

A Descriptive Study to Assess the Knowledge Regarding Immunization Among Mother of Under-Five Children at Selected Hospital Alwar

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Abstract

Introduction : Immunization is one of the most cost effective public health interventions and largely responsible for reduction of under-5 mortality rate. However, vaccine preventable diseases (VPDs) are still responsible for over 5 lakhs deaths annually in India. This underlines the need of further improvement. Today, India is a leading producer and exporter of vaccines, still the country is home to one-third of the world's unimmunized children. There are a number of reasons why India lags behind its many less developed neighbors in vaccination rates.

Methodology : The Descriptive study pretest control group research design was considered as the appropriate design for this study. The study design depicted that on day one a pretest was administered to the assess the gain in knowledge using the same self-administered questionnaire. The present study was planned to conduct in Selected Hospitals, Alwar. In the present study the selection of setting was done by convenient sampling technique. The total study sample consists of 75 mothers of under- five children.

Results : Level of Knowledge score were found 0-35% were poor, 36-70% were average and 71-100 were found good knowledge regarding Immunization among mother of under-five children at selected Hospital, Alwar.

Conclusions : The whole study was cost effective, simple and carried out in an acceptable way to assess the level of knowledge regarding immunization among the mother of under five children at selected hospital Alwar.

Keywords : Assess; Knowledge; Under Five Children

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Introduction

The inter-state variations of immunization coverage in urban areas, reveals a service coverage gap which calls for a rethink on resource allocation and strengthening

processes to improve immunization coverage amongst urban poor. Debilitating environmental conditions and high population density in slums expedite disease transmission. Comparisons of urban-rural disease incidence indicate a

particular urban risk for vaccine preventable diseases. This paper attempts to understand the current scenario and challenges in improving immunization coverage in urban slums; immunization being one of the most successful public health interventions of the past century. It also discusses possible mechanisms for effectively reaching the often left-out urban poor. Coordinated activities by the multitude of providers, accurate information based outreach, effective monitoring and community enablement to demand quality services are critical for improving utilization of immunization services by a heterogeneous urban poor population.

Vaccination is a very essential part of child's health. Vaccination programme is the key step for the vaccine preventable diseases in children.

Monitoring and assessment of coverage rates in national health programmes is becoming increasingly important. We aimed to assess the accuracy of officially reported coverage rates of vaccination with diphtheria-tetanus-pertussis vaccine (DTP3), which is commonly used to monitor child health interventions. Our results suggest that officially reported DTP3 coverage is higher than that reported from household surveys. This size of the difference increases with the rate of reported coverage of DTP3. Results of time-trend analysis show that changes in reported coverage are not correlated with changes reported from household surveys.

Survival is an enormous challenge for children younger than five years old, especially for those under one year. Immunization is perhaps one of the most effective and efficient ways of protecting the health of children and women worldwide against some of the most lethal and debilitating diseases in modern times. Nevertheless, though the Expanded Program on Immunization (EPI) was formally launched in Bangladesh in 1979, EPI efforts were seriously considered only after 1985 when the country made its commitment at the United Nations to reach universal child immunization by 1990. Due to the continuing concerns and interests of all stakeholders in EPI, the program has had remarkable success in Bangladesh to increase its immunization coverage for children, for at least one dose, from 2% in the mid-1980s to 95% currently.

Methodology

Research approach : Descriptive research is an applied form of research that involves finding out how well a programme, practice/policy is working. It involves the collection and analysis of information relating to the functioning of a programme or procedure with the aim of assessing knowledge.

The present study was aimed to assess the knowledge immunization among mothers of under-five children at selected hospital Alwar.

Research design : The research design of the study spells out the basic strategies that the researcher adopt to develop accurate and interpretable evidence. It is the overall plan for how to obtain answer to the question being studies and how to handle some of the difficulties encountered during the research process. The Descriptive study pretest control group research design was consider as the appropriate design for this study.

Variables : Variables are qualities, properties or characteristics of persons, things that change of very.

Dependent variable : It was the outcome variable of interest. The variable that was hypothesized to depend on or caused by another variable. In this study, knowledge of mother regarding immunization under five children as measured by the structured questionnaire was the dependent variable types of variables were used.

Setting of the study : The present study was planned to conduct in Selected Hospitals, Alwar. In the present study the selection of setting was done by convenient sampling technique.

Population : In this study, the population includes immunization among mothers of under-five children Selected Hospitals, Alwar.

Sample and sampling technique : In this study the immunization among mothers of under-five children Selected Hospitals, Alwar.

Sample size : The total study sample consists of 75 mothers of under- five children.

