Anthrologica

Pashtun Communities and Polio Vaccination in Pakistan

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Anthrologica is dedicated to maximising the benefits of the research undertaken and to ensuring that this report is of practical use to UNICEF, Country Offices and partner institutions in Pakistan and beyond.

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Executive summary

Poliomyelitis is a severely debilitating disease, causing permanent paralysis in many affected children and sometimes death, and remains endemic in Pakistan. Polio vaccination campaigns have run into challenges in the form of both absolute refusals and under-vaccination of children due to missed opportunities. The reasons for compromised campaign coverage within Pakistan are complex, and are determined by socio-cultural, economic, political and military contexts, inclusive of community-level factors. As a result, UNICEF has selected several groups of high-risk populations to be the focus of this study: the Afridi, Wazir, Mohmand, Bajaur (Tarkanis), Dawar and Suleman Khel. The majority of these Pashtun communities are based in or originated from certain regions within the Federally Administered Tribal Areas (FATA), and to a lesser extent Khyber Pakhtunkhwa (KPK), in particular Waziristan, Peshawar, Mohmand and Bajaur.

The report has seven main chapters. In the '**Introduction: Polio in Pakistan**', the context of Polio in FATA and KPK is considered in detail. Polio eradication is officially directed by the Government of Pakistan and its structure is tied closely to the Ministry of Health. The work of immunising children with Oral Polio Vaccine (OPV) during campaigns is largely carried out by government health staff, with some additional 'volunteers' hired during the campaign on a daily rate basis. A number of international partners are also involved in polio eradication and provide much of the funding and administration for the programme at national, and sometimes sub-national, levels. The significant international involvement in the polio eradication programme has contributed to its targeting by militant groups. There is much talk of 'rebranding' polio as a Pakistani and Muslim project aimed at protecting Pakistani citizens. Yet, given the current structures and long history of foreign involvement in polio eradication, transforming the national polio eradication effort into one that is perceived by communities as a Pakistani and Muslim endeavor will not be simple.

It is worth noting that across the whole country, polio refusals in Pakistan are as low as 1% of the population—lower in fact than in many high-income countries. Pockets of refusals in areas of ongoing polio transmission remain a real concern, however, particularly those in conflict-affected, politically unstable and difficult to reach populations. Pashtun communities that refuse OPV can be considered as three main categories: refusals of all vaccines; under-vaccinated children; and refusal of OPV during Polio Supplementary Immunisation Activities (SIA). Community fear and refusal of polio vaccination is also reinforced by repeated polio vaccine campaigns. This includes campaign fatigue and concern for children who have received repeated doses of OPV. Communities concerned that OPV is used as an ulterior motive, particularly in the wake of the widely publicised case of the CIA using a vaccination programme as part of their covert operation to locate Osama bin Laden, often question polio workers about their need for repeated visits.

Parents also cite distrust and frustration in what they perceive to be misplaced priorities in government service provision. Health workers frequently report being asked why the government only focuses on polio, while other prevalent diseases like hepatitis and malaria, are not targeted for control and eradication. The inability of Pakistan's public healthcare system to provide quality curative services, especially in FATA and KPK, has resulted in its low credibility. Polio vaccines are not experienced in a vacuum; people's reactions to polio vaccines are clearly tied to their experiences within the broader health system, and in relation to the government in general. Community strategies might therefore benefit from addressing communities' enduring concerns not only for polio, but those diseases which remain unmitigated or untreated by public, private and non-governmental sector initiatives.

Cultural norms around gender further complicate healthcare choices. Mothers refusing OPV for their children often state that the decision was not theirs but was made by their husbands. Such gender bias is perpetuated by low investments in education, economic opportunities for women and the absence of pro-gender laws and law enforcement. Also, lack of trust in the people providing vaccinations feeds into SIA-

specific refusals. If vaccinators are perceived to be too young or of the wrong gender, ethnicity or class to be trusted, this impacts the acceptability of the vaccine.

The second chapter, '**The public health sector in KPK and FATA**', presents an overview of the public health sector in the two areas. The public health sector is administered by the Department of Health in KPK and by the Directorate of Health in FATA. The Federal Government provides some tertiary services, financing, and communicable disease support. At the District level, the Department of Health provides primary and secondary level health services, along with their staffing and management. Preventative healthcare services, such as polio and routine immunisation, are managed at the provincial level but implemented at the district level. The Directorate of Health services in FATA are organised similarly to those in KPK.

In 2011, the Federal Ministry of Health and the majority of formerly centralised vertical programmes, including the Expanded Programme on Immunisation, were devolved to the provinces. Ambiguities and uncertainties concerning the transfer of power from federal to provincial and then district level health systems have meant that the process of devolution has been erratic and fraught with challenges. Recent studies also confirm that because district health systems are frequently under-resourced, under-staffed and mismanaged, they are unable to fully or effectively act on the expanded responsibilities allocated to them through the process of devolution. There has been little corollary emphasis on the importance of civil society engagement for expanding and strengthening local health systems and services, or reducing the socio-economic, political, ethnic or gendered inequalities which inhibit collaboration between the health sector and local populations. The Department of Health in KPK and the Directorate of Health in FATA are yet to develop sufficient community feedback and accountability mechanisms.

