

An Assessment Of Awareness And Practicality Of Parents Towards Immunization Of Children In District Multan

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Abstract

The main objective of the study to assess the parents' knowledge attitude and practices regarding their children vaccination in District Multan, the data was collected with the help of interview schedule from 200 parents having under 2 Years children. SPSS was used for data analysis. The main findings of this research were the parent's awareness regarding EPI vaccination is low, vaccination centers are away from the people of rural areas of district Multan that's why the coverage of Vaccination is low in these areas, its recommended that the Government provide more EPI vaccination centers for the children of rural areas. Vaccination staff also limited so it make sure one vaccinator for the ten thousand of population. . Trained female worker like LHWs, local School Teachers, (Imam Masjid) and key persons of the community can play a vital role in the promotion of Vaccination coverage in their concern areas. Vaccination weeks will also very beneficial for the child's vaccinations and the awareness regarding the prevention of communicable diseases in Pakistan.

Keywords: Child Vaccination, EPI, Parent's awareness, Vaccination coverage, Multan

Introduction

The promotion of healthy practices is not only a social but individual responsibility as well in our society. It has been known that 5 million children were dying each year and another 5 million were disabled by infectious diseases (1). A number of deadly and disabling infectious diseases can be prevented by timely administration of vaccines when child is effectively immunized at the

right age, most of these diseases are either entirely prevented or at least modified so that child suffer from a mild disease without any disability. (2). Immunization is one of the most effective, safest & efficient Public Health Interventions. While the impact of Immunization on childhood morbidity & mortality has been great, full potential, has not yet been reached. Still, Thousands of children die from Vaccine-Preventable diseases each year. (3) Vaccines have eradicated small pox, eliminated wild polio virus in the U.S. and lastly Egypt. Also Immunization had significantly reduced the number of deaths of measles, diphtheria, rubella, Pertussis, and others, but despite these efforts, today tens of thousands of people in the U.S. still die from these and other vaccine preventable diseases. (4) The expanded program of immunization started by the WHO in 1974 and has improved coverage for BCG, DPT, polio and measles to about 80% of children in developing countries (5). Over the past years, the Egyptian Ministry of Health and Population (MOHP) has implemented a national program for childhood immunization (6). Immunization is the most cost effective health intervention known to mankind. When countries can successfully provide vaccines to their children, they are already making an immense difference to the health of their citizens. But immunization alone is not sufficient because all areas of health care deserve attention and resources. (7) Mortality rate may be greater in developing countries, because of low resistance of these children against infection. In the developing world some 23% of deaths among children under five years occur in the Life Science Journal 2013;10(4) (8) first month. However about 3 million babies in the developing countries die during early childhood. In recent years however relatively low immunization levels in this age group have occasional scattered outbreak of certain disease. For this reason in spite of the national effort some immunizations are administered optionally to improve the immunization levels of all children. This vaccination helps to making the babies' immune system stronger. People who are duly partially immunized or not immunized at all may be at risk for the disease that these vaccines prevent. Hence the study plays an important role in spreading the awareness on immunization among the mothers of under five years children. (1,9) Assessing immunization coverage helps to evaluate progress in achieving program objectives and in improving service deliver. In addition, evaluation of immunization coverage provides evidence whether substantial progress towards achieving vaccination targets is being made (10). The mother plays a major role in promoting the health of children. Several misconception, ignorance and inadequacy of knowledge in relation to optional vaccine are prevalent among mothers especially under five children (11) Avoidance of infections is the need of the day. The morbidity and death begin by disease and rising allegations of curative them yearns us to aim more on their avoidance. Immunization is amidst the most thriving components of preventive surgery. Creative public wellbeing intervention has had the utmost influence on wellbeing of the individuals. Every year millions of juvenile children around the globe are keeping from sickness or death by vaccines. By substantially declining the cost of healing diseases, thus immunization boasts possibilities for shortage decrease and communal and financial development of the homeland. magnified event son Immunization was begun in Pakistan in 1978 with the supreme target of decline in morbidity and death started by six vaccine

