

**“A STUDY TO ASSESS KNOWLEDGE REGARDING MR VACCINE AMONG THE PEOPLE RESIDING IN SELECTED RURAL AREA OF PUNE CITY”**

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**ABSTRACT**

Every year, vaccination saves lives of millions of people. Vaccination protect kids from dangerous infections and hence serve a critical role in lowering child mortality and protecting their health. Immunizations protect more children than before, yet nearly one in five newborns worldwide, or 19.5 million kids, do not get these most basic vaccination, leaving them exposed to severe illnesses. Every year, and over 1.5 million child deaths of vaccine-preventable illnesses. Since 1989, when the Herpes Chicken pox Rubella (MMR) vaccine was introduced, the national vaccination programme has significantly decreased the incidence of measles cases. 1 However, the program's effectiveness has waned in recent times, with national vaccination coverage falling below 90% in infants under the age of two in 2014. This has corresponded with an increase in the national measles case count to 339, more than twice the previous year's total. 3 To eradicate diseases, the World Health Organization recommended vaccination coverage be better than 95% . **Objective Of The Study** :To assess the knowledge regarding MR vaccine among the people in rural area and assess the association score between knowledge and selected demo graphical variables. **Methodology**: A non-experimental Descriptive design carried out among 100 people . Non-probability purposive sampling technique was used and was statically analyzed after collecting the data through structured questionnaire was prepared for data collection. Ethical clearance was taken from the Institutional ethics committee. Data analysis was done using descriptive statistics. **Results**: The present study result showed that Knowledge concerning MR vaccine among the rural people. Majority 65% were having average knowledge, 23% were having poor knowledge, and only 12% were having poor knowledge.

**Key Words**: Assess, Knowledge, MR vaccine, people, rural

**INTRODUCTION**

Every year, vaccination saves lives of millions of people. Vaccination protect kids from dangerous infections and hence serve a critical role in lowering child mortality and protecting their health. Immunizations protect more children than before, yet nearly one in five newborns worldwide, or 19.5 million kids, do not get these most basic vaccination, leaving them exposed to severe illnesses. Every year, and over 1.5 million child deaths of vaccine-preventable illnesses.

Every year, about 2.7 million children in India get measles. Survival face major sequel such as Diarrhea, pneumonia, and hunger are all possible outcomes. Rubella infection is however

prevalent in India. It may result in spontaneous miscarriage, stillbirth, and persistent birth defects such as hearing loss, blindness, mental retardation, or heart defect, among others. Around 40 000 children are born each year with congenital rubella syndrome-related birth abnormalities.

The MR vaccination is a very safe and well-tolerated vaccine. The majority of adverse events associated with MR vaccination are moderate and temporary, and are comparable in severity and frequency to those regarding the administration from each of the individual antigen products. The majority of measles vaccine side effects are moderate and temporary. There may be modest discomfort and soreness at the injection site, which is sometimes followed by a mild fever and localized lymphadenopathy. Approximately 7 – 12 days following immunization, some individuals may develop a 1 – 2 day fever and rash.

The vaccine used for the MR program is made in India and is World Health Organization-pre qualified. In India and numerous neighboring countries including such Bangladesh, Sri Lanka, Nepal, & Myanmar, the same immunization is frequently offered. For many years, private practitioners in India had vaccinated children against measles-rubella (MR) and measles-mumps-rubella (MMR). The Indian Academy of Pediatrics (IAP) endorses the method of MR vaccination. The MR vaccination will be delivered completely free of charge.

#### **NEED FOR THE STUDY**

On 5 February 2017, India started one of the world's biggest immunisation programmes against measles and rubella. Measles is a leading cause of death in children, whereas rubella causes congenital syndrome (CRS), which results in irreparable birth abnormalities.

The programme, which was launched with technical assistance from the WHO Country Office in India and other partners, represents a significant step forward in the fight against children mortality and birth abnormalities.

"Measles is a primary cause of childhood mortality, whereas Rubella infection among pregnant women can result in foetal death or congenital abnormalities. WHO congratulates the government on its commitment to prevent these diseases via a large-scale countrywide immunisation campaign with a safe and efficient combination measles-rubella vaccine," stated DrHenkBekedam, WHO Representative in India.

The MR vaccination will be delivered completely free of charge. Following the campaign's conclusion, the MR vaccine will indeed be integrated into regular vaccination and will take the place of the measles vaccine, which is now administered to children aged 9-12 months or 16-24 months. WHO is assisting the government with micro planning, monitoring, preparation, and execution of the MR campaign for quality and safety via its National Public Health Surveillance Project (NPSP) The Measles-Rubella (MR) campaign will provide a single dose of MR immunisation to all children in the target age range (between nine months and less than 15 years), regardless of their past measles/rubella vaccination status or rubella MMR illness status.

The campaign will target youngsters aged nine months to the less than 15 years in government and non - governmental settings such as schools and health facilities. This second campaign

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dosage will improve the child's immunity and safeguard the whole community by eradicating measles and rubella transmission. This technique had a critical role in eradicating measles inside the Western Hemisphere (2002) and indigenous rubella in 2009.

