

KNOWLEDGE, ATTITUDE AND PRACTICES OF MOTHERS REGARDING IMMUNIZATION OF ONE YEAR OLD CHILD AT MAWATCH GOTH, KEMARI TOWN, KARACHI

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ABSTRACT

Objectives: To assess the knowledge, attitude and practices of mothers regarding immunization of one year old child at Mawatch Goth, Kemari town, Karachi, Pakistan.

Methodology: A cross sectional study was conducted among mothers having one year old child at Mawatch Goth, Kemari town, Karachi in February 2007. All mothers having less than one year old child were interviewed through a semi structured questionnaire regarding immunization knowledge attitude and practices. The data collected through a questionnaire entered and analyzed by using SPSS program version 15.

Results: Majority of the mothers were illiterate, belonging to low-income group and not aware about the name of diseases in EPI Program. Majority (70%) of women started routine immunization of the child. The reasons for missing vaccination schedule were lack of understanding of next appointment, non availability of health staff, mild flu and others reasons like household work. About thirty one percent mothers quit immunization after missing one dose. Health care staff was the main source of information. A positive attitude was reflected from both the parents towards immunization. A significant number stated that vaccination is contraindicated in mild illness of child.

Conclusion: The knowledge of our mothers about vaccination was found inadequate with strong positive attitude and limited practices

KEY WORDS: Pakistan, EPI, Mothers Knowledge, Attitude and practices.

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INTRODUCTION

Immunizations today saves more than three million lives a year. However, millions of children still do not have access to basic immunization and die from diseases that can be prevented by available vaccines. Mother's knowledge, attitude and practices play a major role in achieving complete immunization before first birthday of the child. The objective of expanded program of immunization is to achieve 90% routine immunization converge of all EPI antigens with at least 80% coverage in every district by 2010 so that mortality and morbidity can be

reduced from the seven EPI target diseases by immunizing children of the age 0-11 months and women of child bearing age.

An estimated 2.1 million people around the world died in 2002 of diseases preventable by widely used vaccines. This toll included 1.4 million children under the age of five.¹ A study conducted in China showed that Mothers' knowledge, attitudes & practices on childhood immunization were at a low level and influenced by educational background, county's economic level, mother's age, household size & ethnic groups. The coverage rate of all seven vaccines (including HBV, BCG, OPV, DTP & measles vaccine) was 35.2%, & 12.3% of the surveyed children had never been immunized since birth. The main source of knowledge on immunization was interpersonal communication.²

World wide many studies have reported on mother's knowledge, attitudes and practice (KAP) regarding children immunization³⁻⁸ and showed that successful immunization depends on parent's positive attitude and knowledge. In Pakistan literature reports few studies on this topic and these studies also identified that mother's knowledge and positive attitude towards immunization is required to achieve 90% immunization among one year old children.^{9,10} This study was undertaken to assess mother's knowledge, attitudes, and practices in a community setting so that identified gaps should be fulfilled in order to achieve the immunization targets.

METHODOLOGY

A cross sectional study was conducted in Mawatch Goth of kemari town Karachi. All the mothers who had under one year old child and living in Mawatch Goth kemari town were included in the study. During survey 209 mothers having one year old child were interviewed through a pre tested semi structured questionnaire. The questionnaire includes socio-demographic variables, immunization status of the children, contraindication of vaccines and reasons for incomplete immunization and vaccination cards. The data collected were entered and analyzed by using SPSS version 15.

RESULTS

Table-I describes that about 70% children were immunized while 30% did not. In our study 64% of mothers were illiterate, 24% had primary education, 10% had higher secondary education and 2% were graduates. Majority of mothers (67%) reported household income less than four thousand rupees per month, 28% reported income between four to ten thousand rupees, while only 5% reported income more than ten thousand rupees.

Table-II describes about the source of information from where mothers heard about immunization program These were neighbors 16.7%, school /college 2%, health workers 62.2%, media 19%. When mothers were asked about reasons for incomplete immunization status of their child, they reported non availability of immunization center 23.4%, busy in domestic work 32%. Non availability of health staff 34% and 10.5% reported some other reasons. Reasons for missing immunization schedule and their knowledge regarding contraindication for immunization are also mentioned in Table-II.

