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Original Research Article

Awareness of Measles among Mothers of under Five Children Attending UHC Immunization Clinic Of Government Medical College

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Abstract: Measles is one of the six killer disease causing mortality among Under-five Children . Mothers' knowledge towards immunization is likely influence on prevention against Measles among Under five Children. As minimal literature is available on awareness of Measles among Mothers of Under-five children attending UHC Immunization Clinic ,So this study was carried out. The objective is to assess socio-demographic profile of mothers of Under five children, to study awareness of measles among them and to study factors affecting immunization status of under five children attending UHC Immunization Clinic of Government Medical College , Miraj , Maharashtra. A Cross – sectional study was done for period of one month (January 2016) among Mothers of Under-five children attending UHC Immunization Clinic of Government Medical College , Miraj , Maharashtra. All Mothers attending UHC Clinic and willing to participate in study were included. The data was obtained by semi-structured, pre-tested interview schedule from Mothers by interviewing them .The data analysis was done by SPSS version 21 by using appropriate statistical test like chi-square test, frequency, proportion and percentages. Majority of the mothers were Hindu by religion, housewives by occupation and were in age group of 21-30 years. There was no statistically significant association between gender and immunization status while educational status was significantly associated with immunization status of child.
Keywords: Measles, Mothers, Under-five children, UHC

INTRODUCTION

Immunization is one of the most effective, safest & efficient Public Health Interventions. Immunization prevents illness, disability and death from vaccine-preventable diseases including diphtheria, measles, pertussis, pneumonia, polio, rotavirus diarrhea, rubella and tetanus [1]. While the impact of Immunization on childhood morbidity & mortality has been great, its full potential has yet to be reached. Thousands of children still die from Vaccine-Preventable diseases each year[2]. Urban slums pose a major challenge for measles control and are identified as high-risk areas leading to a high rate of measles transmission. This is because of overcrowding (giving rise to faster and wider spread of the disease) and a relatively low rate of vaccination[3]. While regular surveillance of measles can provide data on measles incidence, the existing situation of non-reporting of cases and non-treatment seeking from medical care providers due to cultural beliefs in regard to the disease limit the scope of reliable surveillance[4].

In 2008, WHO ascertained that the number of deaths due to vaccine-preventable diseases among children under five years from all over the world was about 1.7 million per year, and most of the deaths were in developing countries[5]. Several previous studies evaluated parents' reasons for incomplete immunization or for not having had their children vaccinated[6-10]

Keeping above context in mind the present study was conducted to assess socio-demographic profile of mothers of Under-five children, to study source of knowledge of measles, to study awareness of measles among them and to study factors affecting immunization status of under five children attending UHC Immunization Clinic of Government Medical College , Miraj , Maharashtra.

MATERIAL AND METHODS

It was a hospital based Cross – sectional study conducted for a period of 1 month (Jan -2016) among mothers of Under five children attending UHC

Immunization Clinic of Government Medical College, Miraj, Maharashtra. The data was collected by pre tested and semi-structured questionnaire from all the Mothers by interviewing them. The questionnaire consisted of 10 questions with total score 10. Mothers with score of 6 and above were considered to be having good knowledge while remaining were considered to be having poor knowledge about measles. Total 219 mothers were studied after considering inclusion criteria and exclusion criteria. Only mothers who gave verbal informed consent were included in study. Ethical clearance was obtained from Institutional ethical committee. Statistical analysis was done by using frequency, percentages, and chi-square test after entering data in Microsoft excel 2007 and analyzed by using SPSS version 21.

RESULTS

Majority of the mothers were Hindu i.e. 145(66.21%),housewives were 188(85.85%)and 177(80.82%)were from age group of21-30 years. Proportion of illiterates were 32(14.61%)[Table1].Out of 219 mothers, 115(52.51%) were having good knowledge about measles. Predominant source of knowledge was Television in about 71(32.42%)of mothers and the other common source of knowledge being health worker in 42(19.18%)[Table 2].

