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A COMPARATIVE STUDY ON CHILD (0-5 YEARS) HEALTH CARE PRACTICES IN RURAL AND URBAN AREAS (A LOGISTIC REGRESSION MODEL)

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ABSTRACT

Over the last decade, India's child health storey has mainly been one of success, with immunisation and supplements helping to reduce infant death and promote healthy growth. Infant mortality has decreased from 66 deaths per 1,000 live births in 2000 to 39 deaths per 1,000 live births in 2014, while DPT immunization rates have grown from 58 percent to 83 percent. The paper deeply studies on the determinants of health care practice in rural and urban areas in India.The objective of the study is to study the determinants for causing the mortality and other diseases about the children in the age group 0-5 yearsbetween Rural and Urban Areas in the Study Area.Socio Economic conditions are primary sources of health conditions in any society. These are a serious negative effect on the health and well-being of children throughout their life course. On the other hand, child health provides a considerable support to the efforts of families to lift themselves out of poverty.In our analysis, we urge that women receive more education and that maternity and child health care facilities for younger babies be improved. Furthermore, programmes aiming at reducing the primary causes of infant and child mortality, such as acute respiratory infections and diarrheal infections, must be enhanced. Educational initiatives promoting breastfeeding and immunization coverage appear to be significant in the overall framework of policy creation to attain this goal.

KEYWORDS: *Child Mortality,Maternal Health, Infant, Odds Ratio, Urban, Rural.*

1. INTRODUCTION:

Over the last decade, India's child health storey has mainly been one of success, with immunisation and supplements helping to reduce infant death and promote healthy growth. Infant mortality has decreased from 66 deaths per 1,000 live births in 2000 to 39 deaths per

1,000 live births in 2014, while DPT immunization rates have grown from 58 percent to 83 percent.

Though there have been some setbacks. In India, there is still a lot of disparity in terms of child health, both in terms of level and rate of improvement. Infant mortality rates in Uttar Pradesh and Madhya Pradesh are more than four times those in Kerala, with a disparity of more than 40 percentage points between the most and least vaccinated states. There are major discrepancies even within states. Children born in rural settings have infant mortality rates that are more than 1.5 times higher than their urban counterparts. Similarly, within states, the disparity in vaccination rates between the most and least vaccinated districts is usually always larger than 30 percentage points.

These figures raise an obvious question: how can governments aid in the remediation of adversity and the reduction of early childhood inequities that lead to large differences in success and wellbeing in adulthood? In terms of health, the most effective measures for combating inequality include access to essential micronutrients, immunization against life-threatening diseases, clean water and sanitation, and the prevention and treatment of infectious diseases. These techniques must be supplemented with methods that prioritize the "final mile" — getting successful interventions to the most vulnerable (often disenfranchised) people. To boost consumer demand and enhance the incentives of local agents to provide high-quality health services, the greatest work remains to be done.

While the survival and health of early children are of paramount importance, cognitive and non-cognitive skills (which are not perfectly correlated with child health) are frequently more strongly associated with adult economic outcomes. In this aspect, India's outlook is more hazy. While there is some nationally representative information on spatial patterns of cognitive development in later childhood (ages 5 and higher) in India, the country lacks a comprehensive data source for early skill and capability development (below age 3, for instance). These data are crucial for determining where the most significant geographic disparities in skill deficiencies at an early age exist

In recent years, the Indian government has spearheaded early childhood education initiatives, guided by the emphasis given to this topic in the Eleventh Five Year Plan (2007-2012) and subsequently by the Right of Children to Free and Compulsory Education Act in 2009. These commitments from the federal government – along with several high-profile initiatives to support them – establish a set of national priorities related to early childhood development. Such initiatives include the delivery of preschool education through the Integrated Child Development Service; community- based child development support through Accredited Social Health Activists; and the Rajiv Gandhi National Creche Scheme.

In distinguish to infant mortality, rural-to-urban differences in immunization rates while present, appear smaller.Indeed, in some states, such as Andhra Pradesh, Odisha and Tamil Nadu, immunization rates in rural areas have reached or surpassed those of urban areas. These results suggest that although Indian government action has been partially successful in closing the immunization gap between rural and urban regions, they have been less successful in closing the gap in outcomes, at least as proxied through the infant mortality rate.

