



International Journal of Research in Pharmacology & Pharmacotherapeutics



ISSN Print: 2278-2648

IJRPP |Vol.4 | Issue 2 | April-June-2015

ISSN Online: 2278-2656

Journal Home page: www.ijrpp.com

Research article

Open Access

Parents knowledge and attitude on childhood immunization in a tertiary care teaching hospital

P. Ramesh Yadav^{*1}, Dr. D. Giri Raj Sekhar², Dr. Karunakar³, G. Pallavi⁴, P. Neelaphar⁵

¹Pharm.D (PB) intern, Annamacharya College of pharmacy, Rajampet, Andhra Pradesh, India.

²Assistant professor, Department of pharmacy practice, Annamacharya College of pharmacy, Rajampet, Andhra Pradesh, India.

³Associate Professor, Department of Pediatrics, Rajiv Gandhi Institute of Medical Sciences, Andhra Pradesh, India.

⁴Pharm.D (PB) intern, Annamacharya College of pharmacy, Rajampet, Andhra Pradesh, India.

⁵Assistant professor, Department of pharmacy practice, Annamacharya College of pharmacy, Rajampet, Andhra Pradesh, India.

*Corresponding author: P. Ramesh Yadav

E-mail id: pemmaniramesh@gmail.com

ABSTRACT

Aim: The main aim of this study was to assess the Knowledge and attitudes of mothers with children less than twelve years of age about vaccination.

Materials & Methods: A prospective observational study was conducted for a period of six months in a tertiary care teaching hospital. A multi optional questionnaire was used. Descriptive statistics were used to describe all variables. Association between dependent variables and independent ones were tested using Chi-square test. *P* values of < 0.05 were considered statistically significant.

Results: In the present study almost 64% of the parents replied that they knew about childhood immunization. We have assessed that there was no significant difference between the genders. When the socio demography was assessed, a low literacy level was found in the rural mothers and *p* value is (0.00001). This was significant and needs to be addressed in order improve knowledge about vaccinations. Our study has found a significant difference in parents from urban and rural areas in terms of their knowledge and attitude regarding vaccination. There is no significance difference between knowledge and attitude of parents who already had children and number of children.

Conclusion: The present research showed that parents had good knowledge and positive attitudes related to immunization. Majority of the parents in rural areas were unaware about the vaccination and its implications when compared with the parents in urban areas. Educational interventions are needed to upgrade parents knowledge with special emphasis on less educated and residents of rural areas.

Keywords: Attitude, Immunization, Knowledge, Parents.

INTRODUCTION

Immunization is a safe and effective method of preventing many severe infectious diseases. The word immunity refers to the body's capacity to defend itself against a particular disease or infection. Immunization is the procedure whereby a person is made immune or opposed to an infectious disease and different type of maladies, typically by the direction of a vaccine.^[1]

Immunization prevents illness, disability and death from vaccine-preventable diseases including diphtheria, measles, pertussis, pneumonia, polio, rotavirus diarrhoea, rubella and tetanus.^[2] Immunization of infants and young children against serious infectious diseases is among the most successful and cost-effective interventions in preventative health care.^[3]

Parent's knowledge about immunization and their attitudes towards them are likely influence uptake. Previous studies revealed misconceptions on parent's knowledge and negative attitudes towards childhood immunization. Mothers' knowledge about vaccination was found to be quite low and their educational status was significantly associated with child's coverage. Negative attitude, for example mothers fear from vaccination, was found to be significantly affected the immunization status of their children.^[4]

Mother's knowledge, attitude and practices play a major role in achieving complete immunization before first birthday of the child. Factors such as knowledge, attitude and practices of parents and patients are also known to contribute to success or failure of immunization program.^[5]

Aim & Objectives

Despite the success of the Expanded Program of Immunization, many vaccine preventable diseases remain prevalent in developing countries. Parent's knowledge and attitudes towards immunization are likely influence uptake.

- This study aims to determine the knowledge, and attitudes, of the parents regarding immunization of their children.

The objectives of this study include:

- To determine the level of knowledge and attitude based on their demographics.

- To identify the key factors responsible for lack of knowledge in different group of people

Methodology

Study design and study period

This is a prospective observational study done for six months from May-October 2014.

Source of data

All the data was collected in the previously designed data collection form. The data required for the prospective observational study was collected on daily basis for six months. Data was collected from OP of the Pediatric ward in a tertiary care teaching hospital. In this study self-prepared questionnaire form was used to assess the knowledge of the parents.

