

7-1-2016

Mother's knowledge on immunization schedule of her child: A descriptive Survey

Vinish V Mr

Maipal College of Nursing, vinish.v@manipal.edu

Follow this and additional works at: <https://impressions.manipal.edu/mjnhs>



Part of the [Nursing Commons](#)

Recommended Citation

V, Vinish Mr (2016) "Mother's knowledge on immunization schedule of her child: A descriptive Survey," *Manipal Journal of Nursing and Health Sciences*: Vol. 2: Iss. 2, .
Available at: <https://impressions.manipal.edu/mjnhs/vol2/iss2/13>

This Original Research is brought to you for free and open access by the MAHE Journals at Impressions@MAHE. It has been accepted for inclusion in Manipal Journal of Nursing and Health Sciences by an authorized editor of Impressions@MAHE. For more information, please contact impressions@manipal.edu.

Mother's knowledge on immunization schedule of her child: A descriptive Survey

Cover Page Footnote

I express my sincere gratitude to the authorities of Surathkal PHC for their support and all the subjects without whose substantial help and co-operation, this study would not have been accomplished.

Mother's knowledge on immunization schedule of her child: A descriptive Survey

Vinish V

Email: vinish.v@manipal.edu

Abstract

Introduction: Government of India had initiated the Universal Immunization Program (UIP) in 1985 with the objective of eradicating vaccine preventable diseases from India. In order to boost up the vaccination coverage the Government initiated various proactive programs to engage the public. **Objective:** The present study is aimed at determining the mothers' knowledge on the importance of immunization programme and finds the association of the knowledge scores with selected demographic variables. **Methods and Materials:** Descriptive method with survey approach was used in this study. Mothers who brought their children for immunization were the samples. Structured knowledge questionnaire was used for collecting the data from 50 samples that were selected by purposive sampling technique. **Results:** Findings of the study showed that most of the samples were getting information about immunization from the Anganwadi workers. On assessment, it was found that 76% of the subjects had poor knowledge about the topic. As per the chi-square, value researcher concluded that there is no significant association with the participants' existing knowledge and the selected demographic characteristics. **Conclusion:** The study concluded that majority of mothers did not possess knowledge regarding the importance of universal immunization programme. It is very essential to provide adequate education regarding the vaccine preventable diseases and the importance of Immunization Programme along with the advertisement of various health days to the public.

Key words: Knowledge, Mothers, under- five, Universal Immunization Programme (UIP)

Introduction

To protect all infants from six vaccine preventable diseases, Government of India launched the Universal Immunization Programme (UIP) in 1985 (Singh, Badole, & Singh, 1994). Pulse Polio Initiative (PPI) campaign was introduced by the Government of India to widen the vaccination coverage in 1995, which gives a great importance to advertisements and IEC for the immunization programme (Rani, Baker, & Bonu, 2003).

In 1988, after eradicating small pox globally, WHO introduced the global Polio Eradication Initiative. The key strategy to achieve the goal was the mass immunization campaigns with adequate publicity and awareness about the programme. It has resulted in

drastic reduction in cases of polio, which decreased from 125 countries to four endemic (Pakistan, Afghanistan, India, and Nigeria) countries (WHO/ UNICEF, 2006).

Even though the budget allocation is very high, the benefits of these programmes are not reaching the majority of children who are at high risk of these vaccine preventable diseases. In India out of 26 million infants, all due vaccines were taken by only 61%. Ensuring that all the infants are getting the benefits of vaccines in India is a challenging task. (UNICEF, 2010)

However, various studies revealed that there is a big difference between the planned objectives and the achieved targets. To quote, "achievement of the target of protecting 100 % of pregnant women with Tetanus Toxoid vaccination and 85 % of infants with vaccines remains a distant dream" (Gupta & Murali, 1989).

Vinish V

Lecturer, Dept. of Community Health Nursing, Manipal College of Nursing, Manipal, Manipal University, Manipal

How to cite this article: Vinish, V. (2016). Mother's knowledge on immunization schedule of her child:-A descriptive Survey. *Manipal Journal of Nursing and Health Sciences*, 2(2), 41-45.

