

E-ISSN: 2664-1666 P-ISSN: 2664-1658

www.communitynursing.net IJARCHN 2023; 5(2): 29-34 Received: 21-04-2023 Accepted: 27-05-2023

#### Paramjot Kaur

B.Sc. Nursing 4<sup>th</sup> year, Rayat Bahra College of Nursing, Mohali, Punjab, India

#### Prerna

B.Sc. Nursing 4<sup>th</sup> year, Rayat Bahra College of Nursing, Mohali, Punjab, India

#### Ranbir Kaur

B.Sc. Nursing 4<sup>th</sup> year, Rayat Bahra College of Nursing, Mohali, Punjab, India

#### Ritka Rana

B.Sc. Nursing 4th year, Rayat Bahra College of Nursing, Mohali, Punjab, India

#### Rupali

B.Sc. Nursing 4<sup>th</sup> year, Rayat Bahra College of Nursing, Mohali, Punjab, India

### Taranjeet Kaur

B.Sc. Nursing 4<sup>th</sup> year, Rayat Bahra College of Nursing, Mohali, Punjab, India

#### Jasvinder Kaur

Associate Professor, Rayat Bahra College of Nursing, Mohali, Punjab, India

### Dr. Deepika R Kumar

Professor, Director Principal Rayat Bahra College of Nursing, Mohali, Punjab, Punjab, India

#### Corresponding Author: Paramjot Kaur

B.Sc. Nursing 4<sup>th</sup> year, Rayat Bahra College of Nursing, Mohali, Punjab, India A pre experimental study to assess the effectiveness of planned teaching program on knowledge regarding immunization among mothers of under five years children at selected villages of District Mohali, Punjab

Paramjot Kaur, Prerna, Ranbir Kaur, Ritka Rana, Rupali, Taranjeet Kaur, Jasvinder Kaur and Dr. Deepika R Kumar

**DOI:** https://doi.org/10.33545/26641658.2023.v5.i2a.144

#### **Abstract**

**Introduction:** Immunization is the process of giving a vaccine to the individual to protect them against various diseases. Vaccines stimulate the body's own immune system to protect the person against subsequent infection. Children below five year of age are vulnerable and liable to get various diseases and disabilities which may lead to mortality. It is therefore very important to provide care to the children in order to promote the optimal health level.

**Aim of the study:** Was to improve the knowledge regarding immunization among mothers of under five years children of selected villages at district Mohali, Punjab.

**Materials and Methods:** A quantitative approach and pre-experimental research design was used to conduct the study. Total 100 samples were selected by using convenient sampling technique. Self-structured Questionnaire was used for data collection and analysis was done by using descriptive and inferential statistics.

**Result:** The study findings revealed that in pre-test knowledge mean score and standard deviation was  $10.18\pm2.599$ . Post-test knowledge mean score and standard deviation was  $18.68\pm3.194$ . The paired t-test was used in the analysis and p value was 0.001 which is statistically significant.

**Conclusion:** The conclusion was drawn on the basis of the findings of the study. It reveals that planned teaching program was effective. Our findings highlights need for more intensive efforts to promote proper knowledge regarding immunization schedule.

**Keywords:** Knowledge, effectiveness, planned teaching program, immunization

#### Introduction

Immunization is the process of giving a vaccine to the individual to protect them against various disease whereby a person is made resistant to an infectious disease the promotion of health is social as well as individual responsibility. It has been known that majority of children were dying each year and another were disabled due infectious disease. The growth and development plays important role in children life and leads to main contribution to the country [1].

Life threatening infectious diseases can control and eliminated with the help of the best and most effective method is immunization. Each year it estimated to prevent 2 to 3 million death per year. Immunization is the cost effective health intervention with proven strategies because it is accessible to the urban and rural population and can delivered effectively because it doesn't need any lifestyle changes [2].

Under 5 year children are more prone to diseases and disabilities that can lead to increase in death rate. Children health play a vital role because health status, health behaviour and lifestyle formed during childhood period helps us to determine the quality of life in following years not only for the nation and their family's future [3].

