

## Original Research Article

# Barriers for measles rubella vaccination campaign in rural area of Jammu: a qualitative study

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**Received:** 29 October 2019

**Revised:** 12 December 2019

**Accepted:** 13 December 2019

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## ABSTRACT

**Background:** Measles is a highly contagious virus, spread by contact with an infected person through coughing and sneezing. Like measles, rubella can be prevented with a safe, effective and inexpensive vaccine. This can be delivered as a rubella vaccine alone, or combined with measles vaccine (MR) or with measles and mumps vaccines (MMR). The objectives of the study were to analyze the barriers for acceptance of MR vaccination in the field area of New Type Primary Health Centre (NTPHC) Miran Sahib, one of the NTPHC of CHC R. S. Pura, field practice area of Department of Community Medicine, GMC Jammu.

**Methods:** A qualitative study which consisting of interviews of parents of children both vaccinated as well as unvaccinated as well as teachers and principals of children of various government and private schools, Female Multipurpose Health Worker (FMPHW)s, accredited social health activist (ASHA) workers and Anganwadi workers where the campaign was conducted was also interviewed.

**Results:** The major barrier to acceptance of MR vaccination was wrong message conducted through some social media that it results in deaths of some children in various places, and also the messages spread in some religions like in Muslim community that the Vaccine leads to infertility. But the sensitization meetings with the parents, school staff by the health team prior to vaccination played a major role and results in the vaccine coverage of 95%.

**Conclusions:** Before eliminating MR, there are many barriers which are needed to be addressed.

**Keywords:** MR vaccination, IEC activities, Barriers

## INTRODUCTION

The measles and rubella (MR) campaign is one of the important public health initiative of the Govt. of India to eliminate measles by 2020 and control rubella/congenital rubella syndrome (CRS). The initiative targets children in a wide age group between 9 months and 15 years.<sup>1</sup> The campaign is for those children who were left out due to either non-availability of vaccine or due to vaccine failure. The immunity of the population will then be

sustained by follow-up campaigns and incorporation of MR vaccine into routine immunization schedule at 9 months and 18–24 months. The MR vaccine has an excellent safety and effectiveness profile. Under field conditions, seroconversion is 85% at 9 months and 95% at 12 months or more for measles, and 95% at 9–12 months and more than 99% when given beyond 12 months for rubella. Adverse reactions are generally mild and transient.

For the MR campaign to be effective, it is important that no child be left behind. The current campaign is implemented through fixed sites sessions in schools and outreach centers such as Anganwadi centres. Therefore, the field staffs as well as school staff are relied on to convey the importance of vaccination. The first phase of the MR campaign was initiated to accelerate the country's efforts to eliminate measles. The campaign also marked the introduction of rubella vaccine in India's childhood immunization program to address congenital rubella syndrome, which causes birth defects in nearly 40, 000 children every year.<sup>2</sup> The current campaign was the first in the series to cover a total of 410 million children across the country over the next 2 years. Because India accounts for 37% of burden global measles death the success of vaccination will have a tremendous effect on the word figures. In Jammu & Kashmir, the campaign was launched on September 24 to cover nearly 38 lakh children in the age group of nine months to 15 years.<sup>3</sup>

The MR vaccination campaign was launched across Jammu district to administer vaccines to over 3.85 lakh children falling in the 9 months to 15 years age group. In the initial phase of MR campaign, it was observed that the coverage was low because of so many reasons but gradually increased aftersuccessive sensitization of school authorities as well as of parents regarding the disease and its prevention.

## METHODS

This qualitative study was carried out in August 2018, immediately following the initial round of MR vaccination campaign after obtaining the clearance from the Block Medical officer, CHC R. S. Pura, which is a field practice area of Department of Community Medicine, GMC Jammu. The activity is carried out at Zone Miran sahib, which is under the Block R. S. Pura. This study area consists of 25 schools (both Government

and Private), 3 subcentres and 23 villages. With the help of ASHA workers, we were able to identified parents of both twelve vaccinated and unvaccinated children. Both parents were interviewed after taking consent from them and also from the principal of the school. The meeting was conducted at the premises of the school. The data was collected from the school staff and the staff of the NTPHC Miran sahib also. The data were collected till saturation was reached. Each of these selected participants (parents as well as other staff) was interviewed using an interview guide consisting of a list of pre-determined open-ended questions from extensive research. Probing questions were too asked to found out more information.

Each interview was lasted for 30 to 40 min. The transcripts were coded manually so that to identify themes and sub-themes that was then further categorized into categories. To increase the validity of the findings, it was then verified by another researcher. Comparisons between and within the vaccinated and non-vaccinated groups were made.

