

A Descriptive Study to Assess the Knowledge Regarding MR Vaccination among Mothers in Selected Area at Bangalore

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Abstract

Immunization is one of the most cost effective intervention to reduce burden of childhood mortality and morbidity provided used optimal and judiciously. Currently it is estimated that immunization save the lives of 3 million children a year but 2 million more lives could be saved by existing vaccines. Prevention of disease is one of the most important goals in child care, during infancy and childhood, preventive measures against certain infection diseases are available. In recent years relatively low immunization level in age group have occasioned scattered out breaks of certain diseases. For this reason nation effort is being made towards improving the immunization levels of all children. Transmitted in airborne droplets when infected people sneeze or cough, rubella is an acute, usually mild viral disease traditionally affecting susceptible children and young adult's worldwide. Rubella infection just before conception and in early pregnancy may result in miscarriage, fetal death, or congenital defects known as congenital rubella syndrome (CRS), which is characterized by multiple defects, particularly to the brain, heart, eyes, and ears. The highest risk of CRS is found in countries with high rates of susceptibility to rubella among women of childbearing age, and worldwide an estimated 110,000 babies are born with CRS every year.

Keywords: Knowledge, MR Vaccination, Mothers

INTRODUCTION

The aim of immunizing children against chief diseases which are responsible for child mortality and morbidity is certainly a noble one [1]. However, it is not an easy task to accomplish. In a developing country like India, the sheer logistics of the numbers of the target population that stretches across geographically diverse regions make universal immunization of children a Herculean task [2]. However, the health sector of this country is making commendable achievements in that. Several millions of potential life years have been saved from getting lost to vaccine preventable diseases through the universal immunization program [3]. Immunization is one of the most cost

effective intervention to reduce burden of childhood mortality and morbidity provided used optimal and judiciously [4]. In recent years, relatively low immunization level in age group has occasioned scattered out breaks of certain diseases. For this reason nation effort is being made towards improving the immunization levels of all children [5].

A licensed vaccine to prevent measles first became available in 1963, and an improved one in 1968. Vaccines for mumps and rubella became available in 1967 and 1969, respectively. The three vaccines (for mumps, measles, and rubella) were combined in 1971 to become the measles- mumps- rubella

(MMR) vaccine [6]. Vaccinations in emergencies are often delivered both ways, in routine clinic visits as part of primary health care and in campaigns meant to rapidly provide maximum protection to the population. In most emergencies, the vaccine-preventable disease of greatest concern is measles [7]. Large outbreaks of measles have occurred in displaced populations. Such outbreaks can have a very high case-fatality rate, as high as 10-20%, in malnourished populations of children [8]. Therefore, the Sphere Project recommends that a mass vaccination campaign be done emergently for children 6 months - 15 years of age if less than 90% of this group has immunity [9]. Such a campaign should vaccinate at least 95% of eligible children, and at least 95% of new children entering the population should be vaccinated against measles as they enter. Thereafter, vaccination should be made part of routine maternal-child care [10].

STATEMENT OF THE PROBLEM

“A Descriptive Study to Assess the Knowledge Regarding MR Vaccination among Mothers in Selected Area at Bangalore.”

Objectives

1. To assess the knowledge of mother regarding MR vaccine booster dose
2. To determine the association of

knowledge of mothers with selected demographic variables

3. To develop a health education module regarding the prevention of measles and rubella diseases

HYPOTHESIS OF THE STUDIES

H1: There will be a significant association of the knowledge of Mothers with demographic variables.

H2: The mothers will have a significant knowledge on MR vaccine.

CONCEPTUAL FRAMEWORK

A conceptual framework or a model is made up of concept, which is the mental image of the phenomenon. This section deals with conceptual framework adopted for the study. A conceptual framework or model provides the investigator the guidelines to proceed to attain the objectives of the study based on the theory. It is a schematic representation of the steps, activities and outcome of the study. The conceptual framework adopted for this study is integrated model of Rosenstoch, Becker and Miamian Health Belief Model. The “Health Belief Model” emphasized the health behaviour, explain and predict health related behaviours. It explains how people are participating in programs to prevent and detect disease and treatment and what are the factors affecting the health behaviour of the people.

