

## KNOWLEDGE AND PERCEPTION OF MOTHERS REGARDING CHILD IMMUNIZATION IN A TERTIARY CARE HOSPITAL PUNJAB, PAKISTAN

YASMEEN S\*, NAWAZ R, BASHIR S

College of Nursing, Nishtar Medical University Multan, Pakistan

\*Correspondence author email address: [Shazia.yasmeen66@yahoo.com](mailto:Shazia.yasmeen66@yahoo.com)

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**Abstract:** *Child immunization stands out amongst the best intelligent divulgements at any point. It shields adolescents from becoming sick and dead from appalling diseases, diminishing the pain of various guardians. In this study, a quantitative cross-sectional study design is used. The self-administered questionnaire is used to measure the knowledge and perception of mothers regarding child immunization. The data was analyzed using SPSS version 18 and Microsoft Excel. Regarding sources of knowledge, 70% of mothers responded that they got information about the immunization of their child from a Health worker in their town, 2% of mothers responded that they had got information through mass media, i.e., television, social media, etc., out of 100 participants 8% asked that they got information regarding the immunization of their child through the neighborhood, and 20% mothers asked that they got information about immunization from nearest hospital/ health care setup. This study concluded that most of the immunization information is given by Health workers, and mothers perceived that the vaccination is important for their children, but few of them perceived immunization as ineffective.*

**Keywords:** Immunization, Vaccination, Knowledge, Perception

### Introduction

Child immunization stands out amongst the best intelligent divulgements at any point. It shields adolescents from becoming sick and dead from appalling diseases, diminishing the pain of various guardians. In this way, there is the requirement for the watchmen to make unequivocal learning and perceptions about inoculations. Since unequivocal data and practices make elevating mien towards immunization and thus their responsibility to inoculation. It diminishes the heaviness of dreadful, compelling sicknesses, which are best obliged by inoculation. A positive association between parental learning, practice, and vaccination rates of youths was represented by various examinations (Oduanya et al., 2008; Vinish, 2016).

The government of India impelled the general immunization program (UIP) in 1985 (Singh et al., 1994) to shield every single infant kid from six neutralizer-preventable diseases. The inoculation program<sup>13</sup> exhibited the pulse polio movement (PPI) campaign.

As shown by the US Territories for Disease Control and Balancing Activity (CDC), immunizations are undoubtedly the most critical gadgets for keeping away from illness. Sicknesses, for instance, smallpox, have been crushed by using immunization activities, and polio nearly evaporated port about in perspective on inoculation. In 1998, the Annual declared an expanded program on immunization (EPI), a mission set to obliterate, discard, or lessen contaminations to the most decreased measurements possible through bolstered vaccination of all powerless as a fundamental portion of basic social protection (Adil et al., 2009).

World Wellbeing Association (WHO) began the all-encompassing project on immunization (EPI) in May 1974, intending to inoculate kids all over the world. An important

target for the World Prosperity affiliation is controlling certain powerful disease<sup>8</sup>. The major techniques for the balancing activity of ailment are to shed or diminish the proportion of spoiling microorganisms from the stream, improve the host-resistant response, and treat the defiled host. These methodologies are practiced by two immunization types (dynamic and confined) (Birhanu et al., 2016).

In 1974, the World Health Association (WHO) started the all-encompassing system of vaccination (EPI) to inoculate kids worldwide. Systematized vaccination plans have been made and are regularly revived (Asim et al., 2018; Awoh and Plugge, 2016). The EPI has seemingly achieved and proceeded with raised measures of inoculation consideration in various ways in not all countries, ensuring suitable children's security against a couple of infections (Kagoné et al., 2018).

Vaccination prohibitions are starting in a district of extraordinary excitement for general prosperity, particularly in light of the measles flare-ups in 2015 and 2016. Over the main residual century, comprehensive US immunization recommendations have significantly reduced the awfulness and mortality from counteracting agent-preventable afflictions. Vaccination, the foundation mineral disagreeable events after immunization, and the establishment of medication can be unequivocally declared in 2011 that the preferred position far surpasses any hazard. In 2013, the Association of Solutions stated that creating an example of deferring vaccinations or exempting them completely increased counteracting agent preventable scenes and mortality in the US (Pottinger et al., 2018).

Vaccination is a champion among the most monetarily adroit interventions to check critical sicknesses that add to tyke mortality in the country, particularly in conditions where malnourished youths, clog, desperation, and

numbness rule. Information, inspirational outlooks, and appropriate acknowledgments about vaccination became an essential contraption to diminish the rate of counteracting agent-preventable diseases, thus decreasing youth mortality and dreariness. In our overall population, a broad bit of the masses live in natural areas where mothers are uneducated and have different legends about inoculations; this results in children being unimmunized (Ghei et al., 2010).

