



UNDERSTANDING MATERNAL PERSPECTIVES: KNOWLEDGE AND ATTITUDES TOWARDS CHILDHOOD IMMUNIZATION IN RURAL COMMUNITIES

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Abstract:

Background: Vaccination is an immensely efficacious approach for avoiding specific contagious illnesses. Vaccines are typically highly effective and the occurrence of adverse responses is infrequent. Standard immunization protocols safeguard the majority of children worldwide against several contagious diseases. The objective of this study is to examine maternal understanding as well as attitudes toward kid immunization.

Method: The data collection for the residents of Ali Raza Abad is conducted using a survey that has been adapted from the study by Yousif, Albarraq, Abdallah, and Elbur. The surveys are divided into three sections, each including 20 items. Part A focuses on demographic data, while Section B assesses the understanding as well as the mindset of mothers towards motherhood. The participants responded to each question utilizing a scale consisting of four points, where 1 represented "Absolutely agree," 2 represented "Yes," 3 represented "No," and 4 represented don't know. The data collected from those who participated was examined using SPSS version 21 to get statistical information, including mean, frequency ranges, proportion, and deviations from the mean. Explicit permission was obtained from everyone who participated, granting them the autonomy to choose whether to take part or decline involvement in the study. If there is a lack of education, the investigation volunteers interpret the questions in Urdu.).

Results: The study encompassed a total of 236 moms. Over half (53.04%) of the mothers affirm the importance of child immunization. The overwhelming majority (91.5%) of them regarded immunization as important.

The majority (42.3%) completely agreed that vaccines are not hazardous, indicating that they are more advantageous than detrimental. 45.3% of moms and 30.1% of mothers agree that child immunization is not banned by religion. 41.5% of mothers responded affirmatively, whereas 18.2% agreed that the administration of vaccines is linked to negative effects. Approximately 40% of mothers expressed uncertainty regarding whether their kids could get the disease they were immunized with versus after

immunization.

Conclusion: The study aimed to ascertain the level of awareness and attitude of mothers residing in the rural community of Ali Raza Abad, Lahore, about kid immunization. Effective mentorship is essential for enhancing immunizations for children. Every endeavor should be advantageous to people who have limited knowledge about immunizations for children. Medical professionals should enhance the dissemination of this knowledge through seminars and other diverse tactics to rectify the public's misconceptions about kid immunization.

Keywords: Mother's, knowledge, attitude, childhood immunization

1. INTRODUCTION

Health encompasses the entirety of an individual's physical, mental, and social well-being, rather than simply the absence of illness. Creating community service networks for children with unique health needs poses a challenge for pediatricians, families, healthcare companies, and government organizations. (WHO, 2017).

An unvaccinated youngster is at risk of experiencing paralysis or death. Immunization is the sole method to safeguard your family and community. Vaccines are highly effective in preserving lives, averting illnesses and disabilities, and also offer a cost-effective solution compared to other health interventions. (WHO & UNICEF 2016).

—Protect children by taking action (Vekemans et al., 2019).

Vaccination is a remarkably efficient approach to preventing specific infectious diseases. Vaccines are typically highly safe, and occurrences of adverse responses are infrequent. Standard immunization programs save the majority of children worldwide against many contagious illnesses that historically resulted in millions of fatalities annually. (Halsey & Galazka, 2017).

Neonates and newborns have a range of microbial illnesses that result in millions of deaths globally. Newborns, due to their lack of immunity, can become sick, leading to a reduced memory response to antigens. Efforts aimed at mitigating the elevated risk of infection can provide assistance and safeguards to the people. Preterm birth serves as a crucial opportunity for timely immunization, offering prompt immunity for neonates. Enhancing the accessibility and quality of neonatal vaccination is a worldwide imperative for public health. (Alruwaili et al., 2018).

The majority of diseases for which children receive vaccinations typically occur within the initial years of life. Immunization functions as a form of protection against infection. Administering numerous doses of an identical vaccination at appointed times is crucial for enhancing the immune response in children. Administering many vaccines simultaneously does not have any adverse effects on the immune system of children. (Higgins, Trujillo, & Keech, 2016).

Vaccines safeguard the general population from pernicious and potentially lethal illnesses. Vaccinations have rendered numerous perilous diseases avoidable. (Thomas, 2015).