The ratio of male-versus-female infant mortality rates across states. In most states, male infant mortality rates are between 5% and 10%. It is important to note that to some extent this

difference is mechanical; immunization rates are higher than infant mortality rates on the whole so similarly sized absolute differences in rates between urban and rural areas create a larger rural-to-urban ratio for infant mortality rates. However, the fact that some regions have reached parity between rural and urban areas for immunization rates, while only one state has done so for infant mortality rates, suggests this larger gap is not simply an artifact of how we chose to display the data. The decline in rural- urban immunization gaps has also been documented in Singh (2013).

One potential survey is the Multiple Indicator Cluster Survey (MICS) developed by UNICEF (Aslam et al, 2014). MICS, which contains modules on child physical health, child developmental capacity, parental caretaking activities, and maternal health, has been carried out in several developing nations over the last decade. Implementing a survey like this in India would provide valuable insight into the types of constraints that lead to huge regional variations in early learning and, ultimately, long-term labour market results.

At the international level, India has made strides in reducing infant mortality over the last few decades where comparing the neighboring countries like Sri Lanka and China. In fact, Sri Lanka and China's infant mortality rate (IMR) in 2014 (8.4 and 9.2 per 1,000 live births respectively) is less than that of the average IMR in high-income, non-OECD countries (10.2Neonatal mortality accounts for a major fraction of deaths among children under the age of five in India, as it does around the world (death within the first month of life). This is significant since the reasons of neonatal and infant mortality are often complex, resulting in a wide range of policy recommendations. For instance, recent work by Chen, Oster and Williams (2016) finds that while the US lags behind other developed nations in infant mortality, it actually has an advantage in terms of neonatal mortality. These findings lead to more precise policy recommendations based on in-depth investigations of the causes of neonatal and infant/child mortality.

Review of Earlier Studies:

Alizai and Zia (1990), according to the study, there are some gender differences in diarrhoea treatment and a little difference in vaccine coverage, both of which are linked to male-female mortality disparities. Gender inequalities in mortality, on the other hand, appear to be strongly linked to one statistic that represents women's social status in society, namely the proportion of educated women. Younger, less educated, and rural women had a higher chance of child death.

Chen, A., Oster, E. and Williams, H., (2016), this research compares micro data from the United States with similar data from four European countries to look into why the United States has a higher infant death rate. After accounting for possible differences in reporting of babies around the viability threshold, the US remains at a disadvantage. While the impact of birth weight varies by comparison country, the United States has similar neonatal (one month) mortality but higher post neonatal (1–12 months) mortality than all other comparison countries. Similar patterns are observed across census divisions in the United States. Poor birth outcomes among those of lower socioeconomic class are to blame for the post neonatal mortality.

1. Need for the Study:

Health and well-being of children has a positive effect on throughout their life course. Though, child health care practices play vital role to keep well-being of children. It also negatives effects on poverty and support the efforts of families to lift themselves out of poverty. To do so, practices need to adopt effective methods to identify the determinants of health practices. Most

of the studies are not looking in this direction. Hence the paper deeply studies on the determinants of health care practice in rural and urban areas in India.

2. Objectives:The major objectives of the study are:

1. To examine the child health care practices in the study area

2. To study the determinants for causing the mortality and other diseases about the children in the age group 0-5 yearsbetween Rural and Urban Areas in the Study Area.

3. To suggest the recommendations for improvement of child health practices and policy suggestions for policy makers.

4. Methodology

The term "research methodology" refers to a set of methodology and scientific procedures for solving research challenges. Research Methodology is an important phase in any research because it has a direct impact on the entire study and its findings.The present study will be carried out to how differ health care practices (0-5 years) between rural and urban arears with reference to Visakhapatnam, Andhra Pradesh, India.