**Methodology**

The research study design used in this research is the KAP study design (survey-based study ). It is a quantitative type of research. In this study, 100 mothers were selected from the pediatric department of Nishtar Hospital Multan to assess their knowledge and perception regarding child immunization. In this study, the sample is selected by simple random sampling. Data was obtained with the help of a close-ended multiple choice knowledge and attitude-based self-administered questionnaire. The questionnaire was composed of different questions about mothers' knowledge and perception regarding child immunization. The questionnaire consisted of closed-ended structured questions and different answer options such as Yes, No, and Don't Know Likert scale (Urdu). The participants were instructed to fill out the questionnaire in about 30 minutes and return the complete questionnaires. The complete returned questionnaire will undergo the process of analysis.

**Result and Discussion**

Regarding sources of knowledge, 70% of mothers responded that they got information about the immunization of their child from a Health worker in their town, 2% of mothers responded that they had got information through mass media, i.e., television, social media, etc., out of hundred participants 8% asked that they got information regarding the immunization of their child through Neighborhood and 20% of mothers asked that they get information about immunization from the nearest hospital/health care setup. As shown in Fig 1.

Responses of mothers in five categories measure the status of complete and incomplete immunization as 3% of respondents responded that the reason for the incomplete status of their child is due to No availability of health care centers, about 10% of mothers responded that the incomplete status of immunization is due to some domestic issues, 7% mothers showed a response that their child's immunization status is incomplete due to the no availability of staff on duty, 10 % respond that the incomplete status of immunization is due to some other reasons, and out of 100 mother the 70% respond that the immunization status of their child is complete, as shown in figure no. 2.

Regarding the status of knowledge regarding vaccination cards, about 57% of mothers knew that vaccination cards are available at vaccination centers, about 33% of mothers asked that the vaccination card of their child be made but missed them, and 10 % of mothers did not know about vaccination card and its importance. As shown in fig no. 03.

Fig no. 1: Sources of knowledge about immunization among mothers

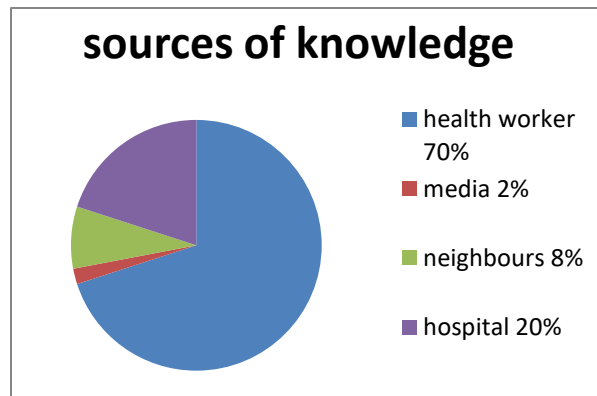


Fig no. 2 Immunization status, causes of incomplete immunization

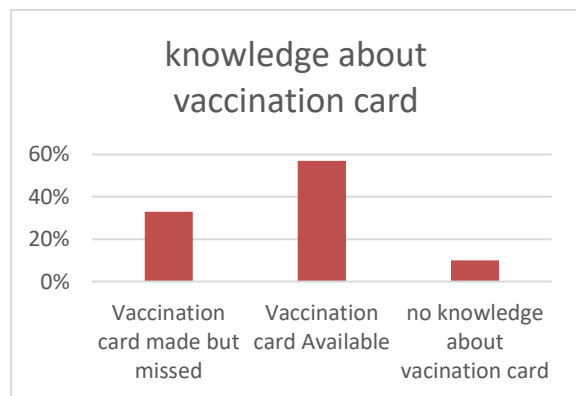
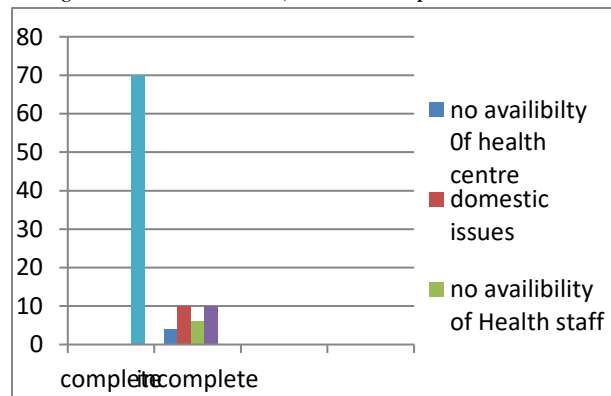