**MATERIAL AND METHODS**

A non-experimental Descriptive design carried out among 100 people . Non-probability purposive sampling technique was used and was statically analysed after collecting the data through structured questionnaire was prepared for data collection .The questionnaire was divided into two section .Section A deals with demographic data related to people. section B Self Structured questionnaires regarding knowledge on MR vaccine of tool was undefined by content validity method.. The reliability of the tool was calculated by “ Test –Retest Method- by Karl Pearson’s co-efficient formula investigator calculated the “r-value” more than +0.8 so the tool was reliable .

**Statistical Analysis**

Analysis and interpretation of the data was done by using both descriptive (in terms of frequency, percentage,) and inferential (chi-square test).

**RESULT**

After collecting the data the information were organized and presented under the following sections.

**Demographic profile of community people**

Findings revealed that demographic profile of people in rural area according to age majority 34% were from 20-30 years of age group, According to education status majority 50% were educated secondary, According to type of occupation majority 49% were doing private Job, According to Source of information, Majority of 48% mass media was source of information.

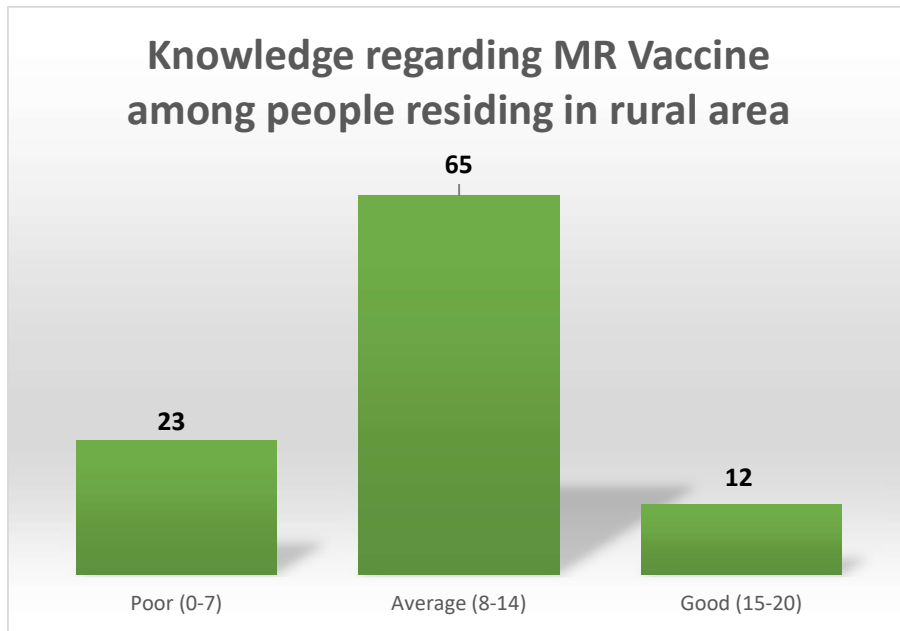
**Table no. 1**

**Knowledge regarding MR Vaccine among people residing in rural area**

Table 1 depicts Knowledge regarding MR Vaccine among the people Majority 65% were having average knowledge, 23% were having poor knowledge, and only 12% were having poor knowledge.

n=10

Knowledge	Frequency	Percentage	Mean	SD
Poor (0-7)	23	23	10.68	3.83
Average (8-14)	65	65		
Good (15-20)	12	12		



**Fig. 1 Knowledge regarding MR Vaccine among people residing in rural area**

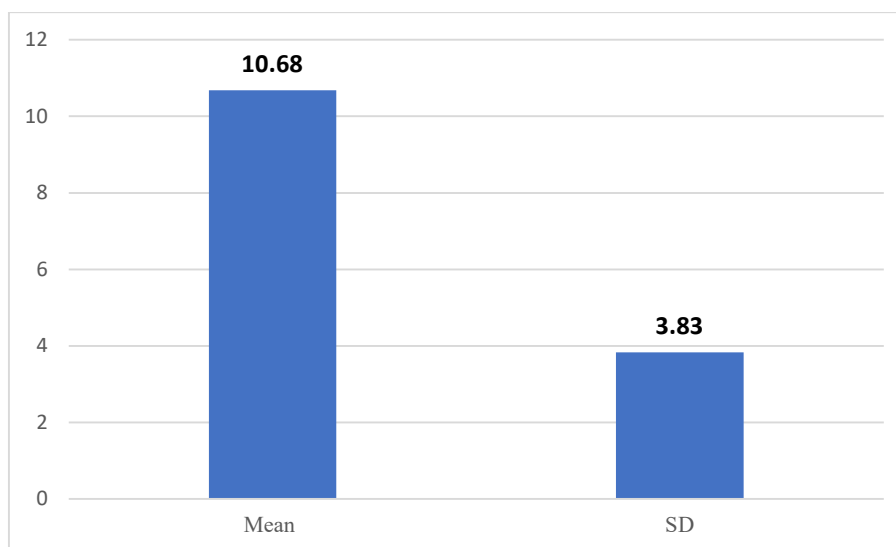
**Table no. 2**

**Association of findings with selected demographical variables**

Demographic variable	Average	Good	Poor	DF	Chi Square Calculated	Chi Square Table Value	P value	Remark
1. Age –								
a. 20-30 year	21	7	6	6	13.18	12.59	0.4	Associated
b. 31-40year	25	2	4					
c. 41-50 year	19	2	10					
d. 50-60year	0	1	3					
2. Education status								
a. Illiterate	0	1	4	6	10.98	12.59	0.089	Not Associated
b. Secondary	34	6	10					
c. Graduate	28	5	6					

