

Causes of Vaccine Hesitancy among the parents: A Survey in Suburban Area of Lahore

TAYYABA NOOR, ATIKA ZUBAIR, MUHAMMAD AFZAL BHATTI

ABSTRACT

Aim: To study the Causes of vaccine hesitancy among the parents: a survey in suburban area of Lahore

Methods: The cross-sectional study was conducted at the Ghurki Trust Teaching Hospital comprising 100 cases fulfilling the inclusion criteria from December 2017 to March 2018. Record of the cases was collected in pre-designed proforma.

Results: Of the 100 cases, 26 (26%) cases are partially/non-vaccinated because there was no door to door facility of all vaccinations, in 22 cases (22 %) parents missed one scheduled dose and didn't follow the schedule further, 20 (20%) cases live in remote areas where centre is far away from their territory and 16 (16%) cases were not vaccinated due to history of illness at the time of particular vaccination.

Conclusion: In this study, maximum partially/non-vaccinated cases were due to non availability of health system facility at their door step and parents missed the planned dose and quit the schedule.

Keywords: Vaccine hesitancy, reasons, geographical barrier

INTRODUCTION

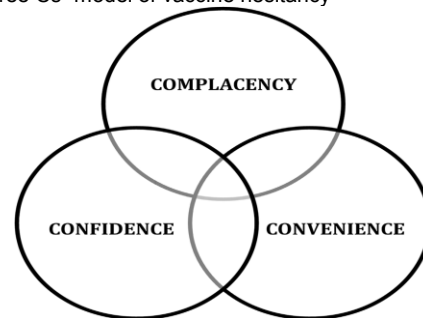
“Vaccine hesitancy” could be a comparatively new term employed in analysis over the past few years to explain anyone who is uncertain regarding vaccinations or who chooses to delay or refuse immunizations even provided around^{1,2}. It's a difficult, context-specific, and apace dynamical world development that varies across time, place and vaccines³

Vaccines play a significant role in preventing diseases in kids, therefore it's crucial that pharmacists and different tending professionals perceive the explanations that why parents feel vaccine hesitancy. Although there are not any federal laws relating to immunizing agent administration, every state has laws in situ dictating that vaccinations needed for children before getting into kinder⁴. In line with CDC, fifty states enable medical exemptions for those patients who are immune compromised or allergic to varied immunizing agent elements. In addition, there are thirty states that enable exemptions for kids whose parents cite spiritual reasons and eighteen states that have special accommodations for those expressing philosophical reasons⁴. States that have a lot of lenient laws on vaccination necessities have associated augmented rate of exemptions granted; this will result in bigger vulnerability within the population in terms of acquiring preventable diseases⁵. There are variety of studies examining the explanations why parents refuse, delay, or feel hesitant to get their children vaccinated. In one such study⁶ 77% of parents polled showing having considerations regarding one or a lot of childhood vaccinations. Reasons expressed by them vary widely however may be classified into four overarching classes. These classes are spiritual reasons, personal beliefs or philosophical reasons, safety considerations, and a need for a lot of information from healthcare worker. The aim of this text is to equip tending suppliers with associate degree understanding of the foremost heavily cited reasons that influence parents to not inject their children in country like ours.

Department of Paediatrics, Lahore Medical & Dental College/GTTH, Lahore

Correspondence to: Dr. Tayyaba Noor, Email: noortayyaba@hotmail.com, Cell: 0300-6630629

Fig 1: “Three Cs” model of vaccine hesitancy



Source: https://www.researchgate.net/Three-Cs-model-of-vaccine-hesitancy_fig1_275278401

METHODOLOGY

It was cross sectional analytic study conducted from December 2017 to March 2018. Children under 5 years age group who were partially vaccinated or non vaccinated, according to EPI schedule Pakistan, visiting the paediatrics OPD of GTTH for any illness were included in the study. A proforma with different questions was filled by interviewing the parents. Parents knowledge regarding vaccines availability, safety was also recorded. Data was analyzed by SPSS version 19.