Data collection tools and techniques : According to "Data collection is the gathering of information needed to address a research problem.

The mother under five children from, Selected Hospitals, Alwar were selected for the study by using the convenient sampling technique. Formal administrative permission was obtained from the concerned authorities of the Selected Hospitals, Alwar. Data was collected from 17-10-2019 to 20-10-2019 of selected Hospitals, Alwar.

The purpose of study was explained to the samples and an informed consent was taken before starting the study. There was no attribution of subjects.

Validity : The prepared instrument along with the objectives, blue print & tool, structure teaching programme was submitted to 7 experts. Content validity was established. The tool got final shape after the modifications based on the opinion of the experts. The tool consisted of 8 items under the socio demographic data, 30 items under the knowledge.

Reliability: The reliability of the structured knowledge questionnaire was computed by KR-20 formula and reliability was found to be .942

Results

Section - 1 : Major findings are summarized as follows:

1. **Demographic distribution level knowledge on immunization among mothers of under-five children at selected hospital in Alwar :** (28) 37.30% respondents were belonging to the age group of below 18-25 years, (22) 29.3% Respondents were belonging to the age group of between 26-30 years, (20) 26.7% respondents were belonging to the age group of between 31-35 years and (5) 6.7% respondents were belongs to the age group of between 36 years and above. The maximum participant in the research study from the age group of 18-25 years.
2. **Distribution of Immunization among mothers of under-five children by Number of children under five in family :** (27) 36.0% respondents were belonging to the 1, (19) 25.3% respondents were belonging to the 2, (24) 32.0% respondents were belongs to the 3 and (5) 6.7% respondents were belongs to the 4. The maximum participant in the research study from the Number of children under five in family group of one group. belongs to the 4.

The maximum participant in the research study from the gender group of joint family

3. **Distribution of Immunization among mothers of under-five children BY Education :** Immunization among mothers of under-five children have participate in the study. (31) 41.3% respondents were belonging to the illiterate, (19) 25.30% respondents were belonging to the primary, (20) 26.7% respondents were belonging to the secondary and (5) 6.7% respondents were belonging to the graduate. The maximum participant in the research study from the Education group of Illiterate.
4. **Distribution of Immunization among mothers of under-five children BY Occupation :** Immunization among mothers of under-five children who have participate in the study. (21) 28.0% respondents were belong to the Housewife, (23) 30.70% respondents were belong to the Employed, (15) 20.0% respondents were belongs to the Business and (16) 21.3% Respondents were belongs to the Agriculture. The maximum participants in the research study from the type of family group of Housewife.
5. **Immunization among mothers of under-five children by Type of family :** Immunization among mothers of under-five children who have participate in the study. (34) 45.3% respondents were belongs to the Nuclear and (41) 54.7% Respondents were belongs to the Joint. The maximum participant in the research study from the type of family group of illiterates.
6. **Distribution of Immunization among mothers of under-five children by Family income per month :** Immunization among mothers of under-five children who have participate in the study. (21)28.0% respondents were belonging to the less than 6500, (20) 26.7% respondents were belongs to the 6500 to 14000, (28) 37.3% respondents were belongs to the 14001 to 32000 and (6) 8.0% respondents were belongs to the above 32000. The maximum participant in the research study from the Family income per month group of below 6500.

7. **Distribution of immunization among mothers of under-five children by Attended any program on immunization :** Immunization among mothers of under-five children who have participate in the study. (40) 53.3% respondents were belonging to the yes and (35) 46.7% respondents were belongs to No. The maximum participant in the research study from the Attended any program on immunization group is Yes.
8. **Distribution of Immunization among mothers of under-five children BY Religion :** Immunization among mothers of under-five children who have participate in the study. (19) 25.3% respondents were belonging to the Sikh, (20) 26.7% respondents were belonging to the Muslim, (26) 34.7% respondents were belonging to the Hindu and (10) 13.3% respondents were belonging to the others. The maximum participant in the research study from the Religion by Hindu.

Section - 2 : Scores and responses of participants on the level of knowledge regarding Immunization among mother of under-five children at selected Hospital Alwar.

Table 01 : Level of Knowledge

N = 75

Level of knowledge	Pre-test	
	Frequency (f)	Percentage (%)
Poor 0-35%	32	42.7
Average 36-70%	30	40.0
Good 71-100%	13	17.3
Total 75 100.0	75	100

Table shows the pre level of knowledge regarding knowledge regarding Immunization among mother of under-five children at selected Hospital Alwar.