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d. Post Graduate	3	0	3					
3. Type of occupation								
a. Famer	26	5	8	6	3.89	12.59	0.69	Not Associated
b. Private job	33	4	12					
c. Gov. job	5	3	3					
d. Labour	1	0	0					
4. Source of information								
a. Mass Media	26	11	11	6	8.64	12.59	0.195	Not Associated
b. Magazine	14	1	5					
c. Internet	13	0	2					
d. Newspaper	12	0	5					



**Fig.2 Findings related association with selected demographical variables.**

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Demographic variables such as Age and Knowledge regarding MR Vaccine was significantly associated as p value is  $<0.05$  level of significance whereas, educational status, type of occupation & source of information was not significantly associated as the p value is more than 0.05 level of significance.

## **DISCUSSION**

The current study is design to assess knowledge regarding MR Vaccine among the people has been analyses by using descriptive and inferential statistics.

The study can be discussed with a similar descriptive study done by Daniel Brieger (2017) on Knowledge, attitudes and opinions towards measles and the MMR vaccine across two NSW cohorts. Parents (n=201) of children  $<12$  years were surveyed with a purpose design survey at public beaches at the Central Coast and community markets at the North Coast. Eight per cent of respondents reported not immunising their child with MMR vaccine. Most respondents recognised that measles is a highly contagious disease. Non-immunisers were found to be older, had a lower perceived severity of measles, were less likely to agree with the efficacy and safety of the vaccine, and were more likely to have encountered someone who had suffered side-effects of the vaccine. The current study is A non-experimental Descriptive design carried out among 100 people. Non-probability purposive sampling technique was used and was statically analysed after collecting the data through structured questionnaire was prepared for data collection. The questionnaire was divided into two section. Section A deals with demographic data related to people like age, gender, marital status, education. Section B Self Structured questionnaires regarding knowledge on MR Vaccine. Following sampling criteria Inclusion Criteria. People with age group of 20 years. People are willing to contribute in the study. People who are willing to participate. Both male & female are included in study. Exclusion- Those having any mental problem. Study analysis has been done for descriptive method: Mean and standard deviation to determine knowledge level of the people will be described. Demographic characteristics of sample will be described in terms of frequency and percentage. Inferential method chi-square test will be used to find out association with selected extraneous variables. The reliability of the questionnaire was calculated by “KARL PEARSON CORRELATION COEFFICIENT” formula. According to Karl-Pearson Correlation Coefficient if “r value” is more than +0.8 then the tool is reliable. The investigator concludes from the pilot study that the study design is feasible and don't reveal any major problem.

Similar study was conducted by Ms. Patel Jalpa (2020) on Study on A study to assess the effectiveness of structure teaching programmed on knowledge regarding Measles and Rubella vaccine among people living in selected rural areas of Mehsana district. The research approach used in the study was quantitative research approach, pre-experimental research One group pre test post test design and the sampling technique was non-probability convenient sampling technique. The result of the study showed that knowledge score is 14.58. This value is significant associated between social economic status and level of knowledge regarding measles and rubella vaccine among rural people living in selected area of mehsana district. It was also found that, there was no association between pre-test level of knowledge, and selected socio-personal variables.

## CONCLUSION:

Immunization saves millions of lives every year. Vaccines enable protection of children from serious diseases and therefore play a central role in reducing mortality and preserving the health of children. Today, vaccines are protecting more children than ever before, but almost one in five infants in the world, more precisely 19.5 million children, does not receive even the most basic vaccines, making these children vulnerable to dangerous diseases. More than 1.5 million children die annually from vaccine-preventable diseases.

The research was done to determine the level of awareness about the MR Vaccine among residents in a rural region of Pune. The descriptive analysis was used to determine the level of knowledge about the MR Vaccine among the population, and the results indicate that the majority of rural residents had an average level of knowledge about the MR Vaccine. Knowledge regarding MR Vaccine among the people Majority 65% were having average knowledge, 23% were having poor knowledge, and only 12% were having poor knowledge. There really is no significant relationship between their degree of knowledge with their demographic characteristics such as educational attainment, work type, and source of information. Only age or knowledge of the MR Vaccine were shown to be linked in a meaningful way.

**Conflict of Interest-** None to declare.

**Statements on human rights-**The study is approved by Institutional Ethics Committee, Bharati Vidyapeeth (Deemed to be University), College Of Nursing Informed consent was taken from each participants .Voluntary participation was the key to sample selection.

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