Health of the children is vital whether it is physical or mental and it is associated with the social development of children. Mother can help to reduce under 5 year children mortality rate as they are first care giver for their children. Education regarding immunization to the mothers of under 5 year children is the effective way to achieve reduction in death rate [4].

#### Need of the study

Since 1990 through the surveys we have found that half of the newborn children were fully immunized. Every year rate ranging from 3.5% to 68% fully immunized children. Survey performed in districts in the year 1998, 1999, 2002 and 2003. Out of which 174 (74%) showed decrease in infant full immunization rates <sup>[5]</sup>.

Immunization is a vital process as it will help to prevent the children against major childhood illness. The area of study has been selected because even today the mortality of under 5 children is high and it is mainly due to diseases that can be prevented. Hence, the need was felt to identify the learning needs of mothers and educate them regarding immunization by introducing structure teaching programme and promoting health of under five children which in turn reduces mortality among under 5 year children [6].

The present study will help to introduce the immunization schedule in both rural and urban areas including the minor community. This study will help to reduce the chances of burst out of any infection immunity and improve future generation which will lead to advancement of practices and improve quality of life. It will help to organize free of cost medical camps for poor and needy ones <sup>[7]</sup>.

**Problem statement:** A Pre experimental study to assess the effectiveness of planned teaching program on knowledge regarding immunization among mothers of under five years children at selected villages of District Mohali, Punjab.

### Aim of the study

The aim of the study is to improve the knowledge regarding immunization among mothers of under-five year's children.

### **Objectives**

- To assess the pre-test level of knowledge regarding immunization among mothers.
- To implement planned teaching program regarding immunization among mothers.
- To assess the post-test level of knowledge regarding immunization among mothers.
- To find out association of pre-test knowledge score with selected socio-demographic variables regarding immunization among mothers.
- To disseminate the findings.

# **Operational Definitions**

**Knowledge:** It refers to awareness regarding immunization. **Effectiveness:** It refers to the power of bringing changes in knowledge regarding immunization.

**Planned teaching program:** It refers to a systematically developed instructional program using instructional aids.

**Immunization:** A technique used to cause an immune response that result in resistance to a specific disease, especially an infectious disease.

### **Hypothesis**

The Hypothesis was tested at p < 0.05.

**H<sub>1</sub>:** There was significant difference between the mean pretest and post-test knowledge score on immunization among mothers of under five years children.

**H2:** There was significant association of pre-test knowledge score with selected socio demographic variable.

### Methodology

**Research Approach:** A Quantitative approach was used to determine the effectiveness of planned teaching program on knowledge regarding immunization.

**Research Design:** A pre-experimental study was used to conduct the research study.

**Research Setting:** The present study was conducted at Village Sahauran, District Mohali.

**Target Population:** The target population in present study include all the mothers of under-five year's children at selected villages of district Mohali, Punjab.

**Sample Size:** The sample size was of 100 mothers of under five years children of selected villages of district Mohali, Punjab.

**Sampling Technique:** A convenient sampling technique was used to collect the sample for the present study.

### Sampling Criteria Inclusion Criteria

Mothers who was willing to participate in the study. Mother of under five years children.

violater of under five years emi

**Exclusion Criteria**Mothers who were not present at the time of data collection.

### **Dependent Variable**

Knowledge regarding immunization.

### **Independent Variable**

Planned teaching program on immunization schedule.

### Selection and development of tool

Tool was developed by keeping in mind the objectives of the research study. It includes 3 parts.

#### Section A: Socio demographic variable

The data sheet deals with demographic variables such as age, education, occupation, family income, type of diet, lifestyle of mother, previous knowledge regarding immunization schedule, source of information.

#### Section B: Planned teaching program

This part consist of planned teaching program on immunization. Teaching was given with the use of AV aids such as chart and flash cards.

### Section C: Self structured questionnaire

The data was collected through Self Structured questionnaire. It consist of total 30 questions. This tool was used to identify the knowledge regarding immunization among mothers of under five year children.

