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Original Research

To determine the coverage of MR vaccination programme in urban area

Gulfam Ahmed Hashmi

Associate Professor, Department of Community Medicine, Gauri Devi Institute of Medical Sciences & Hospital, Durgapur, West Bengal, India

ABSTRACT:

Aim: To determine the coverage of MR vaccination programme in urban area. **Methods:** After taking the ethical permission this study was done in the department of community medicine. 100 Children aged between 8 months and 14 years were included in this study. Children below 8 months and above 14years and those parents not willing to participate in the study were excluded. Pre tested, semi structured questionnaire by interview technique was used in this study. **Results:** out of 100 children's, 40% were in the age group of 4 to 9 years followed by 36% in the age group of below 4 years and 24% in the age group of 9 to 14 years. 87% of the children have been immunized with the MR vaccine and 13% of the children have not been vaccinated by MR vaccine. out of 54 male 50 male (57.47%) were immunized and 4 male (30.76%) were not immunized. Among females, 37 (42.53%) children were immunized and 9 (69.24%) were not immunized. on the basis of sex we found that the 57.47% boys and 42.53% girls were vaccinated. On the basis of MR vaccinations card 64% children's vaccinated while 36% did not have MR vaccinated card. 68% children's were vaccinated in school campus, 24% in anganwadi and rest of the children's in the government hospitals.50% parents get the MR vaccination informations from the school, 24% from anganwadi teachers , 10% from the social media and remaining parents get the information from various sources. due to illness 40% children's, 26% not aware by the immunization process, 15% due to travel or out of station during vaccination campaign,10% forget about the session and remaining due to fear factors were not vaccinated. **Conclusion:** We concluded that the immunization process is very important for the children's. we suggested that the all the people and government worker should be aware for the MR vaccination programmed, it should be compulsory for all the children's.

Key words: MR vaccine, immunizations

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Corresponding author: Gulfam Ahmed Hashmi, Associate Professor, Department of Community Medicine, Gauri Devi Institute of Medical Sciences & Hospital, Durgapur, West Bengal, India

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INTRODUCTION

As per WHO-SEAR countries, in Sep 2013, resolved to eliminate measles and control rubella/congenital rubella syndrome (CRS) by 2020. India is a priority geographic area for intensified vaccination as it accounts for 47% of global measles deaths.[1] The Ministry of Health and Family Welfare (MOHFW), Government of India (GoI), consistent with World Health Organization (WHO) recommendation, proposed to introduce Rubella vaccine in its Universal Immunization Programme (UIP).[2] In accordance with the WHO Strategic Plan for Measles Elimination and Rubella/CRS Control in SEAR, India's National Technical Advisory Group on Immunization (NTAGI) planned a 3-year MR mass vaccination campaign in phases across the country. This wide age-range vaccination campaign, targeting children aged 9 months to less than 15 years will rapidly build up immunity and help reduce measles and rubella transmission in the community. Subsequently, MR vaccine has replaced the Measles vaccine given at 9 months and 14-16 months in the UIP.[3] The vaccine was given to children aged 9 months to < 15 years. For those who had already received MMR or MR Vaccine earlier, the campaign dose was given as a booster dose. All immunized children received a vaccination card to verify the MR vaccine administration. The vaccination campaign was held in government, private and aided schools, Integrated Child Development Services (ICDS) centres, health sub-centres and mobile posts in villages and urban areas. Around 1,500 doctors and 10,000 nurses—besides anganwadi workers and volunteers—were involved in the programme. During

the mass vaccination campaign, there were several rumours regarding inefficiency and adverse effects caused by the vaccine.[4]

MATERIAL AND METHODS

After taking the ethical permission this study was done in the department of community medicine. 100 Children aged between 8 months and 14 years were included in this study. Children below 8 months and above 14years and those parents not willing to participate in the study were excluded. Pre tested, semi structured questionnaire by interview technique was used in this study.

STATISTICAL DATA

Analyzed using SPSS 25.0. Descriptive statistics was applied.

RESULTS

out of 100 children's, 40% were in the age group of 4 to 9 years followed by 36% in the age group of below 4 years and 24% in the age group of 9 to 14 years.

