

Polio Vaccination in Balochistan: Issues and Challenges

Vacunación contra la poliomiélitis en Balochistán: Problemas y desafíos
Vacinação contra poliomielite no Balochistão: questões e desafios

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Abstract

Like the condition of security and governance, health is also a major concern for Pakistan and there is a large population on an already insufficient medical treatment structure to cater for. Amongst various other diseases prevalent in Pakistan Poliomyelitis is one of the key concerns of the country with respect to medical situation. This research investigates the reasons behind the rejection of polio drops in Balochistan; weaknesses and efficiency of the polio eradication campaign and effects of cross-border movement and its governance between Afghanistan and Pakistan on the efficacy of the campaigns. The findings suggest that illiteracy, lack of motivation, religious interpretations, governance and security are the major challenges to the polio campaigns in the context of Balochistan.

Keywords: Poliomyelitis, Health, Balochistan, eradication campaign.

Resumen

Al igual que la condición de seguridad y gobernanza, la salud también es una preocupación importante para Pakistán y hay una gran población en una estructura de tratamiento médico ya insuficiente para atender. Entre otras enfermedades que prevalecen en Pakistán, la poliomiélitis es una de las principales preocupaciones del país con respecto a la situación médica. Esta investigación busca las razones detrás del rechazo de las gotas de poliomiélitis en Balochistán; debilidades y eficiencia de la campaña de erradicación de la poliomiélitis y los efectos del movimiento transfronterizo y su gobernanza entre Afganistán y Pakistán sobre la eficacia de las campañas. Los hallazgos sugieren que el analfabetismo, la falta de motivación, las interpretaciones religiosas, el gobierno y la seguridad son los principales desafíos para las campañas de poliomiélitis en el contexto de Balochistán.

Palabras claves: Poliomiélitis, Salud, Balochistán, campaña de erradicación.

Resumo

Como a condição de segurança e governança, a saúde também é uma grande preocupação para o Paquistão e há uma grande população em uma estrutura de tratamento médico já insuficiente para atender. Entre várias outras doenças prevalentes no Paquistão, a Poliomielite é uma das principais preocupações do país em relação à situação médica. Esta pesquisa investiga as razões por trás da rejeição de gotas de poliomielite no Baluchistão; fraquezas e eficiência da campanha de erradicação da poliomielite e efeitos do movimento transfronteiriço e sua governança entre o Afeganistão e o Paquistão sobre a eficácia das campanhas. As descobertas sugerem que o analfabetismo, a falta de motivação, as interpretações religiosas, a governança e a segurança são os principais desafios para as campanhas de pólio no contexto do Baluchistão.

Palavras-chave: Poliomielite, Saúde, Baluchistão, campanha de erradicação.

Introduction

Poliomyelitis is a disease spread through contagion of oral intake of fecal germs of the carrier. The disease is contagious and hence can take the form of an epidemic (Mushtaq et al, 2015). Pakistan remains the country where the incidence of Poliomyelitis is most common and several international health organizations have shown grave concern over the matter. However, the situation still prevails hence signifying that despite so many efforts and investments, there are still gaps existing in the polio eradication mechanism and initiatives that are hampering the effectiveness of the program (Guth, 2010). While mostly the effected person's legs are paralyzed, sometimes the neck and diaphragm muscles are also paralyzed. The people who are affected by this disease are mostly residents of backward areas and hence generally poor already (Nishtar, 2010). Physical impairment of the effected people renders them unable to make a living because most of the people with such background are daily wagers and laborers. The intensity of this disease can vary from mild that can be treated in a couple weeks' time to very severe that can cause death.

Pakistan is amongst the countries that have a political and administrative structure with a very narrow scope and localized mentality which means that the motives of the participants in the country are not wide spread and strategic by nature but are rather directed towards the constituencies of the participants with a very narrow intent. The purpose of the participants either public representatives or the executives of the state in this case is not to ensure the stability of the region through long term policy making and legislation but is more linked with reelection of these participants by focusing more on their own constituencies. Most significantly however, the level of corruption has become rather uncontrollable in the country with all the institutions like bureaucracy, legislation judiciary and executives all having been plagued by it (Khowaja et al, 2012). In addition to that, the bureaucratic behavior of the country's executive branch has been such that they have always been fond of getting posted and serving in the provinces of Punjab and Sindh with posting to Balochistan being rendered as a punishment for the person and hence an undesirable thing (Abimbola, Malik & Mansoor, 2013).