Statistically significant association was observed with educational status and knowledge about measles among mothers [Table 3]. There was no statistically significant association between gender and immunization status while educational status was significantly associated with immunization status of child[Table 4&5].Among various reasons for delay in immunization of under-five children sickness of child was observed in 81% children while 25% of mothers could not enlist any cause of delayed immunization[fig1].

Table 1: Socio-demographic profile of mother of Under-five children attending UHC immunization clinic

Sr.No.	Socio - demographic variable		Frequency (n = 219)	Percentage
01	Age (in years)	21-30	177	80.82
		31-40	37	16.90
		41-50	05	02.28
02	Religion	Hindu	145	66.21
		Muslim	53	24.20
		Others *	21	09.59
03	Education	Illiterate	32	14.61
		Primary	41	18.72
		Secondary	98	44.75
		Higher Secondary	42	19.18
04	Occupation	Housewives	188	85.85
		Labourers	26	11.87
		Service	05	02.28

(*others include Christian, Buddhist)

Table 2: Information regarding the Source of Knowledge of Mothers of Under Five Children regarding Measles

Sr. No.	Source of Knowledge	Number	Percentage
1	Television	71	32.42
2	Health Worker	42	19.18
3	Hospital	35	15.98
4	Neighbours	28	12.79
5	Anganwadi Worker	22	10.05
6	Others (Relatives)	12	05.48
7	Radio	09	04.11

Table 3: Association between Educational Status & Knowledge about measles

Educational Status	Knowledge about measles				Total	
	Present		Absent			
	No	%	No	%	No	%
Illiterate	8	6.96	24	23.07	32	14.6
Literate*	107	93.04	80	76.93	187	85.4
Total	**115**	**100**	**104**	**100**	**219**	**100**

(χ^2 = 11.37 df = 1,p=0.0007)

*For statistical calculation mothers with primary, secondary, higher secondary education and above were clubbed into literate.

Table 4: Association between gender and Immunization status of child

Sex	Immunization status				Total	
	Complete		Partial			
	No	%	No	%	No	%
Male	107	54.04	12	57.14	119	54.34
Female	91	45.96	09	42.86	100	45.66
Total	**198**	**100**	**21**	**100**	**219**	**100**

(χ^2 = 0.07365,df =1,p =0.7861)

Table 5: Association between Educational Status &immunization status of child

Educational Status	Immunization status				Total	
	Complete		Partial			
	No	%	No	%	No	%
Illiterate	15	7.6	17	80.9	32	17.11
Literate	183	92.4	4	19.1	187	82.89
Total	**198**	**100**	**21**	**100**	**219**	**100**

(χ^2 = 76.16 df = 1,p <0.0001)