Pregnant women, young children, older individuals with compromised health, and individuals with chronic conditions such as asthma and heart disease are more susceptible to serious infection and mortality. (Borrow et al., 2017) Administering vaccines to pregnant mothers offers the advantage of safeguarding their infants. Currently, there is no available vaccine for infants who are less than six months old. Seasonal influenza vaccines provide immunity against the three most common strains that are circulating throughout a particular season. It is the most effective method for minimizing the transmission of intense flu to others and has been in use for over 60 years. To prevent the flu, one can avoid incurring additional medical expenses and preserve revenue by avoiding absence days of work (Grohskopf et al., 2019).

Vaccination not only preserves lives but also facilitates the cognitive and physical development of youngsters. Healthcare providers should increase their time spent in educational institutions to mitigate the hazards associated with childhood illnesses. It can effectively mitigate expenses for both households and communities through straightforward protection measures. (Stutzman & Courtney, 2019).

Immunization is the procedure of acquiring immunity to infectious diseases through the administration of vaccines into the body. Vaccines stimulate the body's self-immune system, which serves as a person's defense mechanism to decrease the likelihood of illness. (WHO). Immunization not only reduces the incidence of illness and death caused by infectious diseases, but also prevents the transmission of diseases among the community population (Kamble, Shelke, & Patavegar, 2015). Many individuals have common concerns regarding the potential correlation between vaccines and an increased likelihood of developing autism. Vaccine safety has undergone rigorous testing on numerous occasions, including extensive populations. Extensive and rigorous research investigations, covering a substantial number of individuals, have consistently demonstrated that immunizations do not have a causal relationship with autism. All of them are self-generated myths and misconceptions, devoid of any factual basis (Dudley et al., 2018).

A child can still receive vaccinations even if they have a slight fever, cold, runny nose, cough, ear infection, or mild diarrhea. Delaying the vaccination of a child with a mild sickness does not provide any health advantages. Timely administration of immunizations is crucial for children, regardless of their well-being, to safeguard them from severe illnesses. A pediatrician can assist in identifying and implementing these safeguards. It is usual for individuals to have mild illness following immunization, which is why this should not deter you from having your child immunized (Mohamed & Idris, 2018).

Maintaining a timely and current schedule for a kid's immunizations is crucial. However, if a scheduled dose is missed, it can be administered at a later time to ensure the child is caught up. The comprehensive revised timetable of vaccinations for children aged 0-18 can be fulfilled along with all accompanying guidelines (Ventola, 2016).

The majority of parents and medical professionals effectively stay updated on vaccines. However, studies indicate that approximately 25% of preschool-aged children are lacking at least one regular vaccination. The majority of states require a comprehensive vaccination history before allowing your child to enroll in school. Occasionally, a youngster may fail to receive a vaccine due to illness. Regardless of the cause, it is crucial to catch up on any missing vaccines (Bradford & Mandich, 2015). Mothers exhibit a higher inclination to administer the polio vaccine to their kids while harboring reservations regarding vaccination. There exists a direct relationship between the opinions held by parents and the individuals or sources that provide them with knowledge. Put simply, a boost in a mother's expertise and routine will result in a reduction in infection (Abdullahi et al., 2016).

Islam is not the exclusive faith globally endorsed for vaccine prescriptions. The United Churches of Christianity and the Dutch Reformed Church, among the main religions, also promote the vaccination of children (Wombwell, Fangman, Yoder, & Spero, 2015). It is imperative to prioritize the use of vaccines for the sake of maintaining good health, and therefore, spiritual convictions should not be used as a basis for prohibiting their use. (Levin, 2016).

In many regions, the majority of individuals adhere to traditional beliefs, holding the notion that birth and death are divinely ordained. Certain adverse effects of immunizations can result in individuals developing misconceptions. Many people are terrified of contracting HIV/AIDS since they often use the same instruments, cotton fibers, and seek care from unregulated health practitioners or unskilled medical professionals (Tan & Matthews, 2018). Therefore, incorrect vaccination procedures may result in adverse effects on infants, leading to a decrease in the number of people seeking immunization services from healthcare providers. An illustration of this conviction can be observed in a vaccination that has been examined for five diseases: diphtheria, pertussis, tetanus, Homophiles'

influenza type B bacterial meningitis, and one strain of polio. Healthcare providers have to address and counteract these misconceptions (Wilson, 2017).

