

Knowledge, Attitude and Practice - Regarding EPI among Parents attending Paediatric Outdoor, Nishtar Hospital Multan

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ABSTRACT

Objective: To assess the Knowledge, Attitude and Practice regarding Expanded Programme of Immunization (EPI) among parents attending Paediatric Department, Nishtar Hospital, Multan.

Study Design: Cross sectional descriptive study.

Place and Duration of Study: This study was carried out among the parents attending Paediatric Medicine & Paediatric Surgery out patients Departments, Nishtar Hospital, Multan for the treatment of their children during the month of September, 2011.

Materials and Method: Two hundred & sixty parents were selected by convenient sampling and surveyed with a self reported questionnaire comprising of questions regarding knowledge attitude and practice about EPI. Data gathered was analyzed and results were obtained to make table.

Results: Among 260 parents interviewed, 40 (15.4 %) were male & 220 (84.6 %) were female. 258 (99.2 %) had knowledge about EPI and only 2 (0.8 %) had not. According to 242 (93.1 %) EPI was beneficial, while 18 (6.9%) thought it to be non beneficial. Children of 195 (75 %) parents were fully immunized. 40 (15.38 %) were partially immunized and 25 (9.62 %) were not immunized at all. 158 (60.8 %) parents were educated and 102 (39.2 %) were illiterate. Out of 260 parents, 214 (82.3%) reported fever / rash / itching as a result of vaccination, while 46 (17.7%) were not. Majority of the parents belong to middle class i.e. 137(52.7 %) while 46 (17.7 %) rich class and 77 (29.6 %) to the lower class.

Conclusion: We conclude that there is a significant difference in the knowledge of the parents. Majority of the parents had awareness about EPI. Middle class has greater attitude to get immunized their children as compared to poor and rich class. Our study demonstrates the importance of education in the practice of vaccination of the children.

Key Words: KAP Study, EPI, Health Education.

INTRODUCTION

In 1974, WHO officially launched a global immunization programme, known as EPI to protect all children of the world against 6 vaccination preventable diseases namely, Diphtheria, Whooping Cough, Tetanus, Poliomyelitis, Tuberculosis & Measles¹.

24 years later, more than 80% of the world's children had been immunized against T.B., Diphtheria, Whooping Cough, Poliomyelitis and Measles. Polio should shortly be eradicated worldwide which will match the past success of global Small Pox eradication². Initially started with 6 antigens, the programme added 2 new antigens, Hepatitis B and Haemophilus influenzae type b (Hib), during the last decade³. Introduction of conjugate vaccine has proved highly effective in controlling invasive H. influenzae infection, notably Meningitis. Immunization has changed the course and natural history of many infectious diseases. Long lasting immunity is achieved only by active immunization with live attenuated or an inactivated organism, or a sub unit thereof².

Hepatitis B vaccine is also included in EPI, because it is endemic throughout the world, especially in tropical and developing countries and also in some regions of

Europe⁴. The Hepatitis B virus infection is a global problem, with 66% of all the world's population living in areas where there are high levels of infections⁵.

The children under 5 years of age (which constitute 15% of the Pakistani population) contribute 50% of the overall mortality as compared to 8–10% in the developed world. The under-five mortality rate (U5MR) is alarmingly high for Pakistan 136/10002. Majority of under-five mortality is associated with infectious diseases and for its protection the project of Expanded Programme on Immunization (EPI) was launched⁶.

In USA and Canada, routine active immunization of children is recommended against Whooping Cough, Poliomyelitis, Measles, Rubella, Mumps, Tetanus and Diphtheria. Active immunization against Rabies is advocated after exposure and against influenza in major epidemics or routinely when children have special health problems likely to make the impact of this disease more severe⁷.

Immunization is frequently postponed if children are ill or mal nourished. This is not acceptable in the light of present knowledge. In fact, it is particularly important to immunize children with malnutrition. Low grade fever, mild respiratory infections or diarrhoea and other

minor illnesses should not be considered as contra indication to immunization. These are the very children who are most in need of immunization, they are most likely to die should they acquire vaccine preventable disease⁸.

Immunization and vaccination remain among the most important function of the public health services. The major protective action against tuberculosis, measles or pertussis is a rise in standard of living. This implies that immunological protection is most required by the deprived and malnourished as in the developing world, where Measles for instance, is still major cause of death⁹.

Desirable vaccine attributes include minimum vaccine related adverse effects, high level of immunity, long lasting protection, minimal cost and ease of delivery¹⁰.

The main objective of present time is to increase the awareness and importance of EPI programme among the parents. By accomplishing this aim we can reduce the morbidity as well as mortality among the children¹¹.

MATERIALS AND METHODS

This study was carried out in the Department of Community Medicine, Nishtar Medical College Multan. This is important to mention that subjects under study were the parents attending paediatric medicine and paediatric surgery outpatient departments Nishtar Hospital, Multan for the treatment of their children. A total of 260 parents were selected for this study. After taking informed consent, the parents were interview and data was collected on structured self reported questionnaire, regarding information about their personal history, and KAP about EPI and immunization status of their children. Data were analyzed to get frequency and percentage among the population.