# Validity of Tool

The tool was prepared along with problem statement, objectives and self-administered questionnaire on knowledge regarding immunization and given to the experts for content validity who was from nursing

**Ethical Consideration:** Written permission was taken from Director Principal and ethical committee.

**Pilot Study:** The pilot study was conducted to find out practicability, convenience sampling techniques were used to collect the sample to assess the effectiveness of planned teaching program. It was conduct on 10% of total sample size. The pilot study was conducted at Daub majra village of District Mohali.

### Reliability of Tool

Reliability of tool of the present study was established by using statistical and inferential method. The tool was found to be valid, reliable, feasible and participable.

Written permission was taken from Sarpanch of selected

villages of Mohali.

Informed consent was taken from each study subject. Confidentiality and Anonymity of the subjects was maintain throughout the study.

# Description of demographic profile of staff nurses

**Table 1:** Demographic profile of the subjects N=100

Variables	Opts	Percentage	Frequency	
	21-25	46.0%	46	
Age	26-30	46.0%	46	
	31-35	8.0%	8	
	No formal Education	1.0%	1	
Education status of Mother	Primary	44.0%	44	
Education status of Wother	Secondary	38.0%	38	
	Graduate	17.0%	17	
	Housewife	86.0%	86	
O	Working	14.0%	14	
Occupation of Mother	Studying	0.0%	0	
	Others	0.0%	0	
	Rs 10,000-20,000	64.0%	64	
Income more Month	Rs 20,001-30,000	35.0%	35	
Income per Month	Rs 30,001-40,000	1.0%	1	
	Rs 40,001-50,000	0.0%	0	
	Vegetarian	69.0%	69	
Dietary pattern	Non vegetarian	23.0%	23	
	Mixed	8.0%	8	
Life-telle of Methen	Active	62.0%	62	
Lifestyle of Mother	Sedentary	38.0%	38	
Descional la code describinations de la companya della companya de la companya della companya de	Yes	31.0%	31	
Previous knowledge regarding immunization	No	69.0%	69	
	Literature	0.0%	0	
Source of Information	Mass media	7.0%	7	
Source of Information	Health personnel	92.0%	92	
	Others	1.0%	1	

Table 2: Comparison of frequency & percentage distribution of pre-test and post-test level of knowledge N=100

Criteria measure of knowledge score							
Coope level (v. 100)	Pre	e-test	Post-test				
Score level (n=100)	Percentage	Frequency	Percentage Freque				
Inadequate knowledge (0-10)	64%	64	0%	0			
Moderate knowledge (11-20)	36%	36	76%	76			
Adequate knowledge (21-30)	0%	0	24%	24			

Maximum Score = 30, Minimum Score = 20

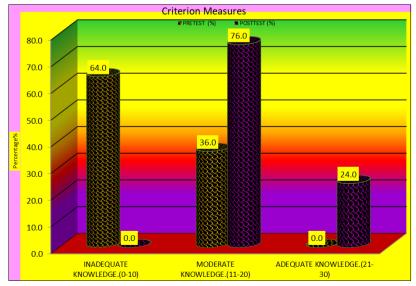


Fig 1: Comparison of percentage distribution of pre-test and post-test level of knowledge.

Table 3: Comparison of descriptive statistics of pre-test and post-test Scores of knowledge by using paired T Test N=100

Categories	Mean ± S.D	Mean%	Range	Mean Diff.	Paired T Test	P value	Table Value at 0.05
Pretest Knowledge	10.18±2.5999	33.90	5-18	9.500	21.217	< 0.001	1.09
Post test Knowledge	18.68±3.194	62.30	11-27	8.500	*Sig	<0.001	1.98

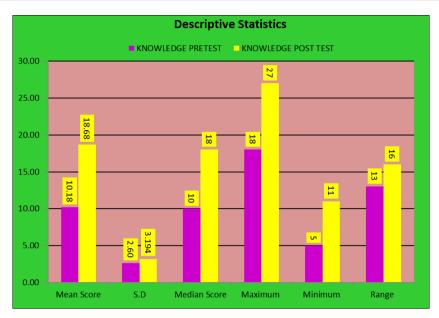


Fig 2: Comparison of descriptive statistics of pre-test and post-test knowledge scores.