Another important thing to know as part of the Pakistan's demographic context is that Pakistan is a heavily urbanized country which means that the otherwise native rural population of the country has moved into the metropolitan cities of the country that were in their close proximities due to the fact that the living conditions, particularly those related with education, health and employment are far better in the urban areas of the country than in the rural areas. The people of Balochistan have been neglected significantly with respect to their needs and requirements by all the governments of the country since inception. Although being the largest province by area in Pakistan it has been tremendously ignored owing to its small population and lack of political interest by the governments (Javaid, 2010). Education and health provided by the state remains a largely lacked facility in the province and due to the fact that there is little literacy in the province several domestic level barriers originate in the provision of polio vaccinations to the children eligible for it. The section of the population that is well educated often finds it convenient to leave the province and head towards the larger cities of Islamabad, Lahore, Karachi and Peshawar where there are better facilities for health, education and safety and offer better opportunities for employment and a much securer future for their children (Closser, 2010).

Polio vaccination has been rendered as the most suitable and appropriate way of treating the disease through keeping it from happening. Polio vaccines are provided to the children aged from 3 months to 5 years so that their bodies generate ability to reject the poliovirus upon its entry into the body. Both the government and the general public have shortcomings in welcoming a widespread provision of polio vaccinations to the eligible children. This situation is worse in the smaller provinces of Pakistan like the Khyber Pakhtoonkhwa and Balochistan (Obregón et al, 2009). In addition to that, the fact that the border between Pakistan and Afghanistan is very porous makes it even more complex as an issue. Balochistan being situated alongside a very poorly maintained border with Afghanistan allows free and unaccounted for movement of people from Pakistan to Afghanistan and vice versa. This inter mixing of people also contributes towards miscalculations and under

effectiveness of the polio eradication campaign currently ongoing in Pakistan.

Previous literature sheds lights on different aspects of the issue. For instance, Tiefengraber in his article "Non-State Actors & Global Health Eradicating Polio In Pakistan" had identified the main problems faced by Pakistan in eradicating the polio virus from peripheries of Pakistan, which eventually obstructs the objective of eliminating the polio from the globe. Investigation demonstrated that the currently reappeared polio virus in Syria is similar to the one brought in to Egypt from Pakistan. And the underlying causes is the weak health system which results into non-uniform delivery of vaccines in underserved and difficult-to-reach areas of Pakistan, hence failing the overall program. Moreover, misinterpretations about OPV and doubts about the motivations driving the campaign rose, particularly in the light of other obvious issues such as understaffed facilities, poor streets and different sicknesses. Misconceptions such as OPV causes ailment in youngsters, it is ineffective, it can cause barrenness in males and females and lastly it is an arrangement to control the Muslim population, were also prevailing. Parental figures revealed being sick of repeated rounds of vaccination and doubted the OPV's efficiency, the circumstances are exacerbated by news blaming the organizers for utilizing low quality vaccines. Non-aggressive resistance developed because the families did not effectively oppose OPV but rather did not actively participate to vaccinate their kids (Obregón et al., 2009).

In addition, previous research also suggests that the 86% experts concurred that the polio eradication campaign is exceptionally connected with profiting. 73% experts were of the view that Direct Dis-imburement Method (DDM) had turned out to be one of the greatest issues which made postponed payments to the polio workers. Introducing this new payment method at this critical situation of polio eradication has created challenges for the program. None of the staff at UC level and zone level was advised about the procedure of DDM which caused immense dismissal of DDM installment method. DDM applies financial settlement to the polio worker's Bank account or authority Agents dissimilar to the past settlement approach of by means of health department. Polio teams were required to have Computerized National Identity Card, which was a test for most at the time, and DDM cards were to be managed by district health

offices and sent centrally that additionally caused delay in field team payments. During the interviews 73% of experts concurred that the most essential issue in polio eradication was the payment date being settled. The study recommended that in the event that we need to perform well in polio eradication campaign in Balochistan, we ought to encourage paying the polio workers on time. Postponed payments through direct dis-imburement have specifically lessened the number of teams to be associated with the campaign. As a result fewer teams are available in the field to perform more work than their capacity. A 53% of experts proposed that the release of funds to hire vehicles, to buy markers and purchase ice from ice plants ought to be discharged ahead of time, at least a specific amount (Fetene, 2013).