RESULTS

Among 100 children 66 were females and 44 were males. Average numbers of children per family were between 4 to 5. Children of one family didn't have same status of vaccination (some of them were completely vaccinated). Detail of results is given in tables 1, 2 and 3

Table 1: Reasons of partially/ non vaccinated cases (n=100)

Reasons	n	%age
Gender biased	4	4%
Religious basis	02	2%
Health system deficiency	26	26%
Geographic barrier	20	20%
H/O illness at scheduled time	16	16%
Vaccines are ineffective	10	10%
Doses missed randomly	22	22%

Table 2: Awareness of parents about diseases prevented by vaccination

	n	%age
Yes	55	55
No	45	45

Table 3: Awareness of vaccine safety

	n	%age
Yes	85	85
No	15	15

DISCUSSION

Vaccine hesitancy has become the main target of growing attention and concern. Measuring vaccinum hesitancy and its determinants worldwide is vital so as to grasp the scope of the matter and for the event of evidence-based targeted ways to cut back hesitancy.

In this study, twenty six (26%) cases area unit partially/non-vaccinated as a result of there was no door to door facility for all the vaccinations, twenty (20%) cases live in remote areas wherever centre is way from their territory, and 16(16%) cases weren't vaccinated because of history of health problem at the time of vaccination.

In one in all the study by Kennedy et al⁶, 38% parents of children thought that their kids get too many shots throughout one doctor's clinic visit; 32% had issues regarding fevers; 30% were concerned about vaccines inflicting learning disabilities; 11% failed to assume their children would get the vaccine-preventable disease; 23% had no issues about vaccines. In another study by Imdad et al⁷, the prevalence of religious exemption increased from an average of 0.23% to 0.45% in 2011; while in our study its only determined in 2(2%).

In a study by Womb well et al⁸, the foremost common reason described for religious issues with the MMR vaccine is the use of aborted fetus material and animal-derived gelatins utilized in the production of vaccines.

Another common reason that parents provide for refusing or delaying protection their youngsters is personal or philosophical reasons⁸ as in our study twenty two (22%) parents incomprehensible regular doses and so didn't follow additional. Some parents believe that resistance is healthier for their youngsters than the immunity induced through vaccinations⁹. Others categorical the assumption that if their kid contracts a preventable illness, it'll be useful for the kid within the long run, because it can facilitate create the child's system stronger as he grows into adulthood¹⁰. Some believe that the diseases that we tend to inject don't seem to exist around therefore their children are at minimal risk of getting these diseases. For this reason, they additionally believe that the negative effects of vaccinum administration outweigh the advantages of the vaccines. They are also below the belief that if they were to contract one in all the diseases that it might be simply treatable¹¹.

Another reason parents categorize for refusing vaccinations for their kids is regarding the protection of vaccines. In our study fifteen (15%) of oldsters thought that vaccines don't seem to be safe. Most of those issues are supported by information these parents have discovered within the media or received from acquaintances. Without knowing the actual facts, the stories stem from tv, the net, radio, or from family and friends, they are bombarded with different peoples' opinions regarding vaccinations.² All of

this knowledge is overwhelming for a few parents , creating it troublesome for them to create their own intelligent call⁹.

Education and taking time with patients are shown to bring modrate improvement in terms of touching parents' attitudes regarding protection from immunization, however the precise messages or tools for healthcare workers haven't been totally discovered¹¹. All these workers need to create an endeavor to remain up to this point on the counseled vaccines. Involvement of religious leaders and native body councilor will create the vaccination campaign a large success. This can enable parents to possess face-to-face access to reliable information that may facilitate them to create the most effective selections for their families. Further analysis geared toward evaluating how practitioners will give best information to parents to assist them with vaccinations. Some fearful parents balk at the temporal order of immunizations. Concern will influence the oldsters to decide on to delay vaccinations so their kid doesn't receive over one vaccine at a time¹⁰. They also concern that at the same time administering multiple vaccines could overload their child's system. As a results of this logic, several parents prefer better to delay vaccines so as to higher shield their children¹¹.

CONCLUSION

In this study, majority of partially/non-vaccinated cases were due to lack of door to door vaccination facility for all the vaccines, geographical barriers and randomly missed doses by parents.

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