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" A Compartive Study To Assess Knoweledge Regarding Preventive Measures Adopted By Mother To Prevent Vector Borne Disease Among Children Of Selected Urban And Rural Area Of Bhuj ,Kutch-Gujarat"

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Abstract
Vector Borne diseases are the illness caused by the vectors. A vector is a carrier of the causative microbe for various diseases such as mosquitoes, ticks and fleas. The reproduction rates of vectors are influenced by climate and weather. Such diseases are widespread and found throughout the world. VBDS usually affects the children who are between 5-15 age group.

Objectives*: Study aimed to assess the knowledge of mothers regarding prevention of vector borne disease residing in urban and rural community, associate the knowledge score of mothers with selected demographic variables and to find the correlation between the knowledge of mothers residing in urban and rural community.*

Results*: Knowledge score reveals that among 100 Mothers of Urban areas had 9 (poor), 76 (average) and 15 (good). Among rural areas had 6(poor), 76 (average), 15(good) respectively. This satisfies the1st objective of the research. At p<0.05, df=3, the calculated p value is less than the table value for age, religious and no. of children, in both urban and rural is less which shows, that these are not associated with knowledge, educational status of urban and rural both are associated, df=1. For type of family, table value of p < calculated p value which shows it is associated in urban and not in rural. This satisfies the 2nd objective. To find out the correlation of knowledge between mothers residing at urban and that of local community is found to be r=0.95 which is found to be moderately correlated, used Karl Pearson's correlation coefficient and thus Ho is accepted and 3rd objective is achieved.*

Conclusion: *This study was conducted to assess and compare the level of knowledge regarding preventive measure of VBDs among mothers in selected urban and rural areas. The purposive sampling technique used for sample selection. The study findings suggest that urban mothers were good knowledge compare to rural mothers.*

Keywords: *Mother, Knowledge, Vector Borne Disease.*

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I. INTRODUCTION

"Vector-borne diseases are human illnesses caused by parasites, viruses and bacteria that are transmitted by vectors."

Vector borne diseases is a concern in India, which paves way for lot of health related problems among mankind and also leads to loss for the nation due to high prevalence of mortality and morbidity. *Malaria and Dengue* is two common mosquitoes borne disease in India, which affects millions of people and peak mainly during rainy season. According to World Health Organization (WHO), 80% (2020) of the World's population is at risk of vector borne diseases. Vector-borne diseases account for more than 17% of all infectious diseases, causing more than 700000 deaths annually. Mosquito borne diseases are major public health issue in India and South East Asia. Dengue fever, Japanese encephalitis and malaria occur in epidemic proportions almost every year with considerable morbidity and mortality. Social, demographic and environmental factors strongly influence transmission patterns of vector-borne pathogens, with major outbreaks of dengue, malaria, chikungunya, yellow fever and Zika virus disease.

OBJECTIVE OF THE STUDY

1. Assess the knowledge of mothers regarding prevention of vector borne disease residing in urban and rural community.
2. Find the association between knowledge score of mothers with selected demographic variable of urban and rural areas.
3. To find out the correlation of knowledge score between mothers residing in urban and rural community.

ASSUMPTION

Mothers residing at urban and rural area are more knowledgeable then rural

RESEARCH METHODOLOGY

"Watching Your Child Suffer the Horr-
ors of Treatment in Order to Have a Chance at Life Is Something No Parent Should Ever Have to Experience."
-Kristin

RESEARCH APPROACH

Quantitative Research approach with comparative research design, using purposive sampling method 200 mothers from urban & rural were selected to select the study subjects from the urban and rural areas of Bhuj, Kutch Gujarat taking all ethical consideration.

Content validity and reliability of the instrument was done from the respectives experts and by conducting a small scale study using split half method of Karl Pearson's test

DATA ANALYSIS AND INTERPRETATION

SECTION: I Knowledge regarding vector borne diseases among mothers of urban and rural areas

n=200

LEVEL OF KNOWLEDGE	URBAN		RURAL	
	Fr.	%	Fr.	%
POOR	9	9%	6	6%
AVERAGE	76	76%	79	79%
GOOD	15	15%	15	15%

TABLE:4.1 Frequency and Percentage Distribution of Level of Knowledge

Above table depicts that 9%,76%, and 15% of mothers in Urban areas and 6% ,79% ,15% in rural areas have poor, average and Good Knowledge Respectively.