Purposive Stratified Random Sampling method is used for selecting the samples from the study area for an in-depth study. The information that was collected 157 sample respondents from urban areas i.e., Maddilapalem,Gurudwara, Seethammapeta, NAD, Peddawaltair,Chinnawaltair, HB Colony, Venkojipalem, Pedhagadhili, Madhurawada, and Gajuwakaand43 sample respondents from rural areas i.e.,P.M.Palem,Bakkannapalem, Paradesipalem, Kommadi, and Gidijala.

5. Statistical Tools, Results and Discussions:

5.1. Socio Economic Conditions of Sample Households in the Study Area

Socio Economic conditions are primary sources of health conditions in any society. These are a serious negative effect on the health and well-being of children throughout their life course. On the other hand, child health provides a considerable support to the efforts of families to lift themselves out of poverty. Area wise, Sex wise and Age wise sample respondents are presented in the following Table.1.

Table. 1. Area Wise, Sex Wise and Age Wise Sample Respondents

Locality			Sex		Total
			Female	Male	
Urban	Age	0-12 months	6	12	18
		1-2 years	16	7	23
		2-3 years	23	11	34
		3-4 years	19	17	36
		4-5 years	24	22	46
	Total		88 (56.05)	69 (43.95)	157 (100.00)
Rural	Age	0-12 months	2	0	2
		1-2 years	1	0	1
		2-3 years	6	1	7
		3-4 years	8	6	14
		4-5 years	9	10	19
	Total		26 (60.47)	17 (39.53)	43 (100.00)
Total	Age	0-12 months	8	12	20
		1-2 years	17	7	24
		2-3 years	29	12	41
		3-4 years	27	23	50
		4-5 years	33	32	65
	Total		114 (57.00)	86 (43.00)	200 (100.00)

Source: Primary Data

From the above Table, it is observed that 57 percent are female children and 43 percent are male children in the study area. In the area wise analysis revealed that 60.47 percent are female children in rural area where as it is 56.5 percent in the urban area. On the other hand, 39.53 percent are male children in rural area whare as it is 43.95 percent male children in urban area. Area wise father's and mother's education levels in the study area depicted in the Table 2.

Table. 2. Area Wise Father's and Mother's Education Status

		Father Education			Total	Mother Education			Total
		Below SSC	SSC to Inter	Graduation and above		Below SSC	Inter	Below Graduation	
Locality	Urban	68	29	60	157	93	34	30	157
	Rural	26	10	7	43	30	9	4	43
Total		94 (47.0)	39 (19.5)	67 (33.5)	200 (100.0)	123 (61.5)	43 (21.5)	34 (17.0)	200 (100.0)

Source: Primary Data

From the Table, it is inferred that, gender wise analysis 47 percent of fathers are having below SSC level education, followed by 33.5 percent are having graduation and 19.5 percent are having Inter level education in the study area, where as in mother education61.5 percent are having below SSC level, 21 percent are having Inter and 17 percent are having below graduation.Area wise father's and mother's occupation in the study area showed in the Table 3.

Table 3 Area Wise Father's and Mother's Occupation

		Father Occupation				Mother Occupation				
		Govt. Employee	Private Employee	Daily Labour	Total	Home Maker	Govt. Employ	Pvt. Employ	Daily Labour	Total
Locality	Urban	22	78	57	157	123	4	16	14	157
	Rural	7	16	20	43	36	1	2	4	43
Total		29 (14.5)	94 (47.0)	77 (38.5)	200 (100.0)	159 (79.5)	5 (2.5)	18 (9.0)	18 (9.0)	200 (100.0)

Source: Primary Data

From the above Table, it is inferred that father's occupation 47 percent are private employees followed by 38.5 percent are daily labour and 14.5 percent are government employees in the study area. On the other hand, mother's occupation implies that 79.5 percent are home makers followed by private laborer's (9 percent), private employees (9 percent) and government employees (2.5 percent).Area wise, Sex wise status of feeder cleanliness before giving food is presented in the Table 6.