To the same note, flawed organizational structure of the polio vaccine activities is to be for the most part reprimanded for the non-annihilation of the polio infection from Pakistan. He underpins his contention through a public relations theory which expresses that if there should be a situation of crisis people will probably append responsibility on outside elements than inward ones. Individuals consider others accountable for their failures. We can also see this blame-game in the anti-polio initiatives. There are three principle partners that should make these activities fruitful: INGOs; the administration; and the media (Shah, 2016).

Afghanistan and Pakistan are having a 2430 kilometer long porous international border on which there is a large-scale to and fro movement of the people on daily basis. Epidemiological data assembled on either side of the border indicates the presence of wild poliovirus; thus the two nations constitute one epidemiological piece and need to cooperate to stop polio transmission. Supervisory systems at the borders need to be built up and consistent supervision by the provincial and district groups should be made to make these posts feasible (Government of Pakistan, 2014).

Method

This research investigates the reasons behind the rejection of polio drops in Balochistan; weaknesses and efficiency of the polio eradication campaign and effects of cross-border movement and its governance between Afghanistan and Pakistan on the efficacy of the campaigns. Through a quantitative approach, the unit of analysis in this study is individual and the

most appropriate respondents to provide useful insight into the issue and to answer the questions. 120 respondents were selected through snowball sampling and random sampling. The age of the respondents spanned from 20 years to 50 plus years. The majority of the respondents were within the age bracket of 31 to 50 years as indicated in the above graph. This shows that the mature members of the family responded. The data was analyzed through SPSS.

Findings
Details on the polio vaccination process include the frequency and the possibility of the children being vaccinated. The responses collected show that out of 120 families only 77 have vaccinated their children while the rest of the 33 families did not bother to do so and the 10 families didn't wish to answer. The rate of the vaccination process being a failure is alarming given that such small sample have mixed results. Moreover, when acquired to why they have not vaccinated their children the responses were also mixed. Most of the responses implied that they did not trust the process or the medicines. Some didn't wish to tell the reason because they were not sure but consider is safe to follow the majority or their general perception towards the product. The rest who did get their children vaccinated however, showed positive result that they consider the process beneficial to their children and an obligation to their government and authorities.

Inquiring about the role of the government, only 33 out of 120 families said that they do know of the government awareness programs while the 65 families never had the experience of the awareness programs and the rest never realized there was one such thing designed for general public. This shows that the progress is being designed and can be effective but these programs are not being promoted as there should be so that more and more audiences can be attracted to it and attend the sessions. When inquired if the government should improve its efforts in the designing and promotion of the awareness programs the responses were again mixed. 88 families out of 120 implied that such effort should be made for the benefit of the public and for the benefit of those who are not aware of that such program even exists. The 32 families however implied that there is no need of further efforts mainly due to the mistrust they have towards the

government or out of fear that such material will spread and harm their traditional beliefs and values.

The next inquiry was regarding the frequency of the visits of the vaccination teams to the family's doorsteps. The responses in this part were mixed, 71 respondents said the polio teams visits them frequently. This implies that sometimes it is not easy of the resources to reach out to the families that may or may not be agreeable to the vaccination process. The 17 families however showed that the frequency of the polio vaccination is often and maintained throughout the time irrespective of the fact that they get their children vaccinated or not. 5 families suggested that the polio vaccination teams rarely visit them, which is alarming and highlights the need to increase the number of resources on the teams so that more and more families can be sought out and reach in the limited time. The frequency of the polio vaccination teams to visit their respective areas is about after event one and half month in many areas which is acceptable but it is mainly crafted to make sure the less possible number of children are missed on polio vaccination.

Regarding the time, the families were inquired if they were vaccinated in time. The 76 families from 120 showed positive results while the rest 44 showed negative results, which means that the number of resources increases and the frequency to visit the respective rural areas is required. Moreover, it will be beneficial to establish small-scale vaccination camps within the rural areas so that the travel cost and the vaccination loss due to expiry is reduced and the rural communities are vaccinated from their own local vaccination camps on time and as frequency as possible.

Furthermore, regarding the sufficiency of the vaccines implied that most of the families, 65 out of 120 implied that there are never sufficient vaccinations available with the polio vaccination teams for their entire neighborhood. This suggests that there are more number of families that are willing to get their children vaccinated but the supply of polio vaccination is limited. The polio vaccination teams and official required more vaccinations and process time to make sure there is less expired product in the process.