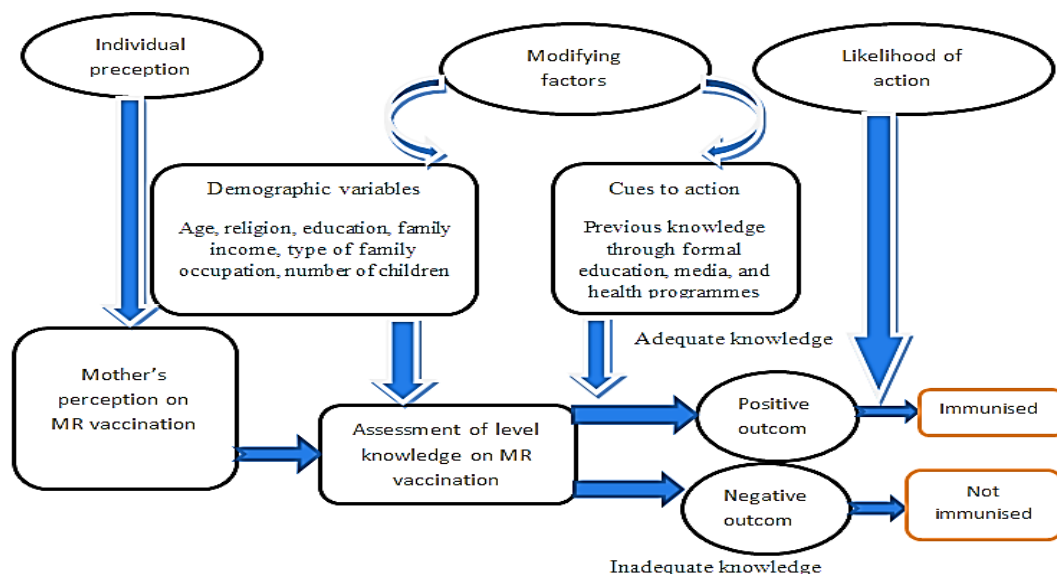


Figure 1: Modified Rosenstoch, Becker and Maiman Health Belief Model.