Sample size: A sample size of 200 members were included in the study

Inclusion criteria

The study included

- Parents who are available in OP of the pediatric ward in a teaching hospital.
- Pregnant and lactating mothers are also included in this study.
- Parents with <12 yrs age of children are included.

Exclusion criteria

The study excluded

- Patients with terminal illness or cognitive deficits (determined from the medical record)

Method of collection of data

A prospective observational survey study was conducted for a period of six months (May -October 2014) in RIMS Kadapa, Andhra Pradesh. Parents with children of 0-12 years old were included to participate. Data was collected from the parents in OP of the pediatric ward. Face-to-face interview method was used and responses were recorded in a self-prepared structured questionnaire. The questionnaire composed of three main sections to collect data on parent's demographics, parent's knowledge and attitudes on childhood immunization. Responses to knowledge questions were recorded as "Yes", "No", and "Don't know". A multi-optional

questionnaire was used to assess parents' attitudes toward childhood immunization.

Statistics Analysis

Descriptive statistics were used to describe all variables. Association between dependent variables (knowledge, and attitudes) and independent ones (parent's demographics) were tested using Chi-square test. P values of < 0.05 were considered statistically significant. Ethical approval for the study was

obtained from the Health Institute of RIMS at Kadapa, A.P. The questionnaire comprised of sixteen questions and the score was given based on the correct responses

- Very good- >14 correct responses
- Good – 11-13 correct responses
- Average – 8-10 correct responses
- Poor -5-7 correct responses
- Very poor-<4 correct responses

RESULTS

Background characteristics	Frequency	Percentage	Chi square P value
Gender			
Male	55	27.5%	>0.15925
Female	145	72.5%	
Age groups(in year)			
18-24	98	49%	
25-31	86	43%	
32-38	16	8%	
Residence			
Urban	64	32%	<0.00047
Rural	136	68%	
Education level			
Primary	107	53.5%	<0.00001
Secondary	45	22.5%	
Graduate	19	9.5%	
Post graduate	02	1.0%	
No formal Education	27	13.5%	
Number of children			
One	87	43%	>0.76275
Two	84	42%	
Three	23	11.5%	
Four	05	2.5%	
Five	01	0.5%	
TOTAL	200	100%	

Table 1: Demographic profile of the respondents (n=200)

In the present study 200 parents' knowledge and attitude regarding immunization were assessed. Out

of them 145(74%) were female respondents and other were male 55(26%).

Table 2: Knowledge & attitude of parents on Immunization based on their Gender

Characteristic	Response					Total	P value
	Very good	Good	Average	Poor	Very poor		
Male	15	10	19	11	00	55(27.5%)	0.1592
Female	29	28	39	38	11	145(72.5%)	

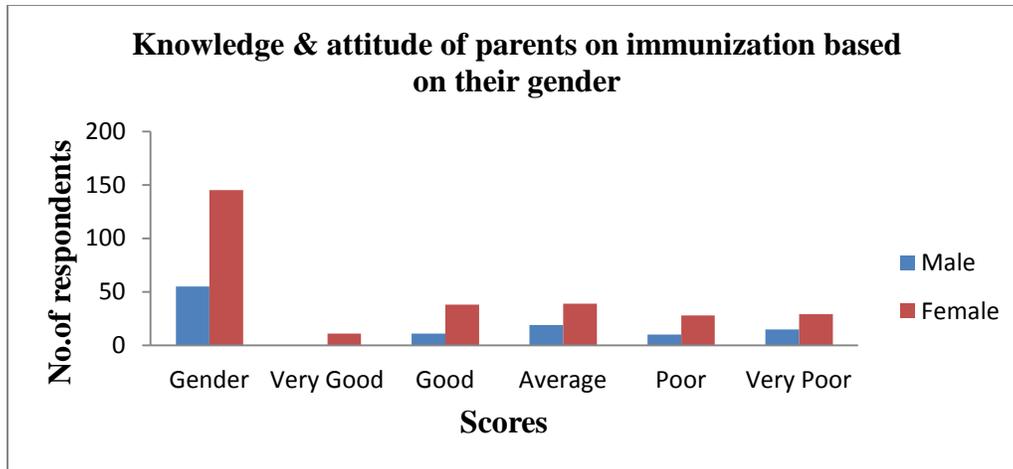


Figure 1: Distribution of Knowledge & attitude of the Parents with Gender

Mothers were the main decision makers regarding vaccination of the child. The level of significance for both parents shows that chi square P value is >0.1592. That means both male and female parents

are with equal knowledge. There is no significance between the male and female. So role of the gender was not influencing the knowledge and attitude regarding immunization of the children.