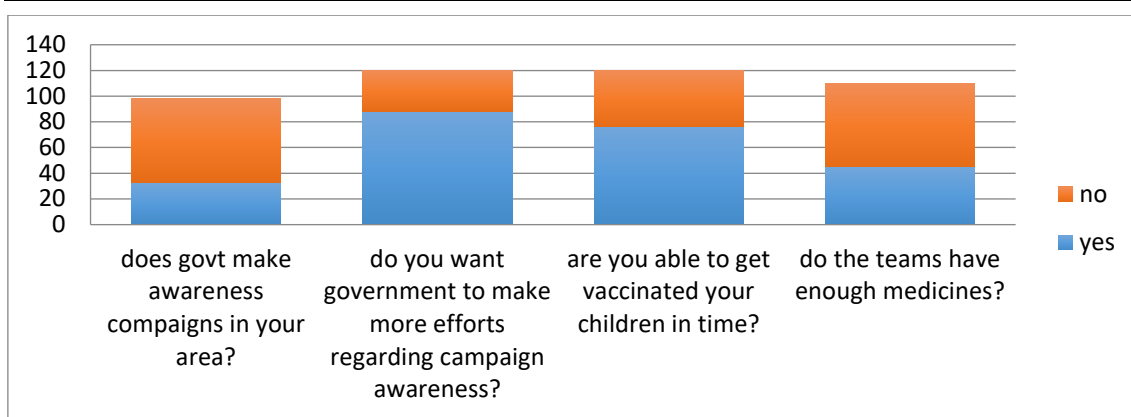


Figure 1- Responses to the operational level questions in the survey

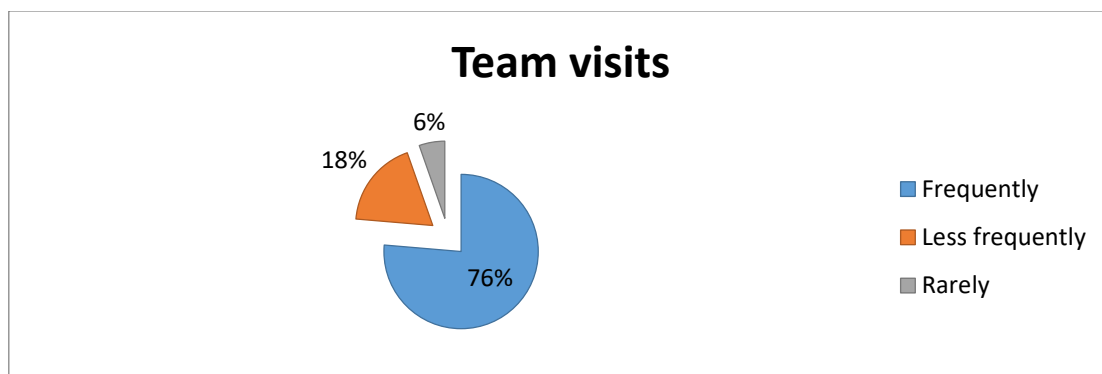


Figure 2 – How often polio teams visits their áreas

Regarding the security and safety of the polio vaccination officials, the responses of families revealed that most of the vaccination teams have good security measures in place. 95 out of 120 families said that there are official and arm guards with the polio vaccination teams while the rest implied that the security is either poorly in place or not sufficient or not provided at all to e vaccination officials.

Regarding the safety measures that are in place for a reason of the local militant’s attack and the general public harassment of the polio

vaccination workers especially female works, the families were asked if there is actually a need of safety measure in place with the polio vaccination teams. In response to these the families implied that the safety measure is necessary and the teams should have security with them. This points out as though by 70 families out of 120 that the threat to the polio vaccination teams persists and they should be guarded for the sake of their own safety and for the sake of the families that are willing to get their children vaccinated.