To check awareness and knowledge of immunization a cross sectional study with descriptive design was conducted among the mothers of Ahmedabad. The result showed that only 55 % of the samples knew about poliomyelitis, 15 % possess knowledge about Hepatitis B and shockingly 80 % of them had no knowledge about Vitamin A (Kapoor, 2010).

While attending the pulse immunization camp the investigator noticed that parents who bring their children are not aware about the immunization programme and its importance while talking to them. Thus, personal experience of the investigator with those parents motivated the researcher to conduct a study to assess the mother's knowledge on immunization of their children.

Objectives

Objectives of the study were to

1. determine the existing knowledge on importance of immunization programme among the mothers of under-five children
2. rule out the association between the knowledge scores with selected demographic variables

Materials and Methods

The study design selected to attain the objective was descriptive and survey approach was found much beneficial for the attainment of objectives. The study was conducted in Surathkal PHC at Mangalore where immunization camp is conducted weekly. Samples for the study were fifty mothers who brought their children for immunization to Surathkal PHC immunization camp. The samples for the study were selected by using the purposive sampling technique. Prior to research study administrative permissions were obtained from District Health Officer, Mangalore, and Medical Officer of Surathkal Primary Health Centre. Keeping in mind the ethical aspect of research, data were collected after obtaining informed consent from the subjects. The respondents were assured of anonymity and confidentiality of information provided by them. The researcher himself has collected the data from 50 samples.

Structured knowledge questionnaire, which was developed by the investigator and validated by seven experts in the field of community health nursing and

two experts in the field of community medicine, was used for collecting the data. The tool was divided into two parts,

Part I: Demographic characteristics:-This was designed to elicit the personal information and source of information on immunization from respondents, consisting of six items.

Part II: Structured knowledge questionnaire on immunization programme:-The items were divided into two main areas. Area I:-Knowledge about vaccine preventable diseases and

Area II:-Knowledge on Universal Immunization Programme. The participants were instructed to select the most appropriate answer for the questions and place a tick (✓) mark against the corresponding places. Both areas consist of 12 items and each item had a score of one for the correct answer and zero for the wrong answer. Thus, altogether there are 24 items with a maximum possible score of 24. Split half method was used to test reliability of structured knowledge questionnaire and the value was $r = 0.82$.

Result

The collected data was coded, entered in a master data sheet, and the SPSS was used to analyze it. Frequency and percentages of demographic variables were analyzed. Association was ruled out by using the chi-square test.

Results of the study are organized as follows

a) Description of demographic variables

Table 1: Frequency and Percentage Distribution of Samples N=50

Socio – Demographic Variable	Frequency	Percentage
Age group (years)		
21-28	36	72
29-36	10	20
37-44	4	8
Religion		
Hindu	33	65
Muslim	14	30
Christian	3	5
Others	-	0
Education		
Illiterate	10	20
Primary education	34	68

Vinish V: Mothers' knowledge on immunization schedule

Socio – Demographic Variable	Frequency	Percentage
Secondary education	1	2
Pre university and above	5	10
Occupation		
Unemployed	36	72
Labourers	10	20
Service	4	8
Type of family		
Joint	10	20
Nuclear	36	72
Extended	4	8
Source of Information on immunization		
Health Worker	8	16
TV	14	28
Radio	1	2
Anganwadi Worker	20	40
Neighbours	1	2
Hospital	6	12

Table 1 shows that majority 72 % of participants were in the age of 21 to 28 years. Among the respondents, 72 % were unemployed and 65 % of them follow Hindu religion. Sixty-eight per cent had primary education and 72 % were from nuclear family. It also says that Anganwadi workers were the main source of knowledge for 20 (40%) mothers. It was noted that there was considerable difference with the use of other sources of information like radio and neighbours when compared with Anganwadi workers and television as the source for information.

b) Assessment of knowledge levels of mothers on immunization programme

In order to assess the level of knowledge scores of subjects, the percentage scores were graded arbitrarily as follows: poor level of knowledge $\leq 33\%$, average knowledge 34to66%, and good knowledge 67to100% and is presented in table 2.

