

ORIGINAL RESEARCH

A Comparative Study to Assess the Knowledge and Attitude Regarding Immunization Among Mothers of Under Five Children in Selected Urban And Rural Areas of Faridkot, Punjab

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ABSTRACT

Aim: To Assess the Knowledge and Attitude regarding Immunization among Mothers of Under Five Children in selected Urban and Rural areas of Faridkot, Punjab. **Material and Methods:** A quantitative research approach and comparative descriptive research design was used. The Sample size was 100 mothers of under five children, selected by non probability purposive sampling technique. The data were collected by using structured interview schedule with the help of self structured knowledge questionnaire and attitude scale (5 points likert scale). Descriptive and inferential statistics were used to analyze the data. **Results:** The study revealed that in urban area was 72% had adequate knowledge and 28% had inadequate knowledge regarding immunization and in rural area 68% mothers had adequate knowledge and 32% had inadequate knowledge regarding immunization. In urban area 76% had highly positive attitude and 24% had low positive attitude regarding immunization and in rural area 86% had highly positive attitude and 14% had low SD for knowledge score of mothers±positive attitude regarding immunization. The mean 5.00 for urban and rural area's mothers respectively. So± 5.60 and 18.16 ±were 20.34 SD were slightly high in urban mothers than rural mothers. The results were±mean SD for attitude score of mothers±found statistically significant at 0.05 level. The mean 11.00 for urban and rural area's mothers respectively. So± 10.89 and 67.56 ±were 61.76 SD were slightly high in rural mothers than urban mothers. The results were±mean found statistically significant at 0.05 level. In urban area there was significant relationship between knowledge score with Education of Mother, Monthly Income of family, Number of children, Source of information and in rural area significant relationship with occupation of Mother and religion of family. In urban area there was significant relationship between attitude score with Monthly Income of family and Source of information and in rural area there was significant relationship between attitude score with Age of mothers and source of information. **Conclusion:** From the findings of the study following conclusion were drawn that the level of knowledge mothers of urban area were higher than the mothers of rural area and the attitude of mothers of rural area were highly positive than the mothers of urban area.

Keywords: Knowledge, Attitude, Immunization, mothers of under five children Urban and Rural Areas.

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INTRODUCTION

Immunization, is the progression by which an individual's immune system becomes prepared adjacent to an cause known as the immunogen. When an immune system is showing to molecules where are foreign to the body (non-self), it will arrange an immune response, but it can also develop the capability to quickly take action to a subsequent encounter.¹

It is indicator of the well being of all children below the age of five years under five mortality rates worldwide from 146/1000 in 1970 to 79/100 in 2003. A total numbers of 10.6 million children are still

dying every year before the age of five years. Causes of death of under five year children are measles (4%), HIV AIDS (17%), communicable diseases (10%), Diarrheal diseases (17%). Now with the help of immunization the current infant mortality rate in India is 60/100 live birth.²

Vaccination is one of the most cost-effective interventions to prevent major illnesses that contribute to child mortality in the country, chiefly in environments where malnourished children, overfilling poverty and illiteracy supremacy. The Knowledge, positive attitudes and appropriate perceptions about vaccination hence become one of

the main tools to reduce the incidence of vaccine preventable diseases that had dropping childhood rate mortality and morbidity. So, In our society, a large portion of the population those are lives in rural areas, where mothers are illiterate and have numerous myths about vaccination this results in children being unimmunized, so this is directly concern with the mothers knowledge level related to immunization.³

According to World Health Organization (WHO) immunization has been regard as the on the whole cost valuable intervention for child health encouragement. Immunization to a child significantly reduces cost of creating diseases thus providing a healthy childhood and reducing poverty and suffering. According to WHO immunization annually averts 2- 3 million infants' deaths globally from diseases such as diphtheria, hepatitis B, measles, mumps, pertusis, polio and tetanus. And thus far one in five children or an estimated 21.8 million worldwide infants missed the basic vaccines. According to Extended Programme of Immunization (EPI) non immunization is the foremost cause of high childhood mortality and morbidity in developing countries.⁴

RESEARCH PROBLEM:

A Comparative Study to Assess the Knowledge and Attitude Regarding Immunization Among Mothers of Under Five Children in Selected Urban and Rural Areas of Faridkot, Punjab.