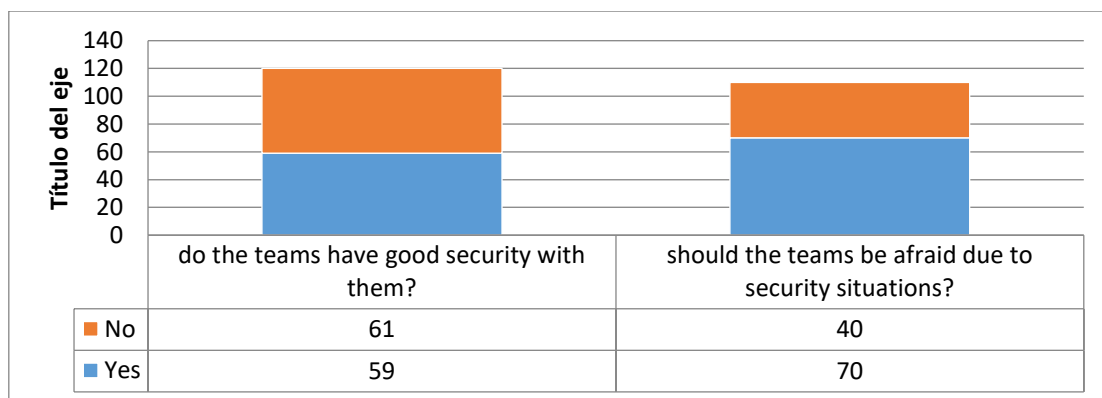


Figure 3 – Responses to the security related questions

The question regarding the boarder management with Afghanistan and other nations pointed out that the general public also has greater concerns regarding the boarder management and their ever-growing population. 40 out of 120 families implied that the management at border is not effective and should be improved. Some of the families also suggested that they themselves travel across boarder for personal or business reasons (34 out of 120) while 8 families refrained from answering.

On the effectiveness of the team working in the polio vaccination and the identification of vaccinated children, the families were asked if their children were marked on their thumbs for vaccination. 78 out of 120 families answered that their children are being identified but this rest recorded opposite results which indicate the lack of ability in the vaccination team part. Moreover, the 40 families out of 120 also suggested that their identification and the family number along with other details are never recorded which means they are never part of the database which is to be maintained and kept by the polio vaccination teams.

Discussion

The issue of polio vaccination is related to the public policies and how the policies are developed, established and implemented. The research work of Dye (2001) argues that the United States is the best-known democracy system in the world but even in the policy making the decisions is control and applied by the top-down approach. The public policies are the representatives of the benefit provided to the communities and the citizen of the nation. The public policies represent the interest, preferences and the values of the governing body that is working for the benefit of the local communities and citizens. The research work of Dye (2001) explains that the effect of the policy making and the implementation are different. The development of policies is controlled by the governing bodies but the implementation is influenced by the local communities but still under the control of the governing body. This addresses the issues that the implementation and the establishment of public policies to be addressed differently when it comes to the interest of the communities.

The research work from Lipsky (1980) address the issue of the administration and

implementation of the public policies in terms of the local level authorities. The researcher stresses that the 'street level bureaucrats' play the most important role in the implementation and acceptance of the public policies. These officials are the controller of the policies significantly. Hence, their rules and laws direct how the policies are to implemented and even accepted or not. This gap between the policy objectives and actual implementation address the factors of how much gap can be identified and overcome. The issue that are pointed out as the causes of the gap are the local authorities discord with the government, the value and interest of the local community that do not fully align with the government rules and laws as well as the treatment of the government with the local communities (Hill and Hupe 2002; Sabatier 1999).

Moreover, the sociological theory and the social structure theories also address the issues of failure of the public policy implementation in the countries. The research suggests that the failures occur due to the lack of the understanding of the local community's social and sociological understand of the public policy implemented (Gilson and Raphaely 2007). The research also addresses the issue of the organizational management that sometimes lack in the process of implementation hence failing the whole system of the public policy. The currents study addresses the similar issues of the lack of implementation in the Balochistan community due to the failure of the local teams to be able to implement the process fully. This is because the teams are notable to help the local due to resistance.

Though literature have addressed the reasons of the resistance of the local community is the implementation of the public policies, the research also covers the suggestion and recommendations that can be implemented before hence the policies are introduced to the public. These recommendations include the education and participation of the local community members in the public policy system of implementation and design. This way the local community members develop their trust with the governing authority's officials and help them learn the local communities needs and fear which can then be treated with education and proper help (Ingram, Schneider & DeLeon, 2007). The research provides the testaments on how the government can develop the positive and negative behaviors amongst the local

communities through public policy making and developing a bridge of understanding with the targeted population.