Table 2:
Frequency and Percentage Distribution of Mothers Based on Their Knowledge Scores N=50

Level of knowledge	Range of score in percentage	Number of respondents	Percentage (%)
Poor	0 – 33	38	76.00
Average	34 – 66	10	20.00
Good	67 – 100	02	04.00

The data presented in the Table 2 shows that majority of the subjects 38 (76%) had poor knowledge, 10

(20%) had average knowledge and only 2 (04%) had good knowledge on immunization. This indicates the need of creating awareness among the participants on the topic.

c) Area wise Analysis of Mean, SD, and Mean Percentage of Knowledge Scores of

Samples on Immunization Programme

Table 3:
Area wise mean, SD, and mean percentage of knowledge scores of samples on immunization programme N=50

Knowledge area	Mean \pm SD	Mean Percentage
Area I (Knowledge about vaccine preventable diseases)	5.90 \pm 2.40	28.32
Area II (Knowledge on Universal Immunization Programme)	3.82 \pm 1.36	24.71

The data presented in the Table 3 revealed that the subjects scored the highest in the area of Knowledge about vaccine preventable diseases with a mean score of 5.90 followed by Knowledge on UIP with mean score of 3.82. Mean deviation of the highest in the area of Knowledge about vaccine preventable diseases and the lowest in the area of Knowledge on UIP. Participants had the highest mean percentage in the area of Knowledge about vaccine preventable diseases with 28.32 % followed by area of Knowledge on UIP with 24.71 %.

d) Comparison of general Educational Status and Knowledge on immunization

Table 4:
Comparison on Mother's General Educational Status and Knowledge on Immunization N=50

Educational status	Knowledge on UIP			
	Yes		No	
	Frequency	Percentage	Frequency	Percentage
Illiterate	3	6	7	14
Primary education	15	30	19	38
Secondary education	1	2	0	0
Pre university and above	2	4	3	6

Knowledge of mothers about immunization programme was compared along with their common educational status. The sample who gave at least one correct response on immunization were considered

having knowledge of the topic and those who did not give a single correct response were considered not possessing knowledge of immunization irrespective of their common educational status. It shows that majority of samples (58%) did not possess any idea regarding vaccine preventable disease and about strategies of UIP. Interestingly subjects who have the educational status of PUC and above also were not able to score on immunization (Table 4).

e) Association between knowledge scores with selected demographic characteristics

Table 5:
Association between Knowledge Scores with Selected Demographic Characteristics N=50

Demographic characteristics	χ^2	df	p value	Inference
Age	3.590	2	0.464	NS
Religion	2.760	1	0.599	NS
Occupation of mother	0.893	2	0.925	NS
Educational status of the mother	3.650	3	0.455	NS
Type of family	5.500	2	0.239	NS
Source of knowledge	4.950	4	0.292	NS

(Table value=3.84, df=1; Table value=5.99, df=2; Table value=7.81, df=3; Table value=9.48, df=4; NS - Not significant)

Data presented in Table 5 reveals that the calculated chi-square value of all the demographic characteristics like age, religion, occupation of mother, education of mother, type of family, source of knowledge are lower than that of table values at significance level of 0.05. As a result, null hypothesis is accepted and concluded that the existing knowledge of subjects was not significantly associated with the selected demographic characteristics.

