



# Parents Concerns and Hesitation to Vaccinate Their Children in Urban and Rural Areas of Lashkargah City

Saeed Sadaqat\*, Hamidullah Halimy, Muhammadullah Sadat, Nazifullah Safari

Department of Medicine, Wadie Helmand Institute of Higher Education, Helmand, Afghanistan  
Email: \*drsaeedkhansadaqat@gmail.com

**How to cite this paper:** Sadaqat, S., Halimy, H., Sadat, M. and Safari, N. (2025) Parents Concerns and Hesitation to Vaccinate Their Children in Urban and Rural Areas of Lashkargah City. *Open Access Library Journal*, 12: e12788.

<https://doi.org/10.4236/oalib.1112788>

**Received:** December 8, 2024

**Accepted:** February 10, 2025

**Published:** February 13, 2025

Copyright © 2025 by author(s) and Open Access Library Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

## Abstract

Parental refusal of vaccines is a growing concern for the increased occurrence of vaccine-preventable diseases in children. Many studies have been conducted across the globe about why parents hesitate and are reluctant to vaccinate their children. The reasons for hesitancy vary among parents; studies have shown that there are 4 main reasons for hesitancy. These 4 categories are religious reasons, some personal thoughts, concerns about the safety of the vaccines, and the majority of the parents want more information about the vaccines from health care providers. Parental worries about vaccines in every category lead to a different spectrum of decisions; some parents completely refuse all vaccinations, and some parents only delay vaccinations [1]. A large group of parents confess to having concerns and questions about childhood vaccinations. For this reason, it can be more productive and helping for doctors, pharmacists, and other healthcare providers to know the main reasons for hesitancy so they can be better prepared to educate their patients' families. The main reason vaccines are still subject to debate is that there are strong opinions on either side of the issue. Social media play a big part in spreading misinformation about vaccines, leading to parental fear of vaccinating their children. With recent Covid-19 outbreaks in the news, the vaccine debate is once again circulating in the media. The main purpose of vaccines is that parents must acknowledge that vaccines have been proven safe and effective at protecting public health and keeping individual children healthy. However, vaccines are an individual decision made by parents. Education is the key factor in keeping parents informed with the essential information so that they can make better decisions for their children's health. [2] I have conducted a questionnaire-based study across the city of Lashkargah and its rural areas. The study was conducted on 1000 people, and all were asked about their hesitation in vaccinating their children. The study mainly focuses on four aspects: 1) Religious beliefs, 2) Personal Beliefs,

---

3) Inadequate information, and 4) Safety concerns.

## Subject Areas

Allergy & Clinical Immunology

## Keywords

Vaccines, Hesitancy, Concerns, Spectrum, Rural Area, Urban Area

---

## 1. Introduction

“Vaccine hesitancy” is a relatively new term used in research over the past few years to describe anyone who is reluctant about vaccinations or who chooses to delay or deny immunizations even when they are easily available. [2]

### 1.1. Consequences of Avoiding Vaccination

Recent Covid-19 outbreaks in the news lead to the consequences of many parents reconsidering their decisions not to vaccinate because it takes the issue from theoretical to the real world. Vaccines boost everyone’s immune system, thus protect from diseases. Those people who cannot be vaccinated for their health reasons are protected against various infections as well when the majority of the population is immunized.

Most people now come to the point that vaccines are necessary to protect communities from diseases. Public immunization programs have worked so well that many of the frightening diseases paved the way for the development of various types of vaccines. Vaccines have played a big role in the eradication of many childhood diseases like polio, mumps, measles, rubella, and whooping cough. Parents who refuse to immunize have long depended on the immunity of others to protect their children, but as large numbers of families in many communities deny vaccines and illnesses like measles return, the results are so bad.