In the context of this study, the findings reveal that the local communities are being educated in the vaccination process. Moreover, the study also reveals that the local communities are influenced by the religious Fatwa and the local community's religious leader's influence led to the vaccination process. The religious beliefs are very strong in the rural communities of the Balochistan hence the polio vaccination official's teams have targeted the religious leaders to help spread the word for the vaccination. This has somewhat helped the polio vaccination teams to deal with their resistance of the families that do not allow the children to be vaccinated.

The executive level management and operations are dependent on the development of the process. The process of the vaccination team for polio working in the Balochistan is dependent on the management resources and the planning provided by the government. The assessment of resources in the current study however, showed that the government efforts toward the development and success of the polio vaccination teams are not as effective as they should be. The resources provided by the government are limited along with limited funds while transportation and the cost of the vaccination process is very expensive. Moreover, the number of team members in the vaccination process is very limited which means that these team members are assigned larger portions of lands to cover in the minimal time which is hectic and also risky.

Some suggest that the issue of the management and the resources are due to the corruption in the vaccination teams. The funds provided are not fully allocated to the teams and the resources required in the process. The control of the funds provided are with the local authorities that find means to exploit the resources and use them for their own benefit. The issues of transparency have been identified in the process of vaccination for polio and many other health related services. The local officials who are assigned the funds report the full application of the funds assigned but when acquired, the development of the vaccination process is poorly equipped. The officials of the vaccination teams also identify that the resource they are provided are not sufficient to meet the high number of children in the Balochistan communities. The hiring is done and the resources neither are present on the site nor ever report to the official. These ghost employees are given their wages and benefits as

under the polio vaccination organization management and policies but are never present to work. This creates issues of trust and negative behaviors amongst the team members who are willing to work but have to take the burden of the ghost employees as well.

The other issue revealed in the study is the mismanagement of the resource that should be sufficient for the process of polio vaccination. The mismanagement is due to the lack of training in the management of the resources or the lack of abilities to fully control the situation. There are less number of resource assigned to the polio vaccination and even lower to plan and map out the process, these resources are not fully equipped with the skills and ability to address the risks and issues of the process that are later on identified and need to be dealt with by applying more of resources.

The current situation in the Balochistan is closely related to the Influential theories of the public policy process. These policies determine and address the issues of the local administrative control being higher than that of the government that developed the policies. According to Kingdon (1984), there are multiple streams to the public policy process as well as the top-down and bottom-up implementation (Sabatier 1999). According to the Kingdon (1984), multiple stream theory process, there are many factors that influence the implementation of the public policy in the administrative base. These streams include the factors of extent of problems, nature of policies and politics control and division. The problem stream includes the broad problems and conditions facing societies. These problems include the factors like the trust on the government in this case of Balochistan. This stream also addresses the issue to the current unrest in the local communities due to terrorism and disruption in the law and order. These problems require public attention as well as the working from the government to address the law and order situation to have complete control over the safety of the polio vaccination teams as well as the local communities that are willing to give their children the polio vaccination.

The policy stream addresses the national problems like situation in the Balochistan is to be addressed. The government avoids managing the policies and the proper laws in the local Balochistan communities. This avoidance has not benefit the overall country where the local communities in Balochistan have developed deep-rooted hatred towards the rest of the country as they think they are being treated unwell. The stream of the policy contains the

ideas to address the issues of the problems in the first streams. These technical ideas regarding the issues of public safety, development and education as well as control of the government more influential than the local militants in the Balochistan can help reduce mistrust in the local communities.

The political stream has the components of national mood and social pressure as well as the political transition. When there is sufficient window of opportunity and success the government tends to act and develop better solution to solve problems and also control the political stream but it is not necessarily a success every time. The research of the Balochistan political unrest shows that the issue is not new. The issues of the government with the local authorities and the issues of the local communities' mistrust towards the officials of the polio vaccination teams mirrors the reaction to government treatment on other factors like education and safety.

There have been many research works on health sector and policies making that have applied the Kingdon's theory to explain how particular health issues can develop and emerge in the political situations and how such situations can be controlled and treated. Further research work in the Kingdon's theory of streams added the additional elements into the political stream. The most recognized work of Reich (1995) identified additional elements that are relevant to the streams of politics and the problem solving factors attached between the political and the problem streams. These factors are economic, scientific and politician politics as well as managerial, organizational and symbolic.

