

A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING NATIONAL IMMUNIZATION SCHEDULE AMONG MOTHERS IN NORTH INDIA

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ABSTRACT

Introduction: Immunization schedule is a series of vaccination including the timing of all doses which may be either recommended, or compulsory depending on the country of residence. Since last fifty years immunization has save the lives of many children. Vaccines are safe, simple and one of the most cost effective ways to save and improve the lives of children worldwide. However, many children in developing countries are reluctant to get immunized because of their living standards in community. Vaccines ensure that all children must be immunized, no matter what the circumstances are. In early years the mortality rate of child was high due to communicable diseases and that time immunization has saved three million lives worldwide. **Methodology:** The research project attempts to assess the level of knowledge regarding national immunization schedule for mothers attending OPD at AIIMS Patna. The objectives of the research project was to assess the level of knowledge regarding national immunization schedule for mother attending OPD, to find the association between the national immunization schedule and demographic variables, to provide health education to the mother about national immunization schedule. The research project was carried out in OPD at AIIMS Patna. The Sample comprised of all mothers who fulfilled the criteria of the research project. The sample was 100 in number. Pilot study was conducted on 10 samples and the tools were found to be feasible Data was collected by using a questionnaire and analyzed by descriptive and inferential statistics. The reliability of the questionnaire tool was 0.883. **Results:** The result of the research project shows that, 10% sample have excellent knowledge, 57% have very good knowledge, 28% have good knowledge and 5% having poor knowledge. A relationship between national immunization schedule and demographic variables like education level, religion, area of residence were assessed.

KEYWORDS: knowledge, national immunization schedule.

INTRODUCTION

“The child is god’s gift to the family. Each child is created in the special image and likeness of God for greater things; to love and to be loved.” Immunization schedule is a series of vaccination including the timing of all doses which may be either recommended, or compulsory depending on the country of residence.

Since last fifty years immunization has save the lives of many children. Vaccines are safe, simple and one of the most cost effective ways to save and improve the lives of children worldwide. However, many children in developing countries are reluctant to get immunized because of their living standards in community. Vaccines

ensures that all children must be immunized, no matter what the circumstances are.

In early years the mortality rate of child was high due to communicable diseases and that time immunization has saved 3 million lives worldwide.

Need and significance of the study

Prevention from infectious disease is one of the greatest benefits that any country can offer to its population.

Immunization is one of most effective, safest and efficient public health intervention for the prevention from several diseases among under five children. India

has the highest number of morbidity and mortality of under five children.

Immunization is the prevention which has decreased global morbidity and mortality. WHO estimates that Hib annually cause 3 million cases of serious illness and 4 lakh death world wide among under five children.

Before the initiation of expanded programme for immunization for tuberculosis, diphtheria, pertussis, tetanus, polio and measles was estimated to be fewer than 5% now not only has coverage increased to 79% it has been expanded to include vaccination for hepatitis B, haemophiles influenza type B, rubella, tetanus, and yellow fever. The impact of increased immunizations is clear from the decreasing incidence of many diseases. For example measles death decreased by 60% worldwide between 1999 and 2005 and polio, although missing the goal of eradication by 2005, has decreased significantly as there were fewer than 2000 cases in 2006.

Immunization protect us from six killer diseases (Tuberculosis Diphtheria, Pertusis, Tetanus, Polio, Measles) and also prevents its transmission. Without immunization, these diseases could be transmitted and spread in the population causing epidemics.

It is estimated that at least 4,00,000 kids die of these disease every year in India. India accounts for almost 40% of world wide childhood pneumonia cases. In most studies Hib is estimated to cause over 20% of life threatening childhood pneumonia. According to latest report by UNICEF, more than 1000 children under the age of 5 die because of pneumonia every day in India. It is estimated that 30% of meningitis cases are due to Hib infections. Incidence of Hib meningitis in India is estimated to be 50-70 cases for 1 lakh population, below the age of 5 years.

According to the vaccination coverage ranking Bihar comes at 23rd number among 27 states of India.

A descriptive study was conducted to assess the knowledge regarding immunization among mothers in Ahmedabad, Gujrat in the year of 2009 by Rachna Kapoor. Objective of the study was to assess knowledge of immunization among mothers of underfive and prepare health education programme regarding immunization and the tool used for study was questionnaire. Sample was 300 and study revealed that 73% of mothers belong to the age group of 21-30 years and were housewives. Knowledge are categorized in 3 categories good, average, and poor and 162 mothers have good knowledge 78 mothers have average knowledge and 60 mothers have poor knowledge.

A health survey conducted regarding immunization status in mothers by Shamila Hameed in North Kashmir in the year of 2011. The objective of study is assessing maternal knowledge and practice regarding

immunization by survey method. This study revealed that out of 300 samples 86.33% mothers having knowledge that vaccines prevent from disease and 13.67% mothers having low level of knowledge regarding immunization benefits.

Prema (2006) conducted a descriptive study on utilization of immunization services among underfive children at Raichur district Karnataka. 150 mothers (75 in rural and 75 in urban areas) have been selected an interview technique followed to assess knowledge and utilization of immunization services. The findings shows that total knowledge score was 50. In urban area 80% were having low awareness, 16% having average awareness, 4% having no awareness. In rural areas 96% of mothers were having low awareness and 4% mothers having average. And lack of knowledge both in urban and rural areas are related to mothers and their beliefs.