Table 4 Area Wise and Sex Wise Status of Feeder Cleanliness Before Giving Food

Locality			Feeder Cleanliness		Total
			NO	Yes	
Urban	Sex	Female	25	62	87
		Male	22	48	70
	Total		47 (30.1)	110 (70.5)	157 (100.0)
Rural	Sex	Female	2	24	26
		Male	4	13	17
	Total		6 (13.9)	37 (86.1)	43 (100.0)
Total	Sex	Female	27	86	114
		Male	26	61	86
	Total		53 (26.5)	147 (73.5)	200 (100.0)

Source: *Primary Data*

From the above table, it is noticed that 70.5 percent are cleaning their hands before feeding the baby in urban are, where as it is 86.1 percent in rural area. In the study area, 73.5 percent are washed their hands before feeding their baby child. It is a good significance for the health awareness among the sample respondents in the study area. Also observed that if child is male then the health concentration is more in the rural area.

Chi-square Test:

Null Hypothesis (H_0): There is no association between sex of baby and cleanliness of feeder

Alternative Hypothesis (H_1): There is an association between sex of baby and cleanliness of feeder.

	Pearson Chi-square	**Asymp. Sig(2-sided)**
Urban	0.053	0.817
Rural	2.147	0.143
Total	0.678	0.41

Source: Primary Data, Compiled by Author

Chi-square table suggested that, there is no association between sex of baby and cleanliness of feeder in urban, rural and also in the total study area. Though, gender discrimination partiality decreasing when the days are going.

Table 5 Area Wise and Sex Wise Status of Baby hands Cleanliness Before Giving Food

Locality			Baby hands Cleanliness Before Giving Food		Total
			NO	Yes	
Urban	Sex	Female	27	61	88
		Male	22	47	69
	Total		49 (31.2)	108 (68.8)	157 (100.0)
Rural	Sex	Female	2	24	26
		Male	3	14	17
	Total		5 (11.6)	38 (88.4)	43 (100.0)
Total	Sex	Female	29	85	114
		Male	25	61	86
	Total		54 (27.0)	146 (73.0)	200 (100.0)

Source: Primary Data

From the above Table, it is noticed that 68.8 percent of mothers wash their baby hands before giving food in urban area where as it is 88.4 percent in rural area. In the total study area, it is 73 percent.

Chi-square Test:

Null Hypothesis (H_0): There is no association between sex of baby and cleanliness of baby hands before eating.

Alternative Hypothesis (H_1): There is an association between sex of baby and cleanliness of baby hands before eating.

	Pearson Chi-square	**Asymp. Sig(2-sided**
Urban	0.026	0.872
Rural	0.991	0.319
Total	0.328	0.567

Source: Primary Data, Compiled by Author

Chi-square table advised that, there is no association between sex of baby and cleanliness of baby hands in urban, rural and also in the total study area. Though, gender discrimination partiality decreasing when the days are going on. The data relating to area wise and age wise sickness of babies in the study area is presented in Table 7.

Table 6. Area Wise and Age Wise Sickness of babies in the Study Area

Locality			Baby sick						Total
			Once in a week	Once in a month	Once in 3 months	Once in 6 months	Once in Year	Never	
Urban	Age	0-12 months	0	1	4	4	5	4	18 (11.46)
		1-2 years	3	4	2	4	6	4	23 (14.65)
		2-3 years	0	11	8	7	5	3	34 (21.66)
		3-4 years	1	7	10	12	4	2	36 (22.93)
		4-5 years	6	5	9	6	12	8	46 (29.30)
	Total		10 (6.37)	28 (17.83)	33 (21.02)	33 (21.02)	32 (20.38)	21 (13.38)	157 (100.00)
Rural	Age	0-12 months	0	0	0	1	0	1	2 (4.65)
		1-2 years	0	0	0	0	1	0	1 (2.33)
		2-3 years	0	0	4	2	0	1	7 (16.28)
		3-4 years	1	0	4	6	2	1	14 (32.56)
		4-5 years	1	2	4	3	6	3	19 (44.19)
	Total		2 (4.65)	2 (4.65)	12 (27.91)	12 (27.91)	9 (20.93)	6 (13.95)	43 (100.00)
Total	Age	0-12 months	0	1	4	5	5	5	20 (10.00)
		1-2 years	3	4	2	4	7	4	24 (12.00)
		2-3 years	0	11	12	9	5	4	41 (20.50)
		3-4 years	2	7	14	18	6	3	50 (25.00)
		4-5 years	7	7	13	9	18	11	65 (32.50)
	Total		12 (6.00)	30 (15.00)	45 (22.50)	45 (22.50)	41 (20.50)	27 (13.50)	200 (100.00)