This aligns with the current study of the Balochistan local communities being affected by the local militants that are against the practices of the government and advancements offered by the government to keep control on the lands and the resources they claim to be theirs by law. The polio vaccination teams are also affected by the terrorism and threats advanced by the local militants. The process of polio vaccination is greatly affected by the members of the local militant forces and those who follow them either out of their strong believe in local militants as their saviors or out of fear. The polio vaccination teams are threatened and often subject to violence in some of the cases that were created strong policies to provide safety from the government to help avoid such incidents in the past also enraged the local communities for allowing the armies and police to be patrolling

their streets. The issue here is of mind set and acceptability of the local communities that are sure that they are separate from the rest of the country and have their own different set of rights. The government laws hold on all of the boundaries of the country and must be followed but the influence of the local militants and the forces are higher than the government influence which creates one, clash between the community members with the polio vaccination teams, and second, creates more gap between the two factors to be able to understand that these polio vaccinations are actually planned to help the local community have better future.

From the theoretical perspective, the equilibrium theory discussed by Baumgartner and Jones' (2010), focuses on the issues of policy-making process and how such process can be stabilized with minimal or incremental policy change. The rapid transformation through which the Balochistan community is going through due to the large number of immigrants crossing the borders legally and illegally demands that the policy is to be changed and designed according to the need of the current number of community members. The incremental changes in the local policy for the polio vaccination is required at this stage to either separate the immigrants on the entry level to be vaccinated or to keep track of the immigrants crossing the borders which is an even difficult task than the first one.

The equilibrium theory presented by Baumgartner and Jones' (2010) has two concepts: the policy image and the policy venue. The policy image is the way the problem is understood and the solution is conceptualized. The policy venue is the set of factors that can affect the solution to be implemented. In this case the Balochistan borders being used in the daily immigrants in the problems and the factors associated with the policy venues are the illegal immigrations, smuggling, and the issues of vaccinations that are not regulated and cannot be in the case of those crossing the borders without any documented proof. The policy image in this case is challenged with the drastic changes in the communities of the Balochistan not only due to the immigrants but also due to the local community resistance that feeds into hatred for the government and any of their representatives.

The policy venues however are not fully discovered and addressed in this case and need to be solved so that proper implementation of the solutions devised by the government can be further improved and applied. The equilibrium

theory addresses the issues that can affect the balanced state of the policy and the solutions. In the case of the Balochistan the factors of the policy venue have affected the balance and there is need of better or separate policies to address the polio vaccination for the local communities and the citizen of Pakistan and those who are crossing the boarders. Hence, the prime issue in the current study regarding the polio vaccination is the lack of ability to understand new problems faced in the communities and how they can be removed.

Another factor to be considered here is that the polio vaccination is harmless and cannot be identified in the children that have been given the vaccination from those who have not been given the vaccination for years. This is a major issue that is why the frequency of the vaccination has been increased which means that every month the children are recoded and vaccinated. The new children come in the record and even in some cities the pictures of the vaccinated children are also recorded to make sure the vaccination system is actually taking place and the vaccines are not destroyed without any one vaccinated- which has one of the initial issues in the polio vaccination process.

Though the new system is recording the vaccinated children by taking in account the details of their parenthood, their family number assigned to the citizens, their pictures and even marking their thumbs, the efforts are insufficient when it comes to the assessment of the immigrants. The immigrants who avoid the contact with the government agencies and those who are not willing to be vaccinated never come forwards with their children. These children in the future are to become part of the communities and may develop the polio effects in their future generations.

Conclusion

Findings suggest that the children are not vaccinated due to the belief of the local communities that such vaccination may develop long term illness and health issues in the future. The misconception is also fuelled by the local pharmacists and physicians and faith-healers who offer cheap traditional natural herbs as medicines to the local communities. The reason of the mistrust is also the misconception that the government is trying to poison the individuals because of many social and political influences that have develop deep rooted hate towards the government and its officials. This study also found that, according to some of the polio

workers in Quetta, the untimely payment of wages has also damagingly affected the efficacy of the campaign. Pay, safety and performance are the foremost issues that are faced by the vaccinators. The remuneration of a vaccinator is a mere Rs500 per day. Which is a sum very little to be lived upon and risk one's life. Another factor covered in the current study is the issue of immigrants entering to Pakistan from Afghanistan. These individuals are not vaccinated in their own areas before they travel and hence pose a threat to the entire polio vaccination campaign. But the issue here is that there are no policies to regulate these individuals or to encourage them to come to the vaccination camps and get their children vaccinated. The large numbers of immigrants as well as the local community children are not given any identification to make sure they are being vaccinated that is why the vaccination frequency has been increased but still it is not sufficient to cover the crisis.

