The Vaccine Dilemma: A Case Study of Pakistan

Muneera Moulabuksh

Cooperative Lecturer

Department of Social Work

Federal Urdu University of Arts, Sciences & Technology

Karachi – Pakistan

muneerahouth9@gmail.com

Sikander Bakht Abbasi

Research Scholar

Department of Political Science

University of Karachi

Karachi – Pakistan

Nabila Aftab

PhD Scholar

Department of Political Science

University of Peshawar

nabilaaftab123@gmail.com

Abstract:

In addition to economic, political, and societal barriers, vaccination is also hampered by a lack of public acceptability. Similar to the 2019 Coronavirus Pandemic (COVID-19), environmental and health catastrophes have a substantial influence on immunisation efforts. Due to interruptions in routine vaccination and the growth of health care systems, Pakistan's immunisation efforts were predicted to be badly affected by the pandemic. More outbreaks of vaccine-preventable diseases (VPD) are expected as a result of this trend. But there isn't any proof to back this up. According to a qualitative research, this article evaluates the influence of COVID-19 on Pakistan's regular immunisation programmes. Locals in Sindh region of Pakistan opposed routine polio vaccinations for some time until they were resumed in July 2020. A 'Western Conspiracy' was believed to be behind both the vaccination and COVID-19. Arguments for the existence of socioeconomic memory suggest that these attitudes and behaviours may be understood in the context of economic, sociocultural, and geopolitical factors. By arranging Supplementary Immunisation

Activities (SIAs), the government may address COVID-19's detrimental influence on routine vaccination, as well as other important concerns affecting vaccination programs in the country.

Keywords: Coronavirus, Pandemic, Health, Vaccination programs, Pakistan.

Introduction:

Vaccination confronts a variety of context-specific challenges across the world (Nichter, 1995; Feldman-Savelsberg et al., 2000; Ali, 2020a,c). Events such as the COVID-19 pandemic and natural disasters have a major influence on immunisation efforts (Ali, 2020c; World Health Organization, 2020). COVID-19 epidemic has forced some countries to temporarily halt routine immunisation efforts (Ali, 2020d).

We know from the Ebola outbreak in West Africa that VPD can cause catastrophic epidemics if immunisation is stopped when resources are moved elsewhere (Masresha et al., 2020). Abbas et al. (2020) conclude that the advantages of sustaining frequent kids immunisation campaigns, on the basis of their risk-benefit analysis of routine childhood vaccination in 54 African countries, outweigh the risk of COVID-19 transmission linked with vaccination clinical visits. In order to continue the immunisation campaign, it is suggested to adopt the required protective measures—physical distance, personal protective equipment, and adequate hygiene practices—to prevent the transmission of COVID-19 during vaccine delivery interactions. Vaccination efforts in low-resource countries confront many obstacles, both during pandemics and in normal times, we suggest, especially when issues like geopolitics are involved. A number of socio-economic and political issues influence local views and practises regarding COVID-19 as well as vaccination delivery, for example, in Pakistan (Abimbola et al., 2013; Ali, 2020b). There have been rumours and conspiracy theories that have impacted vaccination efforts in Pakistan for a very long time (Abimbola et al., 2013; Khan and Chiau, 2015; Ali, 2020a,b).

COVID-19 containment techniques were expected to have a significant impact on routine immunisation efforts in the early stages of the pandemic. For this, there was no empirical proof at all, only reasonable hypotheses. Nevertheless, these assumptions have been proven to be correct (Ali, 2020b). People in low-income nations like Pakistan were also told that the pandemic's influence on vaccination efforts will be different because of various sociocultural, economic, and political issues (Ali, 2020b). During COVID-19, one out of every two youngsters in Pakistan's Sindh region did not receive their regular immunizations (Chandir et al., 2020).

Chandir et al. have observed a 51% reduction in immunisation visits in the province (2020). There has been a reduction in immunisation services, general restrictions on local movement, stock-outs due to disruptions in global manufacturing and supply chains, border closures and strict restrictions on the movements of vaccine providers doing outreach, according to the report (ibid.). Immunisation is necessary because of concerns about probable infection exposure, "myths" and misinformation surrounding vaccination, and rumours about COVID-19 (ibid.). In Pakistan's rural areas, vaccination efforts have been far less effective than in the province's urban areas, where we conducted our research (ibid.). Vaccination campaigns for COVID-19 are discussed in this article, along with myths and stories that explain local people's reluctance to get vaccinated, and government efforts to stop the virus from spreading.