Source: Primary Data

Table 7 inferred that 22.50 percent of babies sick either once in three months or once in six months in the study area. The trend appears in both urban and rural area. It followed by 20.50 percent of babies getting sick once in a year, the same trend appears in rural and urban area of study area. On the other hand, 4–5-year babies are sicker when compared to other age group of babies. This phenomenon is different in rural and urban areas in the study area.

Chi-square Test:

Null Hypothesis (H_0): There is no association between age of baby and sickness.

Alternative Hypothesis (H_1): There is an association between age of baby and sickness.

	Pearson Chi-square	**Asymp. Sig(2-sided)**
Urban	30.164***	0.067
Rural	17.957	0.590
Total	35.750**	0.016

*Note: * indicates 1percent level, ** indicates 5 percent level,*

*** indicates 10 percent level of significance*

Chi square table revealed that there is an association between age of baby and sickness in urban and total study area but there is no association between age of baby and sickness in rural area. This prevails those rural areas are hit the health problems till the birth to attaining of 5 years.

5.2. Logit Regression Model:

Consider a Logit Model of the form

$P(y=1/x) = F(\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \ldots\ldots + \beta_k x_k = F(\beta_0 + x\beta) = F(Z)$

Where F takes values strictly between Zero and one for all real numbers z. This ensures that the estimated response probabilities are strictly between zero and one. Various non-linear functions have been suggested for the function F to make sure that the probabilities are between zero and one. One such popular function is the logistic function F, where

$$F(Z) = \frac{e^{z_i}}{1+e^{z_i}} = \frac{1}{1+e^{-z_i}}$$

This is the cumulative distribution function for a standard logit random variable and e is the exponential under logit approach.

URBAN

Logistic regression						Number of obs =	157
						LR chi^2(9) =	35.07
						Prob > chi2 =	0.0001
Log likelihood = -86.392959						Pseudo R2 =	0.1687

sick	Coef.	Std. Er	z	P>z	[95% Conf.	Interval]	Odds Ratio
sex	-0.3228	.3787	-0.85	0.394	-1.065107	.4194836	0.7241102
f_edu	0.1805	.4535	0.40	0.691	-.7083363	1.069428	1.197871
f_occu	-0.1154	.4648	-0.25	0.804	-1.026579	.7955996	0.8909299
m_edu	-.5106	.3956	-1.29	0.197	-1.286069	.2647373	0.6000957
m_occu	1.3815***	.7434	1.86	0.063	-.0755268	2.838725	3.981262
feeder_clean	1.0072***	.5463	1.84	0.065	-.0636163	2.078184	2.738154
feed_baby_clean	1.0893**	.5044	2.16	0.031	0.1007015	2.077973	2.972303
breastfeed	.1166973	.2626	0.44	0.657	-.3980339	.6314286	1.123779
earlyborn.	0.7502***	.4176	1.80	0.072	-.0682564	1.568848	2.117626
constant	-1.0995	.6930	-1.59	0.113	-2.45784	.2587609	2.117626

Note: * indicates 1percent level, ** indicates 5 percent level, *** indicates 10 percent level of significance

From the above Table, it is observed that four independent variables viz., mother education, feeder cleaning, feed baby cleanliness and early born are significant at various probability levels. The odds ratio of the variable mother occupation inferred that; a unit increase mother occupation in the study area, the odds in favour of become a baby sick a lower by 3.9812 or about 98.12 percent. The odds ratio of the variable feeder cleanliness in the study area, the odds in favour of become a baby sick a lower by 2.7381 or about 73.81 percent. The odds ratio of variables feed baby cleanliness and early born in the study area, the odds in favour of become a sick a lower by 2.9723 and 2.11 or about 97.23 percent and 11.76 percent respectively.

