



Reasons of Polio Vaccine Refusal By Parents in Pich-Dara Distric of Kunar Province

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Poliomyelitis (polio), a highly contagious viral disease, remains a significant public health concern in Afghanistan, one of the last endemic regions globally. Despite substantial progress in reducing cases, vaccine hesitancy continues to undermine eradication efforts. This study aimed to explore the reasons behind parental refusal of polio vaccination in the Pich-Dara district of Kunar province, Afghanistan, focusing on cultural, religious, and sociopolitical influences. A qualitative research approach was utilized, involving in-depth interviews (IDIs) with 15 parents who refused at least one round of polio vaccination for their children. Participants were recruited through local healthcare workers and community leaders. Data collection spanned two weeks, from October 1 to November 15, 2024. Interviews, conducted in Pashto and later translated into English, explored vaccine safety perceptions, religious and cultural believes, trust in healthcare providers and government institutions, and the impact of conflict on healthcare access. Data were analyzed using thematic analysis with MAXQDA 2020 software. Key themes identified included concerns about vaccine safety, the influence of myths and misinformation, religious and cultural beliefs, distrust in government and healthcare providers, and the impact of ongoing conflict on healthcare access. Parents highlighted fears of sterility and infertility associated with the polio vaccine, fueled by local rumors and misinformation. 53.57% of vaccination refusals were due to misconceptions, while 26.3% were due to insufficient vaccine literacy. In the same research, 28.6% of refusals were due to religious grounds. Religious and cultural barriers, often propagated by community leaders, further reinforced vaccine hesitancy.

Keywords: Parents, Pich-Dara District, Polio Vaccine, Refusal

Introduction

The highly contagious viral disease known as poliomyelitis (polio) is brought on by polio. In many parts of the poor world, it is a serious problem that constantly puts children at risk for serious social and economic development issues like COVID [1,2]. Since the condition is the primary cause of impairment among children aged five and under, it has worldwide public health implications. Three strains of wild poliovirus (WPV) were discovered worldwide; two of these strains were successfully eliminated, while types 1 and 3 are still primarily found in endemic polio regions. Unlike COVID, polio is not associated with groups of blood, and it can cause acute respiratory syndrome, paralysis, or even death. It may be asymptomatic, transmitted through personal contact (Infected nose and mouth discharges) via contaminated faces [3]. Because of this, precautions are required. Prior to vaccination, polio was common around the world [4]. However, after the introduction in the 1955's of inactivated polio vaccine (IPV) and the 1960s of live oral polio vaccine (OPV), in the United States, the last case of polio linked with Wild Poliovirus (WPV) was detected quickly in 1991. The World Health



Organization (WHO) started the Global Polio Eradication Initiative (GPEI) in 1988, one of the biggest public health initiatives in history, based on effective polio control efforts in the Americas [5, 6]. Wild poliovirus (WPV) incidences have dramatically decreased as a result of the Global Polio Eradication Initiative (GPEI), from an estimated 350,000 in 1988 spanning more than 125 countries to 174 in 2019. 2021 had the lowest incidence of WPV instances to date, with only six cases recorded overall, including four in Afghanistan, one in Pakistan, and one in Malawi. However, in 2022, there were 30 cases: two in Afghanistan, 20 in Pakistan, and 8 in Mozambique. Only 12 cases of polio have been identified in 2023 (as of December 31, 2023), with 6 occurring in Pakistan and 6 in Afghanistan. The GPEI has effectively eradicated the virus from all major regions of the world, with the exception of Pakistan and Afghanistan, where it still exists, thanks to the oral polio vaccine (OPV) [7, 8].

Afghanistan is among the final three nations where wild poliovirus (WPV) is prevalent [9]. There is evidence of continued circulation in the South and a rise in polio cases in the East due to circulation after importations from Pakistan during the second half of 2014 to 2017, despite notable progress in lowering the number of polio cases from 2013 to date [10–12]. The ongoing transmission puts Afghanistan's attempts to eradicate polio in jeopardy [13,14], Therefore, in the event that importations do place, substantial levels of population immunity are necessary to stop transmission and stop outbreaks. Although vaccination coverage surveys and official regular immunization (RI) coverage statistics from Afghanistan offer imprecise estimates of population immunity, they are not precise indicators of immunity and cannot reveal the real protective immunity profile. Seroprevalence measures the impact of vaccination coverage, field vaccine efficacy, natural infection, and secondary transmission of oral poliovirus vaccine (OPV), hence measuring poliovirus antibodies using serosurveys offers a direct assessment of population immunity. This data aids in program planning to stop the spread of the poliovirus [9].