Many studies have shown and elaborated on different reasons why parents refuse, delay, or are hesitant to vaccinate their children. The purpose of this article is to obtain information and equip pharmacists and other health care providers to encourage parents and other family members not to hesitate about vaccinating their children. This will better enable healthcare providers to provide education and awareness to the families who need to make responsible immunization choices. [2]

There was a need to conduct a study and collect information so that healthcare providers could easily point out the big hurdles, particularly in this area. The main reason highlighted in this study is a lack of knowledge about vaccines, including their merits and demerits. We also found that most parents are curious about more knowledge about the diseases that vaccines prevent. Diseases like polio and rubella are mostly unknown to parents. What we got from the study is more along

the lines of vaccine hesitancy or uncertainty rather than direct refusal by the parents and families. We know why parents are uncertain and want to assist them in knowing that vaccines are safe and more important. We normally and consistently talk with families who have concerns and hesitancy about the safety of vaccines, and we try to convince parents and families that vaccines are safe, effective, and important for their kid's health and well-being. [3]

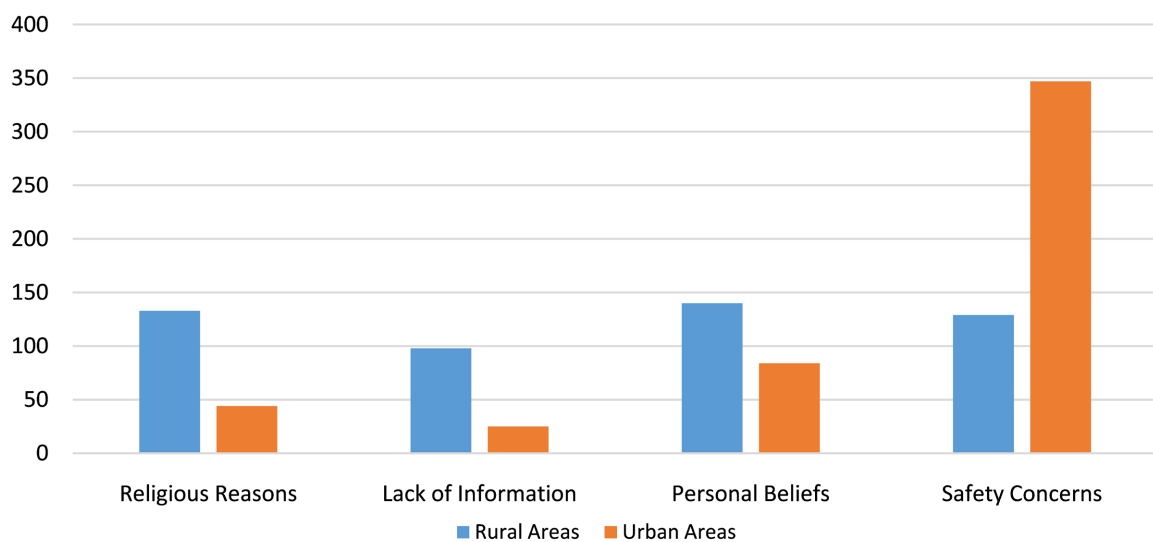
### 1.2. What Are the Reasons Some Parents Do Not Vaccinate Their Children?

A 2016 study published in the Journal of Pediatric Pharmacology and Therapeutics glanced at four main reasons that parents refuse or hesitate to vaccinate their children. [4] These are reasons related to religion: In some cases, a patient's religious beliefs have led them to refuse some of the active ingredients and excipients in vaccines or call for avoiding medical interventions. [5]

Personal beliefs: according to that study, some parents thought that there is a benefit to allowing kids to experience childhood illnesses to enhance their immunity against various upcoming infections. Parents may also be worried about chemicals that are being put in their children's bodies and feel that vaccines are not "natural" enough. [6]

Safety concerns: Ever since the vaccines came into use, physicians and other health care professionals have often been asked about the safety of vaccines. Many of the questions that are circulating about the safety of vaccines have put parents in an ambiguous state of mind. Many parents are deeply worried about the use of vaccines endangering their children's health. A vast majority of studies have been conducted about the safety of vaccines that show rare adverse effects to vaccines while millions of safe vaccinations go unreported. [7] (See **Table 1** and **Figure 1**)

#### Comparison of Vaccine Hesitancy Factors in Urban and Rural Areas



**Figure 1.** Comparison of vaccine hesitancy factors in urban and rural areas.

**Table 1.** Data in urban and rural areas.

| Total No. of People asked | Rural Area (500 people) |                     |                  |                 | Urban Area (500 people) |                     |                  |                 |
|---------------------------|-------------------------|---------------------|------------------|-----------------|-------------------------|---------------------|------------------|-----------------|
|                           | Religious reasons       | Lack of information | Personal beliefs | Safety concerns | Religious reasons       | Lack of information | Personal beliefs | Safety concerns |
| 1000                      | 133                     | 98                  | 140              | 129             | 44                      | 25                  | 84               | 347             |

