

# A Study to Assess the Effectiveness of Planned Teaching Program on Immunization on Knowledge of Mothers Visiting a Selected Maternity Center of Delhi

## Madhu Bala<sup>1</sup>

## Abstract

All mothers wish good health for their children. Health workers desire all children are immunized against vaccine preventable diseases. Immunization is vital; it protects nearly 3/4<sup>th</sup> of children against major childhood illness. There are several diseases, which can be easily prevented by timely vaccination as a part of routine immunization. Every child has the right to benefit from the appropriate traditional and new life-saving vaccinations. A study was conducted with an objective to evaluate the effectiveness of planned teaching program on knowledge of mothers on immunization of their children visiting a selected maternity center of Delhi. Research approach used for the study was quantitative and the research design used was pre-experimental research design. A structured questionnaire was used to assess the knowledge of mothers regarding immunization. It contains 15 items to judge the knowledge regarding child immunization. Study findings revealed that the mean post-test knowledge score (10.9) was more than the mean pre-test knowledge score (6.9). There was mean difference of 4 between mean pre-test and post-test score. Hence the teaching program was found to be effective in improving the knowledge of mothers regarding immunization.

**Keywords:** Immunization, Mother, Knowledge

## Introduction

Immunization can occur naturally when a microbe or other antigen is received by a person who has not yet come into contact with the microbe and has no pre-made antibodies for defense. The immune system will eventually create antibodies for the microbe, but this is a slow process and, if the microbe is deadly, there may not be enough time for the antibodies to be used. Artificial active immunization is where the microbe is injected into the person before they are able to take it in naturally. The microbe is treated so that it will not harm the infected person. Depending on the type of disease, this technique also works with dead microbes, parts of the microbe, or treated toxins from the microbe. A common example of this form of active immunization is vaccination.<sup>1</sup>

Immunization is vital; it protects nearly 3/4<sup>th</sup> of children against major childhood illnesses. There are several diseases, which can be easily prevented by timely vaccination as a part of routine immunization. Every child has the right to benefit from the appropriate traditional and new life-saving vaccinations. Parental decisions regarding immunization are very important

<sup>1</sup>Associate Professor, Lakshmi Batra College of Nursing, Batra Hospital and Medical Research Centre, New Delhi.

E-mail Id: madhubala.cancer9@gmail.com

Orcid Id: http://orcid.org/0000-0002-5397-0540

**How to cite this article:** Bala M. A Study to Assess the Effectiveness of Planned Teaching Program on Immunization on Knowledge of Mothers Visiting a Selected Maternity Center of Delhi. *Int J Nurs Midwif Res* 2017; 4(2): 13-16.

**Digital Object Identifier (DOI):** 10.24321/2455.9318.201712

ISSN: 2455-9318

for increasing the immunization rate and compliance and for decreasing any possible immunization errors. Parents' knowledge and practices regarding immunization are the major factors that contribute to their vaccination decisions.<sup>1</sup>

There are many barriers against immunization, including misinformation about vaccines, adverse effects of vaccines, vaccine-preventable diseases, and disease development after the administration of vaccines.<sup>1</sup>

The purpose of vaccination or immunization is to artificially induce active immunity, so there will be resistance to the pathogen under laboratory condition from either dead or severely weakened antigen. Vaccination is administered to prevent various forms of disease when there vaccines are given then basically improve the immunity to the disease when an antigen is administered through vaccination, the body recognize this as foreign and states producing antibodies to kill it and remember it so even if they encounter later they can destroy them.<sup>2</sup>

Deficiencies in parents' knowledge about the adverse effects and contraindications of vaccines often lead to many immunization errors. Many parents believe that mild illness is associated with vaccine contraindication, therefore mild illness is considered as a reason for not giving their children up-to-date vaccinations.<sup>1</sup>

### **Aim**

- To assess the knowledge of mothers regarding immunization of their child
- To assess the effectiveness of a planned teaching program on knowledge on immunization of mothers

#### **Materials and Methods**

Quantitative research approach was considered appropriate because the primary objective of study was to determine the knowledge deficit in mothers and the effectiveness of a planned teaching program.

The present study was conducted in the Primary Health Centre, Badarpur, New Delhi. The sample of the present study comprised of 15 mothers attending immunization clinic at the PHC, Badarpur. The tool used to collect the data from the samples was a structured questionnaire. It comprised 15 items to assess the knowledge of mothers regarding child immunization. A pre-test was conducted to assess the knowledge of mothers regarding immunization of their child. Data. A planned teaching program was administered to the mothers with the help of teaching aids for 20 minutes, following which a posttest was conducted. Data was analyzed using descriptive statistics. Data analysis revealed that there was knowledge deficit in mothers regarding the above topic and there was knowledge enhancement after administration of the planned teaching program.

#### Results

The study findings revealed that the mean post-test knowledge score (10.9) was more than the mean pre-test knowledge score (6.9). There was a mean difference of 4 between mean pre-test and post-test score.

Hence the teaching program was found to be effective in improving the knowledge of the mothers regarding immunization.

Table 1.Pre-test and Post-test Knowledge Scores of Mothers regarding Immunization of Their Child

n=15

Code No. of Sample	Pre-test Score	Post-test Score
1	8	12
2	6	10
3	7	10
4	9	13
5	5	11
6	7	12
7	6	11
8	7	11
9	8	12
10	5	10
11	6	9
12	7	10
13	9	12
14	8	11
15	6	10
Total Score	104	164

Data presented in Table 1 shows that the lowest score in pre-teaching is 5 while the lowest score in post-teaching is 9.