In cooperation with Agha Khan University (AKU), the Afghanistan Ministry of Public Health (MoPH) carried out a nationwide nutrition study of Afghan mothers and children in May and September 2013 [15]. In 2013, the nation recorded 14 instances of wild poliovirus type 1. At birth, six, ten, fourteen weeks, and nine months, RIs containing trivalent OPV (tOPV), which contains poliovirus strains 1, 2, and 3, were administered. Bivalent OPV (bOPV), which covers poliovirus strains 1 and 3, or tOPV, was made available to all children under 5 in Afghanistan during many supplementary immunization activities (SIAs) in 2013 [13].

Myths and false information about the polio vaccine have also been a major factor in vaccination rejection. Rumors that the polio vaccination causes sterility, infertility, or other negative side effects are common in Afghanistan, especially in remote communities with little access to health information. These myths are frequently spread through members of the local population or religious authorities, which erodes trust in the vaccination even further. Parental vaccination decisions are significantly influenced by religious views in particular. Many parents in conservative areas see illness as a divine test and think that vaccinations and other forms of human intervention are against God's will. Even though Islamic scholars throughout the world have confirmed that vaccinations are safe and acceptable, local religious leaders in Afghanistan nevertheless have a significant influence on how the population feels about public health initiatives. An increase in parental and caregiver immunization refusals was cited as a primary cause of this setback. To learn more about the community's polio vaccination refusal, the World Health Organization (WHO) established the SAGE Working Group on vaccination Hesitancy in 2012. The working group emphasized the elements that affect parents' or caregivers' decisions to consent to vaccinations. It created the phrase "vaccine hesitancy," which refers to the reluctance to accept or refuse vaccinations even when immunization services are available [16]. Even though



there was a slow decline in WPV1 incidence in Afghanistan between 2015 and 2017, cases have started to rise yearly starting 2018 [17]. Between January and July of 2020, 41 WPV1 infections were found, compared to 15 occurrences during the same time frame in 2019 [18]. After contracting polio, 24% of kids will experience signs of abortive poliomyelitis without any serious central nervous system damage. Non-paralytic aseptic meningitis causes stiffness in the neck, back, or legs in 1–5% of affected children. Though the symptoms might worsen in two to three days and frequently result in persistent asymmetrical or even proximal paralysis, less than 1 percent of affected children would experience flaccid paralysis [19].

Materials and Methods

Study Design

The present study was conducted from 01/Oct/2024 to 15/Nov/2024. This study utilized a qualitative research approach to investigate the reasons behind parental refusal of the polio vaccine in the Pich-Dara district of Kunar province. In this sense, in-depth interviews (IDIs) were conducted with those who refused polio vaccination.

Study Setting and Population

The study was conducted in the Pich-Dara district of Kunar province, Afghanistan. This region was selected due to its varying levels of vaccine coverage and sociopolitical contexts. This diversity in settings allowed for the examination of different cultural and geographical influences on vaccine refusal.

The target population included parents who had refused at least one round of polio vaccination for their children. Parents were recruited through local healthcare workers and community leaders who had previously been involved in polio immunization campaigns. A total of 15 parents participated in the study.

Data Collection

Data were collected for two weeks. Semi-structured interviews were conducted with individual parents, while IDIs were considered for data collection from the parents. All interviews were conducted in the local language (Pashto) and were facilitated by trained researchers familiar with the cultural, and social context of the region, and the objectives of the study. The interview guide focused on exploring the reasons for vaccine refusal, including perceptions of vaccine safety, religious and cultural beliefs, trust in healthcare providers and government institutions, and the impact of conflict on access to healthcare. Interviews were audio-recorded, transcribed, and translated into English for analysis. All the interview guides were commenced by informed consent which included the introduction and objectives of the study, volunteer participation of the respondents, dissemination of the results, confidentiality of the information, and other relevant.

Statistical Analysis

Data Analysis

The collected data from IDIs was subjected to MAXQDA 2020. The thematic analysis was considered for this analysis and was conducted as illustrated by Braun and Clarke (2006). In this method, the analysis

was conducted in six distinct phases namely familiarizing with the data, generating initial codes, generating initial themes, reviewing themes, defining and naming the themes, and report writing.