**Table 4:** Table showing association of pre-test level of knowledge scores regarding immunization among mothers with their selected demographic variables

	Association of pretest knowledge scores with selected socio-demographic variables									
Variables	OPTS	Adequate Knowledge	Moderate Knowledge	Inadequate Knowledge	CHI Test	P Value	DF	Table Value	Result	
Age	21-25	0	19	27	1.212 0.546			Not		
	26-30	0	15	31		0.546	2	5.991	Significant	
	31-35	0	2	6						
	No formal Education	0	1	0	3.072			7.815	Not Significant	
Education status of	Primary	0	15	29		0.381	3			
Mother	Secondary	0	12	26	3.072					
	Graduate	0	8	9						
	Housewife	0	30	56	0.332 0.5		1	3.841	Not Significant	
Occupation of	Working	0	6	8		0.564				
Mother	Studying	0	0	0						
	Others	0	0	0						
	Rs 10,000 – 20,000	0	19	45	4.070		2	5.991	Not Significant	
T M (1	Rs 20,001 – 30,000	0	17	18		0.131				
Income per Month	Rs 30,001- 40,000	0	0	1						
	Rs 40,001 – 50,000	0	0	0						
	Vegetarian	0	27	42					Not Significant	
Dietary pattern	Non vegetarian	0	5	18	3.004	0.223	2	5.991		
	Mixed	0	4	4						
Lifestyle of Mother	Active	0	21	41	0.321	0.571	1	3.841	Not Significant	
	Sedentary	0	15	23						
Previous knowledge regarding immunization	Yes	0	15	16	2.992 0.084			3.841		
	No	0	21	48		0.084	1		Not Significant	
Source of Information	Literature	0	0	0						
	Mass media	0	4	3	2 240	0.100	2	5.991	Not Significant	
	Health personnel	0	31	61	3.348	0.188				
	Others	0	1	0						

The conclusion was drawn on the basis of the findings of the study. The findings of the study showed that post-test knowledge score were greater than pre-test knowledge score regarding immunization among mothers of under 5 year children. It reveals that planned teaching programme was

effective. In pre-test knowledge score, distribution is on the basis of knowledge. Out of which 64% of mothers had inadequate, 36% moderate and 0% had adequate. In post-test knowledge score 0% inadequate, 74% moderate. 24% had adequate.

#### Discussion

Discussion relates the results of the findings of the present study with the findings of studies conducted in the past. The findings of the study had been discussed in accordance with the objective of the study.

# The first objective was to assess the pre-test score

The present study depicts that the pre- test knowledge score in which 64% of mothers have inadequate, 36% of mothers have moderate and 0% of mothers have adequate knowledge.

The findings of the study are similar to the study conducted by Reja Reshma (2018) <sup>[7]</sup>. According to which 98.4% mothers knew that immunization is, 69.2% mothers acquired knowledge regarding immunization from antenatal clinics. 28% mothers have good knowledge about immunization <sup>[8]</sup>.

The second objective was to assess the post-test score.

The present study depicts that the post-test knowledge score in which 0% of mothers had inadequate, 76% of mothers had moderate and 24% of mothers had adequate knowledge. The findings of the study are similar to the study conducted by Zahid Anm (2021) [9] which reveals that around two-thirds of respondents (66.74%) were satisfied and (87.69%) of them agreed that an awareness campaign about childhood immunization. Similar study was conducted by Ali Mohammed Hayder Almigdad (2020) which reveals that overwhelming majority (99.2%) of mother had positive attitude of mothers reported that they will recommend immunization for others [10].

The third objective was to find out association of pre-test knowledge score with selected socio-demographic variables. The present study depicts that there was no association between socio-demographic variable and pre-test score. These findings were supported by Tharani Julit (2017) [10] reveals that there is no association between knowledge score and demographic variable [11]. The findings of the study were also similar to the study conducted by V Vinish (2016) [11] as per the chi-square, value researcher concluded that there was no significant association with the participants' existing knowledge and the selected demographic characteristics [11].

### Conclusion

The conclusion was drawn on the basis of the findings of the study. The findings of the study showed that post-test knowledge score were greater than pre-test knowledge score regarding immunization schedule among mothers of under five year children. It reveals that planned teaching program was effective.