ISSN: 2455-9318 14

Table 2.Possible Range of Scores, Obtained Range of Scores, Mean, Median, Standard Deviation of Knowledge Scores

n = 15**Mean Difference** Variable **Possible Range Obtained Range** Mean Medium SD of Scores of Scores 0-15 5-9 6.9 4 Pre-test knowledge 1 279 9–13 Post-test knowledge 10.9 18 1.099

Data presented in Table 2 shows that mean post-test score (10.9) was higher than mean pre-test score (6.9), which shows that the planned teaching program was

effective to increase knowledge among mothers regarding immunization.

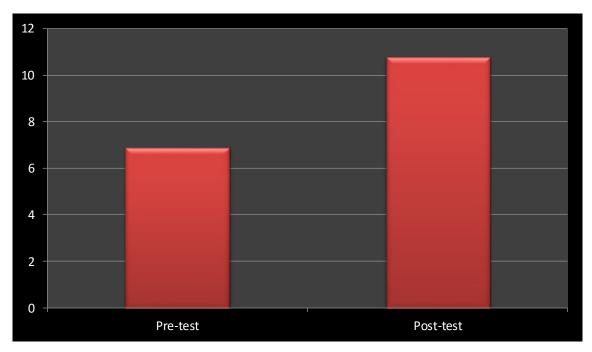


Figure 1.A Bar Diagram Depicting the Pre-test and Post-test Knowledge Scores of Mothers regarding Immunization

## **Discussion**

The findings of the present study revealed that the mean post-test knowledge score (10.9) was more than the mean pre-test knowledge score (6.9). There was a mean difference of 4 between mean pre-test and post-test score. These findings are similar to a study conducted by Birhanu et al. to assess knowledge, attitude and practice of mothers regarding infant immunization Only 55.0%, 53.8%, and 84% of respondents had good knowledge, positive attitude, and good practice towards immunization of infants, respectively.<sup>3</sup>

The present study findings are also similar to a study conducted by Santos et al., who conducted a descriptive census study in 2015 with vaccinators from vaccination rooms of the urban area of Teresina, Piauí, Brazil, and data was collected through a questionnaire. The results showed that out of 70 vaccinators who were interviewed, most answers relating to knowledge and attitude of the vaccinators toward childhood vaccination were considered inadequate (n=58 and n=39, respectively); with regard to practice, there were 43 adequate answers; there was no

statistically significant association between the variable knowledge and the variables attitude and practice.<sup>4</sup>

The findings of the present study revealed that the mean post-test knowledge score (10.9) was more than the mean pre-test knowledge score (6.9). These findings are similar to a study conducted by Varghese et al. They conducted a study to assess the effectiveness of a planned teaching program on knowledge regarding immunization among antenatal mothers at selected villages of Waghodia Taluka. The study findings revealed that in the pre-test 41.66% had moderate knowledge, 58.33% had inadequate knowledge and 10% had adequate knowledge. The post-test knowledge score showed 53.33% had moderately knowledge, 46.66 had adequate knowledge and no one had inadequate knowledge. The mean post-test knowledge score (36.42) also was higher than the mean pre-test score (18.93).5

A similar study was conducted by Udaykar and Joanna to assess the effectiveness of a health teaching program on knowledge regarding immunization among mothers of fewer than five children. The study findings revealed the overall pre-test mean knowledge score as 14.675 and SD as

15 ISSN: 2455-9318

4.226. And the overall pre-test mean knowledge score was found to be 21.800 and SD as 4.207. Paired t-test showed statistical significance at 5% level (p<0.05), establishing the impact of planned teaching on knowledge regarding immunization among mothers of under-five children in the selected community setting.<sup>6</sup>

#### Conclusion

The major conclusion drawn on the basis of the findings of the study was that the mothers were having less knowledge regarding immunization of their child and the planned teaching program was found to be effective in increasing the knowledge of the mothers regarding immunization.

#### **Conflict of Interest: None**

#### References

- Angadi MM, Jose AP, Udgiri R et al. A study of knowledge, attitude and practices on immunization of children in urban slums of Bijapur City, Karnataka, India. *Journal of Clinical and Diagnostic Research* 2013; 7(12): 2803-06.
- 2. The Handy Anatomy Answer Book, 28. Available from URL:

- www.answer.com>Home>Library>Health>Anatomy O&A.
- 3. Birhanu S, Anteneh A, Kibie Y. Knowledge, attitude and practice of mothers towards immunization of infants in health centres at Addis Ababa, Ethiopia. *American Journal of Health Research* 2015; 4(1): 6-17.
- Santos CA, Costa RD, Silva JL et al. Knowledge, attitude and practice on childhood immunization personnel in Teresina-PI, Brazil. Epidemiology and Health Services 2017; 26(1): 133-40.
- Varghese R, PGN S, Patel SV et al. Effectiveness of planned teaching programme on knowledge regarding immunization among antenatal mothers at selected villages of Waghodia Taluka. *International Journal of Applied Research* 2016; 2(8): 157-60.
- Udaykar S, Joanna JK. Effectiveness of health teaching programme on knowledge regarding immunization among mothers of fewer than five children. *International Journal of Science and Research* 2016; 5(6): 84-89.

Date of Submission: 2017-06-27 Date of Acceptance: 2017-07-28

ISSN: 2455-9318 16