ORIGINAL ARTICLE

Knowledge, Attitude and Practice of mothers regarding vaccination among the children under the age of five years

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ABSTRACT

Background: Vaccination is an effective method to control the vaccine preventable diseases. It is also effective to minimize the mortality and morbidity caused by communicable and contagious diseases. It has been observed that a number of mothers are reluctant to get vaccination for their children due to social, financial, cultural, political and religious constraints.

Aim: To assess the knowledge, attitude and practice of the mothers regarding vaccination program among the children under the age of 5 year attending pediatric OPD Mayo Hospital, Lahore.

Methods:A cross sectional study was conducted in pediatric outpatient of Mayo Hospital Lahore during 1st November 2015 to 30th April 2016. A total of 1050 mothers of children under 5 years of age with different medical problems attended pediatric outpatients were included in this study. Data was collected on a specified questionnaire by a doctor who entered the required information after interviewing the mothers accompanying the children.

Results: The study showed that 330(31.43%) mothers belong to18-30 years age group, 580(55.24%) mothers belong to 30-45 years age group and 140(13.33%) mothers belong to 45 years and above age group. 220(22.95%) mothers were uneducated, whereas 830(79.05%) were literate and educated. From uneducated group 176(80%) mothers had the knowledge of vaccination but only 154(70%) mothers got vaccinated their children. From literate group 747(90%) had the knowledge of vaccination however 664(80%) mothers got vaccinated their children?

Conclusion: It is concluded that 90% mothers from educated group had knowledge about vaccination whereas 80% mothers from this group got vaccinated their children, 10% mothers got incomplete vaccination of their children and 10% mother had not vaccinated their children. 70% mothers from uneducated group had knowledge of vaccination, 60% mothers got vaccinated their children, 10% mothers had incomplete vaccination of their children and 20% mothers were reluctant or no vaccination for their children.

Keywords: knowledge vaccination, uneducated, educated, WHO

INTRODUCTION

Vaccination/immunization is the administration of vaccine to stimulate one's immune system to develop immunity against pathogen. Antigenic material can prevent or control morbidity from infectious disease when a large portion of the population is immunized, that leads to herd immunity. The effect of immunization is verified after different studies i.e. vaccine for influenza[1], the vaccine HPV[2] and vaccine for chicken pox[3].The infectious diseases are prevented by effective method of immunization[4].Small pox was eradicated and polio, measles and tetanus are restricted from world due to vaccination.

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Twenty five percent infections/diseases can be prevented and controlled by the use of licensed vaccines as stated by WHO[5].The attenuated and inactivated virus is highly immunogenic which is form of the causative pathogen or purified compounds of the pathogen but active agent in vaccine may be intact. For vaccination against toxin based disease, there is production of toxoids by the modification of tetanospasmin of tetanus for removal of toxic effects but immunogenic effect is retained[6].People had been trying to prevent small pox by inoculating themselves and vaccine was also produced for this disease[7,8].The British physician Edward Jenner discovered vaccine for small pox in 1796.Atleast six people were the first to publish evidence of its effectiveness by using the same principles[9].A concept was added by Lois Pasteur after his working in subject of microbiology. The vaccination was given nameafter derivation of virus affecting cows[7,10].The deadly & contagious disease small pox causing

deaths of 80% children and 20-60% of infected adults. In1979, when there was eradication of small pox, in 20th century estimated 300-500 million people died[11,12,13]. With the improved conditions in lifestyle and proper scheduled expanded program of immunization by WHO, there is changes in incidence and decline in vaccine preventable diseases .We are not successful to prevent, control and eradicate certain diseases in our country with these efforts.The objective of this study was to assess the knowledge and awareness of vaccination among mothers those are getting management for different vaccine preventable diseases for their children of 5 years of age. Almost four decades have passed since availability of vaccines at public sector & commercial level. It has been observed that despite of easily availability of vaccine, mothers are reluctant to get vaccinate their children. It is common observation that due to cultural, social, political and religious issues, mothers are reluctant to get vaccination of their children. It has been observed that there is propaganda against vaccines that these are causing impotency and mental problems.

