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Knowledge, Attitude and Practices of Mothers with Children Under Five Years of Age About Vaccination

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Abstract
Background: *Immunization is a cost effective process of improving child survival in developing countries.*
Aim and Objectives: *To assess the knowledge, attitude and practices of mothers with five years children of age about vaccination. To educate them regarding the vaccination schedule and importance of vaccination.*
Methodology: *It is a cross sectional study design. Purposive sampling technique was used for selecting study subjects. Data was collected from 60 mothers who visited immunization clinic during the study. Mothers with children under five years of age, mothers of Kashmiri ethnicity were included in the study.*
Results: *61.6% of mothers completed their preschool education and majority of them are housewives (63.30%).Both mother and father used to make decision regarding child immunization (71.7%). TV/Radio, Anganwadi workers, Hospitals remain the major sources of information about immunization .65% of mothers know the correct age to start vaccination and majority (58.33%)of mothers believe that vaccines are not harmful. Most of the mothers believe that child with fever and cold should not be vaccinated. The attitude of mothers towards vaccination was satisfactory. 93.33% of mothers believe that vaccination is important and 91.66% of mothers believe that it is important to follow the vaccination schedule. The practices of mothers towards immunization were found to be satisfactory.*
Conclusion: *The attitude and practices of mothers were found to be satisfactory. Their knowledge was to be improved to promote better immunization coverage. Appropriate information & awareness campaigns may improve the knowledge of mothers regarding vaccination.*
Keywords: *Knowledge, Attitude, Vaccination, mothers.*

INTRODUCTION

Vaccines are one of the most successful health interventions that bring about significant reductions in infectious diseases and adverse health consequences and improve quality of life in the population. Over the years vaccines have provided highly cost effective improvements to human health by reducing avoidable human suffering, costs of care and treatment, economic consequences of work i.e. lower productivity and loss of work. More and more diseases are becoming vaccine preventable; including those for prominent killers like pneumonia and diarrhea.[1] Immunization is a highly cost effective process of improving child survival in developing countries.[2,3] However in the past few decades immunization coverage rates have improved sufficiently in developed countries whereas most of the

developing countries are still struggling with low rates.[4] India has one of the largest immunization program in the world but diseases like Maternal and neonatal tetanus (MNT) has alone led to 58,000 newborns deaths in 2010 and a significant number of women also die to due to maternal tetanus every year.[5] Infant mortality rate (IMR) is considered as one of the most sensitive indicators of health status of a community. Infant mortality rates in India are very high and the important causes which contribute major chunk to the IMR is inadequate breastfeeding and immunization. [6] Despite India being a major producer of vaccines, it harbors one-third of the world's unimmunized children.[7] Only four diseases – respiratory infections, diarrhoeal diseases, other infectious and parasitic diseases and malaria – account for about half of under-five deaths in India.[8] The current scenario depicts that immunization coverage has been steadily increasing but the average level remains far less than the desired. Still only 62 per cent of the infants in India are fully immunized (NFHS-IV) which is much less than the desired goal of achieving 85 per cent coverage.[9] In India, under Universal Immunization Programme (UIP) vaccines for six vaccine-preventable diseases (tuberculosis, diphtheria, pertussis (whooping cough), tetanus, poliomyelitis, and measles) are available for free of cost to all. UIP was launched in 1985 with much dynamism to attain the target to immunize all eligible children by 1990. Lot of energy and money has been spent on the UIP but it does not reap the expected outcome. Unmistakably, various survey results show the glaring gap between the target and achievement even after several years.[10] Though there is increased accessibility of health care services in both urban and rural areas, still the utilization of health care services is low by the different segments of the society.[11]

There is increasing recognition within the international aid community that improving the health of poor people across the world depends upon adequate understanding of the socio-cultural and economic aspects of the context in which public health programmes are implemented. Such information has typically been gathered through various types of cross-sectional surveys, the most popular and widely used being the knowledge, attitude, and practice (KAP) survey.[12] The attractiveness of KAP surveys is attributable to characteristics such as an easy design, quantifiable data, ease of interpretation and concise presentation of results, generalisability of small sample results to a wider population, cross-cultural comparability, speed of implementation, and the ease with which one can train numerators.[25]

AIM AND OBJECTIVE

1. To assess the knowledge, attitude and practices of mothers with five years children of age about vaccination
2. To educate them regarding the vaccination schedule and importance of vaccination

METHODOLOGY

The study was carried out in Immunization Clinic of Department of Community Medicine, SMHS Hospital, Srinagar. It is a cross sectional study design. Purposive sampling technique was used for selecting study subjects. Data was collected from 60 mothers who visited the clinic during the study. They were explained about the importance of the study verbally and upon their acceptance and will, they were interviewed, data was collected with help of semi structured questionnaire. Mothers with children under five years of age, mothers of Kashmiri ethnic origin were included in the study. Mothers with children above five years of age, from urban areas, and who are not willing to participate in the study are excluded. Mothers with significant difference in knowledge, attitude and practices towards vaccination were educated about vaccination in recommended Immunization Schedule for Children Aged 0 through 18 years – India, 2016

RESULTS

Table 1: Socio Demographic Characteristics of Study Population

Characteristics	Categories	Number	Percentage
Education	Illiterate	17	28.30%
	Primary	37	61.60%
	Secondary	6	0.10%
	Graduate	0	0
Occupation	Housewife	38	63.30%
	Govt. Employed	3	0.05%
	Self Employed	1	0.01%
	House Maid	17	28.30%
	Others	1	0.01%
Decision Maker	Mother	13	21.60%
	Father	4	0.06%
	Both	43	71.70%
Sources of Information	ANM	9	0.15%
	TV/Radio	15	25.00%
	Anganwadi	16	26.60%
	Hospital	17	28.30%
	Doctor	3	0.05%

Table1 shows the socio-demographic profile of the mothers. Majority of the mothers were educated up to preschool (61.60%) and most of them were Housewives (63.30%).Both mother and father together took decisions regarding the immunization of children.TV, Anganwadi workers and hospitals played crucial role in providing information regarding immunization.