A small hamlet in rural Sindh sent back the "polio" vaccination teams because they believed the coronavirus and vaccine were "Western plots." They rejected routine vaccinations for Bacillus Calmette–Guérin (BCG) and measles because they assumed the vaccines offered were for polio. This study explores the elements that affect people's decisions to refuse and show anger against vaccination, as well as their anti-vaccine views, and explains why they feel that these are "Western conspiracies."

COVID-19's influence on immunisation during August–September 2020 was quickly determined by this qualitative research, which gathered information quickly. There are two components to this section: collection of data and location.

Due to the nature of the investigation, the team spent 2 weeks in the field in August and September 2020 in the same location where he had previously performed his M.Phil. Research on asthma. Sindhi is his native language, therefore he didn't need to spend time building rapport or learning the language because he'd already done study in that area. With these advantages in mind, the team conducted many group talks using a method called Kachahr, developed by lead author Inayat Ali (Ali, 2020a). An explanation of this approach is in order. This technique, which Ali created, is based on a culturally accepted regional public procedure for debating and resolving a specific challenge.

On their Otq station, the team organised ten conferences with roughly 50 adult males on a deliberate or convenience sample and an interview guide for 2-3 hours each (guest house for male members). We inquired about local attitudes and practises with respect to COVID-19, local views of the immunisation and the underlying causes of vaccine refusal.

Personal health information was not present in the study, but an overview of how participants felt about COVID-19 was given. We discovered that these people refused regular immunizations, such as BCG, since they considered COVID-19 to be only polio vaccines and the "Western" world was connected with COVID-19 and vaccinations. Then we concentrated on impressions and rejections. The Kachahr discussions took place in Sindhi. These villagers are the mother-tongue of Balochi, while the second language of Sindhi. Interlocutors gave their consent for some conversations to be audio recorded. To analyse the data, we first read the full dataset many times to discover significant themes and then listed, summarised, reviewed, and refined these topics. Accordingly, we looked into the following issues: In what ways are COVID-19's effects seen by the local population, and what strategies are employed to cope with it? How is vaccination seen locally, and why do individuals object to it? Thirdly, why is immunisation and COVID-19 viewed as "Plots of West?"

Previously, a team of researchers detailed the study's setup in detail (Ali, 2018). Village in Sindh located in a desolate area it has a population of 150 people and is located around 70 kilometres from Sakhar, the province's third-largest city. The majority of the population is employed in animal husbandry, agriculture, and day-to-day work. Many government personnel, such as elementary school teachers, are involved in the creative process. "Master" is the greatest level of formal education available to the majority of individuals (16 years of education). The rate of formal education differs substantially between men and women, with males having a higher rate of formal education than women.

Numerous residents are religiously literate, offer the Namaz (prayers) and able to read the Holy Quran. In the community, there is neither a hospital nor a functional sanitization system. Everyone in this community believes that health and sickness are dictated by God or fate (Qismat). In addition to home treatments with origins in Unani medicine and Ayurveda, they also use vocal healing, which involves prayers, offerings and chanting of certain passages of the Holy Quran, as well as pilgrimages to holy sites and shrines, consultations with a Hakeem, and visits to biomedical facilities. A person's health-seeking behaviour can also be influenced by the aetiology of an illness, their gender, economic status of their family, and their contact to health care facilities. To provide context for our findings, we provide an outline of COVID-19 and the immunisation campaigns in Pakistan in the following sections.

Overview of COVID-19 in Pakistan

On February 26, two men who returned from Iran were initially infected with COVID-19 in Pakistan. By March 2020, around 1,400 people were affected and 11 deaths were reported. It is projected that around 120,000 people will be sick and 2,000 die by 2020. By 10 December 2020, about 430,000 people will have been sick and over 8,600 will have died "officially" (Johns Hopkins University, 2020). In addition to its efforts, Inayat Ali (in the media) disclosed that the government of Pakistan may fake these numbers to make it appear as if they are making a good deal with COVID-19.