Results

Knowledge Level of Refusals Regarding Polio Vaccine

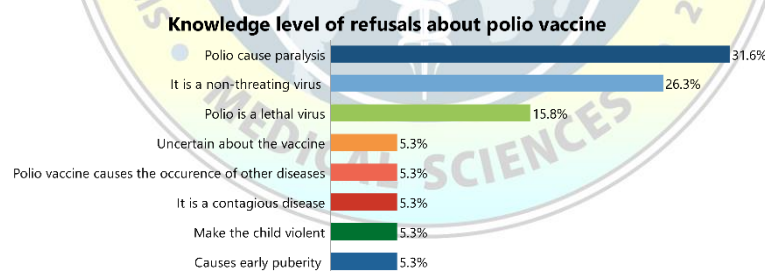
The chart represents the knowledge level of individuals in Pich Dara, Kunar Province, who refused the polio vaccine, based on interview analysis. According to thematic analysis, a significant proportion of refusals (31.6%) understood that polio is a virus that causes permanent paralysis. Additionally, some refusals (15.8%) also recognized the virus as deadly and life-threatening. However, a larger group (26.3%) held incorrect beliefs, thinking that the virus posed no health or life threat. Very few respondents (5.3%) were aware that the virus is contagious. On the other hand, some refusals who lacked correct information about polio expressed various misconceptions about the vaccine, stating that it leads to premature puberty (5.3%) and causes children to become rebellious.

Quotes from some respondents who refused the polio vaccine are as follows:

I don't have much information, but the people who bring the vaccine say it is a wild and harmful microbe or a virus that causes permanent paralysis. (Male refuser, Pich Dara)

Additionally, some misconceptions shared by refusals about the polio virus are:

Polio has no benefit; it brings children to early puberty and corrupts their minds, making them disobedient. (Male refuser, Pich Dara)



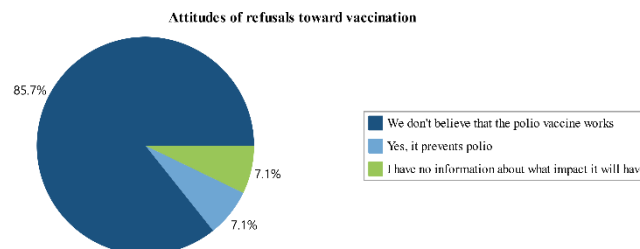
The attitude of refusal toward vaccination

The chart shows the analysis results of interviews related to the attitude of vaccination of individuals who refused the polio vaccine in Pich Dara, Kunar Province. According to the thematic analysis, a significant majority of refusals (85.7%) held incorrect beliefs, claiming that the vaccine provided no benefit. Additionally, a small number of refusals (7.1%) were aware that the vaccine could prevent the polio virus, while another (7.1%) did not know the vaccine. Some quotes from the refusals are as follows:

- ***We do not believe that the polio vaccine is effective against the polio virus because diseases have their forms of treatment and medication. Yet these people come to our homes two or three times a month.*** (Male refuser, Pich Dara)

Additionally, some misconceptions about the polio virus shared by refusals are as follows:

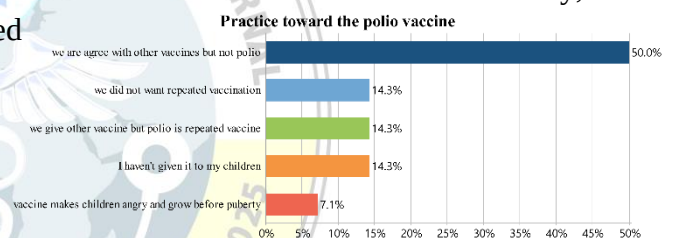
The vaccine is not that beneficial because it is administered too frequently. If it continues at this rate, it will damage other parts of the body and may even cause cancer. (Male refuser, Pich Dara)



Practice toward the polio vaccine.

The analysis results of interviews related to the practice toward the polio vaccine who refused the polio vaccine in Pich Dara, Kunar Province, are shown in this chart.

According to the thematic analysis, a significant number of refusals (50%) stated that they were satisfied with all other vaccines except the polio vaccine, which they administered to their children. Additionally, some refusals (14.3%) expressed that they did not want repeated vaccinations, while (14.3%) mentioned that they administered other vaccines to their children but avoided the polio vaccine because it was too frequent. Another (14.3%) stated that they simply do not give it to their children.



On the other hand, a portion of refusals who lacked accurate information about polio also expressed certain misconceptions, such as that the polio vaccine causes early puberty (7.1%) and makes children rebellious.