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preventable diseases.⁵ In supplement vaccination against Hepatitis B was adopted in EPI in July 2002, construction on the accomplishment of little Pox eradication, World wellbeing Assembly resolved to eradicate polio globally. Marvelous advancement has been made in the worldwide assault against polio since 1988. The number of polio positions worldwide has turned down from 350,000 in 1988, to 273 positions in 2010 (by May 25, 2010). Pakistan is amidst the two some of countries where Polio has yet to be eradicating whole heartedly. In 1980, Polio medication was just two per hundred which was magnified to 54% by 1990 (12-14).

This study was conducted in different union councils of Multan to assess the level of knowledge among parents regarding perception about vaccination and EPI in our local population of southern Punjab. There was no such study done in our population previously to assess their knowledge and practicality regarding immunization. The results will highlight issues regarding poor immunization status and their perceptions regarding vaccination.

Objectives of the study

- i. To check the awareness level of the patients towards immunization usage
- ii. To assess the attitude of the patients towards immunization usage

Methodology

The researcher selected district Multan for the purpose of collection of data (all the parents ether they have and have not the knowledge, practice and attitude or any sort of information about EPI program) as a universe. “Divisions of Towns and Union Councils of District Multan.

Table 1: Selected union councils

Districts	Towns	Union councils
Multan	Jalalpurpirwala	15 union councils
	Mumtazabad	24 union councils
	Shah Rukne-Alam	25 union councils
	Shereshah	24 union councils
	Shujaabad	17 union councils
	Bosan	26 union councils
	Total	131 union councils

All the parents of district Multan were the target population according to the sampling technique and procedures in the selected UCs.

Then the researcher selected 200 parents, 120 male and 80 female from the (selected) UCs of district Multan through convenient sampling technique. After illustration of the sample and designed the appropriate research technique the data is collected through interview schedule as a tool for data collection process. The researcher focused on questions included in the interview schedule and tried to avoid the biasness and errors in the structure of interview schedule. The researcher had to change some questions for the research after pre-testing. Data analyzed with the help of “SPSS” software. The researcher had combined detailed information into a number of categories that enable simple description of the data that allowed statistical analysis of the research.

Analysis of the Data

Quantitative analysis was used for presenting and interpreting the Numerical data.

Table 2: Frequency of descriptive variables

Variable	Frequency	Percentage
Age		(%)
Under 20 years	14	7.00
B/w 20-25 years	18	9.00
B/w 26-30 years	61	30.50
B/w 31-35 years	54	27.00
B/w 36-40 years	49	24.50
More than 40 years	4	2.00
Total	200	100.00
Gender		
Male	83	41.50
Female	117	58.50
Total	200	100.00
Education		

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Illiterate	94	47.00
Primary	39	19.50
Secondary	34	17.00
Intermediate	11	05.50
Graduation	22	11.00
Total	200	100.00
Residence		
Rural	108	54.00
Urban	92	46.00
Total	200	100.00

Table 1 shows that 7.0% respondents were under 20 years old, 9.0% of the respondents were the age of between 20-25 years, 30.5% respondents were the age of 26-30 years old, 27.0% were the age of 31-35 years, 24.5% respondents were 36-40 years old and 2.0% were more than 40 years old. The researcher found that majority of the participants was the age between 20-25 years old. In this research 41.5% respondents were male and 58.5% were female. The majority of the respondents in this research were female and the education level was that 47.0% respondents were Illiterate, 19.5% respondents were Primary, 17.0% respondents were Secondary level of education, 5.5% respondents were Intermediate and 11.0% were Graduate at the time of research. The majority of the respondents were Illiterate in this research. By the residence table shows that 54.0% respondents were lived in the rural area and 46.0% were lived in the urban area. The majority of the respondents, in this research were lived in the urban areas.