The Government of Pakistan has made several efforts to restrict the infection, "flatten the curve" and to safeguard public health. Flights from China, Qatar, Italy and Iran ceased at the beginning of the outbreak (Ali et al., 2020). Samples were transferred to China and the United States when test kits were not available. The country then bought a thousand Chinese test kits (Ali et al., 2020). Only 30 people were sick when authorities stopped schooling and established a COVID-infected quarantine camp near the Pak-Iran border on 13th March (Khan, 2020). Conferences and gatherings were thereafter prohibited throughout the nation. A lockdown in the province of Sindh was introduced on 17 March, however Premier Nawaz Sharif did not opt for a lockdown since 97 percent of patients recovered (Ali et al., 2020) and the federal government announced a nationwide lockdown, deployed security services to enforce the entry of persons infected with COVID-19 to centres in quarantine; invoked Section 188 of the Penal Code on infringement of Pakistan, shut down markets; supervised interprovincial borders, and established the Corona Relief Tiger Force to educate individuals on the critical consequences; (Ali and Ali, 2020; Ali et al., 2020). There will be a "smart" lock-down on 9 May 2020, notwithstanding the rich, elite individuals that wish to extend the lock-down viral hotspots (Ali and Ali, 2020; Ali et al., 2020). The smart lockdown would close education institutions, eateries (save for takeout's), wedding halls, cinemas and business districts. A variety of other activities were also prohibited, such as sports, social and religious meetings.

As of December 2020, a smart lockdown was still in effect, and yet many people were preparing marriage festivities. In addition, there were specific socio-cultural, economic and political variables that contribute to the virus' capacity to had devastating repercussions in the nation (Ali and Ali, 2020).

Vaccination in Pakistan: Backdrop

It was during the 1970s that Pakistan began to vaccinate its population in order to contain and exterminate viral infections after having signed the UN Charter. The Expanded Immunization Program (EPI) was established as a pilot programme in 1976 and extended

throughout the country in 1978. (Alicante, 2020a). The EPI was initially meant to protect children between 0-11 months of age against six infectious illnesses: childhood poliomyelitis, TB, diphtheria, tetanus, pertussis and measles, so as to minimise mortality and morbidity among children. New vaccinations such as hepatitis B were released throughout time in 2002, haemophilia influenza type b (Hib) in 2009 and pneumococcal infections in 2009. (Ali, 2020a). In addition, vaccinations are routinely provided to pregnant women.

Using a top-down strategy, the EPI focuses on a number of levels, including federal, provincial, district, sub-district, and BHU. The cold chain can be maintained at any of these stages. It's the district's Executive District Officer (EDO) who's responsible for receiving vaccinations. The EPI also has a focal point person who is in charge of all tasks from storage to distribution. Monitoring teams visit the field and interview the target group—parents—to ensure vaccines are being administered. These include: (a) Does your community have a vaccinator that visits the village to administer vaccines to your children? (a) If your kid is immunised, could you kindly show us the vaccination card? If the kid does not have a vaccination card, the BCG scar is examined and used as confirmation that the child has been vaccinated.

Each Union Council (UC) has a BHU, which is supervised by a physician (MO). Aside from that, at the beginning of each month, vaccinators from every BHU go to the district level office to acquire vaccinations based on the demographic they are targeting. Every day, a vaccinator keeps a stock register of all vaccines received, utilised and remaining. The MO is in charge of overseeing the entire operation. According to the due and defaulter list for vaccinations, vaccines are kept in the relevant BHUs at regulated temperatures and subsequently distributed among vaccinators.

Introduction of "E-Vaccs Programme"

To make the immunisation more 'efficient' and 'effective,' the Punjab EPI has revised its methods with the use of smartphone technology: the 'E-Vaccs' digital system for guaranteeing that the vaccinators are present in the field (Ali, 2020a). A mobile application registers the coverage of real-time vaccinations in a central registry using the same eHealth methods used on the Internet for the use of ICTs. Initially launched as a test project in Punjab's four districts in June 2014, the application has now been rolled out to all of Punjab's districts as of October 2015. To ensure that every child gets vaccinated, the introduction of cell phones with GPS tracking is a novel concept.

There has been a considerable reduction in vaccinators' attendance after the introduction of E-Vaccs, from 97% to 54%. It was new and maybe too advanced for many vaccine providers, who were unable to grasp and utilise it properly. To begin with, they believed that if they did not record their presence on it, nothing would happen. Third, they resisted this application since it would enhance their accountability at the district level, which was a concern. Due to this, they intended to make this manoeuvre fail. A few of them claimed to have misplaced their iPhones and used that as an excuse to get out of the meeting early.