Table-III shows that when fathers were asked reasons about child immunization majority (86.6%) said that vaccination is necessary, while 13.4% reported the vaccination is not necessary. About 55.5% mothers had vaccination cards

Table-I: Distribution of variables regarding socio-demographic characteristics of Mother

<i>Variables</i>	<i>Frequency</i>	<i>(%)</i>
<i>(n=209)</i>		
<i>Immunization status</i>		
Immunized	147	70.3
Not immunized	62	29.7
<i>Educational status</i>		
Uneducated	134	64.1
Primary education	50	23.9
Higher secondary education	21	10.0
Graduation	4	1.9
<i>Socioeconomic status of families</i>		
> 4000 Rupees/ month	140	67
4001- 10,000	59	28.2
> 10,000	10	4.8

Table-II: Distribution of variables regarding importance of immunization of children

Variables	Frequency (n=209)	(%)
<i>Source Of Information For Immunization Program</i>		
Neighbors	35	16.7
School/College	4	1.9
Health Workers	130	62.2
Media	40	19.1
<i>Causes of Incomplete Immunization Of Children</i>		
Non availability of immunization center	49	23.4
Domestic work	67	32.1
Non availability of health staff at center	71	34
Other reasons	22	10.5
<i>Opinion Of Mothers about vaccination During Mild Flu</i>		
Vaccination is not contraindicated	107	51.2
Vaccination is contraindicated	102	48.8

with them, 21.5% made cards but lost some where, while 23% did not know about cards. Regarding mothers knowledge about age at which immunization should be started 98.6% reported at birth and about age at which immunization completed 56% said 9 month, 22% said 2 years and 22% reported 3 months. About 54% of women reported exact number of diseases against which EPI is scheduled. When asked about name of vaccine for preventable diseases 75.6% mentioned polio vaccine, 40.4% tuberculosis, 20.2% whooping cough, 38.8% tetanus, 18.7% diphtheria, 33.5% measles and 15.4% were able to name Hepatitis B vaccine. About 72.7% women stated that immunization is important, 15.8% did not know about vaccine preventable diseases and 11.5% mothers considered that immunization is harmful for child.

DISCUSSION

World wide studies report that successful immunization of children depends highly on mothers existing knowledge and positive attitude. These ranged from individual cognitions

Table-III: Distribution of variables regarding importance of immunization and Vaccination cards

Variables	Frequency (n=209)	(%)
<i>Opinion of Fathers about Immunization</i>		
Vaccination is not necessary	28	13.4
Vaccination is necessary	181	86.6
<i>Awareness of Mothers about Importance of Vaccination Cards</i>		
Vaccination cards available	116	55.5
Vaccination cards made but missed	45	21.5
Vaccination cards not made	26	12.4
No knowledge about vaccination cards	22	10.5

and attitudes to family and social factors to system factors. Individuals perceived the benefits of vaccines as outweighing the risks. These positive perceptions were supported by aspects of the social environment, including beliefs about infectious disease threats, ideas of social responsibility, high levels of declared trust in authorities, a willingness to conform and a strong sense of societal responsibility. Finally, success was achieved with system factors, including free, comprehensive services.¹¹

Australia's success in achieving high immunization rates, at least 93% for two-year-olds is a result of similar factors identified above.¹² A study conducted in Sydney during 1999 reported that, in their support for vaccination, parents not only valued the benefits of protecting their own individual child but mothers from a range of socioeconomic and educational backgrounds also understood and appreciated the social nature of the vaccination decision.¹³ Contrary to these in our communities mothers are not empowered with education and belong to low socioeconomic status and pay less attention towards child health.

Our study findings revealed lack of knowledge of mothers regarding immunization of child which leads to incomplete immunization status of child. In our study the vast majority of mothers and fathers expressed positive attitudes towards immunization. This positive attitude

about vaccination is reported in almost all previous studies from developing and developed countries and ranged from 80 to 98% in different series.^{3,14,15} Our study reported limited knowledge of mothers about vaccine preventable diseases and similar findings have been reported from studies conducted in India.^{16,17} In our study health care staff was the main source of information for mothers and media played a very insignificant role. Similar findings have been reported from India and Bangladesh where Nurses and other paramedical workers were mentioned as the main sources of information about immunization for slum women.^{17,18} In our study a significant number of mothers said that in some mild infections vaccination is contraindicated. Similar findings from developed^{14,19} and developing^{4,17} countries have reported mild diseases as a reason for deferring immunization. Vaccination cards are considered to be the important source of immunization coverage record keeping and in our study half of the mother produced cards and rest did not. In a similar KAP study in India 76% of mothers were aware of the use and the necessity to save Immunization cards.¹⁷

CONCLUSION

Our study concluded that the knowledge of our mothers about vaccination was found inadequate with strong positive attitude and limited practices. It has been suggested that health education campaign should target mothers to improve the child health status and to achieve the targets of one year old child immunization.

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