Section - 3 :

1. Association between the knowledge on Immunization among mothers of under-five children with their Age (Year). Date presented in the table revealed that there

is a significant association between the knowledge on Immunization among mothers of under-five children with their Age (Year) as the calculated Chi-square value 14.028 was greater than the tabulated value 12.591 at $p > 0.05$.

2. Association between the knowledge on Immunization among mothers of under-five children with their Number of children under five in family Data presented in the table revealed that there was significant association between the knowledge of Immunization among mothers of under-five children with their Number of children under five in family as the calculated Chi-square value 12.897 is greater than the tabulated value 9.488 at $p > 0.05$.
3. Association between the knowledge on Immunization among mothers of under-five children with their Education. Data presented in the table revealed that there was significant association between the knowledge on Immunization among mothers of under-five children with their Education as the calculated Chi-square value 13.085 is greater than the tabulated value 9.488 at $p > 0.5$.
4. Association between the knowledge on Immunization among mothers of under-five children with their Occupation. Data presented in the table revealed that there was significant association between the knowledge on the immunization among mothers of under-five children with Occupation as the calculated Chi-square value 12.996 is greater than the tabulated value 12.591 at $p > 0.05$.
5. Association between the knowledge Immunization among mothers of under-five children with their Family income per month Data presented in the table revealed that there was significant association between the knowledge on Immunization among mothers of under-five children with Family income per month as the calculated Chi-square value 12.783 is greater than the tabulated value 12.592 at $p > 0.05$.
6. Association between the knowledge on Immunization among mothers of under-five children with their Attended any program on diarrhea. Data presented in the table revealed that there was no significant

association between the knowledge on Immunization among mothers of under-five children with Attended any program on diarrhea as the calculated Chi-square value 1.569 is less than the tabulated value 9.488 at $p > 0.05$

Discussions

The findings of the study were discussed in terms of objectives and hypothesis of the study. The discussion follows keeping the objective in mind. The tool had two sections, Section I deals with demographic data, Section II deals with structured questionnaire on immunization. The present study was designed to assess the "A descriptive study to assess the knowledge regarding immunization among mothers of under-five children at selected hospital in Alwar." The finding of the study have been discussed with reference to the objectives and hypothesis stated in chapter II, along with finding of the other studies.

Conclusions

1. Association between the knowledge on Immunization among mothers of under-five children with their Age (Year). Data presented in the table revealed that there is a significant association between the knowledge on Immunization among mothers of under-five children with their Age (Year) as the calculated Chi-square value 14.028 was greater than the tabulated value 12.591 at $p > 0.05$.
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Implications

The findings of the study have implications in various areas of nursing practice, nursing education, nursing administration and nursing research.

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Conflict of Interest : There are no conflicts of interest

References

1. Dr. Vipin M Vashishtha, 50 years of immunization in India, Indian pediatric 2013;50: 111-118.
2. Siddharth Agarwa, Arti Bhanot Geetanjali. Goindi, Understanding and addressing Childhood Immunization, Indian. Pediatrics, 2005;42:653-663.
3. Murray CJ 1, Shengelia B, Gupta N, Moussavi S, Tandon A, Thieren M, Validity of reported vaccination coverage in 45 countries, M, 2003 SEP.27;362(9382):1022-7.

4. Prathibha D,soouza V,umarani J,Teaching package improves mothers knowledge on vaccine preventable diseases and vaccination, Int J Res Med Sci. 2014; 2(3):976-982.
5. Chowdhury AMR, Aziz KMA, Bhuiya A. The ‘near miracle’ revisited: social science perspectives of the immunization program in Bangladesh. Amsterdam: Het Spinhuis, 1999:138
6. Expanded Program on Immunization (EPI). National Coverage Evaluation Survey Report. Dhaka: Ministry of Health and Family Welfare, 2000.
7. Expanded Program on Immunization (EPI). National Coverage Evaluation Survey Report. Dhaka: Ministry of Health and Family Welfare, 2006.
8. National Institute of Population Research and Training (NIPORT). Bangladesh Demographic and Health Survey 1999-2000. Dhaka: Mitra and Associates, ORC Macro, 2001.
9. Jamil K, Bhuiya A, Streatfield K, Chakrabarty N. The immunization program in Bangladesh: impressive gains in coverage, but gaps remain. Health Policy and Planning 2005;14(1):49-58.
10. Uddin J, Ashraf A, Sirajuddin AKM, Alam M, Tunon C. Incorporation of community’s voice into Health and Population Sector Program of Bangladesh for its transparency and accountability. Dhaka: ICDDR, B, 2001: Working Paper No 148.

