

# A study to assess effect of health teaching on knowledge regarding rainbow vaccination among PNC mothers of selected hospitals in PCMC area

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## Abstract

**Introduction:** The Government of India Ministry of health and family welfare Launched Rainbow vaccination programme on 25<sup>th</sup> December 2014 for children health care. It aims to Immunize all children against seven vaccine preventable diseases namely diphtheria, whooping cough, tetanus, polio, tuberculosis, measles and hepatitis –B by 2020 through a Catch –up campaign.

**Methods Research Approach:** Evaluative approach. Research design used was Pre experimental one group pre test post test research design. The setting for this study was the selected hospital in PCMC, Pune. Non probability purposive Sampling Technique was used for 100 sample.

**Results:** There was no significant association between the levels of knowledge with selected demographic variables.

**Conclusion:** The study show that the knowledge regarding rainbow vaccination has been improved through health teaching.

**Keywords:** assess, effect, postnatal, rainbow vaccine, mothers, health teaching, knowledge

## Introduction

Mission Indradhanush covers seven diseases like indradhanush or Rainbow has seven colours. The programme will provide vaccination to children who are either not vaccinated at all or partially vaccinated against these seven diseases. These diseases are dangerous and affect the lives of many children but can be prevented by the vaccination. The plan is to cover all children by the 2020 and achieve full immunization. The programme will be implemented phase wise, firstly covering those district where half of the children are not vaccinated at all between January and June 2015 four social vaccination campaigns will be conducted under the mission. Around 201 districts will be covered in the first phase and 297 will be targeted in the second phase.

## Research Design

Pre experimental one group pre test –post test Research design Variables under study Dependent variable  
In this study dependent variable is Knowledge regarding rainbow vaccination.

## Independent variable

In this study independent variable is health teaching regarding rainbow vaccination.

## Research Setting

The setting for this study was the selected hospital Dr. D.Y Patil Pimpri Pune 18.

## Population

The population of the present study are the PNC Mothers conducted in out patient Department (OPD) of Dr. D.Y Patil hospital Pimpri Pune 18.

## Sample

The sample selected for the present study PNC Mothers are selected hospital of Dr. D.Y Patil out patient Department (OPD).

## Inclusion criteria like

- Mothers having under five year child.
- Mothers who know to speak, read and write in English or Marathi
- Mothers who are willing to participate

## Exclusion criteria

- Mothers who are not PNC mothers.

## Sample Size: 60

## Sampling technique

Non probability purposive sampling technique is used

## Development of tool

Opinions and suggestions were taken from the experts, which helped in determining the important areas to be included.

## Description of the tool

It includes two sections:

**Section A:** Demographic variable consist of age, sex, occupation, education, type of family, family monthly income, Number of children in the family, previous knowledge and source of knowledge.

**Section B:** Self structured questionnaire to assess effect of health teaching on the knowledge of PNC mothers of children regarding rainbow vaccination.

## Validity

The tool was validated by 15 experts from different specialties i.e., child Health Nursing, doctors from pediatric department, community health nursing, obstetrics nursing, statistics etc. Based on the suggestions given by the experts modification like in section B question no 1 all options are same so they suggest change options. etc. and rearrangements in the all three sections were done. Their valuable suggestions and

corrections were taken into consideration and after discussion with the guide the tool was finalized.

#### Plan for data collection

Permission from the matron of the selected hospital. Consent from PNC mothers rainbow vaccination. The investigator approached the mothers of selected samples, informed them regarding the objectives of the study and obtained their informed consent after assuring the confidentiality of the data. The data collection was done among selected sample by using structured questionnaire. The duration of the data collection for each sample was 45 minutes.

Pre test was administered followed by health teaching was given to the samples then the post test was conducted after one week. In data collection demographic data was also obtained to find out the association between knowledge.

#### Data analysis and interpretation

Items related to the background variables were analyzed in terms of frequency and percentage. Frequency distribution were plotted to represent the final score. Mean, standard deviation of the test was computed. The association with the selected demographic variables would be assessed by paired t-test. The findings were documented in tables, graphs and diagrams. Pilot Study

After doing pilot study investigator found that it is feasible to carry out actual study. In these study data was done among selected mothers of rainbow vaccination.

#### Result

The major findings of the study were based on the objective of the study.

#### Section I

##### Demographic characteristics

I have included of age, religion, occupation, education, type of family, family monthly income, previous knowledge and source of knowledge

Majority i.e. 46 % of the samples were in the 20 to 30 years of age. The highest i.e. 27 % of samples are educated up to secondary level.

- Majority i.e. 69 % of the samples were house wife and highest percentage. i.e. 25 % of samples were from nuclear family.
- Majority i.e. 19 % had a monthly family income below Rs.5000 and the highest percentage i.e. 60 % of samples were Hindu.
- In this study no one can having previous knowledge regarding rainbow vaccination.

#### Section –II

##### Comparing the knowledge score of pre and post test

##### Findings related to knowledge of PNC mothers regarding care of rainbow vaccination before giving health talk.

- In the pre test the average knowledge score was 23 % where as the poor knowledge score was 77 %.
- In pre test knowledge mean score was 6.0 % regarding rainbow vaccination on knowledge of mother

##### Findings related to knowledge of PNC mothers regarding rainbow vaccination in after giving health talk.

- In the post test the Good knowledge score was 100

% where as the poor and average knowledge score was 0 %.

- In post test knowledge mean score was 19.8 % regarding rainbow vaccination

#### Section –

#### III

##### Association

##### n

To find the association between the levels of knowledge with selected demographic variables, the paired t-test was used. The obtained values were less than the table values, Hence there was no significant association between the levels of knowledge with selected demographic variables.

#### Section –IV

##### Effect of health teaching

The findings in the pre test of mothers of health teaching regarding rainbow vaccination average knowledge score was 6.0 which increased to 19.8 in post test T –value for this test is 66.1 with 99 degree of freedom. Corresponding p-value was small (less than 0.05) the null hypothesis is rejected. Health teaching is found to be significantly effective in improving the knowledge of the PNC mothers regarding rainbow vaccination.

#### Conclusion

The study shows that the knowledge regarding rainbow vaccination has been improved through health teaching. There is no any association between knowledge level about the rainbow vaccination which can be updated through education. This study has also proved that health teaching improve the knowledge of mothers regarding rainbow vaccination

#### Recommendations

On the basis of the findings of the study, the following recommendations are made for future research.

- The study can be repeated on the large scale to validate and for better generalization of the findings.
- The study can be repeated on a large sample having a control group.
- Comparative study can be done in different hospitals on the same topic

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I will tell of all the wonderful things have been done.....”

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### References

1. Park K. Preventive and Social Medicine, 19<sup>th</sup> edition, Jabalpur, Banarsidas bhanot Publication, 2007, 45.
2. Urinary Tract Infections, Journal of American family physician. 2005, 1.
3. Lewis. Medical Surgical Nursing, 6<sup>th</sup> edition, Mosby Torrance.
4. Tolan WR, Pharma DW, Rauch D, Urinary Tract Infection, Ejournal, 2008.
5. Raju BS, Tiwarics. Lecture notes, Urinary Tract Infection, A stable approach, Department of Nephrology, All India institute of medical science, New