Some quotes from the refusals regarding the above findings are as follows:

- We have given other vaccines because they are administered via injection in hospitals, whereas these vaccines are mostly given orally, which makes them less effective.*** (Male refuser, Pich Dara)

Additionally, regarding some misconceptions about the polio virus, refusals expressed opinions such as:

- We have given other vaccines, but once this particular vaccine is administered to children, they start lying down upside down, and they develop rebellious and devilish behavior.*** (Male refuser, Pich Dara)

Reasons for being refusal

The chart highlights various reasons related to the polio vaccine refusal, with specific percentages illustrating the prevalence of these beliefs. The largest concern, cited by 50%, is that vaccination might change the natural thought process of children. Another 14.3% fear that the vaccine could cause precocious puberty, leading to

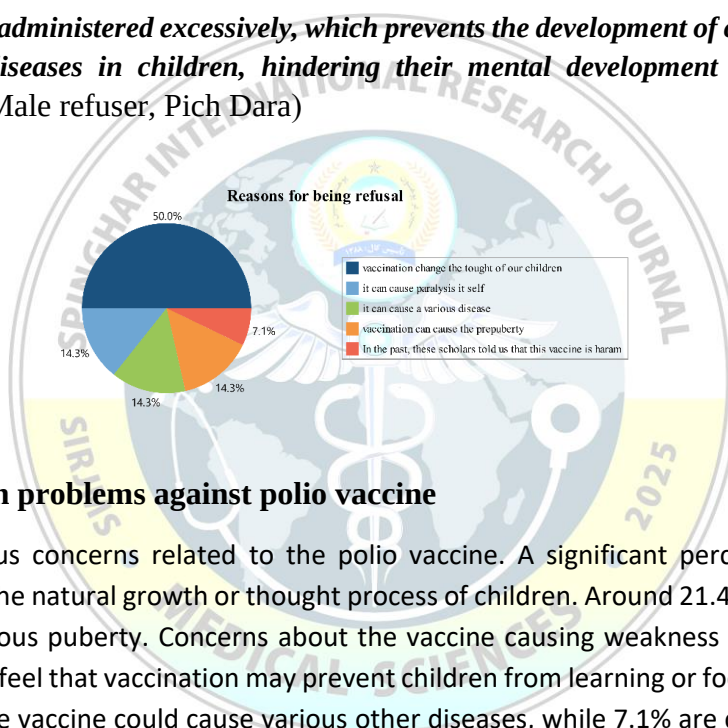
early physical development. Around 14.3% of respondents believe that vaccination can cause weakness in children or result in various diseases. Additionally, 14.3% are concerned that the vaccine itself might cause paralysis. Another 7.1% reference religious beliefs, influenced by past statements from some Islamic scholars declaring the vaccine as haram. These concerns underscore widespread misconceptions and the importance of addressing them through education and awareness.

Quotes from some respondents who refused the polio vaccine are as follows:

- ***I have often heard that these vaccines cause cancer, instill foreign ideas in children, detach them from religion, and cause girls to reach puberty earlier than usual.*** (Male refuser, Pich Dara)

Additionally, some misconceptions shared by refusals about the polio virus are:

- ***Polio vaccines are administered excessively, which prevents the development of children's bodies. Along with this, it causes harmful diseases in children, hindering their mental development and preventing them from contributing to religion.*** (Male refuser, Pich Dara)



Knowledge about health problems against polio vaccine

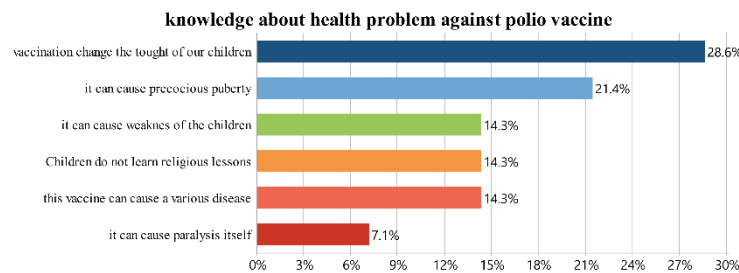
The chart highlights various concerns related to the polio vaccine. A significant percentage, 28.6%, believe that vaccination might change the natural growth or thought process of children. Around 21.4% fear that the vaccine could potentially lead to precocious puberty. Concerns about the vaccine causing weakness in children are expressed by 14.3%. Additionally, 14.3% feel that vaccination may prevent children from learning or focusing on religious teachings. About 14.3% worry that the vaccine could cause various other diseases, while 7.1% are concerned that it might even lead to paralysis. These perceptions reflect widespread misconceptions and underline the importance of addressing misinformation through education and awareness campaigns.