Discussion

Present study was conducted to assess mother's knowledge of immunization programme. Statistical values revealed that majority of the subjects (76%) had poor knowledge, 20% had average knowledge, and 04% had good knowledge on the topic. Analysis of the association with demographic characteristics revealed that the calculated chi-square value at 0.05 level of significance of all the personal characteristics is lower than that of the table values. Hence, the research hypothesis can be rejected and the researcher reached the conclusion that the existing knowledge of the samples was not significantly associated with the selected demographic characteristics of the samples. It

is very essential to provide adequate education regarding vaccine preventable disease and the importance of timely vaccines for children in the strategies of UIP. The present study findings were supported by a study conducted in Mangaluru on the effectiveness of teaching package on vaccine preventable diseases and vaccination. Quasi-experimental study shows that majority of the mothers are missing the vaccine due dates of their children because of lack of knowledge on the requirement of vaccination for children. The study also suggests that if providing adequate knowledge to caretakers of children can ensure cent percentage objective of UIP (Prathiba & Umarani, 2014.).

A study conducted in Uttar Pradesh also supported the findings of the present study. A prospective study conducted in Uttar Pradesh on achievements, roadblocks, and future of immunization in India. The study revealed that the major reasons for lack of achievement of of vaccination programmes in India are less awareness about the need of the programme. It strongly recommends the high demand of Information Education and Communication (IEC) and awareness programme on immunization to public in order to achieve the major objectives of the immunization programme in India (Vashitha & Kumar, 2013).

The present study results are supported by a survey conducted among 90,000 mothers all over India. Result of the survey states that lack of awareness and motivation is the major reason for missing the vaccine for the children. The survey suggests that likelihood of vaccination increases with mother's age, exposure to mass media and knowledge about immunization. It also states that health personnel can create awareness regarding immunization among mothers in large volume (Patra, 2003).

Limitations of the study

- Only one immunization camp was selected for the study due to limited time for data collection.
- The study was conducted in a selected rural area, restricting the generalization of the findings.

Recommendations

Based on the present study findings the following recommendations were put forward for further research:

- To generalize the findings a similar study can be undertaken on a larger sample.
- A comparative study can be done between mothers in urban and rural areas.
- An experimental study can be conducted to know the effectiveness of the intervention.

Conclusion

This study concluded that majority of the mothers were blindly taking their children to vaccination centres without having any idea about vaccines and vaccination schedule. So there should be compulsory provision for health education sessions for mothers with main emphasis on importance of vaccination. Due to low awareness, many mothers were missing the vaccine due dates of their children. Two good sources for passing health education messages to mothers were Anganwadi workers and television.

Acknowledgements

I express my sincere gratitude to the authorities of Surathkal PHC for their support and all the subjects without whose substantial help and co-operation, this study would not have been accomplished.

Source of support in form of grants: None

Conflict of interest: None declared

References

Singh, M. C., Badole, C. M., & Singh, M. P. (1994). Immunization coverage and knowledge practice

of mothers regarding immunization in rural India. *Journal of public health*, 38(3), 103-107.

Rani, M., Baker, T. D., & Bonu, S. (2003). "The impact of the national polio immunization campaign on levels and equity in immunization coverage: Evidence from rural North India". *Social Science Medicine*, 1807-1819.

UNICEF. (2010). *Coverage Evaluation Survey: All India Report 2009*. New Delhi: Government of India and Unicef.

WHO/UNICEF. (2006, JULY). Retrieved on OCT 2012, from www.who.int/vaccines-surveillance

Gupta, J. P., & Murali. (1989). *National Review of Immunization Programme in India*. New Delhi.: National Institute of Health and Family Welfare.

Kapoor, R. (2010). Awareness and knowledge of mothers of under five children regarding immunization in Ahmedabad. *Healthline*, 1(1). 39-43

Prathiba, V., & Umarani, J. (2014). Teaching package improves mothers knowledge on vaccine preventable diseases and vaccination: a Quasi experimental study. *International Journal of Research in Medical Sciences*, 2(3), 976 - 982.

Vashitha, V. M., & Kumar, P. (2013). 50 years of Immunization in India: Progress and Future. *Journal of Indian Pediatrics*, 50(1), 111-118.

Patra, N. (2003). Universal immunization programme in India: The determinants of childhood immunization. *International Journal of Scientific Study*, 3,34-38.