It is worth noting that after resolving these flaws and providing training to vaccinators at district level, frequent monitoring was instituted, and absentees were issued show-cause letters, the app's effectiveness rose to 94 percent. Khyber Pakhtunkhwa (KPK) and Baluchistan were the only two provinces in Pakistan to use this technology in 2016.

Furthermore, a second pilot programme, Har Zindagi, was running for two districts in Punjab province, Shiwal and Sheikhpur, and would be expanded to the entire province and country if it proves effective (Sarwar, 2017). With the goal of instilling parental vigilance and respect, this new immunisation card has the same colour and design as the country's passport (green). On its surface, it includes a Near-Field Communication tag that, when both devices are touched together, allows data to be sent in real-time between E-Vaccs and the smartphone. To remind parents of upcoming vaccinations, the application will use Robo-calling and a short messaging service (SMS).

Another critique of this technology-driven programme is that it suggests that everyone in Pakistan has smartphones, yet the majority of the villages do not have any smartphones. But there are several factors that contribute to the difficulties of usage, such as economic affordability, a lack of energy for charging phones, or a slow Internet connection. Hence, it's important to ask: What preparations are made for people who do not have and cannot afford a smartphone or a charging device? To yet, the administration has made no obvious steps to resolve these concerns.

Absence of Vaccination Milestones

Pakistan still has a long way to go before its full potential is reached. Despite the government and the significant partners of WHO, the nation has not met the immunisation indicators, acknowledges the WHO (World Health Organization, 2019; Ali, 2020a). Polio, measles and the elimination of neonatal tetanus are the three major objectives are still to be accomplished. While majority of the world is polio-free, there are indeed poor coverage of vaccines in Pakistan. There is a gap in the existing

immunisation besides the pertussis, diphtheria and measles outbreaks in different parts of the country. There are two polio states, one Pakistan and that the other Afghanistan. They together account for 85% of current polio occurrences worldwide (Ali and Ali, 2020). In 2019, over 150 people were infected with polio (Global Polio Eradication Initiative (GPEI, 2020). Wild polioviruses are still prevalent in Pakistan and Afghanistan. The country has also reported additional instances of the measles virus (Ali, 2020a,b). Tetanus is highly prevalent among pregnant women and babies inside the nation (Iqbal et al., 2020).

All these VPDs are seriously affected by the Expanded Immunisation Programme (EPI). Immunization rate has decreased due to vaccine administration problems as well as vaccination scepticism from people, the government and worldwide stakeholders. Vaccination refusals are a difficult problem connected to "a nation's history, society and political systems" (Closser et al., 2016). There is also a link between rejections and government failure to meet other human obligations (Closser et al., 2015). Many Pakhtun people refuse to vaccines for their children because they have little vaccination information, limited money and formal education, and a great number of children per household (Shah et al., 2019). As a result, more young people do not receive immunizations. According to the recent Pakistan Health and Demographic Survey (National Institute of Population Studies [Pakistan] ICF, 2019), just 51 percent of Pakistani youth obtained all necessary vaccinations for age. As a result, almost 50% of young people don't obtain any vaccinations depending on their age.

COVID-19 Vaccination: International Concerns about Routine Immunization

As a new phenomenon, COVID-19 will continue to evolve. In "developing countries," as its incidence rises, it will have a severe impact on the poor healthcare systems in low-income areas. Current health initiatives have been affected, particularly by immunisation efforts, due to the extension of health services (Ali, 2020b). Millions of children are not vaccinated against illnesses including measles, diphtheria and polio, placing them at risk of disease (United Nations News, 2020). The Strategic Advisory Group on Immunization (SAGE) of the World Health Organization (WHO) advised to all nations in March 2020 that they halt mass immunisation campaigns against all VPDs (Roberts, 2020). Because to this ban, there will be 78 million unvaccinated youngsters, only for measles (ibid.). There would be an enormous rise if the remaining nations were counted as well as additional VPDs.

COVID-19, in addition to measles, has the potential to have a significant impact on the Global Polio Eradication Initiative (GPEI). These efforts target about 400–450 million

people each year. In the past, the GPEI urged governments to delay their mass immunisation efforts till the second section of 2020. (Friedrich Roberts, 2020). Poliovirus is likely to spread to polio-free countries, WHO leader Michel Zaffran said (Roberts, 2020).

