### A CROSS SECTIONAL STUDY OF KNOWLEDGE, ATTITUDE AND PRACTICES **ON IMMUNIZATION OF CHILDREN IN HAJIPUR, KATIHAR**

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ABSTRACT: A cross-sectional study was conducted to estimate and to compare immunization coverage and to understand reasons of partial/ un-immunization among children. A total of 110 children between 1-5 years of age were interviewed in 11 clusters consisting 10 children from each cluster (five from each group) by expanded program on immunization cluster survey method. Statistical analysis was performed with proportions, their 95%, confidence intervals, chi-square test, and binary logistic regression. Full immunization coverage rate was 40% and 60% was partially immunization and 10% was un-immunization. Reasons cited for un-immunization/partially immunized were, place or time of vaccination not known, unavailability of immunization services at site, inconvenient time of sessions, unaware of need for vaccination etc. Thus full immunization coverage rate was significantly lower among children.

**KEYWORDS:** Immunization Status, Perception of parents or guardian, Source of information.

**INTRODUCTION:** Global Immunization vision and strategy sets a goal of protecting more people against more diseases by expanding the reach of immunization to every eligible person. Identifying and reaching the unreached people in every district is one of the key strategies to achieve this goal.<sup>1</sup> Immunization is one of the best indicators to evaluate the health. It is also one of the most cost effective interventions to prevent a series of major illness, particularly in environments where children are under nourished and die from preventable diseases.

Immunization of a new born with BCG vaccine enhances with a typical Mycobacterium which can infect the child during the post neonatal period.<sup>2</sup> Likewise, administration of "0 dose" of OPV leads to early colonisation of the intestinal tract with the attenuated vaccine virus which can act as a barrier to the wild Polio virus.<sup>3</sup> The Janani suraksha Yojna (JSY) is an ambitious step under NRHM which is introduced on 12<sup>th</sup> April 2005 to reduce Neonatal and maternal mortality by promoting institutional deliveries as well as better ante natal care and post natal care through Accredited social Health Activist.<sup>4</sup> At birth immunization is a important preventive measure however the impact of ISY scheme on at birth immunization practice especially in tertiary level health centre has not been documented. Institutional deliveries will not only facilitate safe delivery but will also identify neonates who need special care. The safe delivery process conducted in an institution will have a definite impact of reduction of maternal mortality. Delivery of a new born in an institution also provides an opportunity to the health care system to administer at birth immunization. Immunization coverage did not differ by the gender of child which was similar to other studies.<sup>5,6,7</sup> We found father's education an independent determinant in both groups. Educated males have better social networks. Likelihood of partial immunization was found to be more in home delivered children; similar findings were reported by other workers.<sup>8,9</sup>

Lack of information about place/time of immunization sessions, inconvenient timing and unavailability of services at the site were common reason for immunization. In routine immunization

program outreach sessions are held in villages with the help of support group involving Aganwari workers and ASHA however, these workers, Labourers usually live in the vicinity of factories which are usually located outside the village or town also their work schedule starts from 8 A.M to 4 P.M which makes access to outreach session of that particular village inconvenient in place and time.

The extensive social benefits of immunization, any inequities in the knowledge, attitude and practices that leave out large sections of the most deprived populations are a cause of serious concern. The study was cross sectional one and the data was collected by a predesigned schedule from the parents of all the babies attending the immunization.

**METHODOLOGY:** A cross sectional study design, 110 sample size, structured questionnaire tool study, 16 August 2014 to 2<sup>nd</sup> Sept. 2014 study period at Rural Health Training Centre Hajipur of Katihar Medical College Katihar Bihar.

Immunization status, literacy of parents or guardian, religion, occupation, source of information and sex of the child are the study variables.

A community based, cross sectional study was conducted in RHTC HAJIPUR, KATIHAR. All children aged 1-5 years were included in the study. A Structured questionnaire was used to elicit the information about the knowledge, attitude and practices of the respondents regarding immunization.

