

# Knowledge and attitude of caretakers of children regarding immunization

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**Abstract.** Immunization is the most successful component of preventive medicine and is a cost effective strategy to reduce both the morbidity and mortality associated with infectious diseases. The caretakers of six hundred children, who attended our immunization clinic, were included in the present study to assess their knowledge and attitude regarding immunization. Maximum numbers of caretakers were aware of poliomyelitis, followed by tuberculosis and hepatitis. Health institutions were the most frequent sources of information regarding immunization. Television was providing better information regarding immunization. A maximum number of caretakers believed that the immunization was important and majority of them were aware of importance of vaccination to be done as per schedule. Health facility was preferred for immunization. A need to encourage more male participation as caretaker, augment awareness for less known vaccine preventable diseases using mass media and non government organizations was observed.

Key words: Attitude, immunization, knowledge, vaccination

## 1. Introduction

Immunization is one of the most important public health interventions and is the most successful component of preventive medicine. It is a cost effective strategy to reduce both morbidity and mortality associated with infectious diseases. Studies have shown that the utilization of vaccination services is dependent not only on provision but also on other factors including knowledge and attitude of mothers regarding vaccination (1,2). There are evidences of inequalities in immunization in India, although the childhood immunization has been an important part of maternal and child health services since the 1940s. Insufficient knowledge and inequities of attitude and practices regarding immunization are a cause for serious policy concern (3).

An attempt to address these factors may go a long way to improve vaccine utilization and subsequent protection of the children against childhood infectious diseases.

The present study was carried out to assess the knowledge, and attitude of caretakers of children attending our immunization clinic for routine childhood immunization.

## 2. Material and methods

The caretakers of six hundred children were included in the present study, who attended our immunization clinic in the Department of Community Medicine. The study was conducted between January 2011 to December 2011. Only those caretakers who attended with children between 0-5 years were included. Data was collected in a standard pre-tested proformas. The educational status and socioeconomic status of caretakers was assessed using Kuppaswami's method and Prasad's classification, respectively.

## 3. Results

The maximum numbers of children were brought for immunization purpose by their mothers', although 10.33% were brought by their fathers'.

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Table 1. Socio-demographic characteristics

Sex(caretaker)	No.	%
Male	62	10.33
Female	538	89.67
Age of children		
	No.	%
0-6 months	362	60.33
7-12 months	147	24.5
1-5 years	91	15.17
Education		
	No.	%
Illiterate	265	44.17
Primary	178	29.67
Secondary	104	17.33
Higher	53	8.83
Social class		
	No.	%
I	25	4.17
II	62	10.33
III	130	21.67
IV	215	35.83
V	168	28.00
Decision maker		
	No.	%
Father	48	8
Mother	196	32.67
Both	341	56.83
Others	15	2.5

Maximum children were in the age group of 0-6 months. Mothers were more active in decision making regarding immunization, though in maximum number of children (56.83%) it was both mother and father who had been the decision makers (Table 1).

Among the various vaccine preventable diseases, maximum numbers of caretakers were aware of poliomyelitis, while a good number of caretakers had a knowledge of tuberculosis and hepatitis (Table 2).

Health institutions were the most frequent source of information regarding immunization, followed by Anganwadi workers. Non government organizations were least involved in providing the information. Among the mass media, television was providing better information regarding immunization (Table 3).

Table 2. Knowledge of various vaccine preventable diseases

Disease	No.	%
Poliomyelitis	573	95.5
Diphtheria	448	74.67
Tuberculosis	519	86.5
Pertussis	392	65.33
Tetanus	347	57.83
Hepatitis	496	82.67
Meningitis	327	54.5
Measles	483	80.5
Mumps	301	50.17
Rubella	136	22.67

Table 3. Source of information regarding immunization

Source	No.	%
Health institution	242	40.33
Anganwadi workers	129	21.5
Television	76	12.67
Auxiliary Nurse Midwife	72	12
Radio	32	5.33
Friends & Relatives	32	5.33
NGO	17	2.83

Table 4. Caretakers' knowledge regarding benefits of immunization

Benefits	No.	Percent
Prevents illness	511	85.17
Prevents death	10	1.67
Prevents paralysis	57	9.5
Necessary for child health	22	3.67

A majority of the caretakers believed that vaccination prevents illness (85.17%). A good number believed that immunization prevents paralysis (9.5%) (Table 4).

A maximum number of caretakers believed that the immunization was important and majority of them were aware of importance of vaccination to be done as per schedule. Health facility was preferred for immunization. Although about 96.67% were in favor of immunization but only 92.83% advised vaccination to others (Table 5).

Table 5. Attitude of caretakers regarding immunization (Response to the study questions)

Study question	No.	Percent
Is immunization important?		
Yes	575	95.83
No	10	1.67
Don't know	15	2.5
Whether vaccination as per schedule is important?		
Yes	567	94.5
No	26	4.33
Don't know	7	1.17
Where do you prefer to receive vaccine?		
Health facility	543	90.5
Others	57	9.5
Are side effects of vaccine dangerous?		
No	593	98.83
Yes	7	1.17
Are you in favor of vaccination?		
Yes	580	96.67
No	6	1
Don't know	14	2.33
Do you advice vaccination to others?		
Yes	557	92.83
No	43	7.17

#### 4. Discussion

Utilization of immunization services is dependent to a large extent on knowledge and attitude of caretakers of children (3). The present study shows that the maximum numbers of children were brought for immunization purpose by their mothers and only about one tenth were brought by their fathers. So, clearly there is a need to involve more and more male members of the family to take care of their children regarding immunization and further to involve them in decision making to a large extent, as it is evident in the present study that mothers out-number their better halves in decision making regarding immunization. Paternal involvement in child immunization has been shown to increase the immunization rate (4). Maximum numbers of caretakers were aware of poliomyelitis, tuberculosis and hepatitis among the various vaccine preventable diseases. The most probable reason for maximum awareness of poliomyelitis was the provision of maximum awareness programs regarding this vaccine preventable disease through mass media, health institutions and the like. So there is a clear need to maximize

the efforts to make caretakers aware of other less known vaccine preventable diseases that will go a long way to change their attitude regarding immunization resulting in extensive immunization coverage.

Our study also shows that health institutions were the most frequent sources of information while non government organizations were least involved in providing the information. There is a need to augment the use of mass media like television, radio and newspapers and even internet in providing the comprehensive vaccination knowledge. Further non government organizations form an important contribution in any awareness program and it is the need of the hour to update knowledge of non government organizations and encourage them to involve actively in providing the requisite knowledge regarding immunization. The rate of utilization of immunization has been shown to be higher when non government organizations are actively involved in the process (5).

A majority of caretakers believed that the immunization was important and should be given as per schedule and the health facility was preferred for immunization. Although about 96.67% were favoring immunization but only 92.83% advised vaccination to others. So when a child is brought for immunization, the caretakers should be counseled and encouraged to advise vaccination to others in their vicinity.

#### 5. Conclusion

In conclusion, although majority of the caretakers had good knowledge of immunization and were aware of the fact that vaccination could prevent childhood diseases, there is still a need to encourage more male participation as caretaker, augment awareness for less known vaccine preventable diseases, using mass media and non government organizations.

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