Quotes from some respondents who refused the polio vaccine are as follows:

- ***These vaccines do not have good outcomes; they cause paralysis.*** (Male refuser, Pich Dara)

Additionally, some misconceptions shared by refusals about the polio virus are:

These vaccines cause other diseases, and the children to whom we give the vaccine do not stay healthy. (Male refuser, Pich Dara)



Influence of Religion on Refusal

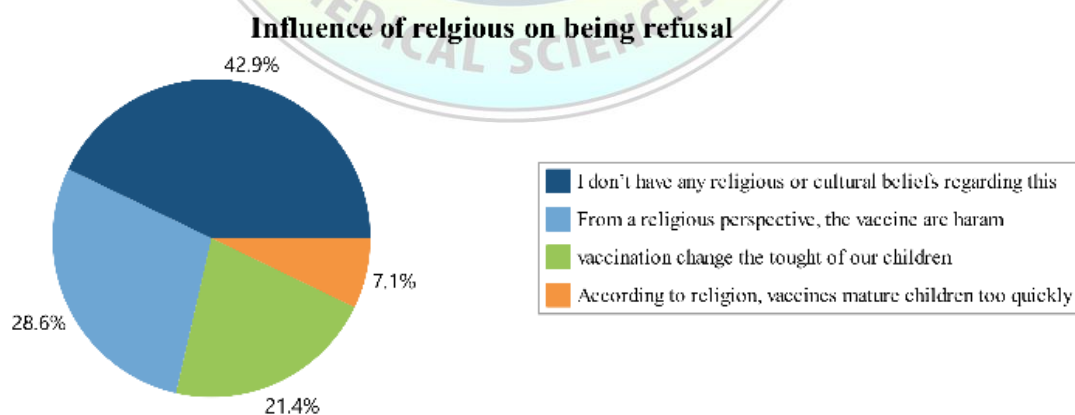
The pie chart illustrates the influence of religious and cultural beliefs on vaccine refusal. A significant portion, 42.9%, indicates that they do not have any religious or cultural beliefs affecting their vaccination decision. However, 28.6% believe that from a religious perspective, vaccines are considered haram, contributing to their hesitancy. Additionally, 21.4% of respondents think that vaccination alters the natural thought process of children, raising concerns about behavioral changes. Lastly, 7.1% of individuals believe that vaccines cause children to mature too quickly, which they perceive as conflicting with religious teachings. These findings highlight the critical role that religious and cultural perceptions play in shaping attitudes toward vaccination and emphasize the need for targeted educational efforts to address these misconceptions.

Quotes from some respondents who refused the polio vaccine are as follows:

- ***In our religion, many people consider vaccines bad and regard them as unlawful.*** (Male refuser, Pich Dara)

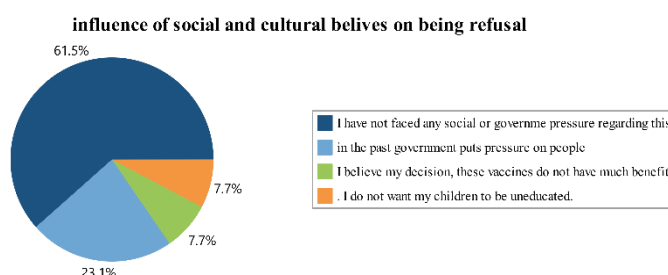
Additionally, some misconceptions shared by refusals about the polio virus are:

- ***From a religious perspective, vaccines cause children to mature early. As a result, children do not listen to advice, and words or counsel do not affect them.*** (Male refuser, Pich Dara)



Influence of Social and Cultural Beliefs on Refusal

The analysis of interviews conducted in Pich Dara, Kunar Province, regarding the level of understanding of the polio virus among rejecters shows the following results. According to a detailed and precise analysis, a significant number of rejecters are entirely (61.5%) opposed, with certain views suggesting that specific and governmental efforts cannot change people's beliefs regarding these vaccines. Similarly, some (23.1%) hold the belief that the government can make these vaccines more prevalent if it desires. A few rejecters (7.7%) believe that these vaccines are ineffective and do not have a positive impact on children's health. Additionally, a very small percentage (7.7%) hold the view that they do not want their children to remain uneducated in the future, fearing that the administration of these vaccines will keep children away from education. Below are some quotes from the above findings regarding the opinions of rejecters.



Quotes from some respondents who refused the polio vaccine are as follows:

- ***In the past, districts used to exert pressure on us, but now they do not.*** (Male refuser, Pich Dara)

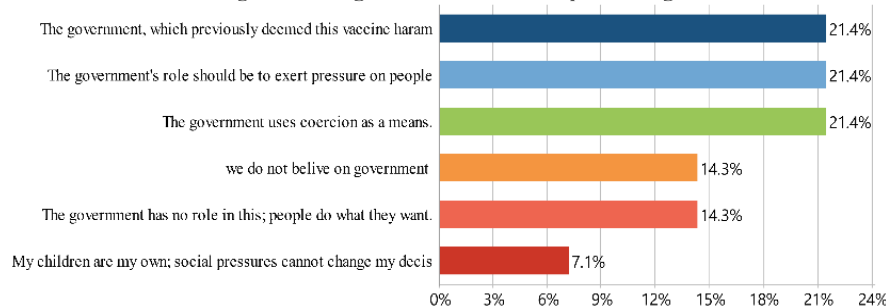
Additionally, some information shared by refusals about the polio virus are:

- ***In the past, districts used to exert pressure on us, but now they do not.*** (Male refuser, Pich Dara)

Feeling about the government's role in promoting vaccine

The findings from interviews conducted in Pich Dara, Kunar Province, regarding the level of understanding of the polio virus among rejecters are presented in the following format. Based on thematic analysis, a significant number of rejecters (21.4%) held views that governments play a major role in the inefficacy of these vaccines, leading to the belief that these vaccines are declared haram by the government in certain situations. Similarly, some (21.4%) believe that for these vaccines to become widespread, the government should exert more external and unofficial pressure on people. Additionally, a portion of rejecters (21.4%) understood that the government plays a significant role in administering these vaccines. On the other hand, some (14.3%) held views that these vaccines are not directly related to the government, but rather to individuals, such as family members or community leaders, who have the authority to decide on vaccination. Furthermore, a few rejecters (7.1%) provided information indicating that they, as guardians of their children's welfare, do not believe that government or external pressures can change their stance on not administering polio vaccines.

Feeling about the governments roles in promoting vaccine



Quotes from some respondents who refused the polio vaccine are as follows:

- *The government can reform people through advertisements and force, by making them accept or informing them that if someone does not get vaccinated, they will be deprived of other benefits such as medicines, schooling, and so on.* (Male refuser, Pich Dara)

Additionally, some misconceptions shared by refusals about the polio virus are:

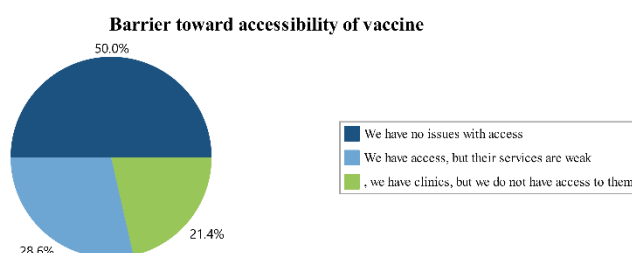
- *We do not understand the government's efforts, but I can say that whenever they close it and whenever they open it, they see their benefit in it.* (Male refuser, Pich Dara)

Barriers toward accessibility of vaccine

The findings from interviews conducted in Pich Dara, Kunar Province, regarding the level of understanding of the polio virus among rejecters are presented in the following format. Based on thematic analysis, a significant number of rejecters (50.0%) held views that they have no access to polio vaccines. Some rejecters (21.4%) stated that while they have access to these vaccines, the individuals providing the services are not reliable, making these services questionable. Additionally, more (26.6%) held views that they have clinics available, but access to them is very limited or they are located far from their area.

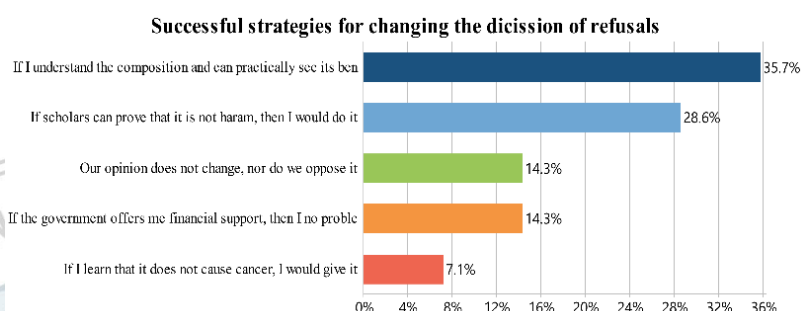
Quotes from some respondents who refused the polio vaccine are as follows:

- *We have access, but the services are weak.* (Male refuser, Pich Dara)
- *Polio vaccines reach us up to the doorstep, but other centers lack vaccines.* (Male refuser, Pich Dara)



Successful strategies for changing the decision of refusals

The findings from interviews conducted in Pich Dara, Kunar Province, regarding the level of understanding of the polio virus among rejecters are presented in the following format. Based on the analysis, a significant number of rejecters (35.7%) stated that if they understood or witnessed firsthand what polio vaccines are made of, they would reconsider their views and allow their children to receive them. Additionally, some rejecters (28.6%) held the views that if religious scholars from various regions provided opinions on the permissibility of these vaccines, then people would accept and administer them. To a lesser extent (14.3%), some rejecters held the belief that no one can change their stance on not administering polio vaccines. Similarly, an equal percentage (14.3%) mentioned that if the government offers financial support for these vaccines, they would have no problem administering them to their children. Furthermore, a very small proportion (7.1%) expressed concern that if polio vaccines do not cause cancer in children, they are willing to administer them to their children.



