

Adherence to recommended early childhood immunization schedule/practice

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Abstract – Immunization enhances the immune system by stimulating the antibodies against antigens through specific inoculation or vaccination. In 1974 WHO started EPI against six diseases Diphtheria, Pertussis, Polio, Measles, Tuberculosis, Tetanus. Later on different vaccines were added. Aim is to make immunization complimentary to other Primary Health Care services in order to reduce mortality morbidity and disability from the vaccine preventable diseases by childhood vaccination. An observational and questioned based study was conducted in different Government hospital in Punjab district. This was done to know the level of compliance to the vaccination schedule. This report provides up-to-date information regarding the vaccination and its impact. Parents' to 50 children answered a written questionnaire prior to a physical examination and individual semi structured interview. Qualitative and quantitative analyses of validity, sensitivity, specificity, and predictive values of the questionnaire were performed. The main motive behind carrying out this survey was to estimate the ratio of vaccinated child belonging to different status and also to check the awareness of people about preventive health, importance of immunization. The outcome was somehow satisfactory majority of people have known about the importance of adherence to early childhood immunization but till there is a great room for improvement. Even now at the present stage few people are blinded by the some beliefs that vaccination is against religion. So we required great support from parents as well as from society to contribute in task of eradication of polio and other diseases which can be minimized by early childhood recommended schedule.

Keywords – Immunization, Vaccination, Antigen, Antibodies

1. Introduction

Immunization is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine. A vaccine is a biological preparation that provides active acquired immunity to a particular disease [1]. A vaccination schedule is a series of vaccinations, including the timing of all doses, which may be either recommended or compulsory, depending on the country of residence. Vaccine schedules are developed by governmental agencies or physicians groups to achieve maximum effectiveness [2]. Childhood vaccines protect children from a variety of serious or potentially fatal diseases, including diphtheria, measles, meningitis, polio, tetanus and whooping cough [3]. The first human vaccines against viruses were based using weaker or attenuated viruses to generate immunity [4]. The World Health Organization (WHO) initiated the Expanded Program on Immunization (EPI) in May 1974 with the objective to vaccinate children throughout the world. Ten years later, in 1984, the WHO established a standardized vaccination schedule for the original EPI vaccines: Bacillus Calmette-Guérin (BCG), diphtheria-tetanus-pertussis (DPT), oral polio and measles [5]. Immunization is one of the most successful and cost effective health interventions. It has eradicated small pox, lowered the global incidence of polio so far by 99% and achieved dramatic reductions in illness, disability and death from diphtheria, tetanus, whooping cough and measles[6]. A successful immunization program depends on the co-operation of every person.[7] Today, children routinely get vaccines that protect them from more than a dozen diseases

such as measles, polio, and tetanus. Most of these diseases are now become eradicated. Children must get at least some vaccines before they may attend school. Vaccines work best when they are given at certain ages [8]. Role of Clinical Pharmacists in Immunizations is that he must have the knowledge to compel anyone to vaccination with reason. He should counsel the patient about immunization. He should counsel the patient about the adverse effects if the patients do not give importance to immunization.

2. Material and Methods

2.1. Design

A retrospective study was generated and a data collection form was designed, that was filled by parents of the children. The questionnaire contained the content to determine the ratio of vaccinated and non-vaccinated child, awareness of people about preventing health, availability of vaccine in government hospitals. Then the Performa's were evaluated on the basis of percentages and then results were displayed in graphical form.

2.2. Place and duration of study

The places for study selected were Children hospital, Services hospital, Sir Ganga Ram hospital, Mayo Hospital Lahore. And the time duration taken for the study was two months.

2.3. Patients and methods

A sample size of 50 families was selected on the basis of random sampling technique.

2.4. Collection of data

The data was collected by direct interview with the patients.

2.5. Inclusion and Exclusion criteria

Neonates, infants and children under the age of 5 were included. Children of above age 5 were excluded.

3. Results and Discussion

Table 1. Response of patients

Content	Agreed	Disagreed
Awareness about vaccines	98%	2%
Satisfaction from vaccination process	95%	5%
Awareness of advantages of vaccination	95%	5%
Reservation or religious restriction	5%	95%
Side effect of vaccination	2%	98%

It was figured out that 98% people have knowledge about vaccination. They are aware about advantages of being vaccinated. As our survey include fifty families, majority of them satisfied with the process of vaccination and admitted that vaccination is beneficial to health. They are willing to eradicate all that diseases which could be ended by vaccines. Some child have side effect like fever and few have skin rashes. Even now at the present stage the people of the few areas are blinded by the some beliefs that vaccination is against religion. However, some people still don't appreciate the idea of vaccinating their children unaware of the consequences. Their poor health condition and the unhygienic environment they live in make them and their children more susceptible to diseases. But their ratio is much less.

4. Conclusion

The immunization coverage in Pakistan has increased up to 90%. However it needs improvement. With the passage of time and growing education, people are getting awareness. They understand the need of immunization. Polio campaign is trying its best to build a polio free country. The issues of vaccine procurement are its storage, transport and administration. Hepatitis vaccine is now in government used and it requires great efforts for its promotion and implementation. Others vaccines like Rotavirus, Chicken pox, meningococcal influenza MMR Are not available in government hospital because of their expense. Factors such as knowledge, attitude and practices of parents and patients contribute to the success and failure of the immunization program. Most people are satisfied with the process of vaccination but full coverage all over is still to be attained.

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