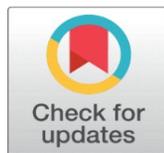# ASSESSMENT OF KNOWLEDGE AND PRACTICE OF CHILD CARE AMONG MOTHERS OF ONE TO THREE YEARS CHILDREN IN A SELECTED RURAL AND URBAN COMMUNITY. KOLKATA, WEST BENGAL

Krishna Dutta [1]✉

[1] West Bengal University of Health Science, India

ABSTRACT

The investigator conducted a comparative descriptive study to assess Knowledge and Practice of Childcare among Mothers of One to Three years children in a selected rural and urban community. Kolkata, West Bengal. She selected 50 rural mothers and 50 urban mothers using non-probability purposive sampling technique. The conceptual framework is based on Barnard Child health assessment model. Semi Structured and structured interview schedule used for data collection. Result showed that mean knowledge score between rural mothers and urban mothers statically significant as evidenced by calculated 't' value 11.42 at 0.05 level of significance . The difference of mean Practice score between rural mothers and urban mothers statically significant as evidenced by calculated 't' value 13.75 at 0.05 level of significance. There was relationship between knowledge and practice (0<0.67<1) and (0<0.71<1), in rural and urban community, respectively.

The findings of study have implications in the field of Community Health Nursing, Nursing Administration and Nursing Research.

Keywords: Knowledge, Practice, Child Care, Mothers

1. INTRODUCTION

Children are the future of every nation. They are the building blocks of every nation. They must be given consideration towards their physical, mental, social, and spiritual well-being. Childcare is a process. Mothers play an important role in child care because they are the primary care givers. Today more than ever before, the children have become a focus for organized, medical, social activities and their death rate is considered to be significant indicator of the social situation in a country.

Under five mortality rate is about 30% in developing countries, where it less than one percent in developed countries The Situation of Children In India.

B. Indumati. Dr. Judai defines Childcare is a process of socializing in the children to live successfully in the culture of their parents. Good childcare is essential for health of the children. The way in which childcare is undertaken differ enormously from society to society and from time to time, depending upon factors such as capital resources, level of knowledge of mothers, technology, and system of values. Indumati and Dr Judai (2008).

WHO defined 6.9 million children under the age of five died in 2011.Leading causes of death in under-five children are pneumonia, diarrhoea, about one third of all child deaths are linked to malnutrition. Leading causes of death in children under five in the world - 2011 Deaths of children under five Pneumonia 18% Preterm birth complications 14% Diarrhoea 11% Birth asphyxia 9% Malaria 7% Other causes 41%. World Health Organization(n.d.)

UN Inter-agency Group defines In India's under-5 mortality fell at a mean rate of 3·7% per year from 96·0 per 1000 livebirths in 2001 to 57·3 per 1000 livebirths in 2012 UN Inter-Agency Group for Child Mortality Estimation (2013).

National demographic and mortality surveys groups shows in2012, the number of districts with under-5 mortality of more than 80 deaths per 1000 livebirths (>8% risk of newborn babies dying before age 5 years) fell from 384 (64%) of 597 districts to 80 (13%). In the districts with a child death risk of greater than 8%, the mean under-5 mortality fell from 114 to 94 per 1000 live births. Parul (2021).

1.1. PROBLEM STATEMENT

"Assessment of knowledge and practice of childcare among mothers of one to three years children in a selected rural and urban community. Kolkata, West Bengal".

2. LITERATURES REVIEW

- Literature related to knowledge of childcare.
- Literature related to practice of childcare.
- Literature related to theoretical framework.

3. METHODOLOGY

Research Approach: Nonexperimental study.

Research Design: Comparative descriptive survey design.

Setting: Rural community at Vidyadhar pur village under Sonarpur Block, south 24 Parganas, West Bengal and for urban community at Desopran Sasmol road, ward no-89& 94, Tollygunge, Kolkata. West Bengal.

Population: The present study population comprised all mothers having one to three years children in selected rural and urban community.

Sample and sampling technique: In the present study mothers of rural and urban community are having one to three years children. Sample was chosen by purposive sampling technique.

Sample size: The sample size for the present study was 100 mothers.