Fig no. 03: Knowledge of mother regarding vaccination card

An interventional study was led by Muhammad et al. July (2017), Assessment of information, Attitude, and discernment among moms towards inoculation in a tertiary education hospital. One hundred three moms took a crack at the examination, of which 77 (74.75%) were uneducated, which was the primary explanation behind the absence of learning on vaccination. The greater part of the moms in the pre-mediation stage got a score in the scope of 2-4; in the post-intercession stage, they got a score in the scope of 10-12. A critical distinction was seen in the pre and post-mediation scores was utilized to break down the pre and post-intercession scores and was observed to be noteworthy (p<0.01).out of 103 moms who had gone to directing sessions on vaccination, 80 (77.66%) youngsters were immunized,23 (22.66%) were somewhat inoculated

and nobody was unimmunized. Muhammad et al. July (2017).

**Table No. 01 Knowledge of mothers regarding immunization**

S No.	KNOWLEDGE OF MOTHERS ABOUT VACCINATION ITEM	Percentage			Mean	SD
		YES	NO	DON'T KNOW		
01	Child immunization is important	73%	07%	20%	1.02	0.1407
02	Is immunization associated with side effects?	85%	05%	10%	1.73	0.4462
03	Immunization is more beneficial than harmful	75%	20%	05%	1	0
04	vaccines for child immunization are safe	70%	25%	05%	1	0
05	Can a child become infected after immunization with the disease/s against which they were vaccinated?	50%	40%	10%	1.07	0.2932
06	Compliance with the immunization schedule is important	60%	30%	10%	1.02	0.1407
07	Immunization keeps your child healthy	65%	30%	05%	1	0
08	Are vaccines harmful?	80%	15%	05%	1.88	0.3562
09	Can a child with a cold be vaccinated?	05%	80%	15%	1.13	0.3667
10	Can a child with a fever be vaccinated?	02%	96%	02%	1.14	0.3487
11	vaccine prevents diseases	70%	25%	05%	1.04	0.2429
12	vaccine should be given at birth	50%	05%	45%	1.01	0.1
13	Did you inform the doctor/health care worker about the side effects seen in your child	90%	07%	03%	1.13	0.338
14	Can a child with diarrhea be vaccinated?	10%	70%	20%	1.1	0.3333
15	Confirm BCG vaccination ( by looking at the presence of a BCG scar )	75%	05%	20%	1.01	0.1

**Table No. 02: Perception of mothers regarding immunization**

S No.	PERCEPTION OF MOTHERS ABOUT VACCINATION ITEMS	Percentage			Mean	SD
		yes	No	Don't Know		
01	Do you advise your relatives and family to immunize their children	70%	20%	10%	1.5	0.5025
02	Can you follow the obligatory vaccination programs?	80%	10%	10%	2	0.201
03	Do you search for other available vaccines for your children	70%	25%	05%	1.96	0.1969
04	Can you manage swelling with a cold compress?	50%	05%	45%	1.15	0.3589
05	Can you use analgesics for swelling and pain after vaccination?	90%	07%	03%	1.77	0.423
06	Can vaccines maintain child health.?	10%	70%	20%	1.01	0.1
07	Routine vaccination prevents children from some infectious diseases and its complications	75%	05%	20%	1	0
08	First dose of vaccination given at birth	73%	07%	20%	1.02	0.1407
09	Most diseases against which children are vaccinated occur during the first year of life	85%	05%	10%	1.05	0.2611
10	Multi doses of the same vaccine given at intervals are important for child immunity	75%	20%	05%	1.04	0.1969
11	More than one vaccine at the same time has no negative impacts on child immunity	70%	25%	05%	1.04	0.1969
12	It is important to vaccinate children against seasonal influenza	50%	40%	10%	1.14	0.4499
13	Common colds, ear infections, and diarrhea are not contraindications for vaccination	60%	30%	10%	1.13	0.4181
14	Tetanus toxoid vaccination during pregnancy	65%	30%	05%	1.04	1.1969
15	Availability of EPI card during immunization	80%	15%	05%	1.01	0.1

## Conclusion

This study concluded that most of the immunization information is given by Health workers, and mothers perceived that the vaccination is important for their children, but few of them perceived immunization as ineffective.

## Declarations

## Data Availability statement

All data generated or analyzed during the study are included in the manuscript.

## Ethics approval and consent to participate

Not applicable

## Consent for publication

Approved by the Department concerned.

## Funding

Not applicable

**Conflict of interest**

The authors declared an absence of conflict of interest.

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