

Original Research Article

An evaluational study: the perception of mother about routine immunization attending anganwadi centre in urban Hapur, Uttar Pradesh

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Received: 05 February 2020

Revised: 12 March 2020

Accepted: 30 April 2020

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ABSTRACT

Background: Immunization is the most powerful, safe and cost-effective measures for prevention/control of a number of diseases. The historical success of eradicating the dreaded disease, Smallpox, prompted World Health Organization (WHO) to ask its member countries to launch immunization against six vaccine preventable diseases in its national immunization schedule because unequivocal knowledge and practices helps to develop positive attitude towards vaccination and thus their contribution to vaccination. It helps to reduce the burden of dreadful infectious diseases, which are best controlled by vaccination. Poor maternal knowledge likely to results in partial immunization coverage or nill immunization coverage in children.

Methods: Total 256 mother with children of aged 12-60 months were interviewed during four months duration, for the study. During the survey, 256 mothers having children between 12-60 months were interviewed through a pre-tested semi-structured questionnaire.

Results: 97.08 mothers knew that immunization is to be started at birth, 39% of mothers knew that OPV protects against polio. All the mothers had received T.T during pregnancy as per schedule (93%) and 99% had received 2 doses. Maximum mother reported that information was received by ASHA/AWW.

Conclusions: According to source of information the IEC activities should be increased and to improve the level of knowledge among mother of under five children.

Keywords: Evaluational study, Perception of mother, Routine immunization, Urban Hapur

INTRODUCTION

The development and application of vaccination and immunization is one of the most remarkable successes of the 20th century.¹ The encouragement of health is public as well as personal responsibility. It has been found that approximately 5 million children were dying annually and another 5 million were incapacitated by infectious diseases.² There is no exaggeration to assert that

vaccination is one of the greatest scientific discoveries ever made. It protects many children from getting sick and dead from dreadful diseases, thereby reducing the agony of many parents. So, there is necessity for the parents to develop unequivocal knowledge and perceptions about vaccinations. Because unequivocal knowledge and practices helps to develop positive attitude towards vaccination and thus their contribution to vaccination. It helps to reduce the burden of dreadful

infectious diseases, which are best controlled by vaccination.³ It has been mentioned in many studies and reported positive correlation between mother's knowledge, attitudes and practice and children's immunization.⁴ Immunization is the most powerful, safe and cost-effective measures for prevention/control of a number of diseases. The historical success of eradicating the dreaded disease, Smallpox, prompted World Health Organization (WHO) to ask its member countries to launch immunization against six vaccine preventable diseases in its national immunization schedule. In May 1974, the WHO launched the Expanded Immunization Programme (EPI) globally, with focus on prevention of 6 vaccine-preventable diseases by the year 2000. In India, EPI was launched in 1978 and it was re-designated as the Universal Immunization Programme (UIP) in 1985, with a goal to cover at least 85% of infants.⁵ Mass campaigns were undertaken in past years particularly for pulse polio immunization. Drawbacks of mass campaigns like beliefs in society that vaccination services will be delivered at home, reducing rate of immunization coverage and reducing EPI activities.⁶

Keeping in mind that maternal health education is a key to success of UIP and understanding of socio-cultural behavior required for better vaccination programme and strategies.⁷ Poor maternal knowledge likely to results in partial immunization coverage or nill immunization coverage in children.⁸ So that we conducted this study to evaluate the knowledge attitude of mother about routine immunization.

METHODS

This was a descriptive observational study and was conducted on 256 mothers* for a duration of four months. Analysis of a study conducted by DLH Surva-49 shows the primary immunization coverage 61%. So, prevalence (p) is 61%. Now using the formula,

$$\text{Sample size} = 4pq/L^2$$

$$p - \text{Probability of occurrence} = 61$$

$$q - \text{Probability of non-occurrence} = 39$$

$$L - 10\% \text{ of } p = 10/100 \times 61 = 6.1$$

$$\text{Sample size} = 4 \times 61 \times 39 / 6.1 \times 6.1 = 255.74$$

Hence the sample was approximately =256*.