Rural community: 50

Urban community: 50 Table 1

Table 1

Table 1 Data Collection Tools and Technique			
S. No.	**Tools**	**Variables to be measured**	**Techniques**
	Tool -1		
1	Structured interview schedule on assessment of knowledge of childcare.		
	Section A: – Semi structured interview schedule.	Demographic variables.	Interviewing
	Section B: -Structured interview schedule on knowledge of childcare.	Knowledge of childcare.	Interviewing.
2	Tool -2		
	Section A: – Structured interview schedule on self-reported practice of childcare.	Practice of childcare.	Interviewing.
	Section B: - Proforma for record analysis of immunization	Practice of immunization	Record analysis.

Section- I

Table 2

Table 2 Distribution of the Mother by their Demographic Characteristics				
				N= 100
S. No.	**Sample Characteristics**	**Rural mothers (50)**		**Urban mothers (50)**
		Frequency	**Percentage**	**Frequency**	**Percentage**
1	**Age of the mothers –**				
	• 18-27 years.	45	90	47	94
	• 28 –37Years	5	10	3	6
2	**Religion**				
	• Hindu.	43	86	45	90
	• Muslim.	7	14	5	10
3	**Number of family member**				
	1-4	27	54	33	66
	>5	23	46	17	34
4	**Per month per capita family income**				
	• Less than Rs 1000	21	42	17	34
	• More than Rs 1000	29	58	33	66
5	**Number of child**				
	• One child	28	56	30	60
	• More than two children	22	44	20	40
6	**Age last child**				
	• 12 Months - 24Months	34	68	37	74
	• Above 24 Months – 36 Months	16	32	13	26
7	**Information related to childcare**				

			Yes	50	100	50	100
	#From where						
		•	Health personnel	27	54	28	56
		•	Neighbors	17	34	9	18
		•	Family members	29	58	24	48
8	**Education**						
	Illiterate			6	12	4	8
	I-VIII			28	56	26	52
	IX and above			16	32	20	40
9	**Occupation of husband**						
	Self			35	70	46	92
	Service			6	12	4	8
	Others			9	18	-	-
10	**Occupation of husband**						
	Home maker			47	94	46	92
	Self-employment			3	6	4	8

Data are not mutually exclusive or exhaustive.

Section-II

This section deals with the knowledge score of child care both rural and urban mothers, analyzed by frequency and percentage and pie diagram. Figure 2
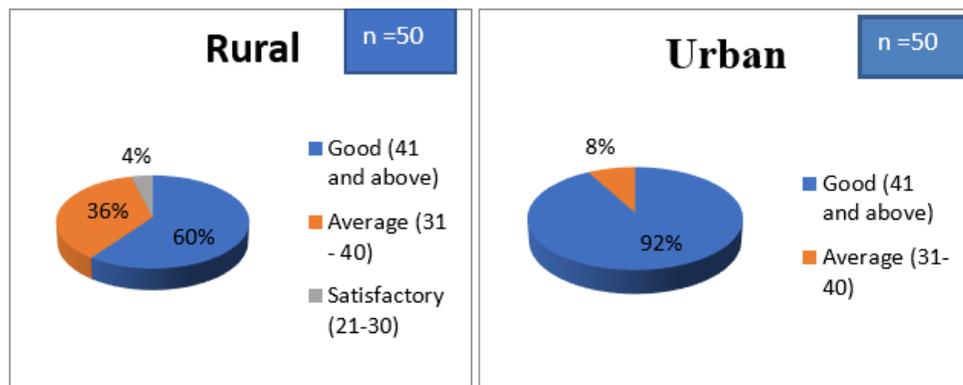
Figure 1

Figure 1 Pie Diagram Percentage Distribution of Knowledge Score of Both Rural and Urban Mothers Based on Category