### 1.3. Desire for Additional Education

The majority of the parents asked said that they needed more information related to vaccines. They want extensive information about the use of the vaccines, including the advantages and disadvantages associated with each vaccine. [8] Many parents want to have more detailed information about the adverse health consequences and advantages associated with vaccines expressed in a factual way that does not appear to be trying to sway them one way or the other regarding vaccinating their children. [9]

A productive role pharmacists and other healthcare providers can play would be providing correct, factual information relating to vaccines as well as sharing extra information with the families. [10] There are many resources online, including the Centers for Disease Control and Prevention and American Academy of Pediatrics Web sites, as well as other media resources and print resources that can be given to parents. Most parents want to be more open in conversation with their child's healthcare provider in that they do not feel judged or harassed. Many Parents like to ask questions without judgment regarding the use of vaccines. [11] Physicians are one of the most reliable sources of information for parents who are making decisions about their children's health. When parents are not well informed about the use of vaccines, they tend to find information from other sources that can potentially be non-trustworthy and misleading, which can misinform them, causing them to make poor decisions for their children's health. [12]

In this study, we normally and consistently talk with parents who are concerned and anxious about the safe usage of vaccines, and we have shown detailed information to the parents that vaccines are safe and effective.

## 2. Discussion

In a religious society, it is more important for the religious preacher and rabbi to give full information about the benefits and importance of vaccination and compel the parents to vaccinate their children.

## 3. Presentation of Results

### Demographic Profile of Respondents

#### 1) Urban vs. Rural Distribution

Out of 1000 respondents, 50% were from urban areas, while 50% were from rural

areas.

## 2) Age and Gender of Parents

The majority of respondents were fathers (75%), aged between 25 - 50 years.

## 3) Education Level

In urban areas, 70% of respondents were illiterate, compared to only 30% in rural areas.

## 4. Key Concerns and Hesitations Identified

The primary concerns and hesitations reported by parents, categorized by urban and rural respondents:

### 4.1. Urban Areas

Approximately 70% of urban respondents cited concerns about the safety of vaccines, particularly side effects like fever or allergies.

### 4.2. Rural Areas

In rural areas, 65% of parents mentioned a lack of information, while 50% cited religious or cultural reservations.

Pharmacists and other health care providers can play a vital role, too.

This study was conducted across Lashkargah city and its vicinities. In rural areas, 500 people were asked where 100 people were in the Bolan area, 100 people in the Ainak area, 100 people in the Marja district, 100 people in the Karez area, 100 people in the Mukhtar area, all the mayors of each family, were asked the four basic questions about the reluctance to vaccinate their children. From this study, we found that in rural areas where the graph of illiteracy is high, the main reasons were religious and personal believes.

In urban areas, the study was conducted on 500 people, of which 100 people in the Karta E Lagan area, 100 people in the Tortang area, 100 people in the Sapiyan area, 100 people in the Malimeen area, and 100 people in Shaheed Ghaltan area, were asked about why they hesitate to immunize their children against infectious diseases. The findings we found were quite different from rural areas, where the majority are educated, and the reasons for hesitancy to immunize their children were safety and personal beliefs.

This study helps pharmacists and other healthcare providers to know the main concerns and ambiguity parents have about vaccinating their children; the parents can be well prepared to have informative conversations about immunizations with healthcare providers. The parents will be able to make a well-informed decision for their kids. Those parents who hesitate to vaccinate or who deny to vaccinate their kids care about their children and want how to protect them. It is vital for physicians to have open and frank conversations with the parents and families so that they will understand the merits of vaccination without feeling embarrassed or judged for having questions regarding their child's healthcare.

## 5. Conclusions

In conclusion, those areas where people are away from the modern education system and lack information about the advantages of vaccines are more reluctant to vaccinate their kids.