All ethical clearance was taken from college ethical committee. This four-month study was conducted from April to July 2019 at anganwadi centre of UHTC (urban health training centre), a field practice area of a teaching in Pilkhuwa, Districts Hapur, Uttar Pradesh. Total 256 mother with children of aged 12-60 months were interviewed during four months duration, for the study. During the survey, 256 mothers having children between

12-60 months were interviewed through a pre-tested semi-structured questionnaire demographic and socioeconomic data were recorded using a questionnaire. The immunization status of the enrolled patients was assessed as per the national immunization programme.⁵ Mother was the primary respondent; if the mother was not available, father was interviewed informally by the author. Mothers were asked about the immunizations received by their children by one year of age, and where possible, this information was verified by cross-checking against the vaccination cards of the children.

Children who had received BCG and three doses of DPT/oral polio vaccine (OPV) and measles vaccine as scheduled in the first year of life were classified as fully immunized. Those who had missed any dose of six primary vaccines were labeled as partially immunized, and those who had not received any vaccine, except OPV in pulse polio immunization, up to 12 months of age, were defined as non-immunized.⁸ Pretested, structured questionnaire consisting of questions related to vaccination were used to assess women knowledge regarding immunization. Children more than 5 years and critically ill were excluded in the study. All statistical analysis was carried out using MS excel 2007.

RESULTS

Among the mothers mostly they belong to 21-30 years of age, 78.2% were <12 education and 72.1% were home maker (Table 1).

Table 1: Socio-demographic indicators.

Socio demographic indicators	Number	Percentage (%)
Age of mother (in years)		
16-20	37	14.45
21-30	200	78.18
>30	19	7.37
Gender of child		
Male	152	59.54
Female	104	40.46
Educational status of mothers		
<12	200	78.2
>12	56	21.8
Occupation of Mother's		
Home maker	184	72.1
Employed	72	27.9
Birth order of children		
1st	114	44.52
2nd	117	45.55
3rd	25	9.93

Health workers were the main source of information (88%). 87.26% of the mothers had the knowledge that immunization is important and (62.33%) beneficial for the child (Table 2).

Table 2: Source of information.

Source of information	Number	Percentage (%)
ASHA/AWW	185	72.26
Radio	167	65.1
Television	153	59.85
Health institution and post partum centre	150	58.74
Others (neighbor/friends etc)	76	30

97.08 mothers knew that immunization is to be started at birth, 39% of mothers knew that OPV protects against polio, 20% mothers were knowing the disease prevented by DPT vaccination, while 99% mothers were ignorant about the disease for which BCG is used. 93.10 mothers were of view that there is no problem with vaccination (Table 3).

Table 3: Knowledge about immunization.

Question	Answer of respondents	Number	Percentage (%)
Do you know about childhood immunization ?	Yes	223	87.26
	No	10	3.97
	Don't know (%)	22	8.75
Why immunization is important?	Cures diseases	22	8.48
	Prevents diseases	160	62.33
	Both	75	29.17
	Don,t know	0	0
At what age full immunization is to be started?	At birth	248	97.08
	At 6 weeks	5	1.59
Name the diseases against which child is immunized?	Polio	100	39
	Measles	27	10
Are there any problems related with vaccination?	BCG	3	1
	Hep B	77	30
	DPT	51	20
Are there any problems related with vaccination?	Yes	7	2.65
	No	238	93.10
	Don't know	11	4.24

The total 92.96% mothers considered that vaccination is important and should be completed as per schedule, as per the instructions of the health workers. All (100%) mothers believed that vaccination should be done in Govt. health facility. 60.21% mothers considered side-effects not dangerous (Table 4).

Ninety eight percent children were completely immunized and 93.4% had been immunized on schedule.