Findings

Perceptions of COVID-19 in Local Communities

When it comes to the effectiveness of government initiatives, local attitudes and behaviours are crucial. As part of COVID-19, we describe the villager's knowledge, attitudes and practises. The presence of coronavirus and its prospective cure, such as performing specific rituals and prayers, shaving your head, drinking green tea, or have been the subject of a variety of rumours across the country (Ali, 2020c). People in Pakistan can be split into two categories based on their attitudes and practises: those who have disregarded coronavirus, and those who have grown scared and frantic after getting the disease gravely.

There have also been conspiracy ideas about the pandemic: it's a "Western," an "American" or a "Jews" plot (Ali et al., 2020; Salma et al., under review). The West has produced this virus as a plot to harm us, for example, according to one of my interlocutors. Likewise, the media has covered it. The entire globe has been touched by this invention." According to these folks, the goal of this "plan" is to sterilise ladies of Islamic religion in order to manage the inhabitants, as "Westerners" dread an expanding Muslim population (Ali, 2020a,b). Because of the protests against Brown and Muslim immigration that took place in Europe, the suspicion that all Muslims are "terrorists," and the overall attitude of white people that they are "better" to everyone else, it's safe to assume that they're right (Kaunert et al., 2015). Because of colonisation and imperialism, this "superiority complex" invokes white power while making the "Others" feeling degraded and inferior, leading to (sometimes hidden) defiance. As a result of "development," "progress," racial discrimination, imperialism, and colonialism in the past, anthropologists have long been sceptical of this us against them attitude (Asad, 1973; Escobar, 1995; Acosta et al., 2020; Terror, 2020).

Within this broader geopolitical framework, it is necessary to examine the underlying causes of local anti-vaccination sentiment. As a result, we can see how vaccination may be seen locally as a "political enterprise" rather than a life-saving undertaking (Ali, under review). Opposition to vaccination began in Pakistan as early as 1953, when many Pakistanis opposed the government's Family Planning Program because they regarded it

as a "Western" effort to limit their reproduction. In the United States, resistance to vaccination began in the early 1970s. A trial experiment in 1976 had led some to believe that the EPI was an attempt by the government and the Western world to reduce the number of Muslims born in the nation in 1978. (Ali, 2020a).

When we return to the hamlet under investigation, we find that individuals have not adhered to the suggested preventative measures, such as physical distance and wearing masks, within this community. In spite of this, when they leave the hamlet, especially for shopping in a nearby small town, they are forced to take these precautions out of dread of police.

Influence of Routine Vaccination on Public Opinion

In Pakistan there are two sorts of vaccination teams: mobile/extensive teams visiting every house to deliver regular vaccinations and stationary teams sitting in specified sites to vaccinate children. In this part we examine the way local people interpret regular immunisation during the epidemic and why locals rejected polio and then sent transportable immunization workers away. Around 800,000 children will be immunised at COVID-19, which will take place on July 20, 2020. Vaccinators began vaccinating youngsters again, this time with masks and gloves (Reuters, 2020). In spite of this, considering the rumours and scheme hypotheses surrounding COVID-19 in Pakistan (Ali, 2020c), residents of this hamlet were suspicious of the newly restarted regular immunisation programme (Reuters, 2020). Both prior vaccination campaigns and COVID-19's recent resurgence have sparked their alarm, according to the group.

Because they didn't believe it would benefit their children, these people refused the polio vaccination. Our children had been vaccinated for a long time, and we requested them not to vaccinate our children when the vaccination team arrived. Despite this, our children's health is not improving. A large number of them are still ill today. What's the use of vaccinating our children if that's true?"

Locals have also connected the present vaccination campaign to a pandemic. Their previously expressed concerns about COVID-19 spilled over into their concerns about vaccines as well. Since the coronavirus is a "Western product," they believe the vaccination is a product of the Angraiz... (British). "It appears that this virus is a product of the Angraiz," said one interlocutor. It stands to reason that if this premise is correct, then all medications and vaccinations are the result of this process. If we allow vaccinators to vaccinate our children, and they die, who knows what sort of vaccinations they are?

In the opinion of some participants, vaccination providers ought to inform parents in writing that nothing negative would happen to their children after getting the vaccine. Instead of providing their CNICs, vaccinators might submit their computer-generated national identification cards (CNICs).