Section-III

This section deals with the Practice score of childcare both rural and urban mothers, analysed by frequency and percentage and pie diagram.
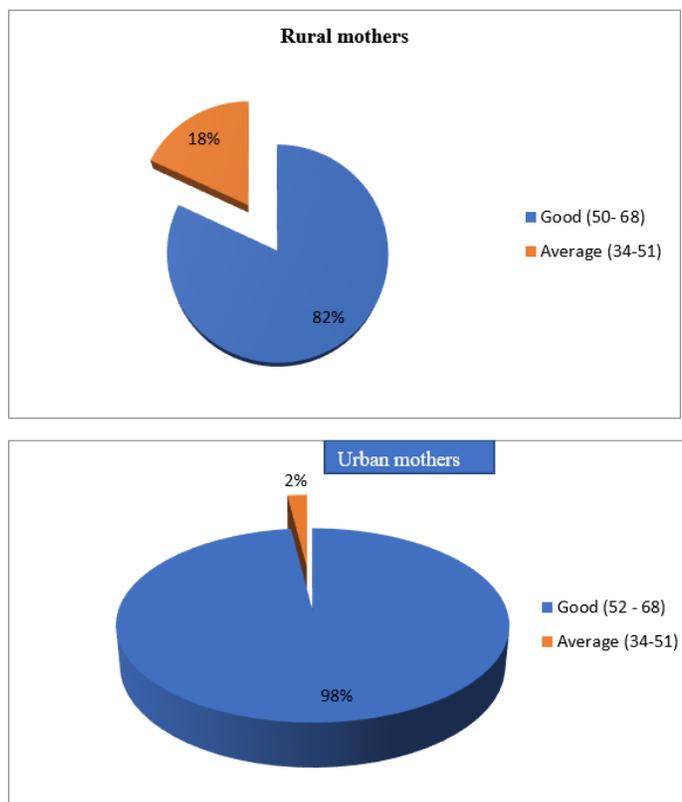
N=100

Figure 2

Figure 2 Percentage Distribution of Practice Score of Both Rural and Urban Mothers Based on Category

Section-IV

Findings related to comparison of knowledge of childcare among the rural and urban mothers. Figure 3 Table 3
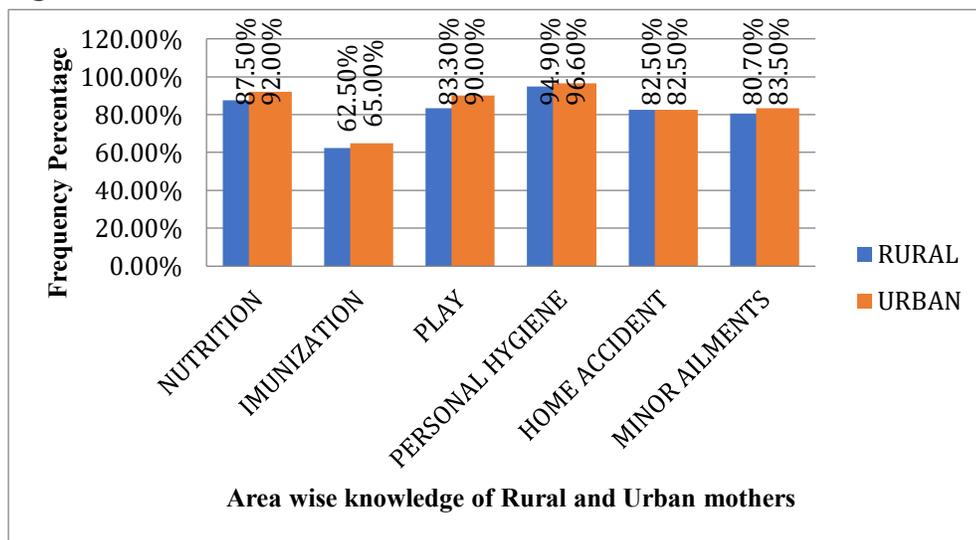
N = 100

Figure 3

Figure 3 Shows Area Wise Mean Knowledge Score of Rural and Urban Mother

Table 3

Table 3 Mean, Median, Standard Deviation and 't' Value of Knowledge Score of Child Care Between Rural and Urban Mothers						
						N=100
Group	Knowledge score of childcares					
	Mean	Mean difference	Median	Standard deviation	SEMD	't' value
Rural mothers	42	4.34	43	3.22	0.38	11.42*
Urban mothers	44		43	1.59		

