 = 11.80$ ,  $p < 0.001$ ) were significantly associated with child nutrition in industrial area. House type was also significantly associated ( $x^2 = 4.19$ ,  $p < 0.05$ ) with nutritional status among children. Number of living room was significantly associated ( $x^2 = 17.32$ ,  $p < 0.001$ ) with child nutrition in industrial area.

## Tables

### 8.1: Association of socio-economic, demographic characteristics and self reported morbidity status with nutritional status of the children in nonindustrial area

**Table 8.1.1: Association of socio-economic characteristics with nutritional status of the children in nonindustrial area**

Variables	Categories	No Anthropometric Failure	(%)	Anthropometric Failure	(%)	$\chi^2$
<b>Fathers' education</b>	Primary	26	10.32	51	13.82	<b>6.79*</b>
	Upper - Primary	146	57.94	234	63.41	
	Secondary	80	31.75	84	22.76	
<b>Mothers' education</b>	Primary	30	11.90	58	15.72	<b>12.10**</b>
	Upper - Primary	136	53.97	231	62.60	
	Secondary	86	34.13	80	21.68	
<b>Family income</b>	≤1400Rs.	85	33.73	125	33.88	<b>0.43</b>
	1401-8332Rs.	165	65.48	239	64.77	
	≥8333Rs.	2	0.79	5	1.36	
<b>Family expenditure</b>	≤1249Rs.	95	37.70	138	37.40	<b>0.13</b>
	1250-6873Rs.	155	61.51	227	61.52	
	≥6874Rs.	2	0.79	4	1.08	
<b>Mothers' occupation</b>	House Wife	214	84.92	306	82.93	<b>0.47</b>
	Manual	9	3.57	14	3.79	
	Non-Manual	29	11.51	49	13.28	
<b>Fathers' occupation</b>	Manual	175	69.44	260	70.46	<b>0.07</b>
	Non-Manual	77	30.56	109	29.54	

Significant Level: \*= p<0.05, \*\*=p<0.01

**Table 8.1.2: Association of demographic characteristics with nutritional status of the children in nonindustrial area**

Variables	Categories	No Anthropometric Failure	(%)	Anthropometric Failure	(%)	$\chi^2$
Number of family members	1(1-4 members)	96	38.10	145	39.30	<b>1.85</b>
	2(5-6 members)	117	46.43	154	41.73	
	3 (above7 members)	39	15.48	70	18.97	
Number of employed persons	1(1person)	188	74.60	276	74.80	<b>0.21</b>
	2(2-3 persons)	56	22.22	79	21.41	
	3(Above 4 persons)	8	3.17	14	3.79	
House ownership	Own	252	100.00	357	96.75	<b>8.36**</b>
	Rental	0	0.00	12	3.25	
Number of living room	1 (1Room)	108	42.86	190	51.49	<b>5.71*</b>
	2(2-4 Room)	140	55.56	177	47.97	
	3 (>5 Room)	4	1.59	2	0.54	
Sanitation	Open	10	3.97	36	9.76	<b>8.21**</b>
	Septic	64	25.4	100	27.1	
	Semi pucca & pucca	178	70.63	233	63.14	
Fuel types	1 (Smokeless)	16	6.35	10	2.71	<b>4.94*</b>
	2 (Smoke)	236	93.65	359	97.29	
Drinking water source	Tube well	236	93.65	336	91.06	<b>1.39</b>
	Tape	16	6.35	33	8.94	

Significant Level: \*= p<0.05, \*\*=p<0.01

**Table 8.1.3: Association of self reported morbidity status with nutritional status of the children in nonindustrial area**

Variables	Categories	No Anthropometric Failure	(%)	Anthropometric Failure	(%)	$\chi^2$
Disease	Communicable	221	87.70	314	85.09	<b>0.85</b>
	Non communicable	31	12.30	55	14.91	
Illness	1(within 2 months)	76	30.16	129	34.96	<b>6.99</b>
	2(within 3-5 months)	81	32.14	138	37.40	
	3(within 6 months)	95	37.70	102	27.64	
Hospitalization	yes	37	14.68	58	15.72	<b>0.12</b>
	No	215	85.32	311	84.28	