## RESULTS

Parents of both twelve vaccinated and twelve unvaccinated children were interviewed. The age of the parents ranged from 18 to 40 years. Among the parents interviewed, the mothers' education status range from illiterate to graduation and 8 mothers were homemakers. And the fathers were educated up to graduation and some were even illiterate. Majority of them were occupied in farmers, shopkeepers, drivers, cobblers, etc. and some were in government jobs. Among the parents who were interviewed, some parents were Hindu by religion and some were Muslim by religion. Eleven of them had two children, whereas the rest had four, three, and one child each.

**Table 1: Demographic characteristics of respondents (n=24).**

Variable	Parents of vaccinated children*	Parents of unvaccinated children
	N (%)	N (%)
<b>Age (years)</b>		
18-22	2 (8.33)	8 (33.33)
23-27	12 (50)	14 (58.33)
28-32	3 (12.5)	2 (8.33)
33-37	7 (29.16)	-
38-42	-	-
<b>Mothers' education status (n=12)</b>		
Illiterate	2 (16.66)	6 (50)
Primary school	4 (33.33)	3 (25)
High school	3 (25)	3 (25)
Graduate	3 (25)	-
<b>Occupation of mothers (n=12)</b>		
Housewife	3 (25)	5 (41.66)
Self employed	6 (50)	7 (58.33)
Government employed	3 (25)	-

Continued.

Variable	Parents of vaccinated children*	Parents of unvaccinated children
<b>Fathers' education status (n=12)</b>		
Illiterate	3 (25)	5 (41.66)
Primary school	2 (16.66)	4 (33.33)
High school	5 (41.66)	3 (25)
Graduate	2 (16.66)	-
<b>Fathers' occupation (n=12)</b>		
Farmer	1 (8.33)	3 (25)
Cobbler	2 (16.66)	1 (8.33)
Shop keeper	5 (41.66)	6 (50)
Drivers	-	2 (16.66)
Govt job	3 (25)	-
Others	1 (8.33)	-
<b>Religion</b>		
Hindu	18 (75)	20 (83.33)
Muslim	4 (16.66)	4 (16.66)
Others	2 (8.33)	-
<b>Number of children (n=12)</b>		
1	3 (25)	1 (8.33)
2	7 (58.33)	4 (33.33)
3	2 (16.66)	5 (41.66)
>3	-	2 (16.66)

\*Parents= father and mother, So 12 parents means 12 father and 12 mothers.

### ***Perceptions of parents regarding routine immunization and MR campaign***

All parents who participated in the study believed that routine immunization against the Vaccine preventable diseases were very necessary and preventable against diseases and their children were fully immunized till date.

Acceptance to pulse polio campaign was much higher than the MR campaign. Many IEC (information, education, and communication) activities were conducted over the years for pulse polio programme as well as for Indhradhanush Programme. With regard to the MR campaign, parents were very apprehension and suspicion among the parents prevalent.

*"First campaign was polio, then it was Indhradhanush and now it was MR vaccine...the campaign never ends..."*

### ***Barriers for MR vaccination campaign***

The conduct of the MR campaign in the schools as well as Anganwadi centres was found to have an impact on the campaign. Parents were apprehensive about giving injections at the school setting because of safety reasons and any mishappening. Some unwilling parents took their children back to the class and not willing for injection. But after 2-3 days after watching the other children healthy status, then they were willing to immunize their children. Other barriers which were of the main importance in the campaign were the lack of awareness regarding the vaccine that was why the vaccine is so

important, even the social media was not so active regarding this campaign and not the least, for administering it in a campaign mode in the school settings. There was anxiety among all the parents including those who had vaccinated their children. None of them seemed to have understood the purpose of vaccinating their children against MR, and neither did they make any effort to find out why it was given. The parents were confused about the measles vaccine already given to their children in the immunization schedule recommended by the Government of India and also by the pediatricians in the private sector, according to the Indian Association of Pediatrics (IAP). This condition was making the sensitization among parents and school authorities even more difficult.