RESEARCH METHODOLOGY

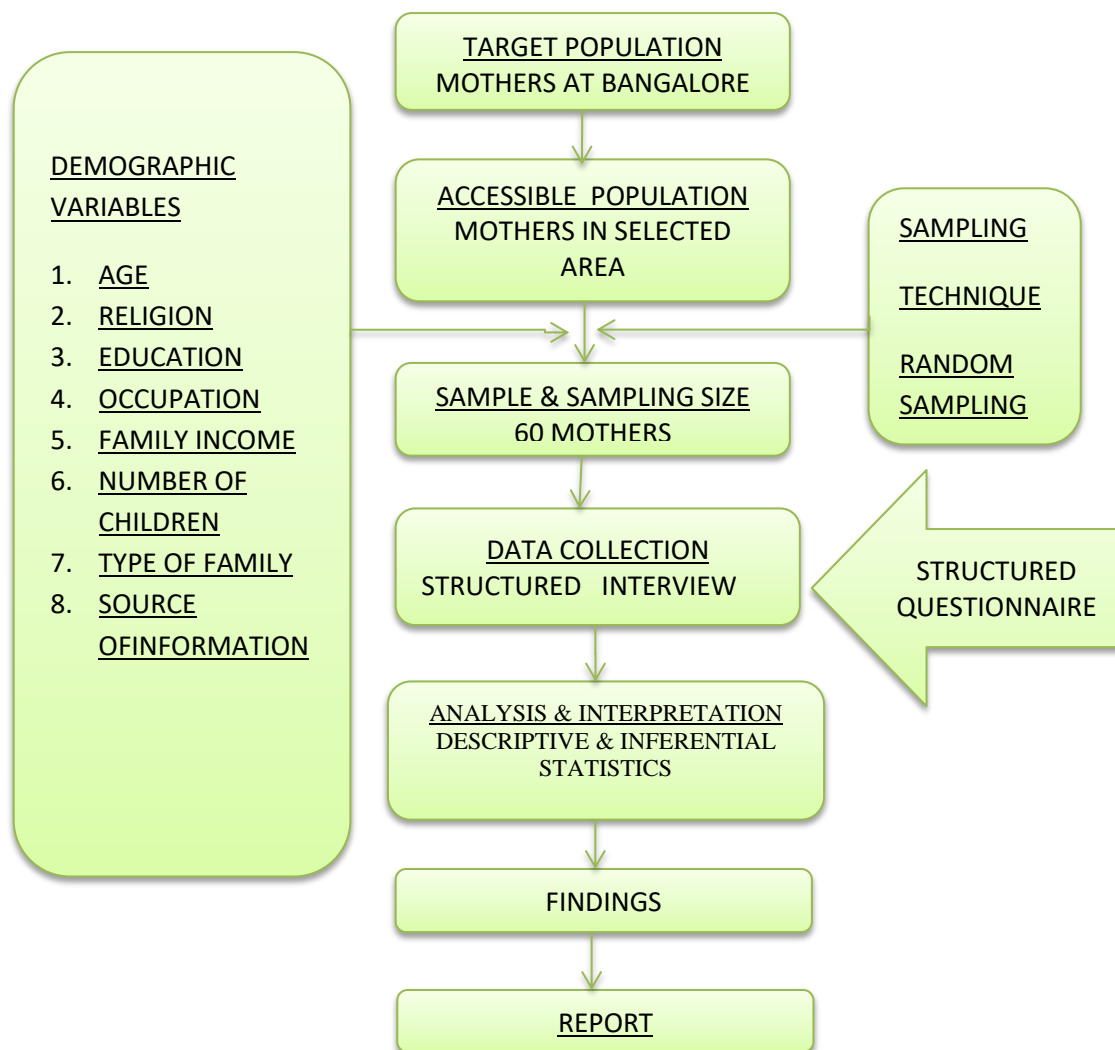


Figure 2: Diagram showing Research Methodology

DATA COLLECTION METHOD

Method of data collection includes selection and development of tool and testing the tool of validity and reliability by administering on few samples.

SELECTION OF THE TOOL

An instrument selected in research study is a device used to obtain data from drawing conclusions, which are pertinent to the study. As per the objectives, a structured knowledge questionnaire was prepared in order to assess the knowledge of mother regarding MR Vaccine.

DEVELOPMENT OF TOOL

Structured knowledge questionnaire was developed by the following several steps

like review of literature, preparation of blue print, expert’s opinion and suggestions. For the selection and preparation of tool, related literature review like books, journals, articles, periodicals, published and unpublished research studies were reviewed. Opinion and suggestions were elicited from experts (guide, co-guide, statistician and subject expert from nursing) who help in determining the important areas to be included in the investigation.

DESCRIPTION OF TOOL

The tool for data collection was constructed after extensive review of literature and discussion with experts. It had two major sections.

Section A: Structured interview schedule to assess the demographic variables

Section B: Structured questionnaire for collecting data regarding the knowledge on MR vaccination

DATA COLLECTION PROCEDURE

The formal permission for conducting the study was obtained from the PHC Kengeri Bangalore and informed then about commencement of the main study. The data collection was done by the investigator after getting consent from the participants. Brief information about self and the purpose of the study was explained to the mothers in selected area, privacy was provided confidentiality regarding the data was assured to them so as to get their cooperation in the procedure in data collection. After getting their informed

verbal consent, data collection was carried out among mothers by structural questionnaire to assess their knowledge on MR vaccination

ANALYSIS AND INTERPRETATION

The raw data was entered in a master sheet and analyzed and interpreted by using descriptive and inferential statistics. The data was organized and presented under the following sections:

Section A: Description of Demographic Variables

Section B: Analysis of Level of Knowledge of mothers Regarding MR vaccines.