OBJECTIVES OF THE STUDY

1. To assess the knowledge score regarding immunization among mothers of under five children in selected urban and rural areas of Faridkot, Punjab.
2. To assess the attitude score regarding immunization among mothers of under five children in selected urban and rural areas of Faridkot, Punjab.
3. To compare the knowledge score regarding immunization among mothers of under five children in selected urban and rural areas of Faridkot, Punjab.
4. To compare the attitude score regarding immunization among mothers of under five children in selected urban and rural areas of Faridkot, Punjab.
5. To find out the association between knowledge score regarding immunization among mothers of under five children in selected urban and rural areas with their selected socio demographic variables of Faridkot, Punjab.
6. To find out the association between attitude score regarding immunization among mothers of under five children in selected urban and rural areas with their selected socio demographic variables of Faridkot, Punjab.

METHODOLOGY

RESEARCH APPROACH: A quantitative research approach was used.

RESEARCH DESIGN: A comparative descriptive research design was used.

RESEARCH SETTING: The study was conducted in selected urban and rural areas of district Faridkot. The rural area was village Golewala of District Faridkot.

TARGET POPULATION: The target population for the study were mothers of under five children in selected urban and rural areas of District, Faridkot.

SAMPLE SIZE: The sample size for the present study were 100 mothers, 50 mothers from urban area and 50 mothers from rural area of District Faridkot.

SAMPLING TECHNIQUE: The sampling technique for the present study was non probability purposive sampling technique was used.

SELECTION AND DEVELOPMENT OF TOOL:

Section A: Demographic variables

Section B: Self structured knowledge Questionnaire for assessing knowledge of mothers of under five children regarding immunization.

Section C: Self structured attitude scale (5 points likert scale) for assessing attitude of mothers of under five children regarding immunization.

KNOWLEDGE CRITERIA

Knowledge score was categorized into 3 levels:

LEVEL	SCORE	%
Adequate	16-30	53.3-100
Inadequate	0-15	0-50

Maximum score = 30

Minimum score = 0

Attitude Scale criteria: The scoring was done in following ways:

Low positive attitude (0-50)

Highly positive attitude (51 - 100)

CONTENT VALIDITY OF TOOL To ensure the content validity of tool was submitted to the 10 experts that were 7 from the pediatric nursing field, 1 community health nursing and 2 from pediatrics doctors. Modifications were done in the tool according to the expert's suggestions.

RELIABILITY OF TOOL: Reliability of the tool was establish by using split half method and was calculated by applying Karl Pearson coefficient correlation. The reliability was calculated to be 0.7 for knowledge questionnaire and 0.83 for the attitude scale. So, the tool was found to be highly reliable for data collection for the study.

ETHICAL CONSIDERATION: Written permission from ethical committee of college and there after written permission from Sarpanch of village Golewala and and from Municipal Corporate of Dogar Basti of Faridkot were taken. The verbal and written consent obtained from mothers of under five children of urban and rural areas before conducting the study.

PLAN OF DATA ANALYSIS: The analysis has been done in accordance with the objectives. The analysis and interpretation of data has been done by using

descriptive and inferential statistics such as frequency, percentage, mean, SD, correlation co-efficient, chi-square test and the level of significance was $p < 0.05$.

Data has been represent in the form of tables, bar diagram.

RESULTS

Table 1: Frequency and percentage distribution of level of knowledge of mothers of under five children regarding immunization of urban area and rural areas.

N=100

Level of Knowledge	Knowledge score	Urban		Rural	
		n	%	n	%
Adequate	16-30	36	72	34	68
Inadequate	0-15	14	28	16	32

Minimum Score = 30 Minimum Score = 0

Table 2: Frequency and percentage distribution of attitude of mothers of under five children regarding immunization of urban area and rural areas.

N=100

Level of attitude	Attitude Score	Urban		Rural	
		n	%	n	%
Low positive attitude	0-50	12	24	7	14
Highly positive attitude	51-100	38	76	43	86

Maximum Score = 100 Minimum Score = 0

Table 3: Comparison of knowledge score regarding immunization among mothers of under five children in selected urban and rural areas.

N=100

	n	Mean	SD	df	t-value
Urban	50	20.34	60	98	2.18 ^S
Rural	50	18.16	5.00		

Maximum Score = 30 NS = Not Significant at $p < 0.05$

Minimum Score = 0 S = Significant at $p < 0.05$

Table 4: Comparison of attitude score regarding immunization among mothers of under five children in selected urban and rural areas.