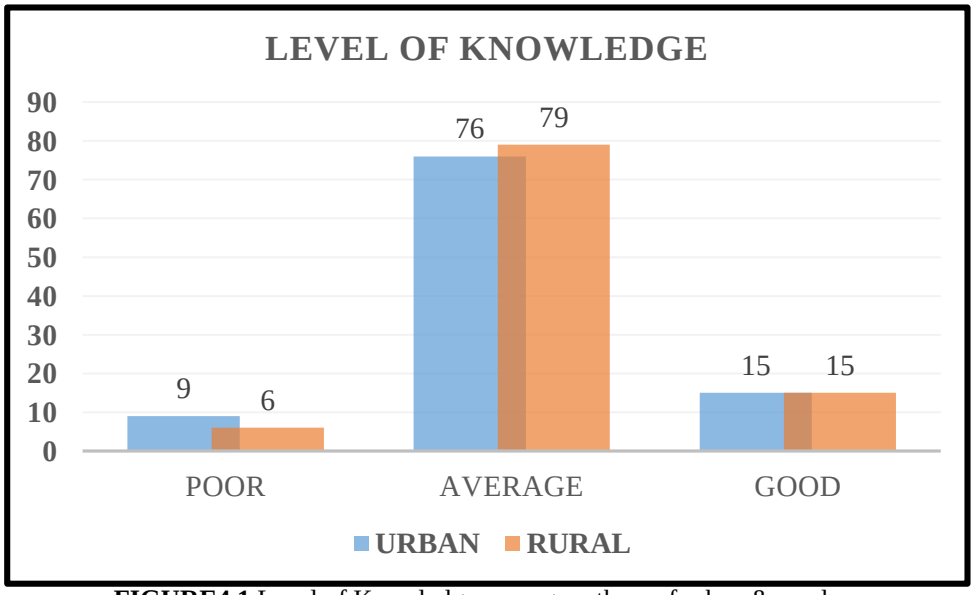

FIGURE4.1 Level of Knowledge among mothers of urban & rural areas

SECTION-II: Frequency and Percentage Distribution of Knowledge and Demographic Variables

n=200

SR.NO.	DEMOGRAPHIC VARIABLES	FREQUENCY		PERCENTAGE	
		URBAN	RURAL	URBAN	RURAL
NO OF CHILDREN					
1	1	24	9	12%	4.5%
2	2	40	30	20%	15%
3	3	23	32	11.5%	16%
4	More Than 3	13	29	6.5%	18.5%
EDUCATION STATUS					
1	10	12	26	6%	12%
2	12	24	42	12%	21%
3	Graduation	27	18	13%	9%
4	Post-Graduation	37	13	18.5%	6.5%
RELIGION					
1	Hindu	52	43	26%	22.5%
2	Muslim	16	26	8%	13%
3	Jain	19	16	9.5%	8%
4	Other	13	16	6.5%	8%
TYPE OF FAMILY					
1	Nuclear	56	42	28%	21%
2	Joint	44	58	22%	29%
AGE					
1	21-25	28	19	14%	9.5%
2	26-30	24	29	12%	14.5%
3	31-35	30	30	15%	15%
4	36-40	18	22	9%	11%

TABL:4.2 Frequency and Percentage Distribution of Knowledge and Demographic Variables

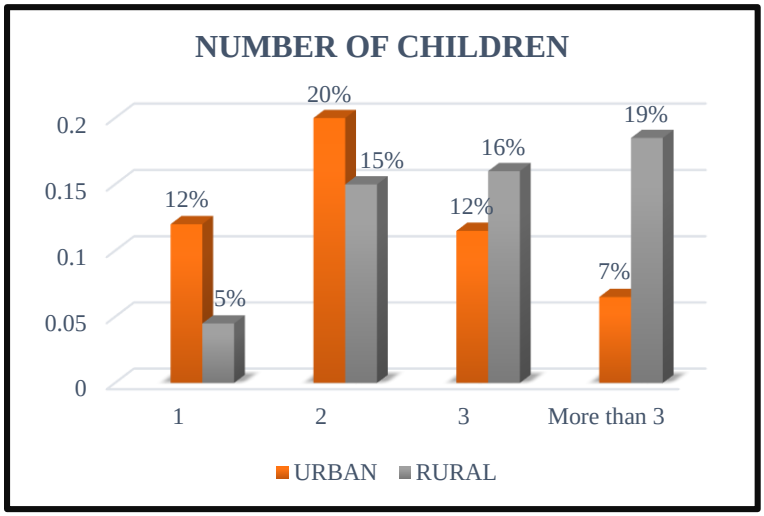

Figure :4.2 Distribution of No. of children among Urban Mothers and Rural Mothers According to Number of Children.

Above figure depicts that 12%,20%, and 12% and 7% of in Urban areas and 5% ,15% , 16% and 19% in rural areas have 1,2,3 and more than 3 children respectively.