Section C: Descriptive statistics of pre-test.

Section D: To find the association of knowledge of mothers with selected socio demographic variable

SECTION A

Demographic Characteristics

Table 1: Frequency and Percentage Distribution of Sample Characteristics (N=60).

S. NO.	DEMOGRAPHIC VARIABLES	F	(%)
2.	AGE OF MOTHERS (IN YEARS)	Below 20 years	03 5%
		21-25 years	24 40%
		26-30 years	17 28.3%
		Above 30 years	16 26.6%
2.	RELIGION	Hindu	14 23.3%
		Muslim	08 13%
		Christian	38 63.3%
3.	EDUCATION	Primary	8 13.3%
		High school	20 33.3%
		Higher secondary	20 33.3%
		Diploma	12 20%
4.	OCCUPATION	Housewives	22 36.6%
		Govt. employee	14 23.3%
		Private employee	24 40%
5.	TYPE OF FAMILY	Nuclear	32 53%
		Joint	28 47%
6.	FAMILY INCOME	Below 10000	14 23.3%
		10001- 15000	24 40%
		15001-20000	16 26.6%
		Above 20000	06 10%
7.	NUMBER OF CHILDREN	One	10 16.6%
		Two	20 33.3%
		Three	15 25%
		More than three	15 25%
8.	SOURCE OF INFORMATION	Multi media	28 46.6%
		Health professionals	20 33.3%
		Group	08 13.3%
		Other sources	04 6.6%

Analysis of Level of Knowledge of Mothers Regarding Mr Vaccines

Table 2: Criteria Measures of Pre-Test Knowledge Score.

Criteria Measures Of Pre-Test Knowledge Score	
SCORE LEVEL (N=60)	PRE-TEST (F & %)
Good (19-25)	15 (25%)
Average (14-18)	15(25%)
Poor (0-13)	30(50%)

Maximum Score=30, Minimum Score=0

In pre-test level of knowledge of mothers showed that 50% of population was having poor knowledge, 15% of population was

average knowledge and 15% of population was having good knowledge. Hence the H2 hypothesis is not significant.