N=100

	n	Mean	SD	df	t-value
Urban	50	61.76	10.89	98	2.64 ^S
Rural	50	67.56	11.00		

Maximum Score = 100 NS = Not Significant at $p < 0.05$

Minimum Score = 0 S = Significant at $p < 0.05$

DISCUSSION

The findings of the study revealed that mothers of urban area 36 (72%) had adequate knowledge and 14(28%) had a inadequate knowledge about immunization. The mothers of rural area 34 (68%) had adequate knowledge and 16(32%) had a inadequate knowledge about immunization. The findings are supported by Mahalingam S, et. al (2014)⁵ Conducted a cross sectional descriptive study on mothers attending the Urban Health Centre in Mangalore city and on mothers attending a Peripheral Health Centre Bengre, outskirts of Mangalore having children under five years of age. The result found that 75.5% mothers of urban area and 62.9% mothers of rural area have adequate knowledge regarding immunization.

The findings of study revealed that the mothers of urban area 12(24%) had low positive attitude regarding immunization and 38(76%) mothers had

highly positive attitude regarding immunization. The mothers of rural area 7(14%) had low positive attitude regarding immunization and 43 (86%) mothers had highly positive attitude regarding immunization. The findings are supported by Mahalingam S, et. al (2014)⁵ Conducted a cross sectional descriptive study on mothers attending the Urban Health Centre in Mangalore city and on mothers attending a Peripheral Health Centre Bengre, outskirts of Mangalore having children under five years of age. The result found that 89.2% mothers of urban and 55.6% mothers of rural area had positive attitude regarding immunization.

The findings of the study revealed that mean and SD for knowledge score of 5.00 for urban and rural areas respectively. ± 5.60 and $18.16 \pm$ mothers were 20.34 So mean and SD were slightly high in urban mothers than rural mothers. The results were found statistically significant at 0.05 level. Hence it was concluded that, mothers of urban area were statistically significant

high knowledge than mothers of rural area. The findings are supported by Mahalingam S, et. al (2014)⁵ There was significant relationship difference between urban and rural mothers. Urban mothers significantly higher knowledge (75.6%) as regard to rural mothers (62.9%).

The findings of the study revealed that that mean and SD for attitude score of 11.00 for urban and rural area respectively. ± 10.89 and $67.56 \pm$ mothers were 61.76 So mean and SD were slightly in rural mothers than urban mothers. The results were found statistically significant at 0.05 level. Hence it was concluded that, mothers of rural area were statistically significant highly positive attitude than mothers of urban area. The findings are supported by Mahalingam S, et. al (2014)⁵ There was significant relationship difference between urban and rural mothers attitude regarding immunization.

CONCLUSION

From the findings of the study following conclusion were drawn that the level of knowledge mothers of urban area were higher than the mothers of rural area and the attitude of mothers of rural area were highly positive than the mothers of urban area.

RECOMMENDATIONS: Based on the result of the study, following recommendations were made;

1. The study can be replicate on large sample to validate and generalize its findings.

2. The study can be conducted in different community health settings.
3. Descriptive study can be conducted in urban and rural area to assess the knowledge and attitude of mothers of under five children regarding completion of immunization.
4. A quasi experimental study can be conducted to evaluate the effectiveness of structured teaching programme of knowledge and attitude of mothers of under five children regarding immunization.

REFERENCES

1. Gulani K.K, Community health nursing principles and practice.1st edition. Delhi: Kumar publishing House Pitampura;2007. 378-439.
2. Ghai O P, Piyush, V.K Paul. Ghai essentials Pediatrics.6th Edition .Delhi-92: Dr.Ghai; 2008.181
3. Polkki T, Pietila A M, Julkunen KV, Laukkala H, Ryhanen P. Determine the relationship between the literacy status and immunization coverage among mothers of underfive children in Kolar district in Bangalore. Journal of Paediatric Nursing 2001 Aug;17(4):270-2.
4. UNICEF and WHO, "promises and achievement and missed opportunities analysis of trends, levels and differentials. 1990-2000:March 2004.
5. Mahalingam S, Soori A, Ram P, Achappa B, Chowta M, & Madi D. (2014). Knowledge, attitude and perceptions of mothers with children under five years of age about vaccination in Mangalore, India. Asian Journal of Medical Sciences, 5(4), 52-57. <https://doi.org/10.3126/ajms.v5i4.10306>