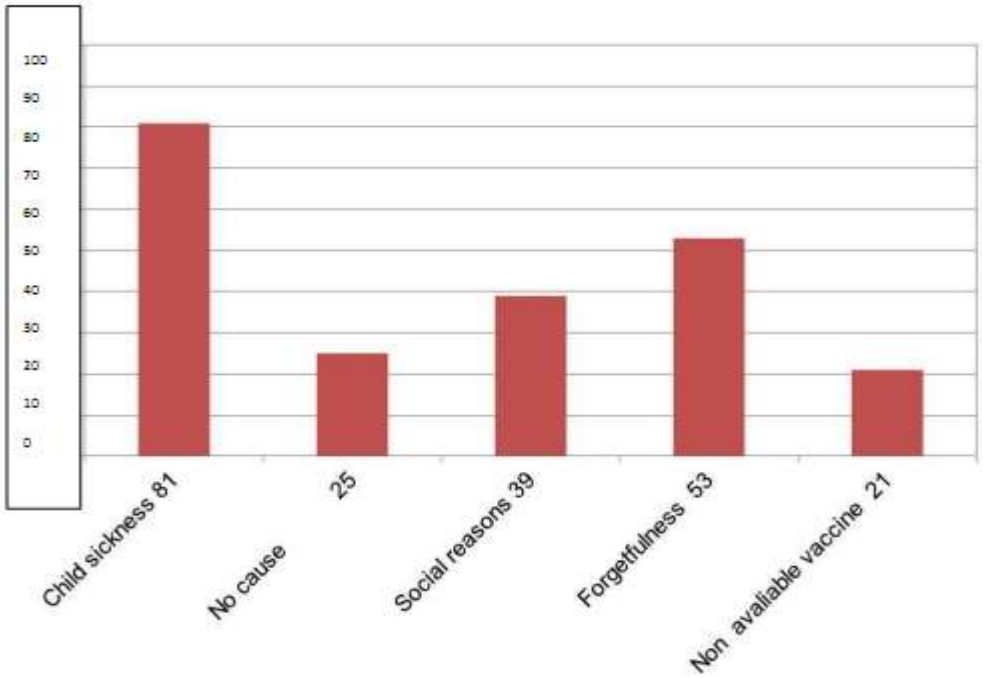

Fig-1: Causes for Delay of immunization according to knowledge of the studied mothers

DISCUSSION

In India, measles continues to remain a major cause of morbidity and mortality in under five children. Due to complex socio-cultural factors, passive surveillance of measles has limitations and there is no system of active surveillance of cases either. Taking socio-demographic factors into account majority of the mothers were Housewives, Hindu and were from age group of 21-30 years. In a study by Kapoor R *et al*[2] it was found that 73 % were from age group of 21-30 years. Mean age of the respondents was 28.4 years. 72% of the respondents were housewives and 65% of them were Hindus. Proportions of illiterates were 14.61%, while it was 4.5% in a study by Yousif MA *et al*[1].

Out of 219 mothers, 115(52.51%) were having good knowledge about measles. Predominant source of knowledge about measles was TV in about 32.42% of mothers, and the other common source being health worker 19.18%. Regarding the source of knowledge of respondents about VPD's, Anganwadi Worker was the main source of information 47 (47%) in a study by Kapoor R *et al*[2]. Statistically significant association was obtained with educational status and knowledge about measles among mothers of under five children. Yousif MA *et al*[1]found that educational levels were found to be significantly associated with both parents' knowledge and attitudes towards immunization. in the study conducted by D. Adeyinka *et al*[11] 65.7 % of

the respondents got information about Vaccine Preventable Diseases from Antenatal clinics & role of media was only 4.8%. Also, Bofarraj M *et al*[12] found that the paramedical worker, was found to be the major source of information to the attendants of completely (50.2%) and partially immunized (34.2%) children; community leaders, on other hand were found to be the most important source of information among partially immunized children

In present study, among various reasons for delay in immunization of under five children sickness of child was observed in 81% children while 25 %could not enlist any cause of delayed immunization while Bofarraj M *et al*[12]got similar findings with the most often mentioned reason for incomplete immunization being childsickness reported in 54%, followed by social reasons, forgetfulness and others. There was no statistically significant association between gender and immunization status while educational status was significantly associated with immunization status of child in present study. In contrast Bofarraj M *et al*[12] found that among educated mothers the percentage of completely immunized children was 71.4% whereas among illiterate mothers it was 88.3%, but the difference was not statistically significant ($p>0.05$).

CONCLUSIONS & RECOMMENDATIONS

Majority of the mothers were Housewives, Hindu by religion and were from age group of 21-30 years. There was no statistically significant association between gender and immunization status while educational status was significantly associated with immunization status of child. Many mothers don't come regularly for vaccination of their children. As a result they miss the due date of vaccination. Low literacy level of mothers is a matter of worry responsible for lack of knowledge regarding measles. Information education and communication activities should be strengthened to increase awareness about measles along with other vaccine preventable diseases. Some of the mothers don't know even about the diseases for which their child is being immunized .

STUDY LIMITATION

This survey was conducted among very few mothers; therefore the observed results cannot be generalized. Assessing knowledge of mothers is not enough, but knowledge of father is also equally important, as both are contributing for the immunization status of the child, this could be considered as another limitation of the study. Future researches on the topic need recruitment of mothers from different areas.

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