Table 2: Knowledge of Mothers Regarding Immunization

S.No.	Questions	Yes	Percent	No	Percent	Don't Know	Percent
1	Knew Reason For Vaccination	26	43.33%	34	56.6%	---	---
2	Knew Correct Age To Start Vaccination	39	65%	21	35%	---	---
3	Are Vaccines Harmful	7	11.66%	35	58.3%	18	30%
4	Can Child With Cold Be Vaccinated	12	20%	35	58.3%	13	21.66%
5	Can Child With Fever Be Vaccinated	6	10%	37	61.6%	17	28.3%

Most of the mothers don't know the reason for vaccination but they knew the correct age to start vaccination. Most of them believe that vaccines are not harmful .Most of the mothers were not willing to vaccinate her child when he/she was suffering from cold and fever.

Table 3: Attitude of Mothers Towards Immunization

S.No.	Questions	Yes	Percentage	No	Percentage
1	Do You Think Vaccination Is Important	56	93.33%	4	6.66%
2	Is It Important To Follow Vaccination Schedule	55	91.66%	5	8.33%
3	Where Do You Prefer To Receive Vaccination	53(Govt)	88.33%	7(Pvt)	11.66%
4	Are You Satisfied With The Way In Which Vaccination Provided	60	100%	---	---

Attitude of mothers towards vaccination was satisfactory because majority of the mothers believes that vaccination is important and to follow the vaccination schedule for good health. Most of the mothers preferred government hospital for vaccination than private hospital may be owing to free supply of vaccines to child, which would be costly otherwise.

Table 4: Practices of Mothers towards Immunization

S.No.	Questions		Yes	Percent	No	Percent
1	Was immunization completed according to schedule		54	90%	6	10%
2	Did side effects appear		49	81.66%	11	18.33%
3	If yes which were seen	Fever	49	81.66%	---	---
		Pain	7	11.66%	---	---
		Rash	4	6.66%	---	---
4	Did you inform to doctor /healthcare provider		42	70%	18	30%

The practice of mothers towards vaccination is satisfactory since majority of the mothers (90%) completed the vaccination to child according to schedule. Fever was the most common side effect appeared after vaccination.

DISCUSSION

In our study it was observed that majority of mothers had primary education (61.6%).However their knowledge towards vaccination is not up to the mark. In a study conducted by K.Vikram *et al* [13] Educated mothers may have better knowledge of good medical practices and thus be more aware of the benefits of medical care. Maternal education has often been suggested to be the single most important factor explaining differentials in child health outcomes. Mothers' education leads to better human, social, and cultural capitals which then help increase immunization rates for their children. [13]In a study conducted by Nenna TB *et al, it* was found that most of the mothers had tertiary or secondary education. This seemingly high literacy level may have influenced the knowledge of the reason for immunizing children. Though this may not reflect the true knowledge of mothers in Enugu as it is a hospital based study, it does however show that a better understanding of the reason for immunization is influenced by maternal education.[14] In our study it was found that the major sources of information were TV/Radio, Anganwadi workers and Hospital. Similar findings were found in a study conducted by Rachna Kapoor, [15] H. Hayat *et al*, [16] M. M. Angadi *et al*. [17]

In our study it was observed that rural mothers have good knowledge regarding the importance of vaccines and the correct age to start vaccination, as the infant will get vaccinated with the requisite vaccines i.e. BCG and Oral polio Vaccine immediately after birth in both government and private hospitals. However, the knowledge of mothers regarding the use of vaccines to prevent particular diseases is poor. Most of the mothers know the particular use of BCG and Polio vaccine only. Similar Findings were observed in studies conducted by Rachna Kapoor,[15] Ms.Mereena.[18] Majority of mothers believed that their child should not get vaccinated in conditions like cold and fever However it is a myth that you have to avoid or delay your child's vaccination if they have a mild illness without a fever, such as a cough or cold, or if they have an allergy, such as asthma, hay fever or eczema.[19]However if your baby has a fever, it's best to wait until it subsides or till she becomes well again before you get her vaccinated. Your baby's immune system produces antibodies when she gets an infection. These antibodies fight off similar infections in the future. When your baby has a fever, the antibodies in her body are busy fighting off an infection. That's why it's best to ensure that your babies immune system is not fighting other infections at the same time as having immunization. [20]

In the present study it was found that majority of mothers has good attitude. Similar findings were reported by study conducted by Ms.Mereena, [18] Shamila Hameed. [21]Majority of mothers prefer to get their child vaccinated in Government hospital. Similar findings were reported in studies conducted by M. M. Angadi *et al*, [17] Shamila Hamid *et al*. [21] In the present Study it was observed that the practices of mothers was found

satisfactory. Similar findings were observed in study conducted by Shamila Hamid *et al.* [21]

CONCLUSION

Our study reflected that mothers had significant lacunae in knowledge regarding immunization whereas the attitude and practices towards immunization were good. Adequate health education should be given to the rural mothers to increase their knowledge regarding immunization. Healthcare workers should play a leading role in bringing awareness about knowledge of vaccines in rural areas by conducting awareness campaigns, by distributing leaflets which depicts importance of immunization.

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