Tuckers researched women's perspectives toward vaccination. Some women have voiced apprehension regarding the vaccine's potential to overtax the immune system of the child and its ability to regulate. (Tukers, 2017).

Immunizations can thwart over twelve grave illnesses. Choosing not to vaccinate can potentially expose children to severe and occasionally lethal illnesses. (Habib et al., 2018).

Due to their susceptibility, infants are highly sensitive to infections, making it crucial to safeguard them through immunization. Immunizations play a crucial role in halting the transmission of diseases and safeguarding young children from severe sequelae. (Ventola, 2016).

LITERATURE REVIEW

Vaccination measures have significantly decreased the occurrence and related dangers of various contagious diseases in Western countries among infants and children. The efficacy of vaccines in preventing diseases is at an all-time high, but their effectiveness can only be shown if parents adhere to childhood immunization guidelines. Healthcare providers, along with community and government efforts, should persistently enhance vaccine coverage to Minimize the occurrence of illnesses or fatalities caused by diseases that can be prevented through vaccination diseases (Phadke, Bednarczyk, Salmon, & Omer, 2016).

The current guideline advises administering influenza vaccines to all children aged 6 months to 19 years, with a specific focus on children under 5 years old or those with chronic conditions. Approximately 66.5% of the parents were aware of the significance of vaccinating their children against seasonal influenza. Parents may be disposed to immunize their children if they are informed about the significant role that children play in spreading infections within communities and families, as well as the health and economic consequences of catching influenza (Kumar & Kavinas, 2018). A recent study conducted in Malaysia revealed that children whose moms lack confidence in the efficacy of vaccines to prevent the spread of diseases were shown to be three times more likely to have incomplete immunization. A further study conducted in the United States of America (USA) has recorded comparable results, indicating that the attitude, beliefs, and actions of parents play a role in determining the immunization status of their children (Wang & Liang, 2015). Furthermore, research has demonstrated that parental attitudes about children's immunization can be influenced by religious beliefs and the sources of information they rely on. This research presents the factors that contribute to insufficient understanding of kid immunization and unfavorable opinions towards childhood immunization among parents in the Hulu Langat district (Erener-Ercan et al., 2015).

The reluctance of parents to vaccinate has resulted in the resurgence of diseases that may have been prevented with vaccination. In Malaysia, the number of measles cases tripled in 2015 compared to the previous year. Immunization coverage has consistently exceeded 95% since 2009. Nevertheless, in 2014, the coverage of the Mumps-Measles-Rubella (MMR) vaccine experienced a substantial decline, reaching only 93.4% (Brinkman et al., 2019).

Mothers require dependable and precise information regarding the genuine contraindications to vaccination. 61.7% of the parents who took part in the study were unaware that there were no limitations to vaccinating against regular nasal cavities, ear infections, and diarrhea (ALAmri, Horaib, & Alanazi, 2018).

Immunization is a powerful way to avoid or fight any sickness. However, a significant number of youngsters who are at higher susceptibility to vaccine-preventable diseases are not receiving the advantages of vaccinations. Mothers who are admitted to the hospital possess the most accurate and reliable knowledge regarding their children's vaccines up until the initial booster shot. Full coverage for 18 months is guaranteed as a result of the implementation of robust security measures.

Various prophylactic measures are employed to combat diseases (Yang, Song, Noh, Cheong, & Kim, 2015).

It is crucial to ensure that the child's immunization is supplemented since studies have shown that inadequately vaccinated and non-vaccinated youngsters are more prone to malnourishment compared to their peers (Sharma, Kennedy, et al. 2019).

Vaccine noncompliance is a prevalent issue on a global scale. Based on the current study on understanding and mindset regarding EPI, it has been found that 8.79% of children are not completely vaccinated and 0.24% are not immunized at all. The main cause for this is misinformation or false beliefs. Healthcare workers have a crucial role in encouraging moms by providing them with facts about partially immunized and non-immunized information (Paterson et al., 2016).

The immunization prevalence in South Asia has experienced a significant increase, rising from approximately 5% in the 1970s to nearly 50% at present. However, it is important to note that despite this progress, half of the children in the region still lack immunization. According to recent research by the World Health Organization (WHO), if all the vaccines now available for pediatric diseases are broadly embraced and if immunization programs can increase vaccine coverage to a global average of 90%, the desired outcome can be achieved. By 2015, vaccines could prevent an extra two million premature deaths each year of kids aged five and below. (Gerlier et al., 2017).