#### **OBSERVATION AND RESULT:**

Immunization	Number	Percentage		
Fully Immunization	40	36.36%		
Partially Immunization	60	54.54%		
Un-immunization	10	9.10%		
Total	110	100.00%		
Table 1: Immunization out of 110				

Present Study 36.36% (40) was fully immunized and 54.54% (60) were partially immunized and 9.10% (10) were unimmunized.

1. Motivator for at birth immunization	No.	Percent
ASHA	63	57.27%
ANM/AGANWADI WORKERS	30	27.27%
FAMILY MEMBERS/ SELF AWARE	10	9.10%
OTHERS/MASS MEDIA	07	6.36%
TOTAL	110	100.00%
2. Vaccine given at birth	No.	Percent
BCG	30	27.27%
OPV	60	54.55%
Hep-B	10	9.09%
Don't know	10	9.09%
Total	110	100%

3. At birth immunization prevents	No.	Percent	
Tuberculosis	10	9.09%	
Polio	60	54.55%	
Hepatitis B	10	9.09%	
Don't know	30	27.27%	
Total	110	100%	
Table 2: Perception of parents on at birth immunization			

In present study table (2) motivator for at birth immunization 57.27% by ASHA, 27.27% By ANM/AGANWADI workers, 9.10% by family members or self-aware, 6.36% by mass media or other sources.

Vaccine given at birth 27.27% of BCG, 54.55 of OPV, and 9.09% Of Hep-B, 9.09% of cases don't know about Immunization.

Prevents disease by immunization at birth 9.09% of know about Tuberculosis, 54.55 about Polio, 9.09% about Hepatitis B, 27.27 of cases don't know anything.

**DISCUSSION:** From a total of 110 studied child 36.36%, (n=40) were fully immunized, 54.54% (n=60) were partially immunized and 9.10% (n=10) were unimmunized.

Health workers (ANM, ASHA, AWW) were the main source of information (84.54%), followed by family members and relatives (10%), through mass media (07%), A large proportion of the children (75%) had received their immunization from government establishments while 16% from private clinics including RHTC Hajipur KMC. Majority of the respondents (72.73%) opined that diseases could be prevented by immunization.

Most cases are from rural areas as it is a tertiary level health care, the patients from nearby areas are referred to the hospital, ASHA'S do work of community mobilization and motivation, similar studies by Huang J and Tembo KC have found that provision of services alone cannot raise the need and utilization of services unless their motivation.<sup>10,11</sup>

In states like Tamil Nadu and Kerala awareness about maternal health issue is high and citizens demand more. Literacy also plays a key role in rendering maternal health services.<sup>12</sup> As reported by Kusuma et al., low uptake of immunization can be attributed to workers, vulnerability, marginalization and alienation in the new socio cultural environment.<sup>13</sup> Antai has reported that the likely hood of full immunization for children is associated with the disruption itself.<sup>6</sup> Parents everywhere share the vulnerability resulting from limited social network, alienation and lively hood insecurity<sup>5,6,14</sup> therefore findings of this study are important and can be generalized for areas from where there is a large scale seasonal work, thus, this study shows that seasonal significantly reduces full immunization coverage rate and highlights necessity of health services package specifically for labourers and workers at a convenient site and timings.

Most of attendants of children had positive attitude toward vaccination which reflect a higher significance for complete and partial immunization. The negative attitude (As fear from vaccination and some false beliefs) played a highly significant role in importing knowledge to partial immunized group. The main reason for partial and non-immunization was found to be lack of information and lower education status.

**CONCLUSION:** Monetary benefits of social workers mainly ASHA is the main factor which brings people for at birth immunization, not the vaccines which prevent the disease. Therefore, steps to create social mobilization among the community to avail not only the benefits but also objectives should be immediately taken up. The innovative engagement of human resources as per need and the arrangements for incentives at each level will help to build up a role model of public health delivery system.

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