Table 1 Age distributions of children's

Age(Years)	Number of children's	%
Below 4	36	36
4-9	40	40
9-14	24	24

87% of the children have been immunized with the MR vaccine and 13% of the children have not been vaccinated by MR vaccine.

Table 2 Status of vaccination

Status	Number of children's	%
MR Vaccinated	87	87
Not vaccinated	13	13

Table 3 show that, out of 54 male 50 male (57.47%) were immunized and 4 male (30.76%) were not immunized. Among females, 37 (42.53%) children were immunized and 9 (69.24%) were not immunized. on the basis of sex we found that the 57.47% boys and 42.53% girls were vaccinated. There was a statistically remarkable difference of immunization status among male and female children ($p< 0.05$)

Table 3: Correlation between gender and vaccination

Sex	Vaccinated with MR vaccine		Total
	Yes	No	
Male	50(57.47)	4(30.76)	54
Female	37(42.53)	9(69.24	46
Total	87	13	100

$\chi^2 = 2.002$, df = 1, p = 0.31

On the basis of MR vaccinations card 64% children's vaccinated while 36% did not have MR vaccinated card.

68% children's were vaccinated in school campus, 24% in anganwadi and rest of the children's in the government hospitals.

50% parents get the MR vaccination informations from the school, 24% from anganwadi teachers , 10% from the social media and remaining parents get the information from various sources.

due to illness 40% children's, 26% not aware by the immunization process, 15% due to travel or out of station during vaccination campaign,10% forget about the session and remaining due to fear factors were not vaccinated.

Table 4: Side effect of vaccine

Side effect of vaccine	Number of children	%
Yes	4	4
No	96	96
Total	100	100

The above table shows that 4 children (4%) had any side effects after vaccination while 96 children (96%) did not have any side effects.

DISCUSSION

The aim of this study was to study the factors associated with who is missed in a mass campaign. It's very important to identification of unvaccinated peoples. Then, if one or more of these correlated factors are known to be clustered in a geographically-

focused site within a larger programme area, we may consider this site as having a higher likelihood of being or becoming a pocket of unvaccinated persons. Understanding such parameter and then how they are distributed can help us predict if and where potential pockets of unvaccinated people might exist in a population. In our study the coverage for MR Vaccine was 87%, 57.47% male children were immunized compared to 42.53% female children. In a study done by Giri BR *et al*.[5] in Bhutan in the year 2006 showed an overall coverage of 98.17%.

In our study 68% children's were vaccinated in school campus, 24% in anganwadi and rest of the children's in the government hospitals. 50% parents get the MR vaccination informations from the school, 24% from anganwadi teachers , 10% from the social media and remaining parents get the information from various sources. Dasgupta S *et al*.[6] in their study showed that major source of information was from Anganwadi workers (34.6%) followed by miking (30.9%).

In our study due to illness 40% children's, were not aware of the immunization process, 15% due to travel or out of station during vaccination campaign,10% forget about the session and remaining due to fear factors were not vaccinated. Scobie HM *et al.* [7] in their study reported that the primary reason for non-vaccination was lack of awareness of the campaign (69.4%) followed by child was travelling (5.4%) and unaware of need for vaccination (5.1%). In our study among the children who complained of any adverse effects following vaccination the commonest complains were fever (71.43%), itching (14.29%) and rash (14.9%). Giri BR *et al*.[5] in their study reported headache, fever, and body ache were the commonest complaints (55%) followed by pain at injection site (24%).

Support and motivation from community level health workers and physicians was reported as a reason for vaccine acceptance. A study conducted by Gargano L, *et al.* gave similar results concluding that physician recommendation plays a crucial role to improve immunization uptake.[8] In this study, the influence of family and friends on immunization played an important role both as a barrier as well as, as a motivating factor. A study to assess vaccine utilization showed similar results.[9]

Fear and misconception of adverse effects in addition to being unaware of the benefits of vaccine was responsible for refusal of the vaccine by majority of the parents of children not immunized. The fear of adverse effects was attributed to various rumours during the vaccination campaign. A review article to assess the barriers for immunization attributed these fears to general lack of information and understanding of vaccines.[10,11]

CONCLUSION

We concluded that the immunization process is very important for the children's.we suggested that the all the people and government worker should be aware for the MR vaccination programmed, it should be compulsory for all the children's

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