The study found that maternal awareness of under-5 child immunization in certain locations is high, with mothers demonstrating a strong understanding and a positive attitude towards the Expanded Program on Immunization (EPI). Nevertheless, there is still a percentage of youngsters who do not complete the vaccine process. Misconceptions and false beliefs are the primary obstacles to the lack of immunization among youngsters. It is imperative to ensure that the field workers in the health sectors have enough training and supervision. An educational campaign targeting a wide audience and coordinated cooperation initiatives to combat misunderstandings about immunization are necessary (Chris-Otubor, Dangiwa, Ior, & Anukam, 2015).

PROBLEM STATEMENT

In summary, the present investigation unveiled a general deficiency in parental understanding of vaccination, accompanied by significant misunderstandings. There is no correlation between parental The level of knowledge and the rate of vaccine coverage are positively correlated, indicating that individuals are willing to receive vaccinations even in the absence of comprehensive information about them. The rationale behind this phenomenon stems from parents' inclination to safeguard their children from potential harm, notwithstanding their resistance to vaccination.

Globally, childhood immunization averts almost two million lives annually. However, there are 2.5 million fatalities annually caused by preventable diseases that can be avoided with vaccination, particularly among children under the age of 5 in impoverished Asian and African nations. immunization coverage in numerous poor nations has reached a commendable level, with children who have not yet received polio immunization remaining unexposed.

Hence, parents must provide their children with polio vaccinations, as recommended. Hence, this study was undertaken to evaluate the mothers' comprehension and perspectives regarding the mandatory immunization of youngsters, in addition to determining their level of commitment.

Purpose of the Study

The objective of our research is to evaluate the level of understanding and mindsets about childhood immunization, as well as the variables influencing these attitudes, across parents.

SIGNIFICANCE OF THE STUDY

The prevalence of infectious diseases contributes significantly to the significant public health issue of infant and child mortality and morbidity. The objective of this study is to assess the present state of children's immunization status in terms of their health. The researcher anticipates that the findings of this study will be beneficial to the subsequent:

Children:

This study will have a significant impact on the health of children. Vaccination enables individuals to lead a healthy lifestyle.

Parents: The findings of this study served as ways to improve parents' understanding of children's immunization. This information can help to counteract their erroneous beliefs and misconceptions regarding immunization.

Medical professionals:

This study elucidates the information and benefits of immunization in mitigating the risk of childhood infectious illnesses.

Prospective researchers:

The survey results will significantly contribute to future researchers by serving as a reference for childhood immunization practices. This may inspire them to pursue further knowledge for their plans (Ramadan, Soliman, & El-kader, 2016).

MATERIAL AND METHODS

The study employed an objective explanatory longitudinal approach to evaluate the understanding and mindset of mothers toward children's immunization.

Location: The investigation will take place within the neighborhood. Ali Raza Abad

Research Time frame: 4 months

Demographic: Mothers residing inside the neighborhood of Ali Raza Abad

Sampling strategy: A random convenience sampling strategy was employed to choose the intended group of community mothers.

Data will be collected using a two-part inquiry. The first section pertains to the population data, while the remaining portion focuses on the year of the query.

DATA COLLECTION PROCEDURE

A questionnaire, derived from the study conducted by Yousif, Albarraq, Abdallah, and Elbur, is employed to gather data from the residents of Ali Raza Abad. The questionnaires are divided into three sections, each including 27 items. Section a focuses on demographic data, while Section B assesses the knowledge and attitude of mothers towards mothers. The participants responded to the items using a 4-point Likert scale, where 1 represented "Strongly agree," 2 represented "Yes," 3 represented "No," and 4 represented "Don't know." The data collected from the participants was analyzed using SPSS version 21 to get descriptive statistics, including measures such as mean, frequency, percentage, and standard deviations. Consent was obtained from all participants, and they were given the freedom to choose whether to participate or decline. If there is illiteracy, the research assistants translate the questions (Urdu).