Quotes from some respondents who refused the polio vaccine are as follows:

- **Scholars should prove that it is not haram, then I will accept it.** (Male refuser, Pich Dara)
- **If I understand the composition and benefits of it, then I will accept it.** (Male refuser, Pich Dara)

Do you want to add anything else about why you have not given the polio vaccine?

The findings from interviews conducted in Pich Valley, Kunar Province, regarding the level of understanding of the polio virus among rejecters are presented in the following format. Based on the analysis, a significant number of rejecters (25.0%) stated that they do not accept polio vaccines administered to children. Some rejecters (18.8%) expressed concerns that these vaccines can cause permanent paralysis in children. Additionally, a portion of rejecters (18.8%) held the belief that these vaccines hinder children's growth and maturity. Alongside, some (12.5%) were concerned that polio vaccines instill demonic thoughts and divert children from the right path. Similarly, others (12.5%) believed that these vaccines negatively affect children's minds, making them less intellectual. Furthermore, a small proportion (6.3%) had a negative perception that scholars previously deemed these vaccines haram and now view them as permissible, making them hesitant to administer them. Additionally, a very small number (6.3%) lacked accurate information, stating that these vaccines do not teach religious lessons or connect children to their religion.

Quotes from some respondents who refused the polio vaccine are as follows:

- **I will only say that if the government cares about our children, they will die from malnutrition, not from worry. Then they can provide the vaccine.** (Male refuser, Pich Dara)

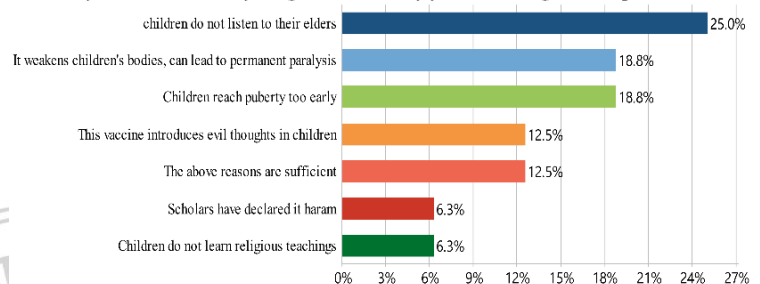
Additionally, some misconceptions shared by refusals about the polio virus are:

- *They cause children to precocious puberty, but they make children undisciplined and unresponsive to parental advice.* (Male refuser, Pich Dara)

Recommendation for improving vaccination efforts

The chart displays recommendations for improving vaccination efforts. The most significant recommendation, receiving 23.5%, suggests enhancing vaccination campaigns through public awareness efforts. Other notable suggestions include religious scholars announcing the halal status of vaccines (17.6%), utilizing imams and government announcements (17.6%), and ensuring local leaders in districts are informed about the benefits of vaccination (11.8%). Additionally, promoting increased public awareness of the disease (5.9%) and demonstrating the effectiveness of vaccines by scholars (5.9%) were also highlighted. Despite these efforts, a notable percentage (17.6%) indicated skepticism regarding the effectiveness of vaccination efforts.

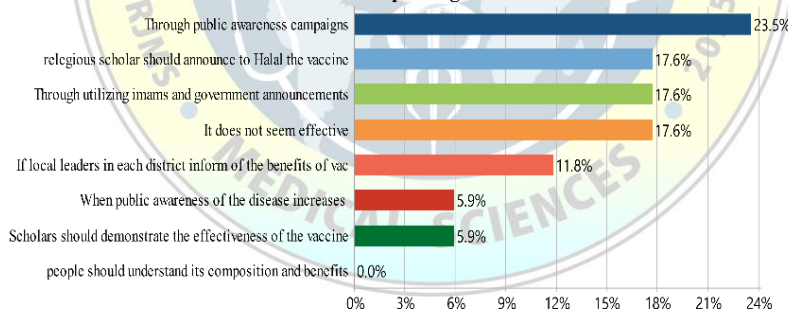
Do you want to add anything else about why you have not given the polio vaccine



Quotes from some respondents who refused the polio vaccine are as follows:

- *Through public awareness, the efforts of imams, and government announcements and promotions, if they explain the benefits to the people, then things will improve.* (Male refuser, Pech Dara)
- *If district leaders gather ethnic people and vaccinate their children, explaining the benefits to them, then they will do it.* (Male refuser, Pich Dara)

Recommendation for improving vaccination efforts



Discussion

The results of this study demonstrate how complicated and multidimensional vaccination rejection is in Afghanistan. Parents' decisions on polio vaccination are greatly influenced by a variety of factors, including misinformation about vaccine safety, religious convictions, mistrust of the government, and the effects of ongoing violence. The widespread false information regarding the polio vaccination emphasizes the necessity of focused health education initiatives that address particular vaccine safety issues. To debunk myths and present factual information regarding the advantages of vaccination, health communication initiatives must involve trustworthy individuals, religious academics, and leaders of the local community.