Table 3: Knowledge of parents based on their residential status

Characteristic	Response					Chi square P value
	Very good	Good	Average	Poor	Very poor	
Urban	09	20	18	10	07	64(32%)
Rural	02	29	40	28	37	136(68%)

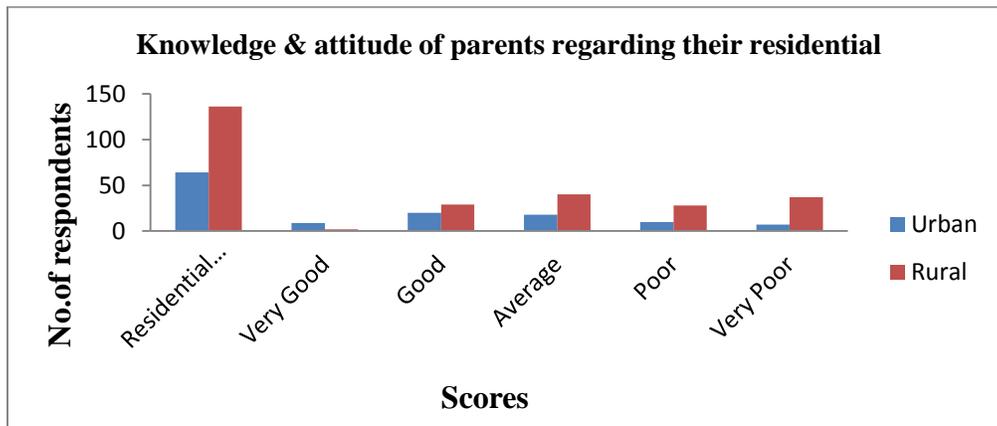


Figure 5.2: Distribution of Knowledge and attitude of the parents with their Residential

The table (5.3) represents knowledge and attitude of the parents based on their residential. Parents with from urban areas are 64(32%) numbers and with from rural areas are 136(68%) numbers. Chi square P value is 0.00047, and there is a level of significance

between the urban and rural areas of the parents. From urban parents out of 64, 9 members awarded as very good, and 20 members with good, 18 with average and 10 with very poor, and 07 with very poor. Whereas in rural parents only 02 with very

good, 29 with good, 40 with average, 28 with poor and very poor with 37 members. Urban parents have more knowledge compare with the rural area parents. The rural area parents 37 were with very poor lack of knowledge where as from urban only 7 members

with very poor lack of knowledge. The results tells overall that the urban parents have more knowledge compare with the rural parents on childhood immunization.

Table 4: Based on the level of education

Characteristic Level of education	Response					Total	P value
	Very good	Good	Average	Poor	Very poor		
Primary	3	18	33	24	29	107(53.5%)	0.00001
Secondary	3	20	12	5	5	45(22.5%)	
Graduation	5	9	4	0	1	19(9.5%)	
Post graduation	0	0	1	1	0	02(1%)	
No formal education	0	2	8	8	9	27(13.5%)	

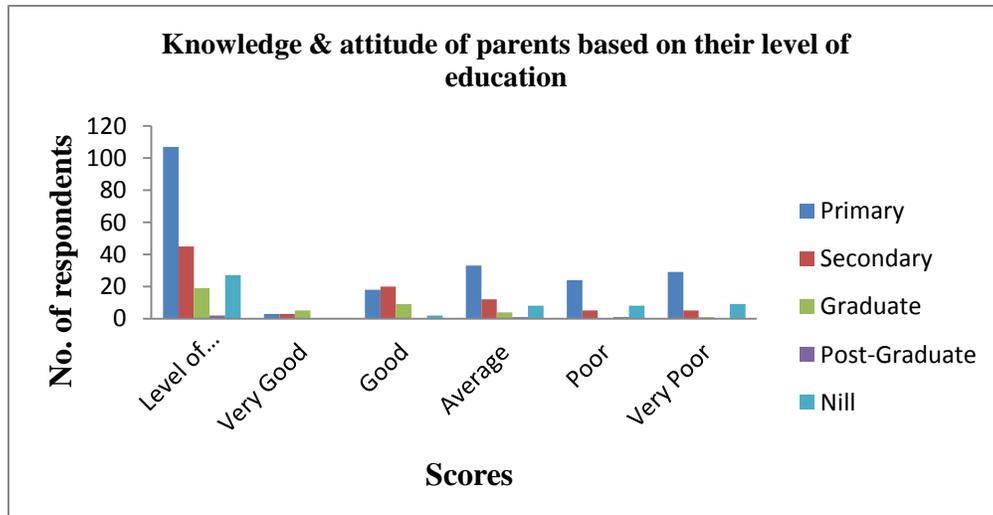


Figure 5.3: Distribution of Knowledge & Attitude of the parents with level of education