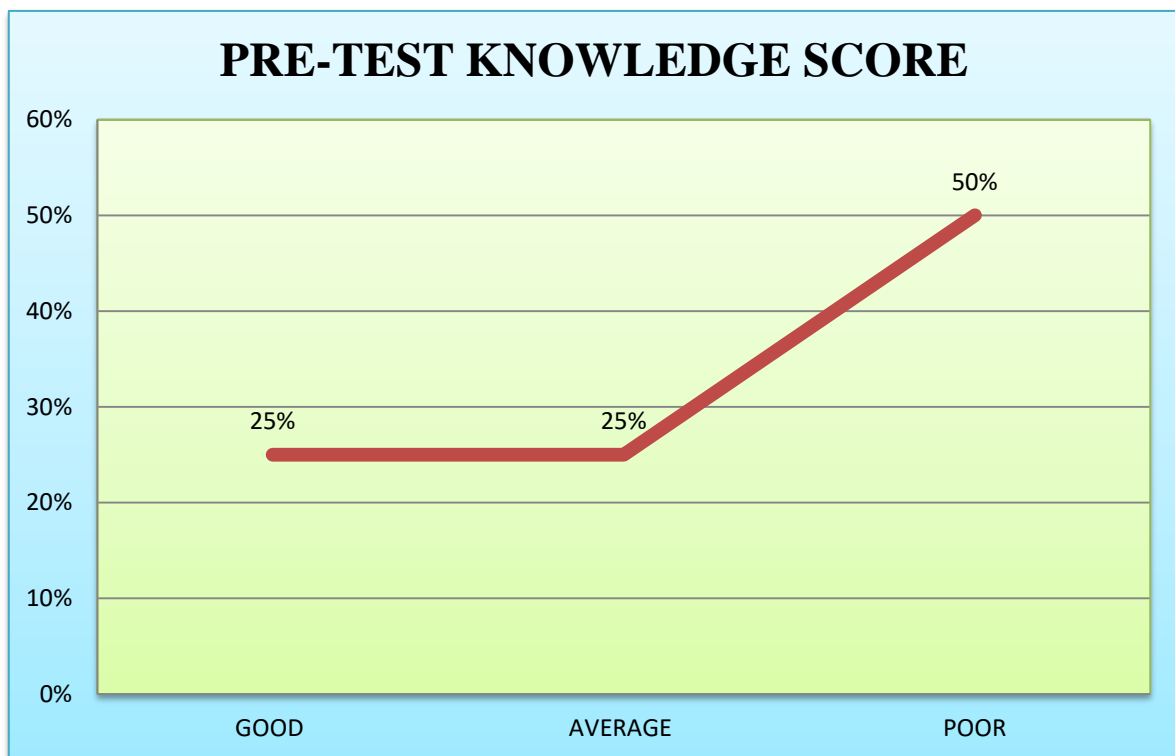


Figure 3: Level of Knowledge Score in pre-test.

Table 3: Descriptive statistics of pre-test (N=60).

T test	Mean	SD	T test	DF	95% Confidence Interval of the Difference		P value	Result
Pre- test	12.8	5.63	9.36	59	lower 5.35	Upper 8.25	<0.001	Significant

It is observed from the present study that the knowledge mean score 12.8 in pre-test and t-test value is 9.36. The

calculated p value (0.001) is significant at 1.98 levels. Hence H1 hypothesis is accepted.