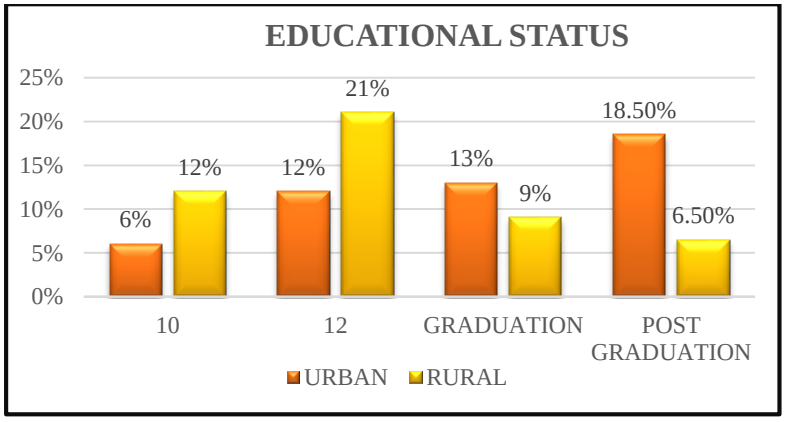

Figure :4.3 Distribution of educational status among Urban Mothers and Rural Mothers.

Above figure depicts that 6%,12%, 132% and 18.50% of in Urban areas and 12% ,21% ,9% and 6.50% in rural areas have 10^{th} ,12^{th}, Graduate and Post Graduate respectively.

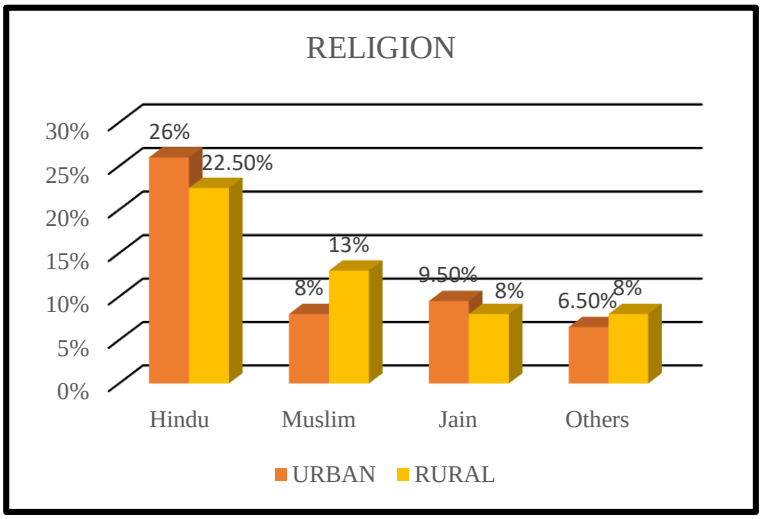

Figure :4.4 Distribution of religion among Urban Mo hers and Rural Mothers.

Above figure depicts that 26%,8%, and 9.50% and 6.50% of in Urban areas and 22.50% ,13% ,18% and 8% in rural areas have Hindu, Muslim, Jain and others respectively.

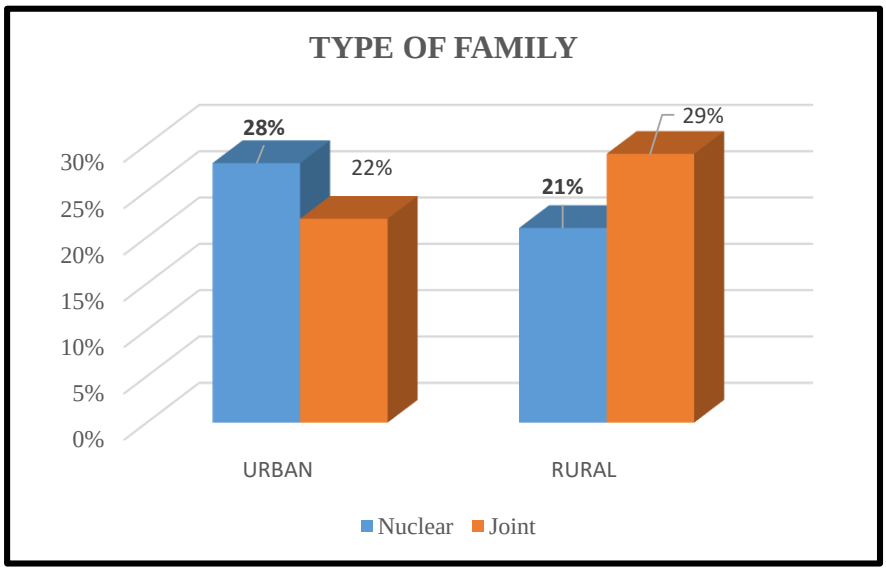

Figure: 4.5 Distribution of type of family among Urban Mothers and Rural Mothers.