Discussion:

Vaccination is a complicated issue in many nations. It has always been in the limelight owing to both its successes and disasters (Feldman-Savelsberg et al., 2000; Blume, 2006; Closser, 2010; Fairhead and Leach, 2012; Greenough et al., 2017; Ali, 2020a). Some of its supporters point to the elimination of smallpox and the prevention of hundreds or millions of illnesses and deaths as evidence. As a result, millions of youngsters are vaccinated on a continual basis across the world. In contrast, as we've seen, its critics distrust its administrators' components and motivations. As a result of these suspensions and resentments, vaccination refusals and unvaccinated children are increasing. It is true that these positions prevail in almost all nations, but in low-income countries they are more prominent resulting in lower education standards and the general mistrust in government and global actors, as we mentioned previously.

COVID-19 has also been the subject of rumours and conspiracy theories throughout the world because of the ambiguity, worry, and terror surrounding a continuously developing phenomena (Ali, 2020c; Ali et al., 2020; Jolley and Paterson, 2020; Romer and Jamieson, 2020; Uscinski et al., 2020). Consider these tales as "social phenomena" that provide light on the interaction between a variety of socio-political, socio-cultural, and economic elements (Ali, 2020c). For this reason, it is important to understand how these narratives might impact the forthcoming vaccine against COVID-19 (Ali, 2020a,b; Jolley and Paterson, 2020; Miller, 2020; Romer and Jamieson, 2020).

The COVID-19 and the vaccination programmes in many regions of the country are both considered as Western plots, partly because they are "spying" on Osama bin-Ladin (Ali 2010b), and the American drones, which they assume are being "spun" around. They are being organised in 2011 by the United States for "fake" vaccination. Similarly It is no secret that the number of tales and conspiracy themes associated with prior reality, such British colonisation or a nearly ten-year old "falsified" vaccination scheme, in Pakistan, is minimal (Ali, 2020a). Because of these strong points of view, vaccination workers were assaulted and over 100 individuals were killed despite the country providing armed bodyguards (Closser and Jooma, 2013; Ali, 2020a,b). Vaccines are also negotiated between the government and the general public. When it comes to vaccinations, economically disadvantaged and marginalised individuals expect something in return

from the government, notably financial help (Ali, 2020a,b). It is the country's socio-economic, economic, and political elements that have shaped their thoughts and behaviours (Ali and Ali, 2020). The perspectives of the locals in that village reflect wider and deeper settings, both national and global in scope. Because of this, their perspectives should be viewed as part of this interplay between national and global settings. "Social memory" preserves these impressions and behaviours of previous injustices, injustice, and exploitation (Ali, 2020a; Ali and Davis-Floyd, 2020).

There are a number of structural inequalities and injustices at play that influence people's perspectives and influence preparedness programmes during a health disaster. People's perceptions and preparedness programmes are affected by these discrepancies and imbalances, according to Famer (Famer, 1996). As a result of these disparities, disadvantaged and rural people obtain less attention of the government and obtain poorer quality care than wealthy and urban people.

"American/Western" perspective of COVID-19 epidemic hampers Pakistan's polio eradication, according to research (Ali et al., 2020). The worry of COVID-19 exposure through physical contact may make people reluctant to take their children to the doctor's office to get vaccinated. Similarly, many vaccine providers fear transmission and may refuse to administer regular vaccinations for the same reasons (Ali, 2020b). Since the COVID-19 epidemic has impacted regular vaccination coverage in Pakistan, vaccine scepticism has increased at the local level.

For this reason, it takes a lot of work to keep VPDs under control and operate effective regular immunisation programmes. In order to prosper in normal times, and adapt effectively to unusual times, they require a judicial, economic and political infrastructure that offers a solid foundation on which to create a stable, secure, and appropriate society. Immunization programmes and the whole healthcare system are intertwined with poor public works, untruthful governance, inefficient social services, injustice, natural environment and inadequate education.

These elements have an impact on the transmission of infectious illnesses and the course of the disease in people who are infected with it (Farmer, 1996; Ali, 2020a; Ali and Ali, 2020). The provision of appropriate healthcare requires efficient, non-corrupt government in the regions mentioned. In the same way that vaccination protects the human body against a wide range of pathogens, political stability and government efficacy immunise "social and political bodies" (Scheper-Hughes and Lock, 1987) against instability, corruption and social strife. In the same way that diseases affect the physical body, there are also elements that undermine the entire politico-economic and socio-cultural structures of civilization, in which health care is also incorporated.