The only two nations having endemic poliovirus infections are Pakistan and Afghanistan, despite the fact that poliovirus has been eliminated in the majority of the globe. The main causes of under-vaccination in poor



nations, according to prior studies, are vaccine hesitation and rejection [20,21]. A complicated topic, vaccine rejection is impacted by political, religious, cultural, and societal variables [21].

According to our research, attitudes toward vaccination, religious convictions, and misinformation are the main causes of vaccine rejection. 53.57% of vaccination refusals were due to misconceptions, while 26.3% were due to insufficient vaccine literacy. In the same research, 28.6% of refusals were due to religious grounds. Religious convictions (39.06%) and unfavorable opinions about vaccinations (84.8%) were identified as the main causes of vaccine rejection in a different Quetta and Peshawar investigation [22]. Prominent religious leaders in northern Nigeria disseminated the myth that the polio vaccine was a Western plot to infect Muslim youngsters with HIV or make them infertile [23]. Political concerns are also important since vaccination efforts are further discouraged by suspicion and fear that health professionals are working for foreign governments [24]. Furthermore, our research showed that high refusal rates have been substantially correlated with inadequate awareness efforts, low literacy rates, and vaccination reluctance. The causes of vaccination rejection differ between areas of the same country as well as between nations [20]. To adequately address these causes, a contextual investigation is necessary. Misconceptions, religious beliefs, and practical concerns such children being unavailable due to illness or sleep were the main causes of refusals in the Quetta Block. Community demands for payment in the form of money, food, or supplies for building and energy in exchange for vaccinations were a new justification for denial.

The results from Afghanistan provide more evidence of the effects of regional instability. According to the 2015 DHS study, which was the first of its type in Afghanistan, the country's vaccine coverage was far lower than the global average [25]. A significant obstacle has been ongoing violence, since research indicates a negative correlation between security concerns and vaccination rates [26]. Opposition to vaccination has been recorded for ages, therefore vaccine hesitancy is not a recent phenomenon worldwide [27]. Designing successful treatments requires an understanding of the causes of reluctance [28]. We also looked at vaccination initiatives and community awareness of polio. The main information source was found to be front-line employees, with television media coming in second. Similar results were shown in Karachi, where injectable polio vaccination coverage and awareness were raised through mass mobilization and health worker visits [29]. Our study indicated that fear of adverse effects, unfavorable social media impacts, and a lack of faith in the quality of the vaccination were among the main reasons for rejection. For instance, Charsada acknowledged reluctance in 2020 due to unfavorable social media videos [30].

Conclusion

This study provides critical insights into the reasons for polio vaccine refusal among parents in Pich-Dara Kunar Province Afghanistan, revealing that misinformation, religious beliefs, distrust in healthcare systems, and conflict-related barriers are key factors. To achieve the goal of polio eradication in Afghanistan, public health interventions must be tailored to address these underlying causes of vaccine hesitancy. Engaging local communities and religious leaders, improving health communication, rebuilding trust in government institutions, and ensuring safe access to conflict zones are essential components of a comprehensive strategy to overcome vaccine refusal. With sustained efforts and international cooperation, it is possible to eliminate polio in Afghanistan and secure a healthier future for its children.



Recommendation

Engage Community and Religious Leaders

- Partner with local religious and community leaders to dispel myths and misinformation about the polio vaccine. Use endorsements from trusted figures to encourage vaccination.
- Develop culturally appropriate public health messages that align with religious and social values, emphasizing the safety and benefits of vaccination.

Enhance Community Trust

- Strengthen the transparency and accountability of vaccination campaigns to rebuild public confidence.
- Recruit and train local health workers from within communities to reduce suspicion of foreign organizations and foster trust.

Counter Misinformation

- Launch targeted awareness campaigns to address common myths, such as the vaccine causing sterility or infertility.
- Use diverse communication channels, including radio, social media, and community meetings, to spread accurate health information.

• Improve Security for Health Workers

- Collaborate with local authorities and community leaders to ensure the safety of vaccinators working in conflict zones.
- Establish secure routes and safe zones for vaccination teams to reach remote and high-risk areas.

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