Above figure depicts that 28% and 22% of in Urban areas and 29% and21% in rural areas have Nuclear, Joint Family respectively.

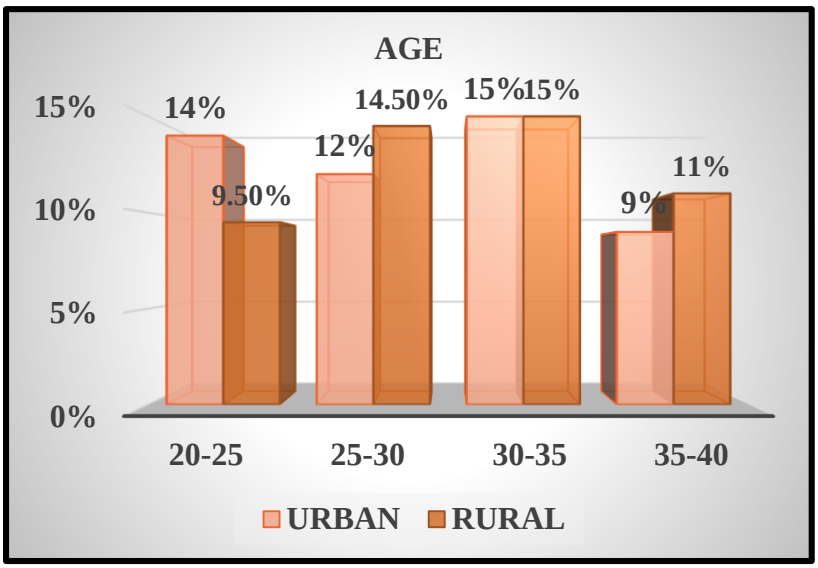

Figure :4.6 Distribution of age among Urban Mothers and Rural Mothers.

Above figure depicts that 14%,12%, 15% and 9% of in Urban areas and 9.5% ,14.5% ,15% and 11% in rural areas have 21-25,25-30,30-35,35-40 respectively.

SECTION-III: Association Between the Level of Knowledge with the Demographic Variable.

RURAL AREA

n=200

Sr No.	Demographic Variable	Equal & Below The Median		Above The Median		Chi-Square
		Fr.	%	Fr.	%	x^2
1	**Age** 20-24 25-30 31-35 36-40	 8 10 14 9	 8% 10% 14% 9%	 11 16 16 16	 11% 16% 16% 16%	**0.74** **df=3** **NS**
2	**Type of Family** Joint Nuclear	 26 15	 26% 29%	 30 29	 30% 29%	**15** **df=1** **NS**
3	**Religion** Hindu Muslim Jain Other	 22 12 04 03	 22% 12% 04% 03%	 21 14 11 13	 21% 14% 11% 13%	**6.66** **df=3** **NS**
4	**Educational Status** 10 12 Graduate Postgraduate	 8 8 12 13	 8% 8% 12% 13%	 18 34 06 01	 18% 34% 06% 01%	**29.95** **df=3** **S**
5	**No. Of Children** 1 2 3 More Than 3	 2 16 12 11	 2% 16% 12% 11%	 7 13 20 19	 7% 13% 20% 19%	**4.11** **df=3** **NS**

(* p > 0.05, 95% confidence interval)

TABLE: 4.3 Association between the level of Knowledge score with the demographic variable.

URBAN AREA

n=200

Sr No.	Demographic Variable	Equal & Below The Median		Above The Median		Chi-Square
		Fr.	%	Fr.	%	x^2
1	**Age** 20-24 25-30 31-35 36-40	 8 13 16 11	 8% 13% 16% 11%	 11 16 14 11	 11% 16% 14% 11%	**0.76** **df=3** **NS**
2	**Type of Family** Joint Nuclear	 33 15	 33% 15%	 25 27	 25% 27%	**4.3,** **df=1** **S**
3	**Religion** Hindu Muslim Jain Other	 29 7 12 00	 29% 07% 12% 00%	 23 09 07 11	 23% 09% 07% 11%	**15.12** **df=3** **S**
4	**Educational Status** 10 12 Graduate Postgraduate	 2 2 17 27	 02% 02% 17% 27%	 10 22 10 10	 10% 22% 10% 10%	**31.51** **df=3** **S**
5	**No. Of Children** 1 2 3 More Than 3	 2 17 11 18	 2% 17% 11% 18%	 7 13 21 11	 7% 13% 21% 11%	**7.97** **df=3** **NS**