Results:

Based on this study, I evaluated the level of awareness and attitude toward immunization among mothers in the rural community of Ali Raza Abad, Lahore. The outcomes yielded Table 02 and Table 03. The responses of community members are classified into four categories: yes, no, do not know, and strongly agree.

Mothers' Knowledge of Childhood Immunization

Sr#	Mothers' Knowledge about childhood immunization	Yes		No	Don'tknow		Strongly Agree		
		n	%		%	n	%	N	%
1	Regular immunization safeguards children against several transmissible illnesses and their associated problems.	129	54.7	18	7.6	24	10.2	65	27.5
2.	The initial immunization is administered at birth.	104	44.1	73	30.9	34	14.4	25	10.6
3	The majority of illnesses for kids who receive vaccinations typically manifest within the initial years of their lives.	85	36.0	60	25.4	44	18.6	47	19.9
4	Administering multiple doses of a single vaccine at regular times is crucial for enhancing a child's immunity.	117	49.6	56	23.7	13	5.5	50	21.2
5	Administering many vaccines simultaneously does not have any adverse effects on the immune system of children.	108	45.8	60	25.4	29	12.3	39	16.5
6	Is it crucial to administer vaccinations to children during immunization initiatives?	124	52.5	34	14.4	28	11.9	50	21.1
7	Administering periodic influenza vaccines to youngsters is highly advisable.	80	33.9	88	37.3	33	14.0	35	14.8
8	There is a potential correlation between immunization and autism.	95	40.3	51	21.6	24	10.2	66	28.0
9	Minor colds, ear infections, and diarrhea do not pose any medical reasons to avoid vaccination.	120	50.8	70	29.7	27	11.4	19	8.1
10	Vaccination is crucial for promoting the well-being of children.	92	39.0	68	28.8	20	8.5	56	23.7

Mother's attitude towards immunization

Sr#	Mothers' Knowledge about childhood immunization	Yes		No		Don't know		Strongly Agree	
		n	%	n	%	n	%	n	%
11	Vaccination of children is crucial.	125	53.0	43	18.2	24	10.2	44	18.6
12	Immunization is predominantly advantageous rather than detrimental.	101	42.8	90	38.1	25	10.6	20	8.5
13	Child immunizations are deemed to be secure.	68	28.8	86	36.4	40	16.9	42	17.8
14	Religious beliefs ban child immunization.	107	45.3	71	30.1	22	9.3	32	13.6
15	Immunization is linked to adverse outcomes.	98	41.5	71	30.1	43	18.2	24	10.2
16	Children may contract an illness that they were immunized for following immunization.	122	51.7	49	20.8	25	10.6	40	16.9
17	Adherence to the immunization program is crucial.	74	31.4	83	35.2	38	16.1	41	17.4
18	Immunization is essential for maintaining your kid's well-being.	82	34.7	52	22.0	40	16.9	62	26.3
19	Immunization decreases death among kids and sickness.	118	50.0	85	36.0	24	10.2	9	3.8
20	Administered promptly after birth, the polio vaccine is given.	86	36.4	80	33.9	27	11.4	43	18.2

Discussion:

The objective of the study was to ascertain the level of awareness and attitude of mothers residing in the rural community of Ali Raza Abad, Lahore, about immunization. This study employed a cross-sectional design. This is It is widely recognized that there is a lack of understanding regarding immunization and health practices in communities.

The study involved a total of 236 mothers. Mothers possessed a strong understanding of various issues about the overall significance of vaccination in preventing infectious diseases, including the optimal timing for administering the first dose in the immunization schedule.

The table displayed the maternal perspectives on childhood immunization. Over half (53.0.4%) of the mothers acknowledge the significance of child immunization. The majority (91.5%) of individuals regarded immunization as more advantageous than detrimental, and a significant proportion (42.3%) firmly affirmed the safety of vaccines. Among moms, 45.3% and 30.1% of them agree that child immunization is not banned by religion. 41.5% of mothers responded affirmatively, whereas 18.2% agreed that the administration of vaccines is linked to negative effects. Approximately 40% of mothers expressed uncertainty regarding whether their kids could get the disease they were immunized against after receiving immunization. 31.4% of the mothers held a positive opinion, whereas 16.9% believed that adhering to the immunization schedule is crucial and that immunization helps maintain the child's health.