#### Recommendations

On the basis of the findings of the study recommendations are offered for further research similar study can be undertaken with a large sample to generalize the findings. Similar study can be undertaken which not only assesses the knowledge of mothers regarding immunization but also focuses on other aspects like six killer diseases.

Instead of Pre-experimental study, an Experimental study can be conducted to assess the knowledge of mothers regarding immunization.

### Acknowledgement

First and foremost, we would like to thank Lord Almighty

for his abundant blessings that he showed on us for accomplishing this task.

Our research project has never been successful without the coordinated efforts of all members involved. The satisfaction and pleasure that accompanies the successful completion of any task would be incomplete without the mention of the people whom admit possible.

We want to express our indelible thanks to all those who have inspired us and rendered their valuable support to us for completing this study.

We express our sincere heartiest gratitude to Prof. (Dr.) Deepika R. Kumar, Director Principal, Rayat Bahra College of Nursing, Mohali, Punjab. It is a great privilege to have benefitted from her excellent teaching skills, sagacious guidance, help keen interest and encouragement all through our research period.

We would like to thank our guide Ms. Jasvinder kaur, Associate professor, Rayat Bahra College of Nursing, Mohali, Punjab for her guidance, critical suggestions and support from the beginning till the end for completion of this work.

We would also like to thank our teachers who have contributed their valuable suggestions. Grateful acknowledgement is extended to all experts invalidating the tool. We own our deepest affection to our parents for their boundless prayers, moral support and constant encouragement during the course of the study.

### **Conflict of Interest**

Not available

### **Financial Support**

Not available

### Reference

- 1. Bhoi C. Children Literature: A Future of Possibility. Labyrinth: An International Refereed Journal of Postmodern Studies. 2014 Jul 1, 5(3).
- 2. John TJ, Samuel R. Herd immunity and herd effect: new insights and definitions. European journal of epidemiology. 2000 Jul;16:601-6.
- 3. Muhammad F, Chowdhury M, Arifuzzaman M, Chowdhury AA. Public health problems in Bangladesh: Issues and challenges. South East Asia Journal of Public Health. 2017;6(2):11-6.
- 4. Murray CJ, Lopez AD. Mortality by cause for eight regions of the world: Global Burden of Disease Study. The lancet. 1997 May 3;349(9061):1269-76.
- 5. Pollard AJ. Childhood immunisation: What is the future? Archives of disease in childhood. 2007 May 1;92(5):426-33.
- 6. Wilson SL, Wiysonge C. Social media and vaccine hesitancy. BMJ global health. 2020 Oct 1;5(10):e004206.
- 7. Reja R, Bhatnager R, Gupta AK. Assessment of Knowledge about Immunization among Mothers of Under Five Children Attending Immunization in Tertiary Care Hospital in Udaipur. National Journal of Community Medicine. 2018 Dec 31;9(12):865-8.
- 8. Hussain A, Zahid A, Malik M, Ansari M, Vaismoradi M, Aslam A, *et al.* Assessment of parents' perceptions of childhood immunization: A cross-sectional study from Pakistan. Children. 2021 Nov 4;8(11):1007.
- 9. Mohamed SO, Ahmed EM. Prevalence and

- determinants of antenatal tetanus vaccination in Sudan: a cross-sectional analysis of the Multiple Indicator Cluster Survey. Tropical Medicine and Health. 2022 Dec;50(1):1-6.
- 10. Tharani J, Nair DS, Karthika S. Immunization among Migrant mothers of under five children in s 9, (07).
- 11. Vinish V. Mother's knowledge on immunization schedule of her child: a descriptive Survey. Manipal Journal of Nursing and Health Sciences (MJNHS). 2016 Jul 1;2(2):41-5.

#### **How to Cite This Article**

Kaur P, Prerna, Kaur R, Rana R, Rupali, Kaur T, Kaur J, Kumar DR. A pre experimental study to assess the effectiveness of planned teaching program on knowledge regarding immunization among mothers of under five years children at selected villages of District Mohali, Punjab. International Journal of Advance Research in Community Health Nursing 2023; 5(2): 29-34.

#### Creative Commons (CC) License

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 International (CC BY-NC-SA 4.0) License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.