$t_{(99)} = 2$, $p < 0.05$ *

Section-V

Findings related to area wise comparison practice score of child care among the rural and urban mothers. Figure 4
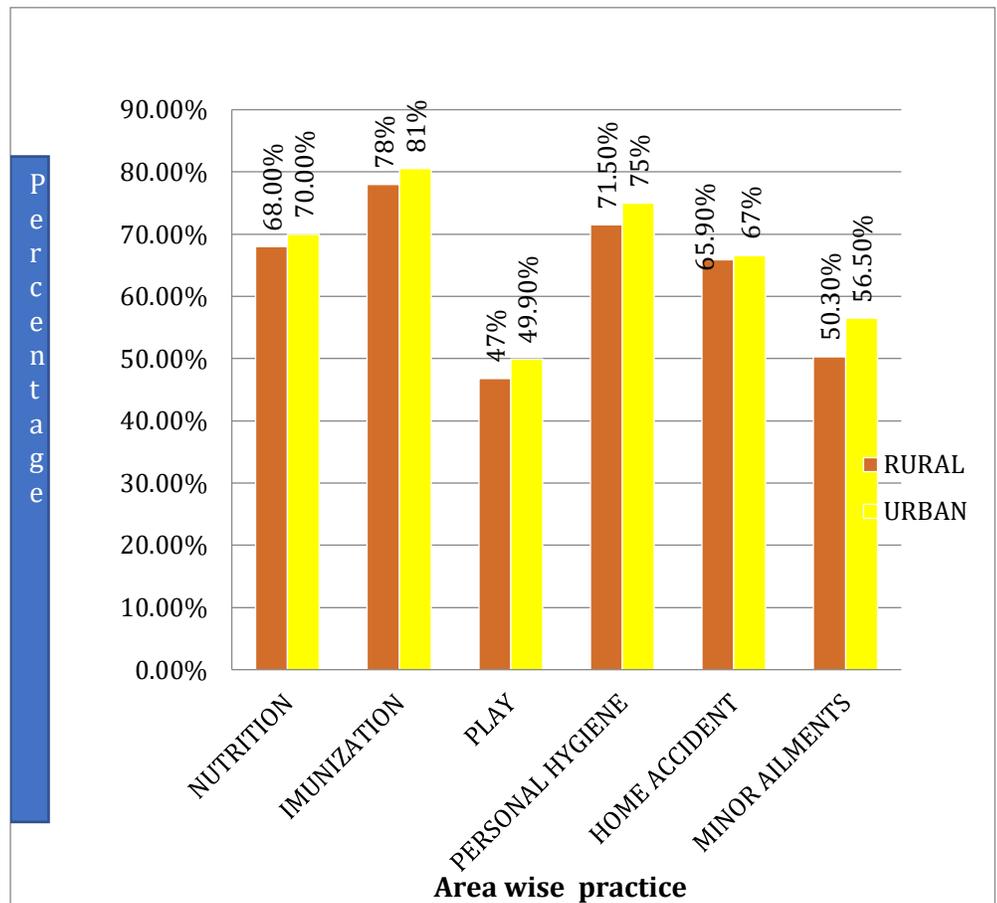
N = 100

Figure 4

Figure 4 Shows Area Wise Mean Practice Score of Rural and Urban Mother

Table 4

Table 4 Mean, Median, Standard Deviation and 't' Value of Knowledge Score of Child Care Between Rural and Urban Mothers						
						N=100
Group	**Practice score of childcares**					
	Mean	**Mean difference**	**Median**	**Standard deviation**	**SEMD**	**'t' value**
Rural mothers	54	4.4	54	2.18	0.32	13.75*
Urban mothers	58		58	1.59		

t(99) = 2 , p < 0.05 *

Section-VI

Findings related to relationship between knowledge and practice of child in rural and urban community.

Table 5

Table 5 Mean, R, 'T' Value Between Knowledge and Practice Score of Mothers in Rural and Urban Community				
				N=100
Group	**Variables**	**Mean**	**r**	**'t' value**
Rural	Knowledge score	42	0.67	17.16*
	Practice score	54		
Urban	Knowledge score	44	0.71	18.89*
	Practice score	58		

t(99) = 2, p < 0.05 *

Section-VII

Findings related to association between knowledge and selected variables between rural mothers and urban mothers.

Table 6

Table 6 Chi-Square Value Showing the Association Between Knowledge and Selected Variables in Rural Mothers and Urban Mothers.							
							R=50, U= 50, N = 100
Group	**Sl. No.**	**Variables**	**Knowledge**		**Chi-square.**	**d f**	**α level.**	**P value**
			≥ median	**<median**				
Rural	1.	Age of the mothers 18-22 years. 23 & above	13 12	7 18	3	1	0.05	3.84
Urban		18-22 years. 23 & above	16 15	3 16	0.01	1	0.05	3.84

Group	Sl. No	Variables	Knowledge ≥ median	Knowledge <median	Chi-square.	d f	α level.	P value
Rural	2.	Religion Hindu. Muslim.	24 1	19 6	2.76	1	0.05	3.84
Urban		Hindu. Muslim.	29 2	16 3	0.33	1	0.05	3.84
Rural	3.	Education Illiterate I- VIII IX & above	- 11 14	6 17 2	16.28*	2	0.05	5.99
Urban		Illiterate I- VIII IX & above	1 11 19	3 15 1	15.84*	2	0.05	5.99
Rural	4.	Occupation of husband Self-employed. Service Other	17 5 4	18 1 5	2.73		0.05	5.99
Urban		Self-employed. Service	27 4	19 -	1.19	1	0.05	3.84

*Significant association.