Results

There are a number of limitations to this research. According to the study's conclusions, there were only 50 male interlocutors who may not reflect the whole community,

especially its women. This is a rapid response study, requiring only two weeks of fieldwork, although it is based on extensive previous work. Due to these limitations, the results cannot be generalised. Unlike other studies, this one collects data directly from local residents on how the outbreak has affected routine immunisation efforts. For researchers, this is a big benefit. As a result, the study has great potential to stimulate more research on the issue. An added benefit of the program's regional focus is Pakistan, where polio and measles outbreaks are still common.

Conclusion and Recommendations

It's a fact that one of the SDGs 2030 stresses the importance of vaccine development and distribution in low-income countries like Pakistan despite the fact that the World Health Organization has stated that developing countries should have relaxed access to affordable crucial drugs and injections (World Health Organization, 2018). As a result of the politicisation of this life-saving initiative, one of us asks for "an anthropology of vaccination" (Ali, under review). Because of this, we may expect to see epidemics of VPDs like measles and polio in the future, as well as opposition to the coronavirus jabs in Pakistan, as well as other nations. However, the government must also deal with the serious concerns that influence the immunisation programme in the country in order to counteract COVID-19's major effects on routine vaccination. As a result, efficient, non-corrupt government that addresses the needs of rural poor people is vital to provide appropriate healthcare services to the rural population. Once again, political and social institutions are protected against corruption, strife, and instabilities by government stability and honesty.

Corruption and structural inequalities undermine the governing entity, preventing it from providing efficient governance for all. During these Covidian periods, all efforts should be taken to ensure that routine vaccination programmes are carried out in order to prevent the spread of other germs. In spite of this, we believe that such initiatives will be unsuccessful unless the Pakistani people, especially the rural poor, are properly informed about the need for, the components in, and the efficacy of vaccinations, as well as the very real risks of refusing immunisation. Some parents claim that their children still become sick after having been vaccinated; nevertheless, they need to understand that not vaccinating their children might lead to more VPDs being contracted by them. There is a need for the people to believe that their government is on their side and is not involved in plans and conspiracies with the West or America. As opposed to "reactive" coping techniques, other nations and Pakistan like it require "proactive" initiatives to boost vaccination acceptance and to successfully cope with upcoming difficulties, according to

the authors. Coronavirus has proved that we all live in a universal society, and that providing sufficient health care is both an international and a national duty.

Reference

- Abimbola, S., Malik, A. U., and Mansoor, G. F. (2013). The final push for polio eradication: addressing the challenge of violence in afghanistan, pakistan, and nigeria. *PLoS Med.* 10:e1001529. doi: 10.1371/journal.pmed.1001529
- Ali, I. (2020b). Impact of covid-19 on vaccination programs: adverse or positive? *Hum. Vaccin. Immunother.* 16, 2594–2600. doi: 10.1080/21645515.2020.1787065
- Ali, I. (2020c). Impacts of rumors and conspiracy theories surrounding covid-19 on preparedness programs. *Disaster Med. Public Health Prep.* 2020, 1–6. doi: 10.1017/dmp.2020.325
- Ali, I., and Ali, S. (2020). Why may covid-19 overwhelm low-income countries like Pakistan? *Disaster Med. Public Health Prep.* 2020:1–5. doi: 10.1017/dmp.2020.329
- Ali, I., and Ali, S. (2020). Why may covid-19 overwhelm low-income countries like Pakistan? *Disaster Med. Public Health Prep.* 2020:1–5. doi: 10.1017/dmp.2020.329
- Ali, I., and Davis-Floyd, R. (2020). The interplay of words and politics during covid-19: contextualizing the universal pandemic vocabulary. *Practic. Anthropol.* 42, 20–24. doi: 10.17730/0888-4552.42.4.20
- Ali, I., Sadique, S., and Ali, S. (2020). Covid-19 significantly affects maternal health: a rapid-response investigation from Pakistan. *Front. Glob. Womens Health* 1:591809. doi: 10.3389/fgwh.2020.591809
- Ali, S. (2018). *Indigenous Care and Cure Against Asthma: A Case of Gertic Health in a Sindhi Village*. M.Phil. Qualitative Thesis, Pir Mehr Ali Shah Arid Agriculture University, Rawalpindi.
- Asad, T., (ed.). (1973). *Anthropology and the Colonial Encounter*. New York, NY: Humanity Books.