RESULTS

Important findings of the study are shown in the given table. In the study population, males were 15.4% and females were 84.6%. 158 (60.8%) were literate and 102 (39.2%) were not. Majority of the parents (99.2%) knew EPI and this fact was appreciated by researcher. Among 260 parents 46 (17.7%) were rich, 137 (52.7%) middle class and 77 (29.6%) were poor. According to the majority of the parents i.e. 242 (93.1%), EPI is beneficial while very small number of parents did not know its benefits. Out of 260 parents, 214 (82.3%) reported fever / rash / itching as a result of vaccination, while 46 (17.7%) were free from these reactions. Children of 195 parents (75%) were fully immunized, 40 (15.38%) partially and 25 (9.6%) were not immunized at all.

Table No.1: KAP Study regarding EPI among parents attending Paediatric Out door, Nishtar Hospital Multan (n = 260).

Variables	Detail	Numbers	Percentage
Gender	Male	40	15.4%
	Female	220	84.6%
Literacy	Literate	158	60.8%
	Illiterate	102	39.2%
Awareness about EPI	Yes	258	99.2%
	No	02	0.8%
Economic Status	Rich	46	17.7%
	Middle	137	52.7%
	Poor	77	29.6%
Opinion about its Benefits	Beneficial	242	93.1%
	Non Beneficial	18	6.9%
Reactions / Complications	Yes	214	82.3%
	No	46	17.7%
Status of Immunization	Fully	195	75%
	Partially	40	15.4%
	Not	25	9.6%

DISCUSSION

Result of present study showed that out of total 260 parents, 258 (99.2%) knew about EPI. Out of these, number of mothers was 220 (84.6%) and the majority of the mothers knew EPI. Similar results were reported by a study conducted in Peshawar, where 98.57% of urban and 86.37% of the rural women knew about EPI, and they started immunization of their infants. Of the urban sampling 67.14% and rural sampling 48.12% has fully immunized their children against Polio, Hepatitis B, Diphtheria, Whooping Cough, Tuberculosis, Measles and Tetanus¹². In our study number of fully immunized children is 75% (i.e. Fully Immunized Child: A child one year or older having 1 BCG, 3 Polio, 3 Pentavalent & 2 Measles vaccine doses) while literacy rate was 60.8%, while in above mentioned study of Peshawar it is 35%¹². Mother education in urban and rural areas varies significantly and this has an impact on EPI services. Because, adequate and appropriate knowledge about EPI is essential for parents as they have to play important role in the practice of immunization and promoting health education.

In another study conducted in Karachi targeting the impact of maternal knowledge on infant immunization rates revealed that out of 179 mothers, 65% of the literate mothers had got their children fully immunized as compared to 34% of the illiterate mothers getting their children fully immunized. 89% of the literate mothers had kept vaccination cards with them also. This shows that improvement of the maternal

knowledge about EPI can increase the immunization rate of the children throughout the country¹³.

A study conducted in the Rajshahi slums of Bangladesh appreciating the relation between age of children and EPI, showed that aptitude of parents towards the immunization of their children decreased with the increase in the age of child. The low odds ratio for the uptake of immunization at higher age of child indicated that the probability of being immunized of the children was low in the higher ages. The results revealed that the child of age 24 months and above was 0.231 times less likely to be completely immunized than the child in age group 0-23. From this it was concluded that the parents of the children did not properly follow the immunization schedules by EPI guidelines with the increase of age of child. From the results of logistic regression analysis, it appeared that the high birth order has a negative effect on full immunization coverage of children relative to the reference category. The results found that the child of birth order 2+ was 0.987 times less likely to be fully immunized than the single birth order child. This clearly shows the negligence by the mother regarding child immunization at higher birth order¹⁴.

In this study, out of 260 parents, 242 (93.1%) thought that EPI programme is beneficial, while according to 18 (6.9%) it is not. As far as complications or reactions are concerned, these may be due to faulty techniques, hypersensitivity and improper storage of vaccine (cold chain).

Surveys like these increase not only parent's awareness, but doctor's awareness as well as about public health problems. This is very useful to improve quality of health services¹⁵.

These findings from this or similar surveys should be used as a basis for corrective measures to improve medical and education care¹⁶.

CONCLUSION

EPI, as important component of primary health care programme of Pakistan, is effectively being exercised in the community. Continuous monitoring, evaluation and community participation is necessary to strengthen this system. Great emphasis should be placed to raise the level of education, improve the standard of living and continue community based vaccination programme. There should be community efforts to improve health system and health education activities. There should be follow ups of routine immunization activities with the participation of parents, Government and vaccination supervisors. WHO is extending all possible technical supports to our government for the forthcoming national health policy of "HEALTH FOR ALL", through a system which is efficient equitable, effective, easily accessible and affordable to the masses.

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