*"Vaccine coverage range was between 9 months to 15 years...if vaccine already taken earlier...then why to receive...?"*

One more obstacle which came in their way was the short span of time given to the parents to decide whether vaccinate their children or not. Because of this, the health staff repeatedly sensitizes them regarding the importance of immunizing their children with MR Vaccine in this short span of time as stated by the various ANMs. So the health staff stated that:

*"To eradicate the MR disease...proper sensitization is necessary...before starting the campaign."*

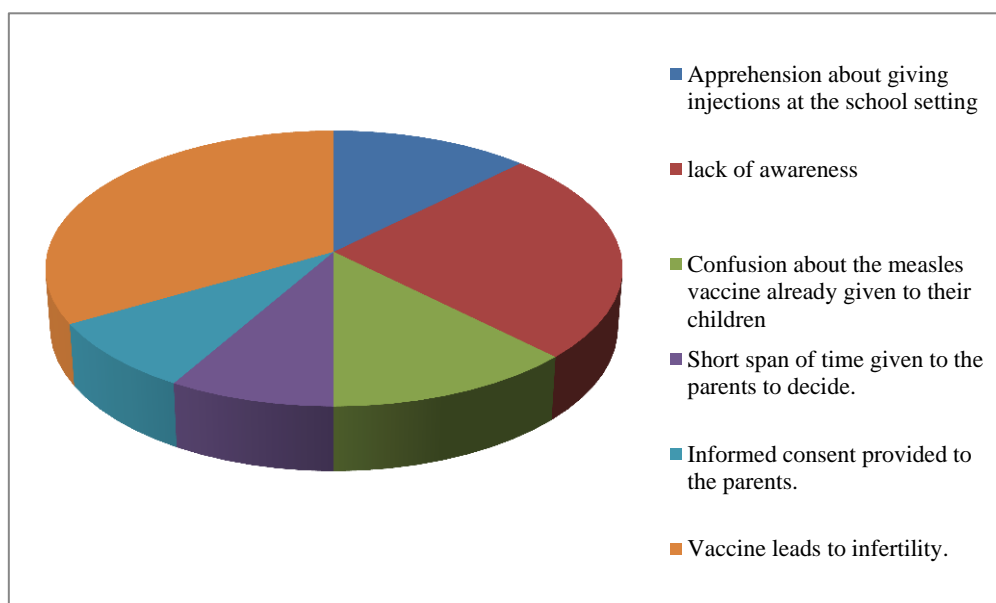
One more barrier of delaying this campaign was that the informed consent provided to the parents by the school

authorities was not timely signed by them as stated by the health staff. Because of the written consent, suspicion arises among the parents regarding the vaccine. But according to the school authorities, written consent was necessary as it would protect them from any mishappening. So, the parents stated:

*“If you were doing full MR vaccination coverage...and side effects were minor....why you were taking the written consent....? it created chaos among us.”*

The major barrier to acceptance of MR vaccination was wrong message conducted through some social media that it results in deaths of some children in various places, and also the messages spread in some religions like in Muslim community that the Vaccine leads to infertility. Also, the main barrier was that, why the girls were specially focused for vaccination. One of the parents of unvaccinated child stated:

*“Why our Government was focusing on our girl child...? I think our government wanted to reduce our Muslim population...”*



**Figure 1: Barriers of MR vaccination campaign.**

## DISCUSSION

The present study was to reveal the different perceptions as well as barriers for MR vaccination campaign. All parents were satisfied about the routine immunization activities as well as supplementary polio immunization activities because of various IEC activities, social media etc. Because of less media involvement as well as less time given to the parents, MR campaign got less acceptability. Some studies stated that “community fatigability is due to the too many programs implemented simultaneously and it required many strategies to address it.”<sup>4,5</sup>

The health workers as well as ASHA workers played an important role in increasing the coverage rate of the area after various sensitization activities and the some studies also stated the same consensus that the health care providers play an important role in all the activities.<sup>6</sup> Immunization activities at the school setting played a double-edge weapon like children were not so anxious as they were in the school not at the hospital but another way, parents were so anxious as the immunization activities being done at the school which is similar to the findings of another study.<sup>7</sup> Because of the more emphasis

on the immunization of girl child, the anti-vaccination lobby popularized that the government targeted the Muslim community and it has anti-fertility side effects. But one of the studies stated that there were no such vaccines which caused anti-fertility effects and the rate of growth of Muslim countries continued to be the same.<sup>8</sup>

## CONCLUSION

To conclude, public health specialists always play an important role in increasing the immunization coverage by way of communication so that the beneficiaries understand the importance of goal of elimination of diseases. A complete knowledge of the all aspects of religious, cultural and social contexts should be taken into account so that the maximum community participation will be achieved and will also help in the faster achievement of our goal of eliminating Measles and Rubella from the world.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: The study was approved by the Institutional Ethics Committee*

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**Cite this article as:** Sangra S, Choudhary N, Kouser W. Barriers for measles rubella vaccination campaign in rural area of Jammu: a qualitative study. *Int J Community Med Public Health* 2020;7:203-7.