Following are some of the recommendation of the policy makers regarding the issues faced by the polio vaccination teams in Balochistan. The first policy is relating to the managerial stream as discussed in the theory above the management system is not effective in polio vaccination teams. The transparency and the issue of funds being disposed in the accurate places are not fully reported and controlled in Balochistan. The factor of corruption is very commonly pointed out where larger funds are involved. As the polio vaccination process is very costly it is best to manage the resources according to the best of the teams that are serving the government policies and those who are to benefit from it. The management transparency should be cleared along with the human resource hiring process that is urgent to the polio vaccination process. The Balochistan's political situation is not friendly to the effective implementation of the funds and resources provided by the government. In this way the government needs to develop the authorities that are able and skilled in dealing with the issues of politics as well as have rights and powers to take effective decisions regarding the issues on social and structural level within their teams. The empowered structure will allow the local teams to be able to point out and address the issue that cannot be explored and experienced by the government officials making decisions from afar.

The practice stream of the polio vaccination should be a designed structure to deal with the issue for polio vaccination solely. There are many health care services that are affected by local

militants, religious leaders and the local chieftains' influences. The health care sector should be considered and practiced free from the influence of the local parties and under the law which abides that every citizen of the Pakistani community has the right to get proper health care services provided by the government. The free of cost vaccination camps should be established and the people should be allowed to reach out irrespective of the facts that they are immigrants or local citizens.

The routine childhood immunization incorporates a set of planned immunizations directed from birth to 15 months in order to guard the child from illnesses like diphtheria, pertussis, measles, pneumonia, loose bowels, tetanus, meningitis, polio, tuberculosis, and hepatitis B. In Balochistan majority of the basic health units (BHUs) are closed. There are no proper facilities and medical doctors available in the peripheries of Balochistan and hence non-technical staff is handling the BHUs. The routine immunization coverage stood at 51pc as per the latest Pakistan Social and Living Standards Measurement of 2014-2015. Which is very low and almost half of the children are still left vulnerable and exposed to these deadly diseases. Therefore, there is a dire need to accelerate and improve the routine immunizations for children in Balochistan.

Policy is relating to the surveillance. It was observed that many families and vaccinators are agreed upon the upon the fake finger marking, which is a win-win situation for both the parties i.e. the family and the vaccinator. The children who were refusals previously are still not vaccinated but in papers they are covered and hence cannot be detected. Therefore, the government and the donor agencies should improve their surveillance system. They should send non-local teams i.e. switching teams from one district to another, who are not partial and do not come under any pressure. Also the authorities should implement a strong system of cross checking and maintain zero tolerance policy for inefficiency. Only through improved surveillance the transmission of polio virus can be handled.

The poor security state is the most significant hurdle in polio eradication efforts. The provincial government should make resolute purpose against militancy and take conclusive actions in volatile areas to improve the anti-polio drive in the far furlong areas of Balochistan. They have to prevent the fear of both health workers and families from reaching out to each other, So that

the children do not have to suffer in this senseless spate of violence. With the support provided by the armed forces in implementation of the campaign, the security related challenges can be effectively addressed.

Balochistan is a pre-dominantly rural area where tribal leaders, chieftains and religious leaders have a significant say in the state of affair of that area. These tribal and leaders are manipulative and most of the times they use these polio campaigns for their personal interests. They demand to recruit their own people in the campaign or there would be no campaign in the area. Many a times the anti-polio campaign is hampered by these chieftains. Therefore, to avoid this particular obstacle the government should maintain high level engagements with them, take them into confidence. The authorities should also garner religious support from imams and mufti(s). These religious scholars should issue Fatwa (a decision on a state of Islamic law given by an expert) in favor of anti-polio campaigns and instruct the people to vaccinate their children, in khutba (a formal occasion for public preaching in the Islamic tradition).

The education system for the awareness of the polio vaccination and other health care services are not designed. There is local management system that develop written materials to help understand the reason of polio vaccination but it is not enough. Community awareness sessions should be conducted on regular basis and the local communities should be encouraged to come forward with their concerns regarding the vaccination and other modern medicines. This way the local government officials will be able to address what causes the local communities problems in understanding the vaccination process. This process will also remove any religious and social misconception regarding the vaccination being poisoned or haram.

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