- Blume, S. (2006). Anti-vaccination movements and their interpretations. *Soc. Sci. Med.* 62, 628–642. doi: 10.1016/j.socscimed.2005.06.020
- Chandir, S., Siddiqi, D. A., Mehmood, M., Setayesh, H., Siddique, M., Mirza, A., et al. (2020). Impact of Covid-19 pandemic response on uptake of routine immunizations in Sindh, Pakistan: an analysis of provincial electronic immunization registry data. *Vaccine* 38, 7146–7155. doi: 10.1016/j.vaccine.2020.08.019
- Escobar, A. (1995). *Encountering Development: The Making and Unmaking of the Third World*. Princeton, NJ: Princeton University Press.
- Fairhead, J., and Leach, M. (2012). *Vaccine Anxieties: Global Science, Child Health and Society*. London: Taylor and Francis. doi: 10.4324/9781849773690
- Farmer, P. (1996). Social inequalities and emerging infectious diseases. *Emerg. Infect. Dis.* 2, 259–269. doi: 10.3201/eid0204.960402
- Feldman-Savelsberg, P., Ndonko, F. T., and Schmidt-Ehry, B. (2000). Sterilizing vaccines or the politics of the womb: retrospective study of a rumor in cameroon. *Med. Anthropol. Q* 14, 159–179. doi: 10.1525/maq.2000.14.2.159
- Global Polio Eradication Initiative (GPEI). (2020). Global Polio Eradication Initiative (GPEI), Pakistan. Available online at: <http://polioeradication.org/where-we-work/pakistan/>
- Iqbal, S., Ali, I., Ekmekcioglu, C., and Kundi, M. (2020). Increasing frequency of antenatal care visits may improve tetanus toxoid vaccination coverage in pregnant women in Pakistan. *Hum. Vaccin. Immunother.* 16, 1529–1532. doi: 10.1080/21645515.2019.1705693
- Iqbal, S., Ali, I., Ekmekcioglu, C., and Kundi, M. (2020). Increasing frequency of antenatal care visits may improve tetanus toxoid vaccination coverage in pregnant women in Pakistan. *Hum. Vaccin. Immunother.* 16, 1529–1532. doi: 10.1080/21645515.2019.1705693

- Johns Hopkins University (December 10 2020). Coronavirus COVID-19 Global Cases. Available online at:
<https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>.
- Kaunert, C., de Deus Pereira, J., and Edwards, M. (2015). Thick Europe, ontological security and parochial Europe: the re-emergence of far-right extremism and terrorism after the refugee crisis of 2015. *Euro. Politics Soc.* 2020, 1–20. doi: 10.1080/23745118.2020.1842699
- Khan, S. (March 13 2020). Pakistan closes western borders, bans public gatherings as coronavirus cases rise to 28. *Dawn*. Available online at:
<https://www.dawn.com/news/1540587>.
- Mansoor, H. (2015). Over 75,000 children in sindh never received polio vaccine. *Dawn*. Available online at: <http://www.dawn.com/news/1204954>
- Miller, J. M. (2020). Do covid-19 conspiracy theory beliefs form a monological belief system? *Can. J. Polit. Sci.* 53, 319–326. doi: 10.1017/S0008423920000517
- Mushtaq, A., Mehmood, S., Rehman, M. A. U., Younas, A., Rehman, M. S. U., Malik, M. F., et al. (2015). Polio in Pakistan: social constraints and travel implications. *Travel Med. Infect. Dis.* 13, 360–366. doi: 10.1016/j.tmaid.2015.06.004
- National Institute of Population Studies (NIPS) [Pakistan] ICF (2019). Pakistan Demographic and Health Survey 2017-18. Islamabad, Pakistan, and Rockville, MD: National Institute of Population Studies (NIPS) [Pakistan] and ICF. Available online at: <https://dhsprogram.com/pubs/pdf/FR354/FR354.pdf>
- Reuters, A. (20 July, 2020). Pakistan resumes polio immunisation drive amid covid-19 threat. *Dawn*. Available online at: <https://www.dawn.com/news/1570155>.
- Roberts, L. (2020). Pandemic brings mass vaccinations to a halt. *Science* 368, 116–117. doi: 10.1126/science.368.6487.116
-

Scheper-Hughes, N., and Lock, M. M. (1987). The mindful body: a prolegomenon to future work in medical anthropology. *Med. Anthropol. Q.* 1, 6–41. doi: 10.1525/maq.1987.1.1.02a00020