(* p > 0.05, 95% confidence interval)

TABLE: 4.4 Association of Level of Knowledge score and with the demographic variable

Knowledge score reveals that among 100 Mothers of Urban areas had 9 (poor), 76 (average) and 15 (good). Among rural areas had 6(poor), 76 (average), 15(good) respectively, satisfying the 1st

objectiveobjective. At p<0.05, df=3, the calculated p value is less than the table value for age, religious and no. of children, in both urban and rural which shows, that these are not significantly associated with knowledge; educational status of urban and rural both are significantly associated, df=1. Type of family, table value of p is less than calculated p value which shows it is associated in urban and not in rural satisfying the 2nd objective.

SECTION IV: Correlation Between the Level of Knowledge Among the Mothers

LEVEL OF KNOWLEDGE	URBAN		RURAL	
	Fr.	%	Fr.	%
POOR	9	9%	6	6%
AVERAGE	76	76%	79	79%
GOOD	15	15%	15	15%

TABLE:4.5 Frequency and Percentage Distribution of Level of Knowledge Regarding the Preventive Measures of Vector Borne Disease Among the Mothers at Selected Urban and Rural Areas of Bhuj-Kutch, Gujarat.

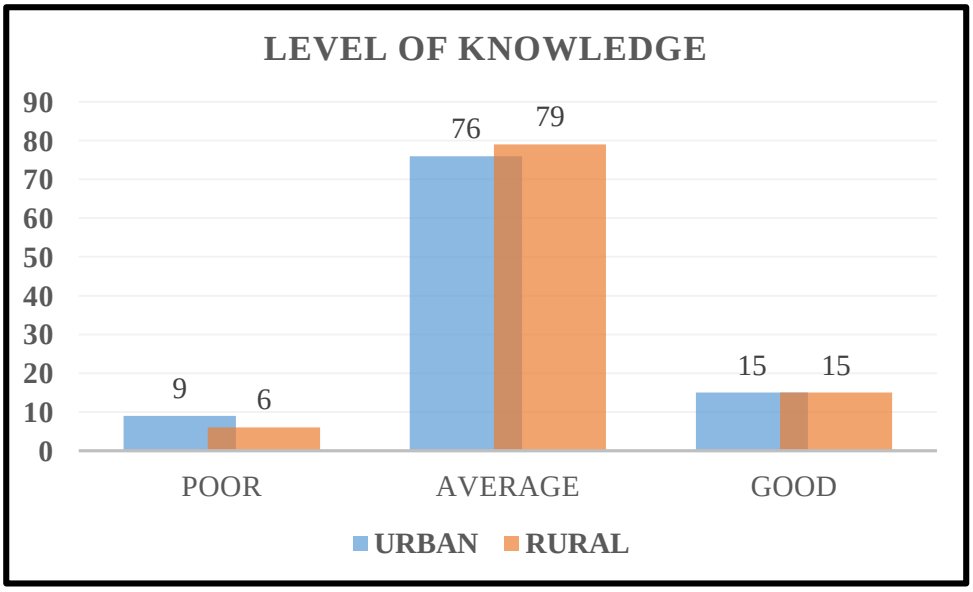

FIGURE:4.7 Knowledge Score Among Mothers

Mothers residing at Urban and that of rural community is found to be r =0.95, is found to be moderately correlated used ***Karl Pearson's*** correlation coefficient and thus Ho is accepted and 3rd objective is achieved.

$$r = \frac{\sum(x - \bar{x})(y - \bar{y})}{\sqrt{\Sigma} \cdot (x - \bar{x})^2 \Sigma (y - \bar{y})^2}$$

= 0.95

II. FURTHER RECOMMENDATION:

- A similar study can be done on a large sample and to generalize the findings to a large population of mothers residing urban and rural areas.
- An experimental study can be done to assess the level of knowledge regarding preventive measure of VBDs among mothers
- A descriptive study can be done in urban and rural areas on mothers to assess the level of knowledge regarding first aid measure of road traffic accident.
- A structured teaching programme can be done to improve the level of knowledge among the among mothers regarding preventive measure of VBDs.

III. CONCLUSION:

This study was conducted to assess and compare the level of knowledge regarding preventive measure of VBDs among mothers in selected urban and rural areas. The purposive sampling technique used for sample selection.

The study findings suggest that urban mothers were good knowledge compare to rural mothers.

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