Table (5.4) represents the level of education, the parents with primary education was 107 (53.55%) numbers, and with secondary education was 45(22.5%) numbers, with graduation 19(9.5%) numbers, and with post graduation was 02(1%) members and parents with no formal education was 27(13.5%). There is a significance 0.0001 with the

level of education, and the primary, secondary parents are participated more in this study, the results overall explains that secondary and graduation have more knowledge compare to others. The parents with no formal education have poor knowledge on immunization.

Table 5 : Knowledge & attitude of parents on immunization based on number of children

Characteristic Number of previous pregnancies	Response					Total	P value
	Very good	Good	Average	Poor	Very poor		
None	06	20	27	12	22	87(43%)	0.76275
One	04	25	20	18	17	84(42%)	
Two	02	05	07	05	04	23(11.5%)	
Three	00	00	01	02	02	05(2.5%)	
Four	00	00	00	00	01	01(0.5%)	

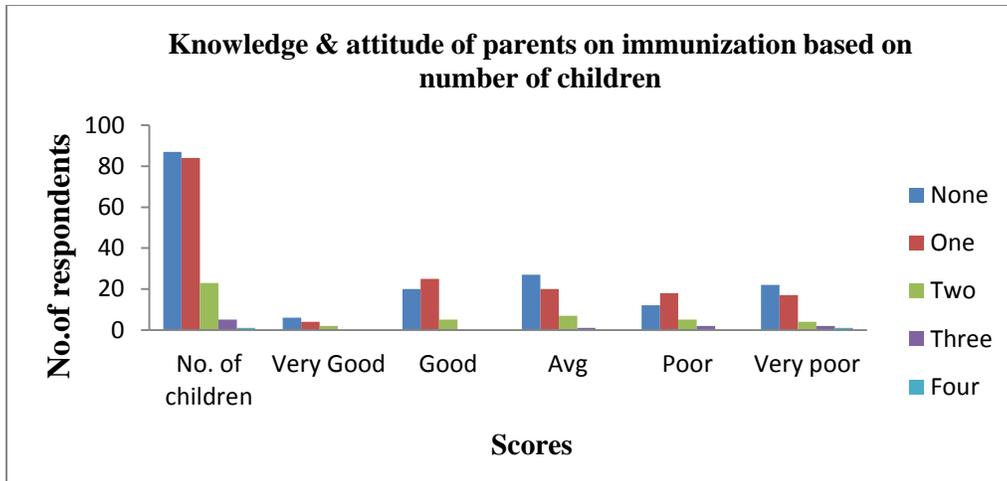
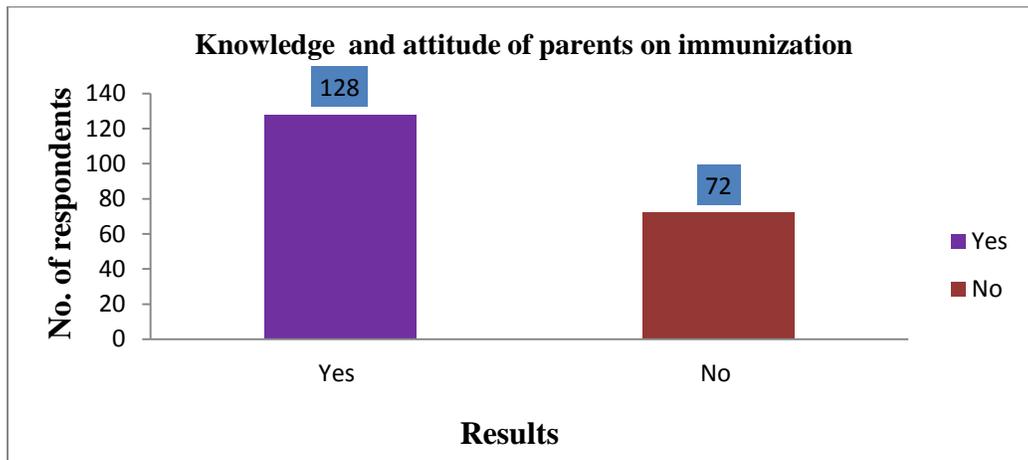