RESEARCH METHODOLOGY

- Research approach was quantitative research approach.
- Research design was non- experimental descriptive research design
- Research variable: Level of knowledge regarding immunization.
- Demographic variables: age, type of family, education, area of residence, previous knowledge, number of children, occupation, religion, distance of hospital from home, marriage duration.
- Setting of study: The research project was conducted in OPD at AIIMS, Patna.
- Population: in present research project population consist of all the mothers who were coming in OPD at AIIMS Patna.
- Sample and sampling technique: In present research report the sample comprise of 100 mothers who attends AIIMS, Patna OPD and for the collection of samples convenient sampling technique was used.

Sample selection criteria

The inclusion criteria of subjects in the research project were

Mothers are willing to participate in the research.
Mothers who are present at the time of data collection.

The exclusion criteria of the subjects in the research project were

Mothers who are not able to read, write and understand Hindi language.

Tools for the Study

The researcher used appropriate statistical technique for data collection and present in the form of table and diagrams.

Knowledge was analyzed by frequency and percentage distribution and level of knowledge was analyzed by mean and standard deviation.

In this research project the investigators had prepared two tools.

Tool 1- Questionnaire to assess the demographic variables.

This tool used to collect base line information it consist of 10 items, age, type of family, education, area of residence, previous knowledge, number of children , occupation , religion, distance of hospital from home, marriage duration.

Tool 2- Questionnaire to assess the level of knowledge regarding immunization. The knowledge questionnaire scores were categorized as follows: Excellent 16-20, Very Good 11-15, Good 6-10, Poor 1-5.

Content Validity

The content validity of tool was obtained from five expert from nursing field.

Reliability

Reliability of an instrument is the degree of consistency with which it measures the attribute it is supposed to be measure. Reliability of the tool was calculated by using pretest method and was conducted in 10 samples. The reliability was calculated by Cronbach's alpha and the value was 0.886.

Pilot Study

Pilot study is defined as a small-scale version or trail of the measure study. Pilot study was conducted in OPD at

AIIMS Patna. After obtaining permission from the head of the institution and informed consent from the mothers, the tool was administered to 10 mothers who attends OPD at AIIMS Patna. The purpose of the study was explained to the mothers and assured the confidentiality of personal information of mothers. The study was found feasible and practicable.

Data Collection Process

A formal written permission was obtained from the head of the institution and consent from the mothers for conducting the research project. The purpose of the research project was explained to the mothers and assured the confidentiality of personal information of mothers an informed consent form was taken from the mothers.

Data collection process was concluded by thanking each mother's participation and co-operation, the collected data than compiled for data analysis.

Findings

Analysis was defined as the process of organizing and synthesizing data in such a way that research questions can be answered and hypothesis tested. The plan for data analysis includes both descriptive and inferential statistics. The analysis was planned on the basis of objectives.

Table 1: Distribution of sample based on demographic variable.

n=100				
s. no	Demographic variables	Category	Frequency (f)	Percentage (%)
1	Age	11-30	79	79%
		31-60	21	21%
2	Type of Family	Joint	55	55%
		NUCLEAR	45	45%
3	Education Level	<10 Class	71	71%
		>10 CLASS	29	29%
4	Number Of Child	>2	39	39%
		<2	61	61%
5	Occupation	House Wife	73	73%
		WORKING	27	27%
6	Religion	Hindu	95	95%
		OTHERS	5	5%
7	Area Of Residence	Urban	32	32%
		RURAL	68	68%
8	Distance of Hospital from House	1-4km	73	73%
		>4	27	27%
9	Marriage Duration	<6	62	62%
		>6	38	38%
10	Previous Knowledge	From Hospital	50	50%
		Mass Media	50	50%

The table depicts about the frequency and percentage distribution of age, type of family, education level,

number of children, occupation religion, area of residence, distance of hospital from house, marriage

duration, and previous knowledge regarding immunization.

Description of level of knowledge of mothers regarding NIS.

Table 2: Frequency and percentage of distribution of mothers/ sample based on level of knowledge.

n=100		
Level Of Knowledge	Frequency (F)	Percentage (%)
Excellent	10	10%
Very good	57	57%
Good	28	28%
Poor	5	5%

The data presented in table 2. shows that majority of the sample have very good knowledge (57%), most of sample have good knowledge (28%), few of them have excellent knowledge (10%) and very few of them have poor knowledge (5%).

Table 3: Pretest scores of experimental group.

Mean	median	SD
11.8673	12.0000	3.30772

Major finding of the research project as follows

- Majority (95%) of sample belongs to Hindu religion
- Majority (79%) of sample was between the age of 1-30 years
- Majority (73%) of sample was house wife
- Majority (71%) of sample was 10th pass
- 5% mother having poor knowledge
- 28% mother having good knowledge
- 57% mother are having very good knowledge
- 10% mother are having excellent knowledge
- There is a significant association between knowledge of mother and demographic variable such as age, education of mother, number of children, marriage duration.

CONCLUSION

In conclusion, our research was to find the level of knowledge regarding immunization schedule among mother who were attending AIIMS Patna OPD, for the data collection we used questionnaire and rating scale, and the findings shows 5% mother were having poor knowledge, 28% were having good knowledge, 57% having very good knowledge and 10% mother were having excellent knowledge regarding immunization schedule.

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