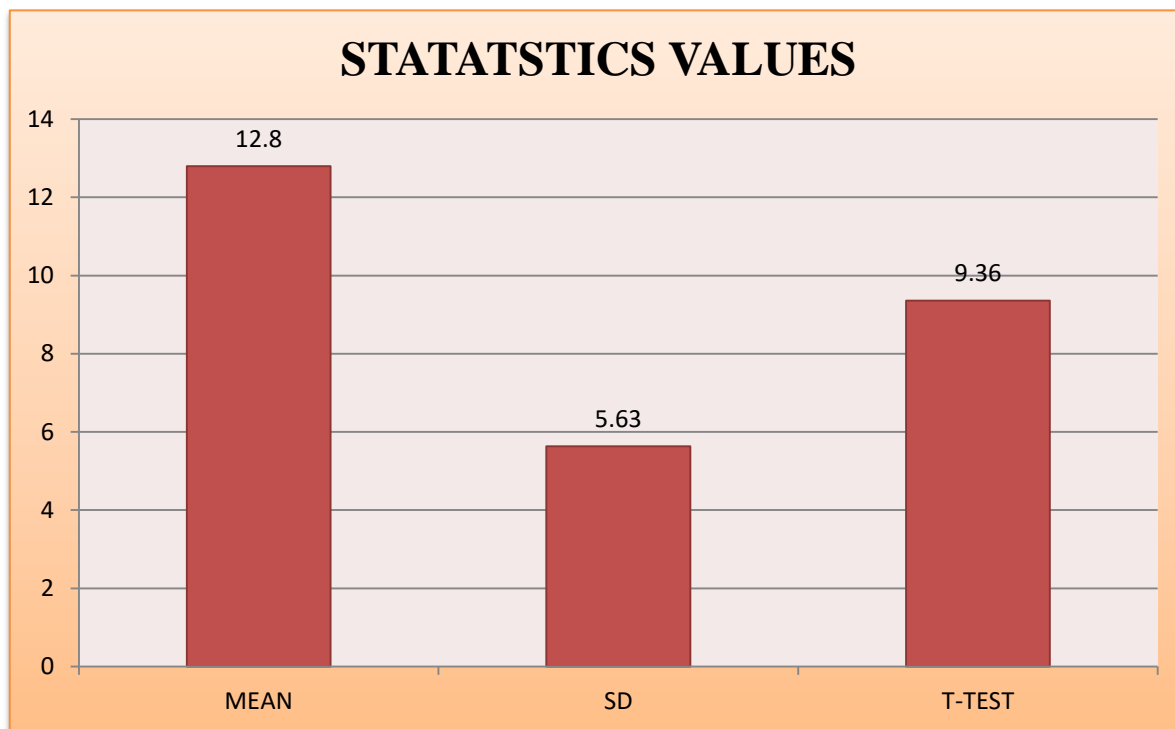


Figure 4: Statistics Values of pre-test.

Table 4: To Find the Association of Knowledge of Mothers with Selected Socio Demographic Variable.

Category	Frequency	PRE-KNOWLEDGE SCORE			DF	(x ²)	P value
		Good	Average	Poor			
AGE (in years)							
Below 20 years	3	00	00	3	6	9.542	>0.001 (NS)
21-25 years	24	2	10	12			
26-30years	17	2	9	7			
Above 30 years	16	00	12	4			
RELIGION							
Hindu	14	8	4	2	6	1.1649	0.883851 (NS)
Muslim	8	4	2	2			
Christian	38	22	8	4			
EDUCATION							
Primary Education	8	2	6	0	6	17.9426	0.00452 Significant
High School	20	8	12	0			
Higher Secondary	20	18	2	0			
Diploma	12	10	2	0			
OCCUPATION							
Housewives	22	15	7	00	4	5.563	0.2343 (NS)
govt. employees	14	05	8	1			
Private employees	24	10	12	2			
TYPE OF FAMILY							

Nuclear	32	20	10	2	2	1.465	0.4806 (NS)
Joint	28	14	10	4			
FAMILY INCOME							
Below 10000	14	12	2	0	6	13.046	0.046 (NS)
10001-15000	24	10	12	2			
15001- 20000	16	8	4	4			
Above 20000	6	3	3	0			
NUMBER OF CHILDREN							
One	10	5	5	00	6	6.875	0.076 (NS)
Two	20	15	5	00			
Three	15	5	10	00			
More Than Three	15	10	5	00			
SOURCES OF INFORMATION							
Group	08	00	00	58	6	38.689	<0.0001 (S)
Multimedia	28	00	119	146			
Health Professional	20	00	78	120			
Other	4	00	15	30			

Table 4 (part a) depicts that the tabled χ^2 value for 6, 4, 6, 4, 2, 4 & 6 degree of freedom were 12.59, 9.49, 12.59, 9.49, 5.99 at $p < 0.05$ level of significance and calculated χ^2 value is more than the tabled value among all demographic variables except sources of information and education. The difference was found to be statistically not significant except two cases.

MAJOR FINDINGS OF THE STUDY

- Majority of subjects (40%) belongs to the age group of 21 – 25 years
- Majority of subjects (63.3%) were Christian
- Majority of subjects (20%) were high school & higher secondary education
- Majority of subjects (40%) were private jobs
- Majority of subjects (40%) were having income range from Rs.10001-15000
- Majority of subjects (53%) were belongs to nuclear family
- Majority of subjects (33.3%) were having two children
- Majority of subjects (46%) were got information from multi media

CONCLUSION

This chapter deals with the conclusion, implication, recommendations and limitations drawn for the study. A study to assess the knowledge of mothers on MR vaccination in selected areas at Bangalore. A descriptive survey design was used in the study. The data was collected from 60 samples through random sampling technique. The result obtained from the study helped the researcher to drive certain implication for nursing practice, nursing education, nursing administration and nursing research.

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