The data presented in Table 6 shows in case of rural mother, the knowledge score has only significant association with education (16.28) at df 2 (P=5.99) at 0.05 level of significance. In case of urban mothers significant association with education (15.84) at df 2 (P=5.99) at 0.05 level of significance.

Table 7

Table 7 Chi-Square Value Showing the Association Between Knowledge and Selected Variables in Rural Mothers and Urban Mothers. R=50, U= 50, N = 100								
Group	Sl. No	Variables	Knowledge ≥ median	Knowledge <median	Chi-square.	d f	α level.	P value
Rural	1.	Occupation of mother Home maker Self employed	23 2	24 1	0.00	1	0.05	3.84
Urban		Home maker Self employed	28 3	18 1	0.005	1	0.05	3.84
Rural	2	Number of family member 1-4 5and above	14 11	13 12	0.08	1	0.05	3.84
Urban		1-4 5and above	21 11	12 6	0.005	1	0.05	3.84

Group	Sl. No.	Variables			Chi-square	df	α level.	P value
		Per capita/ month income.	10	6	1.03	1	0.05	3.84
Rural	3	• Upto Rs 500-Rs1500	16	18				
		• Rs 1501-Rs 2000& above						
Urban		• Upto Rs 500-Rs1500	14	8	0.04	1	0.05	3.84
		• Rs 1501-Rs 2000& above	17	11				

The data presented in Table 7 shows there is no significant association between knowledge score and selected variables in Rural mothers and urban mothers.

Table 8

Table 8 Chi-Square Value Showing the Association Between Knowledge and Selected Variables in Rural Mothers and Urban Mothers

Group	Sl. No.	Variables	Knowledge		Chi-square	df	α level.	P value
			≥ median	<median				
Rural		**Number of child**	17	11	2.92	1	0.05	3.84
		• One child	8	14				
		• More than two child						
Urban	1.	• One child	22	8	5.55*	1	0.05	3.84
		• More than two child	8	12				
Rural	2.	**Age last child**			1.27	3	0.05	7.82
		• 12 Months -18 Months	12	11				
		• Above 18Months - 24 Months	6	5				
		• Above 24 Months – 30 Months	4	3				
		• Above 30 Months- 36 Months	3	6				
Urban		• 12 Months -18 Months	16	7	4.26	3	0.05	7.82
		• Above 18Months - 24 Months	10	4				
		• Above 24 Months – 30 Months	3	4				
		• Above 30 Months- 36 Months	2	4				

*Significant association.

The data presented in Table 8 shows in case of urban mothers, the knowledge score has only significant association with number of child (5.55) at df 1 (P=3.84) at 0.05 level of significance.

4. DISCUSSION

This chapter deals with the study findings and the conclusion. The implications have been stated followed by its limitations. This chapter ends with the recommendations of the investigator for the researchers in future and some suggestions.

5. MAJOR FINDINGS OF THE STUDY

The major findings of the study were as follows:

1) *Demographic characteristics of the mother*

- About 50% participants in rural mothers and 56% participants in urban mothers are 23 -27 years of age.
- Majority of the participants' that is 86% in rural community and 90% in urban community are Hindu.
- 40% in rural and 44% in urban mothers have completed class V-VIII.
- As for occupation of husband, majority that is 70% are self-employed in rural community and 92% in urban community.
- About 94% participants in rural community and 92% in urban community are home makers.
- Majority of the participants that is 54% in rural community and 66% in urban community have 1 to 4 family members.
- Majority of them have per month per capita income ranged within Rs-501- Rs1000(rural 34%, urban28 %).
- 56% in rural and 60% in urban mothers have one child and majority 46% of the children belongs to 12 months-18 months of age in both community.
- All the participants 100% get information related to child care and 54% in rural and 56% in urban community get information from health workers.

2) *Findings related to area wise   knowledge of child care among the rural and urban mothers.*

- Majority mothers that are 87.5% in rural and 92% in urban mothers have knowledge on nutrition.
- 62.5%in rural and 65% in urban community have knowledge on immunization.
- Majority of the mothers that 83.3% in rural and 90% in urban community have Knowledge on play.
- About 94.9% in rural and 96.6% in urban mothers have knowledge on personal hygiene.
- In case of prevention of home accident, in both community 82.5% have complete knowledge.
- Majority of mothers 80.7% in rural and 83.5% in urban have knowledge on minor ailments.