RURAL

Logistic regression				Number of obs		=	43
				LR chi2(7)		=	20.81
				Prob > chi2		=	0.0041
Log likelihood = -14.903966				Pseudo R2		=	0.4111

sick	Coefficient	Odds Ratio	Std. Err	.z	P>z	[95%	Conf. Interval]
sex	-2.5899**	.0750224	.0961171	-2.02	0.043		0.0060 0.9241267
f_edu	-1.1296	.3231409	.4689677	-0.78	0.436		0.0187 5.555498
f_occu	3.3005**	27.12663	42.85967	2.09	0.037		1.2260 600.1803
m_edu	-3.6012**	.0272891	.0415621	-2.36	0.018		0.00137 0.5400015
m_occu	-1.7553	.1728551	.4350038	-0.70	0.485	0	.00124 23.97727
feeder_clean			(omitted)				
feed_baby_clean			(omitted)				
breast feed	-.03054	0.969916	0.704955	-0.04	0.966		.2333798 4.030927
earlyborn	0.4149	1.514221	1.538509	0.41	0.683	.2066972	11.09287
constant	0.1354	1.145001	1.656512	0.09	0.925	.0671961	19.51047

Note: * indicates 1percent level, ** indicates 5 percent level, *** indicates 10 percent level of significance

From the above Table, it is observed that four independent variables viz., sex of baby, father occupation and mother education are significant at various probability levels. The odds ratio of the variable sex of baby inferred that; sex of baby is male in the study area, the odds in favour of become a baby sick a higher by 0.0759 or about 7.59 percent. The odds ratio of the variable father occupation in the study area, the odds in favour of become a baby sick a lower by 600.1803. The odds ratio of variable mother occupation in the study area, the odds in favour of become a sick a lower by 0.5400or about percent respectively.

TOTAL

Logistic regression					Number of obs =	200
					LR chi2(10) =	31.77
					Prob > chi2 =	0.0004
Log likelihood = -118.71875					Pseudo R2 =	0.1180
sick	Coef.	Std. Err.z	P>z	[95% Conf.	Interval]	Odds Ratio
sex	-0.4909	0.3205	-1.53	0.126	-1.119164 .1371876	0.6120212
f_edu	-0.2015	0.3976	-0.51	0.612	-.9808874 .5777518	0.8174481
f_occu	0.2767	0.4010	0.69	0.490	-.5091862 1.062774	1.318895
m_edu	-0.8449**	0.3449	-2.45	0.014	-1.521085 -.1687188	.4295996
m_occu	0.9025	0.5927	1.52	0.128	-.2592386 2.064319	2.465859
feeder_clean	0.3300	0.4948	0.67	0.505	-.6397494 1.299917	1.391085
feed_baby_clean	1.0290**	0.4773	2.16	0.031	.0935422 1.964594	2.798457
breastfeed	.01472	0.2177	0.07	0.946	-.4121279 .4415771	1.014834
earlyborn	0 .7097**	0.34446	2.06	0.039	.0346613 1.384936	2.033582
locality	-1.013**	0.4045	-2.50	0.012	-1.805928 -.2202701	.3630921
cons	-.2127043	0.57584	-0.37	0.712	-1.341332 .9159237	.8083951

*Note: * indicates 1percent level, ** indicates 5 percent level, *** indicates 10 percent level of significance*

From the above Table, it is observed that four independent variables viz., mother education, feed baby clean, early born and locality significant at various probability levels. The odds ratio of variable mother occupation in the study area, the odds in favour of become a sick a lower by 0.4294. The odds ratio of the variable feed baby cleanliness in the total study, the odds in favour of become sick a lower by 2.7984. The odds ratio of the variable early born baby indicates that, the odds in favour of become a sick a higher by 2.0335 or about 66.50 percent (1-0.335). The odds ratio of the variable locality of baby i.e., rural area indicates that, the odds in favour of become a sick a higher by 0.8083.