Figure 5.4: Distribution of Knowledge & attitude of the parents with number of children

The table (5.5) represents that the ranking is given to the parents based on their knowledge with their number of children. The total number of parents with NONE child is 87(43%), and no of parents with ONE child is total 84(42%), and no of parents with TWO children's 23(11.5%), and no parents with THREE child is 5(2.5%) at last no of parents with FOUR is 1(0.5%). The majority of the parents with NONE

having higher number and least number of parents with FOUR children is having only one member. Their no significance between the number of previous pregnancies, the P value was not accepted the level of significance 0.05 value. So the characteristic does not influence on the knowledge and attitude of the immunization.

Figure (5.5): Distribution of knowledge and attitude of the parents on childhood immunization



64% knew about vaccination and 36% don't know about vaccination.

DISCUSSION OF RESULTS

The results of the research offer insight into the knowledge, and attitude with regards to immunization among the parents. Over 90% of respondents were in favor of vaccination and

believed that it prevents disease. Moreover the parents from rural area are with very poor knowledge on childhood immunization.

In the present study almost 64% of the parents replied that they knew about childhood immunization and the

reason being that most of the parents are having secondary education and they are from urban area.

Assessment of knowledge of parents about immunization showed wide gap in the knowledge of urban and rural parents. When the socio demography was assessed, a low literacy level was found in the rural mothers. This was significant and needs to be addressed in order improve knowledge about vaccination strategies and its advantages, as most mothers are the primary caretakers and decision makers regarding vaccination in their families.

Our study has found a significant difference in parents from urban and rural areas in terms of their knowledge and attitude regarding vaccination. The parents from the urban (32%) set up were more aware and showed favorable attitude regarding vaccination than their rural counterparts (68%).

Education plays a key role on parent's knowledge and attitude of their childhood immunization. From our study reveals that secondary (22.5%) and graduated (9.5%) parents have Good knowledge and where as primary (53.5%) education parents with medium and illiterate (13.5%) parents are with very poor knowledge. Resulting that education and communication activities and media must be harnessed in creating awareness and knowledge about vaccines and vaccine preventable diseases.

Knowledge and attitude of parents who are already having children and those parents with first child was

seen and the result was found to be not significant. The consequence of this finding is that parents may think that only the first shot of the vaccine is sufficient to develop immunity and protect their children.

CONCLUSION

The results of the present research showed that parents had good knowledge and positive attitudes related to childhood immunization. Majority of the parents in rural areas were unaware about the vaccination and its implications when compared with the parents in urban areas. We found significant difference in the knowledge and attitude of mothers towards childhood vaccination based on their different level of education.

Educational interventions are needed to upgrade parents' knowledge with special emphasis on less educated and residents of rural areas. Health care workers at the grass root level must be trained and through them the importance of childhood vaccination disseminated to all rural areas.

In rural and small towns it has been suggested that health education campaign should target mothers to improve the child health status, and coverage of vaccines on VPD'S. For high coverage, communication efforts should focus on clarifying correct parental beliefs about immunization.

REFERENCES

- [1] Muhammad Asim, Nazia Malik, Haroon Yousaf., et al. An Assessment of Parental Knowledge, Belief and Attitude toward Childhood Immunization among Minorities in Rural Areas of District Faisalabad, Pakistan. *Mediterranean Journal of Social Sciences*.2012;3(11):153-159.
- [2] Yousif MA, Ahmed Abdul rahman Albarraq, Mustafa Awad., et al. Parents' Knowledge and Attitudes on Childhood Immunization, Taif, Saudi Arabia. *J vaccine &vaccination open access journal*.2013;5(1): 1-5.
- [3] Roos M. Bernsen, Fatmah R.Al-Zahmi, Noura A. Al-Ali., et al. Knowledge, attitude and practice towards immunizations among mothers in a traditional city in the united Arab emirates. *Journal of Medical Sciences* 2011;4(3):114-121.
- [4] Yousif MA, Ahmed Abdulrahman Albarraq, Mustafa Awad., et al. Parents' Knowledge and Attitudes on Childhood Immunization, Taif, Saudi Arabia. *J vaccine &vaccination open access journal*.2013;5(1): 1-5.
- [5] Waris Qidwai, Syed Sohail Ali, Semi Ayub., et al. knowledge, attitude and practice regarding immunization among family practice patients. *Journal of Dow University of Health Science*. 2007; 1 (1): 15-19.