Informing parents and taking time with patients have been shown to result in better improvement in terms of affecting parents' behavior and thoughts about immunization, but the exact resources or tools healthcare providers should use how to convince parents have not been completely understood. Understanding the areas of weakness the families have about the implementation and advantages of vaccines, physicians, pharmacists, nurses, and other healthcare providers can equip themselves to inform and convince parents on a more convincing level and to speak to the parents productively. All healthcare providers should make an effort to stay informed on the recommended vaccines and to know why those vaccines are recommended. This valuable information will give patients and parents the chance to have easy access to reliable information that can help them make the best decisions for their kids. Moreover, research focused on evaluating how healthcare workers can better provide information to parents and families to help them understand the importance and merits of vaccinations that need to be carried out.

## Acknowledgements

The authors wish to express the most grateful appreciation to the Wadie Helmand Higher Education Institution authority for their kindness and support. And permitting us to do this research.

## Conflicts of Interest

The authors have no conflict of interest.

## References

- [1] Seither, R., Masalovich, S. and Knighton, C.L. (2014) Vaccination Coverage among Children in Kindergarten-United States, 2013-14 School Year. *Morbidity and Mortality Weekly Report*, **63**, 913-920. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6341a1.htm>
- [2] Kennedy, A., LaVail, K., Nowak, G., Basket, M. and Landry, S. (2011) Confidence about Vaccines in the United States: Understanding Parents' Perceptions. *Health Affairs*, **30**, 1151-1159. <https://doi.org/10.1377/hlthaff.2011.0396>
- [3] Imdad, A., Tserenpuntsag, B., Blog, D.S., Halsey, N.A., Easton, D.E. and Shaw, J. (2013) Religious Exemptions for Immunization and Risk of Pertussis in New York State, 2000-2011. *Pediatrics*, **132**, 37-43. <https://doi.org/10.1542/peds.2012-3449>
- [4] Wombwell, E., Fangman, M.T., Yoder, A.K. and Spero, D.L. (2014) Religious Barriers to Measles Vaccination. *Journal of Community Health*, **40**, 597-604. <https://doi.org/10.1007/s10900-014-9956-1>
- [5] Fredrickson, D.D., Davis, T.C., Arnould, C.L., et al. (2004) Childhood Immunization Refusal: Provider and Parent Perceptions. *Family Medicine*, **36**, 431-439.

- 
- [6] Saada, A., Lieu, T.A., Morain, S.R., Zikmund-Fisher, B.J. and Wittenberg, E. (2014) Parents' Choices and Rationales for Alternative Vaccination Schedules: A Qualitative Study. *Clinical Pediatrics*, **54**, 236-243. <https://doi.org/10.1177/0009922814548838>
- [7] Harmsen, I.A., Mollema, L., Ruiters, R.A., Paulussen, T.G., de Melker, H.E. and Kok, G. (2013) Why Parents Refuse Childhood Vaccination: A Qualitative Study Using Online Focus Groups. *BMC Public Health*, **13**, Article No. 1183. <https://doi.org/10.1186/1471-2458-13-1183>
- [8] Jarrett, C., Wilson, R., O'leary, M., Eckersberger, E., Larson, H. J. and the SAGE Working Group on Vaccine Hesitancy (2015) Strategies for Addressing Vaccine Hesitancy—A Systematic Review. *Vaccine*, **33**, 4180-4190. <https://doi.org/10.1016/j.vaccine.2015.04.040>
- [9] Dubé, E., Gagnon, D., Nickels, E., Jeram, S. and Schuster, M. (2014) Mapping Vaccine Hesitancy—Country-Specific Characteristics of a Global Phenomenon. *Vaccine*, **32**, 6649-6654. <https://doi.org/10.1016/j.vaccine.2014.09.039>
- [10] Centers for Disease Control and Prevention (CDC) (2012) National, State, and Local Area Vaccination Coverage among Children Aged 19-35 Months—United States, 2011. *MMWR: Morbidity & Mortality Weekly Report*, **61**, 689-696. <https://www.cdc.gov/vaccines/index.html>
- [11] Food and Drug Administration (n.d.) Thimerosal in Vaccines. <http://www.fda.gov/BiologicsBloodVaccines/SafetyAvailability/VaccineSafety/UCM096228#bib>
- [12] Kennedy, A., Basket, M. and Sheedy, K. (2011) Vaccine Attitudes, Concerns, and Information Sources Reported by Parents of Young Children: Results from the 2009 HealthStyles Survey. *Pediatrics*, **127**, S92-S99. <https://doi.org/10.1542/peds.2010-1722n>