Table 3: Percentage distribution of the respondent with respect to respondent number of children vaccinated

Number of children vaccinated	Frequency	Percent
1-3	70	35.0
4-6	117	58.5
Above	13	6.5

Number of children vaccinated	Frequency	Percent
1-3	70	35.0
4-6	117	58.5
Above	13	6.5
Total	200	100.0

The results about the number of children vaccinated, 35.0 percent of the respondents said their 1-3 children were vaccinated, 58.5 percent of the respondent said their 4-6 children were vaccinated and 6.5 percent of the respondents said their above than 6 children were vaccinated. The majority of the 58.5 percent of the respondent said their 4-6 children were vaccinated.

Table 4: Percentage distribution of the respondent with respect to respondent know about immunization

Respondent know about Immunization	Frequency	Percent
Yes	151	75.5
No	49	24.5
Total	200	100.0

The results about the respondent know about immunization, 75.5 percent of the respondents were said yes they know what immunization is and 24.5 percent of the respondents were said no they have no knowledge about immunization. The majority of the 75.5 percent of the respondent yes they know what is immunization.

Tale 5: Percentage distribution of the respondent with respect to vaccination status of respondent children

Vaccination status of respondent children	Frequency	Percent
Fully vaccinated	160	80.0
Partially vaccinated	35	17.5
Unvaccinated	5	2.5

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Vaccination status of respondent children	Frequency	Percent
Fully vaccinated	160	80.0
Partially vaccinated	35	17.5
Unvaccinated	5	2.5
Total	200	100.0

The results about the vaccination status of respondent children, 80.0 percent of the respondents said their children were fully vaccinated, 17.5 percent of the respondent said their children were partially vaccinated and 2.5 percent of the respondents said their children were unvaccinated. The majority of the 80.0 percent of the respondent said their children were fully vaccinated.

Table 6: Percentage distribution of the respondent with respect to main reason for not completion of vaccination

Reason for not completion of vaccination	Frequency	Percent
Lack of knowledge	59	30.3
Non cooperative services	27	13.8
Lack of interest	56	28.7
Lack of trust on services	44	22.6
Health issues	9	4.6
Total	195	100.0

The results about the reason for not completion of vaccination, 30.3 percent of the respondents said due to lack of knowledge about vaccination, 13.8 percent of the respondent said due to non-cooperative services of health worker, 28.7 percent of the respondent said due to lack of interest regarding vaccination while 22.6 percent of the respondent said due to lack of trust on services provided by health worker and 4.6 percent of the respondent said due to health issues they were

not vaccinated their children. The majority 30.3 percent of the respondents said due to lack of knowledge about vaccination.

Table 7: Percentage distribution of the respondent with respect to respondent know about EPI

Respondent know about EPI	Frequency	Percent
Yes	119	59.5
No	81	40.5
Total	200	100.0

The results about the respondent know about EPI, 59.5 percent of the respondents said yes they know what EPI is and 40.5 percent of the respondents said they have no knowledge about EPI. The majority 59.5 percent of the respondents said yes they know about EPI.

Table 8: Percentage Distribution of the Respondent with Respect to Respondent believe Vaccination prevent form Disease

Respondent believe Vaccination prevent form Disease	Frequency	Percent
Yes	161	80.5
No	16	8.0
Don't know	23	11.5
Total	200	100.0

The results about the respondent believe vaccination prevent form disease, 80.5 percent of the respondents believe that vaccination prevent from disease while 8.0 percent of the respondents believe that vaccination doesn't prevent from disease and 11.5 percent of the respondents don't know that vaccination prevent from disease. The majority 80.5 percent of the respondents believe that vaccination prevent from disease.

Table 8: Percentage distribution of the respondent with respect to respondent knowledge about antenatal vaccination

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Respondent knowledge about antenatal Vaccination	Frequency	Percent
Yes	103	51.5
No	97	48.5
Total	200	100.0

The results about the respondent knowledge about antenatal vaccination, 51.5 percent of the respondents said they have knowledge about antenatal vaccination and 48.5 percent of the respondents said they don't have knowledge about antenatal vaccination. The majority 51.5 percent of the respondents said they have knowledge about antenatal vaccination.