The examination of the demographic attributes of the parents participating in this study revealed that the majority of the sample consisted of mothers (Vonasek et al., 2016). Approximately 50% of the mothers were enrolled in higher education. This can be attributed to the fact that the majority of participants resided in their birth city and thus had enhanced opportunities to successfully pursue their higher education. An assessment of parental knowledge in the present study identified variations in their responses to inquiries specifically formulated to assess their understanding of pediatric immunization. Conversely, the study done in the UAE found that over 85% of participants were aware of the significance of childhood immunization in averting life-threatening illnesses (Gowin, Wysocki, Michalak, & Januszkiewicz-Lewandowska, 2017). Only 41.6% of the interviewees knew the importance of the multi-dose administration of the same vaccine at child immunity intervals. (Kumar & Kavinas, 2018) Hence, parents may erroneously assume that the initial dose of the vaccination suffices to establish immunity and save their children.

Currently, there is a lack of scientific evidence to substantiate parental concerns over the use of combination immune overload vaccines. Only 37.1% of responders acknowledged the existence of many vaccines.

Simultaneously administered did not adversely affect the newborn immune response. In contrast, another study found that parents held the belief that excessive vaccines could potentially compromise their child's immune system (O'Leary & Maldonado, 2018). A significant proportion of children can be targeted by mass immunization, who, due to various factors, do not receive routine immunization or are unable to adhere to the prescribed immunization schedule. According to the present study, a majority of parents (73.9%) agreed on the need to vaccinate children during vaccination campaigns (Borrow et al., 2017). In Uganda, parents and caregivers expressed concerns regarding the safety of vaccinations administered during mass immunization campaigns, citing either their expiration or deliberate contamination with hazardous chemicals meant to cause harm to their children (Shinjoh, Hoshino, Takahashi, & Nakayama, 2015). The current guideline in the United States is to administer vaccinations to all children aged 6 months to 19 years, with special attention given to children under 5 years of age or those with chronic influenza immunizations (Ortiz et al., 2016). Approximately 45% of parents were aware of the significance of administering seasonal influenza vaccination to children. Parents may be more inclined to vaccinate their children if they are provided with information on the crucial role that children play in spreading infections between families and communities, as well as the significant health and economic consequences of contracting influenza (Ortiz et al., 2016). Physicians require precise and dependable data regarding genuine vaccine concerns. 61.7 percent of the parents who took part in the study were either unaware or did not realize that ailments such as colds, ear infections, and diarrhea are not reasons to avoid being vaccinated. Postponing vaccination due to misconceptions about restrictions jeopardizes the health and safety of a kid or children (ALAmri et al., 2018). Additionally, there can be systemic reactions such as elevated body

temperature, restlessness, drowsiness, and skin irritation. Over 50% of the enrolled mothers expressed high agreement or affirmation regarding the adverse consequences associated with immunization (Negussie, Kassahun, Assegid, & Hagan, 2015). It is imperative to provide mothers with education regarding these negative consequences. The study findings revealed a significant association between parental education and the level of knowledge and feelings towards children's immunization. Undoubtedly, an additional level of schooling enables mothers to comprehend educational content more effectively. Furthermore, these parents had a higher likelihood of gaining substantial media literacy regarding immunization; this discovery aligns with the results of other research studies. The current investigation reveals significant disparities in maternal knowledge. In the past, it was customary for mothers to go along with their children on inoculation checkups in nearly all instances. The disparity in mothers' knowledge can be attributed to the interaction between mothers and medical care professionals.

Conclusion:

The study aimed to ascertain the level of awareness and attitude among mothers residing in the rural community of Ali Raza Abad, Lahore, about kid immunization. A survey was disseminated among community members to evaluate their knowledge and attitude toward kid immunization. Results were analyzed using statistical methods. Nevertheless, community mothers have ample understanding regarding kid immunization and its significance. Childhood immunization, with its numerous advantages, provides accessible guidance.

Limitations:

The study was constrained by a limited timeframe and a small sample size. The study exclusively focused on rural communities. A closed-ended questionnaire was utilized in this investigation. This study exclusively concentrates on children.

Recommendation:

Effective supervision is crucial for enhancing childhood immunization. Every endeavor should aim to be advantageous for individuals who have limited awareness of childhood immunization. Healthcare professionals should enhance the dissemination of this knowledge through workshops and various initiatives to rectify misconceptions about childhood immunization.

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