Infectious diseases are major killer of the children under the age of 5 years and also causing morbidity. The incidence and mortality is especially high in infancy and very much high in the presence of malnutrition and absence of breast feeding. Aim of this study was to assess the knowledge and practice of mothers regarding vaccination among children under the age of 5 years.

MATERIAL & METHODS

This cross sectional study was conducted in pediatric outpatient of Mayo Hospital Lahore during 1st November 2015 to 30th April 2016.After taking informed consent, the mothers of children under 5 years of age with different medical problems attending pediatric outpatients of hospital. The population comprised of children coming from whole city and suburbs. Data was collected on a specified questionnaire by a doctor and required information after interviewing the mothers accompanying the children, was recorded. The information was collected regarding the vaccination and how they have come to know. The data was entered and interpreted as frequency and percentage distribution.Mothers of children of 5 years of age are included in this research.

RESULTS

In this study 1050 mothers were included those attended pediatric outdoor for management of different diseases of their children. A total 330(31.43%) mothers belong to18-30 years age group, 580(55.24%) mothers belong to 30-45 years age group and 140(13.33%) mothers belong to 45 years and above age group. 220(22.95%) mothers were uneducated, whereas 830(79.05%) were literate and educated. From uneducated group 176(80%) mothers had the knowledge of vaccination but only 154(70%) mothers got complete, 22(10%) mothers got incomplete and 44(20%) mothers got incomplete vaccination of their children. Whereas .747 (90%) mothers from literate and educated group had the knowledge of vaccination but 664(80%) mothers got complete vaccination, 83(10%) mothers got incomplete and 83(10%) mothers had incomplete vaccination of their children.

Table-1 Age of the mothers

Age of the mothers	No. of mothers	%age
18-30 years	330	31.45
31-45 years	580	55.24
46 years or more	140	13.33
Total	1050	100

Table 2: Education of the Mothers

Education	No. of mothers	%age
Uneducated	220	20.95
Primary	180	17.14
Matric	570	54.29
Graduate & postgraduate	80	7.62
Total	1050	100

Table 3: Knowledge and practice of vaccination among mothers.

Knowledge and practice of vaccination	No of Uneducated mothers-220	No. of literate &educated mothers-830
Knowledge	176(80%)	747(90%)
Complete practice	154(70%)	664(80%)
Incomplete ;	22(10%)	83(10%)
No vaccination	44(20%)	83(10%)

DISCUSSION

Many infectious diseases are controlled by constant vaccination process in developed countries as WHO schedule was not up to the mark. It is estimated by WHO that 2-3 million deaths per year are averted and 1.5 million children died due to vaccine preventable diseases, those could had been saved by proper immunization[14].In 2013 estimated 29% deaths of children of 5 years of age were vaccine preventable. In some under developed areas of the world, they arefewer facilities of vaccination and resources. In the developed countries constant vaccination program had control of many infectious diseases whereas in developing countries, despite of WHO facilities of vaccination and resources required results

are not achieved. Sub-Saharan African countries are not in a position to afford complete vaccination program[15].The increasing prices of vaccinations will have negative effect on future generations. In some areas, due to herd immunity there are less chances of spread of diseases. It had been observed that majority of mothers whether educated or uneducated had knowledge and awareness about vaccination but more than 20% mothers from both groups either had incomplete or had not vaccinated their children due to financial, social, cultural, political and religious reasons.

CONCLUSION

It is concluded that 80% uneducated mothers are aware of vaccination but 70% mothers got vaccinated their child which is low percentage regarding this program.90% literate and educated mothers had knowledge but only 80% mothers got vaccinated their child. Low percentage of practice in both groups is showing that despite of having knowledge of vaccination, mothers are reluctant to get vaccination of their children due to cultural, social, political and religious reasons. This is alarming stage that despite of constant campaign by print and electronic media and huge expenditure by Government, the desired results about vaccination are not achieved.

RECCOMDATIONS

1. Government should advertise vaccination program on print and electronic media on large scale.
2. Political and religious leaders should be involved in this campaign.
3. Vaccinations points should be opened in all nursery schools, madrassa and mosques.
4. No child should be admitted in any school without vaccination card.

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