Significant Level: \*= p<0.05,

**8.2: Association of socio-economic, demographic characteristics and self reported morbidity status with nutritional status of the children in industrial area**

**Table 8.2.1: Association of socio-economic characteristics with nutritional status of the children in industrial area**

<b>Variables</b>	<b>Categories</b>	<b>No Anthropometric Failure</b>	<b>(%)</b>	<b>Anthropometric Failure</b>	<b>(%)</b>	<b>X<sup>2</sup></b>
<b>Fathers' education</b>	Primary	5	1.54	3	1.01	<b>12.06*</b> *
	secondary	148	45.54	176	59.46	
	Higher secondary and Above	172	52.92	117	39.53	
<b>Mothers' education</b>	Primary	4	1.23	6	2.03	<b>16.11*</b> **
	secondary	181	55.69	208	70.27	
	Higher secondary and Above	140	43.08	82	27.70	
<b>Family income</b>	≤1750Rs	78	24.00	110	37.16	<b>14.40*</b> **
	1751-10925Rs	242	74.46	185	62.5	
	≥10926Rs	5	1.54	1	0.34	
<b>Family expenditure</b>	≤1666Rs	78	24.00	104	35.14	<b>9.54**</b>
	1667-10925Rs	243	74.77	190	64.19	
	≥10926Rs	4	1.23	2	0.68	
<b>Mothers' occupation</b>	House Wife	294	90.46	260	87.84	<b>1.88</b>
	Manual	1	0.31	3	1.01	
	Non-Manual	30	9.23	33	11.15	
<b>Fathers' occupation</b>	Manual	116	35.69	146	49.32	<b>11.80*</b> **
	Non-Manual	209	64.31	150	50.68	

Significant Level: \*= p<0.05, \*\*=p<0.01, \*\*\*=p<0.001

**Table 8.2.2: Association of demographic characteristics with nutritional status of the children in industrial area**

Variables	Categories	No Anthropometric Failure	(%)	Anthropometric Failure	(%)	$X^2$
Number of family members	1(1-4 members)	71	21.85	58	19.59	<b>0.6</b>
	2(5-6 members)	186	57.23	171	57.77	
	3 (above7 members)	68	20.92	67	22.64	
Number of earning persons	1(1person)	251	77.23	222	75.00	<b>0.77</b>
	2(2-3 persons)	72	22.15	73	24.66	
	3(Above 4 persons)	2	0.62	1	0.34	
House ownership	Own	179	55.08	187	63.18	<b>4.19*</b>
	Rental	146	44.92	109	36.82	
Number of living room	1 (2Rooms)	210	64.62	234	79.05	<b>17.32***</b>
	2(3 Rooms)	93	28.62	45	15.20	
	3 (>4 Rooms)	22	6.77	17	5.74	
Sanitation	Open	0	0.00	0	0.00	<b>1.83</b>
	Septic	0	0.00	2	0.68	
	Semi pucca & Pucca	296	91.08	619	209.12	
Fuel type	1(Smokeless)	288	88.62	257	86.82	<b>0.46</b>
	2 (Smoke)	37	11.38	39	13.18	
Drinking water source	Tube well	170	52.31	166	56.08	<b>0.89</b>
	Tape	155	47.69	130	43.92	

Significant Level: \*=  $p < 0.05$ , \*\*\*= $p < 0.001$

**Table 8.2.3: Association of self reported morbidity status with nutritional status of the children in industrial area**

Variables	Categories	No Anthropometric Failure	(%)	Anthropometric Failure	(%)	$X^2$
Disease	Communicable	278	85.54	259	87.50	<b>0.51</b>
	Noncommunicable	47	14.46	37	12.50	
Illness	1(within 2 Months)	64	19.69	59	19.93	<b>1.13</b>
	2(within 3-5 months)	59	18.15	68	22.97	
	3(within 6 months)	144	44.31	134	45.27	
Hospitalization	yes	20	6.15	21	7.09	<b>0.22</b>
	No	305	93.85	275	92.91	