The reasons given for partial immunization (2%) were sickness of child (4 in number) and unawareness (2 in number). Eighty percent of mothers reported side effects after immunizing the children and 80% reported fever after DPT. BCG scar was absent in 4% of cases.

Table 4: Attitude about immunization.

Question	Answer of respondents	Number	Percentage (%)
Are you in favour of vaccination?	Yes	238	92.96
	No	18	7.03
	Don't know	11	4.24
Is it important to follow vaccination schedule	Yes	40	15.64
	No	152	59.41
	Don't know	64	24.93
Where should children preferably receive vaccination?	Government health institution	256	100
	Private health facility	0	0
Are side effects dangerous?	No	9	9.01
	Yes	154	60.21
	Don't know	79	30.76

Table 5: Practice about immunization.

Question	Answer of respondents	Number	Percentage (%)
Immunisation status	Completely immunized	251	98
	Partially immunized	5	2
	Unimmunised	0	0
Was immunisation completed on schedule	Yes	239	93.4
	No	17	6.6
Did side effects appear?	Yes	169	66
	No	87	34
	Fever	205	80
What side effects?	Swelling		
	Pain	51	20
	Redness		

All the mothers had received T.T during pregnancy as per schedule (93%) and 99% had received 2 doses. With regard to source of information about immunization, maximum mother reported that information was received by ASHA/AWW (Table 5).

DISCUSSION

In present study 78.18% of respondents were belongs to 21-30 years of age and have male child 59.54%. Most of

the mother were educated less than 12 slandered (78.2%). In that village 72.1% mothers were home maker and have 45.55% two child 44.52% have one child with them. In our study highest respondent got information regarding immunization from ASHA/AWW followed by from radio (65.1%), television (59.85%) health institution and postpartum centre (58.74%) respectively. while in the study conducted by Adeyinka et al, 65.7% of the respondents got information about vaccine preventable diseases from antenatal clinics and role of media was only 4.8%, same result was found by a study conducted by Kapoor et al, source of knowledge about vaccine preventable diseases was Anganwadi workers in 47% of subjects and T.V. in 35 % of subjects.¹⁰⁻¹¹

A successful immunization depends on parents positive attitude and knowledge, in this study 87.26% of mothers have knowledge about childhood immunization, 62.33% knew that they prevent the diseases while 29.17% have some confusion about cure and prevention.¹² In another study by Mapatano et al, they studied about immunization related knowledge, attitude and practices of mothers in Kinshasa Democratic Republic of the Congo have similar finding in their study.¹³ Higher degree of knowledge were reported from KAP study in Jammu and Kashmir by Hamid et al.¹⁴

In our study, 98% of children were fully immunized. High level of immunization was found by Hamid et al in their study. Immunization of children in a rural area of North Kashmir, India were also reported similar results.¹⁴ Answering the questions that were should children preferably receive vaccination, the respondent showed 100% faith on public health sector. So two finding of our study that is 100% trust in public health for vaccination and most information given by Anganwadi worker and ASHA is unique opportunity to improve the knowledge of mothers by improving the knowledge of health workers via regular trainings and awareness programmes. But in our study it was seen that not only mothers had positive attitude but their practices were also appreciating which could be the additional advantage of improving knowledge of mother in community. Similar finding were coated by another author from Kashmir in their study.¹⁴ About the question that at what age full immunization is to be started, 97.08% respondent answered at birth. Very few respondents replied about name the diseases against which child is immunized. Lower knowledge reported from author Shah et al 74% and about similar results were shown by Hamid et al. in their study.^{14,15}

CONCLUSION

The ASHA/AWW at the primary level, mass media and other means of IEC activities should be increased to the maximum extent so as to increase the knowledge and change the attitude regarding immunization among people especially mothers.

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: Pathak NK, Kumar P. An evaluational study: the perception of mother about routine immunization attending anganwadi centre in urban Hapur, Uttar Pradesh. *Int J Community Med Public Health* 2020;7:2159-63.