- Mean knowledge score (44) of the urban mother, was significantly higher than the mean knowledge score (42) of rural mother. There is a mean difference of 4.34, which is found statistically significant as evident from 't' value 11.42 which is higher than the table value for df (99) i.e., 2 at 0.05 level of significance.

3) *Findings related to area wise practice of child care among the rural and urban mothers.*
   - Majority of mothers that is 68 % in rural and 70 % in urban mothers have practice on nutrition.
   - 78 %in rural and 80.5% in urban mother have practice on immunization.
   - Majority of the mothers that is 46.8% in rural and 49.9% in urban community have practice on play.
   - About 71.5 % in rural and 75 % in urban mothers have practice on personal hygiene.
   - In case of prevention of home accident have practice that is 65.9% in rural and 66.6% in urban community.
   - Majority of mothers 50.3% in rural and 56.5 % in urban having practice on minor ailments.
   - Mean practice score (58) of the urban mother, was significantly higher than the mean practice score (54) of rural mother. There is a mean difference of 4.4, which is found statistically significant as evident from 't' value 13.75 which is higher than the table value for df (99) that is 2 at 0.05 level of significance.

4) *Findings related to relationship between knowledge and practice of child in rural and urban community.*
   - The knowledge score and practice score of child care in rural mothers which was statistically significant as evident from ' t' value (t 17.16,p<0.05) was more than table value (2.00, p<0.05).
   - In case of urban mothers knowledge score and practice score was statistically significant as evident from ' t' value (t 18.89,p<0.05) was more than table value (2.00, p<0.05).

5) *Findings related to association between knowledge and selected variables in rural& urban community.*
   - The present study shows that in the case of rural mother, the knowledge score has only significant association with education as per obtained chi square value 16.28 at df 2 at 0.05 level of significance. In case of urban mothers obtained chi square value15.84 at df 2 at 0.05 level of significance.

6. CONCLUSION

On the basis of the findings of the present study the following conclusion can be drawn that knowledge and practice score of child care is higher among urban mothers than the rural mothers. It can be concluded that there is significant relation

ship between knowledge and practice score which indicates that knowledge has been executed in practice.

7. LIMITATION

The limitations of the study were:

- The study was conducted by non-probability purposive sampling technique; hence generalization of the findings was limited.
- The study was conducted only in one selected rural and urban area of West Bengal which lack diverse population and limits the generalization of findings.
- The study was limited to only those mothers who have 1-3 years child.

8. RECOMMENDATIONS

On the basis of the findings the following recommendations can be offered for future research.

- A replicate of the study can be done by using a large sample size.
- A replicate of the study can be done in hospital settings.
- A replicate of the study can be done among the mothers of infant.
- A comparative study can be conducted between slum area and urban area.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

REFERENCES

Agarwal, K. N., Dev, M., and Agarwal, K. (1981). Infant Feeding In India. Indian Journal of Peadiatrics, 47, 285–288. https://doi.org/10.1007/BF02824996.

Geetha, M.N. (2008). A Study to Assess Theknowledge and Practice on Management of Minor Ailments Among the Mothers of Unde-Five Childrenat Hesaraghatta.

Global, Regional, and National Causes of Child Mortality: An Updated Systematic Analysis for 2010 With Time Trends Since 2000. Unicefinnovation.

Gupta, P., Srivastava, V. K., Kumar, V., Masood, J., Ahmad, N., and Srivastava, J. P. (2008). Made A Cross Sectional Study on "New Born Care Practices Among Women In Urban Slum of Lucknow City,UP". https://doi.org/10.4103/0970-0218.62570.

Indumati, B. and Dr Judai, A. (2008). Assessment of Knowledge and Attitude on Child Rearing Practices Among Mothers of Preschool Cgildren, 4.

Mr. Alan Fredy, J. (2010). A Comparative Study to Assess the Knowledge of Mothers Regarding Infant Rearing Practices In Rural And Urban Areas At Tumkur.

Parul, D. (2021). Pediatric Nursing (2nd Ed). Jaypee Brothers Medical Publishers Private Ltd.

The Situation of Children In India.

UN Inter-Agency Group for Child Mortality Estimation (2013). Child Mortality Estimates: CME Info.

World Health Organization(n.d.). Leading Causes of Death in Under Five Children.