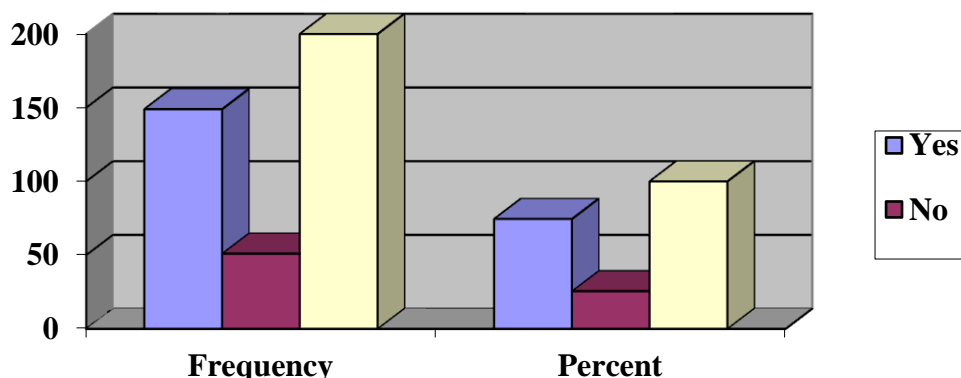


Figure 1: Percentage Distribution of the Respondent with Respect to vaccination card at home

The results about the vaccination care they have, 74.5 percent of the respondents said they have vaccination card at home and 25.5 percent of the respondents said they don't have vaccination card at home. The majority 74.5 percent of the respondents said they have vaccination card at home.

Table 9: Percentage Distribution of the Respondent with Respect to ever practice any type of vaccination for your children

Practice any type of vaccination for your children	Frequency	Percent

Yes	185	92.5
No	15	7.5
Total	200	100.0

The results about the practice any type of vaccination for your children, 92.5 percent of the respondents said they practice vaccination for their children and 7.5 percent of the respondents said they don't practice any kind vaccination for their children. The majority 92.5 percent of the respondents said they practice vaccination for their children.

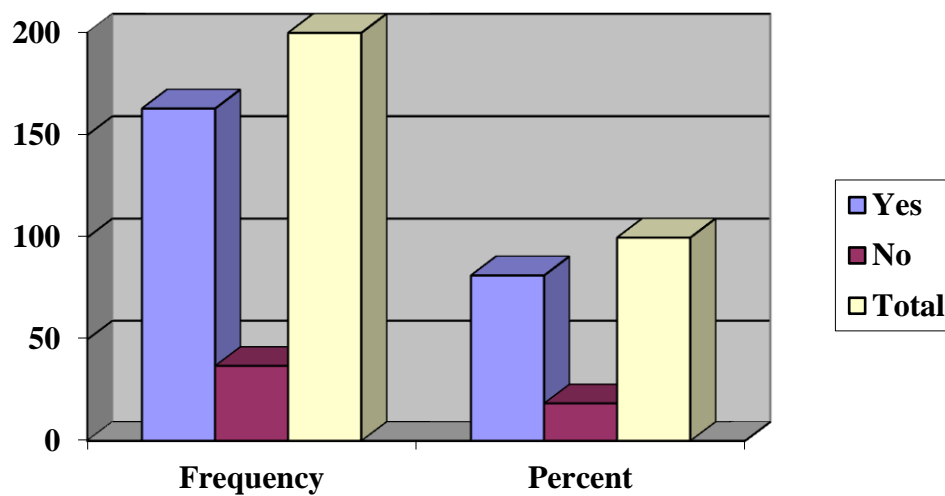


Figure: Percentage Distribution of the Respondent with Respect to efficacy of vaccine play important role towards people choice

The results about the efficacy of vaccine play important role towards people choice, 81.5 percent of the respondents said efficacy of vaccine play important role towards people choice and 18.5 percent of the respondent said efficacy of vaccine doesn't play important role towards people choice. The majority 81.5 percent of the respondents said efficacy of vaccine play important role towards people choice.