Summary and Conclusions:

The socio-economic conditions of sample respondents, it is observed that 57 percent are female children and 43 percent are male children in the study area. In the area wise analysis revealed that 60.47 percent are female children in rural area where as it is 56.5 percent in the urban area. On the other hand, 39.53 percent are male children in rural area where as it is 43.95 percent male children in urban area.

Father and mother education status inferred that, gender wise analysis 47 percent of fathers are having below SSC level education, followed by 33.5 percent are having graduation and 19.5 percent are having Inter level education in the study area, where as in mother education61.5 percent are having below SSC level, 21 percent are having Inter and 17 percent are having below graduation.

The occupation levels of father and mother of baby indicates that father's occupation 47 percent are private employees followed by 38.5 percent are daily labour and 14.5 percent are government employees in the study area. On the other hand, mother's occupation implies that 79.5 percent are home makers followed by private laborer's (9 percent), private employees (9 percent) and government employees (2.5 percent).

The feeder cleanliness before giving food noticed that 70.5 percent are cleaning their hands before feeding the baby in urban are, where as it is 86.1 percent in rural area. In the study area, 73.5 percent are washed their hands before feeding their baby child. It is a good significance for the health awareness among the sample respondents in the study area. Chi-square table suggested that, there is no association between sex of baby and cleanliness of feeder in urban, rural and also in the total study area. Though, gender discrimination partiality decreasing when the days are going. Chi square table revealed that there is an association between age of baby and sickness in urban and total study area but there is no association between age of baby and sickness in rural area. This prevails those rural areas are hit the health problems till the birth to attaining of 5 years.

Logit model (Urban Area), it is observed that four independent variables viz., mother education, feeder cleaning, feed baby cleanliness and early born are significant at various probability levels. The odds ratio of the variable mother occupation inferred that; a unit increase mother occupation in the study area, the odds in favour of become a baby sick a lower by 3.9812 or about 98.12 percent. The odds ratio of the variable feeder cleanliness in the study area, the odds in favour of become a baby sick a lower by 2.7381 or about 73.81 percent. The odds ratio of variables feed baby cleanliness and early born in the study area, the odds in favour of become a sick a lower by 2.9723 and 2.11 or about 97.23 percent and 11.76 percent respectively.

Logit model (Rural Area), it is observed that four independent variables viz., sex of baby, father occupation and mother education are significant at various probability levels. The odds ratio of the variable sex of baby inferred that; sex of baby is male in the study area, the odds in favour of become a baby sick a higher by 0.0759 or about 7.59 percent. The odds ratio of the variable father occupation in the study area, the odds in favour of become a baby sick a lower by 600.1803. The odds ratio of variable mother occupation in the study area, the odds in favour of become a sick a lower by 0.5400 or about percent respectively.

Logit model (Total Area), it is observed that four independent variables viz., mother education, feed baby clean, early born and locality significant at various probability levels. The odds ratio

of variable mother occupation in the study area, the odds in favour of become a sick a lower by 0.4294. The odds ratio of the variable feed baby cleanliness in the total study, the odds in favour of become sick a lower by 2.7984. The odds ratio of the variable early born baby indicates that, the odds in favour of become a sick a higher by 2.0335 or about 66.50 percent (1-0.335). The odds ratio of the variable locality of baby i.e., rural area indicates that, the odds in favour of become a sick a higher by 0.8083.

Policy Suggestions:

In our analysis, we support that woman receive more education and that maternity and child health care facilities for younger moms be improved. Furthermore, programmes aiming at reducing the primary causes of infant and child mortality, such as acute respiratory infections and diarrheal infections, must be enhanced. Educational initiatives promoting breastfeeding and immunization coverage appear to be significant in the overall framework of policy creation to attain this goal.

Limitations of the Study:

This study has been limited, because health-related information is only accessible for these children, this study was limited to a small sample of the survey–children born in the five years before to the survey. We believe that considerably better and more detailed data are needed to capture the effects of socio-cultural factors that account for gender inequalities in health parameters and their relationship to child mortality differentials. The data we examined in this article shows the relative disparities in health-care determinants between boys and girls, but not the specific cultural values or attitudes that contribute to gender inequalities in children's health and nutritional intake.

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