Hypothesis

Knowledge of EPI program and vaccination status of their children

Null Hypothesis: There is no relationship between knowledge about immunization and vaccination status of your children.

Alternate Hypothesis: There is relationship between know about immunization and vaccination status of your children.

Knowledge about Immunization	Vaccination status of your children			Total
	Fully vaccinated	Partially vaccinated	Unvaccinated	
Yes	131	16	5	152
No	22	19	7	48
Total	153	35	12	200

Chi-Square Test = Chi square test was applied to find out the relationship between independent

variable and dependent variable.
$$X^2 = \sum \frac{(fo - fe)^2}{fe}$$

Pearson Chi-Square = 33.12, Degree of freedom = 2, P-value = 0.001

The alternative hypothesis is accepted that there is relationship between the knowledge of parents about immunization and vaccination status of their children. It mean when parent's level of knowledge about immunization high than their child's vaccination also improved.

Discussion

Immunization is a process in which one person is made immune or resistant to infectious disease, usually by vaccination. It requires several visits to healthcare providers immunization schedule inconvenient, increasing the likelihood the child will not be completely immune. The possibility of scheduling a plurality of vaccination takes place in a single vaccine (such as DTP or MMR vaccination) with an access possible, combined with the vaccine to several diseases that vaccines easier and more uncomfortable, increase the child will completely immune. By significantly reducing the cost of treating disease and thus immunization provides opportunities for social and

economic development and the country's poverty reduction. Immunization program began in Pakistan in 1978, and mortality rates caused by preventable diseases, equivalent to 8 ultimate goal of polio, tuberculosis, measles, diphtheria, tetanus, hepatitis B and pertussis expires. Immune disease course is where the reference amplification immaturity mortality and cause of death directive (infant mortality rate measures), one tenor proved IMR process countries. Impact of marital status on children's vaccination have been reported elsewhere. Immunization consciousness is universal. Mother showed more confusion, but only about tetanus and pertussis vaccination programs. Mother has a positive attitude towards immunization, most of which are seen as an important intervention (98%). While childhood immunization status decided difference site, according to the immunization card complete immunization coverage is low, roughly the same in both formations. The basic reasons for poor coverage, study the researchers around the world and in addition to other factors, parental knowledge and belief are documented immune intake. To identify the mother of a knowledge, attitude and practice of knowledge about immunization, we found that both the knowledge and the coverage is very low, affected by the mother of education, age, economic, family size and ethnicity. Related to immunization and to have access to enough information to the mother's positive attitude and better coverage related to children. Another emerging issue, threatening immunization coverage, particularly in the developed countries' concerns about the safety of vaccines." About security and their children's views on vaccine immune status of parents it is very important. There is a doctor and health institutions neither refers to the child vaccination program on immunization centers also welcome any planned immunization activities, a common complaint in the health centers. Maintaining the cold chain vaccine: vaccine cold chain is used to store and transport vaccines at very low temperatures to maintain their effectiveness before use, because the vaccine is a biological system sensitive material, which is exposed to high temperatures directly affect the quality and safety of vaccines Immunization.

Conclusion

Our study results have indicated that there was good knowledge regarding vaccination among parents of children. This knowledge of vaccination was more common in educated, urbanized residential status, distance from health care facility and socioeconomic status. Lack of healthcare facilities, religious and ethnic bindings, lack of service delivery and lack of awareness are the major contributing factors towards poor vaccination in these children.

Suggestions

- i. Awareness campaign should be held by the health educator for the education of the parents regarding EPI
- ii. District Health Committee should monitor and assess the EPI progress and make plan for the improvement of this program

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- iii. Reward & Accountability mechanism Increasing women's access to education by passing and implementing of diseases control programs that courage and impose consequences on child health.
- iv. The social, religious, culture and economic needs should be openly identified, because it will have serious policy implication of EPI

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