Building on this operational context, the chapter considers the coverage, quality and cost of the public health sector services and the impact of conflict on both the health systems and its provision of care. It provides an overview of key health indicators and concludes with a discussion of health-seeking behaviours drawing on evidence from a range of qualitative research.

The third chapter, '**Socio-cultural and political context for select Pashtun communities in FATA**', explores the cultural, political and socio-economic lives of the select groups in light of the challenges that polio vaccination programme have faced amongst these populations. One of the challenges of looking at these social groups is the extent to which migration, both international and domestic, particularly to KPK and urban centers, has moved many individuals from the areas that they are associated with historically. This is particularly an issue when considering how such movement may impact polio reservoirs. While there is only limited ethnographic material on these groups within FATA, it is possible to begin asking questions about what shapes these communities' attitudes towards vaccination campaigns.

Instead of some culturally predetermined condition that makes these tribes particularly resistant, evidence suggests that social practices, coupled with deep historical trends and more recent economic and political upheaval, have made these groups more resistant to outside national and international health campaigns. In particular, vaccination programmes need to consider the ways in which the past decades of conflict have intensified the fragmented social and political nature of these groups and what this may mean for health initiatives. There is a need to move beyond typical stereotypes of Pashtun groups, particularly since the majority of work done in recent years on Pashtuns in Afghanistan and Pakistan 'has been produced to respond to specific military or policy requirements'. The recent American drone war in the area, Pakistan's on and off military campaigns in various parts of FATA and KPK, and the widespread displacement of Pashtun groups in other parts of the country mean that this variety of experiences must be taken into account. This chapter attempts to build on the small but growing body of work by scholars, journalists and research organisations that moves beyond views of the local population as static and FATA and KPK 'as a closed system resistant to change'.

The chapter is divided into five sections. 'The FATA context' presents an analysis of socio-economics, religion and beliefs, and women and family structures. 'Internal social and political relations' explores descent and division, and leadership. 'External factors' addresses historical context, the importance of the

border, and relations between the Government of Pakistan and the international community. The penultimate section, 'Recent instability' considers the insurgency in FATA and American drone war, and the final section 'The effects of the recent instability' discusses migration and displacement, suspicion of Government and international efforts, and relationship between communities and health programmes.

The fourth chapter, '**Profiles of select tribes**', focuses on the six select groups of Pashtuns from the FATA and KPK area (Afridi, Wazir, Mohmand, Bajaur (Tarkanis), Dawar and Suleman Khel) and considers how social norms and recent history may be shaping attitudes towards polio vaccination programmes. Since the majority of these groups originate from and still reside in FATA, the focus is on this region, although reference is also made to the growing number of these communities now residing in KPK and elsewhere in Pakistan. The lack of tribe-specific data and thorough recent ethnographic studies makes the available information uneven. These profiles are therefore provided primarily as a means for raising questions and key considerations about local socio-cultural and political conditions and how these link to and influence attitudes towards vaccination programmes.

The fifth chapter, '**Confronting Polio in Pashtun communities**' starts with a discussion about Polio community 'reservoirs'. Looking at the current increase of polio within this socio-cultural and political context reveals some concerning trends. Amongst the complex factors discussed, the Taliban's ban on polio vaccination has contributed to an increase in cases in FATA, and, through migration, an increase elsewhere in the country as well, although it is important to put this reservoir in the perspective of the millions of children in the rest of Pakistan who are accessible but poorly immunised. Insurgency affects polio eradication efforts in other ways besides closing off children to vaccination. In particular, the targeting of ground-level health staff by militants has impacted the programme across the country. While conflict is an important contributor to the dynamics sustaining polio transmission in Pakistan, it does not act alone. Poor health and sanitation systems, a lack of accountability at many levels, inequality and poverty, all these are also contributing factors. The phenomenon of entire villages or neighbourhoods refusing polio vaccines is now rare or nonexistent. The ultimate choice to accept or refuse OPV is nearly always made at the individual or household level, suggesting the need for a more targeted approach to refusals.

The second section of this chapter presents two recent innovative and creative programmes that attempt to address polio eradication in conflict-affected areas and populations. Both go beyond the traditional campaign mode to address Polio in its broader context. Since Taliban and other anti-government targeting and opposition to polio vaccination is primarily political and driven by polio eradication's high profile, these programmes make an important attempt to place polio vaccination back in the context of broader health services. The first, *Sehat ka Insaaf*, was developed by the government of KPK and offers an expansion of the number of health services offered during campaigns. Along with a wide range of other vaccines, it also provides hygiene kits with items like soap and was considered a success by external observers. A second, conceptually related initiative is the expansion of Health Camps that provide routine immunisations alongside polio vaccines and a wide range of other health services, including the provision of ORS to treatment for malaria. This approach avoids the politicisation of polio vaccines, and provides parents who might otherwise refuse a reason to embrace polio campaigns.

The people who do the work of door-to-door social mobilisation and vaccination in Pakistan fall into three major categories: employees of the government health system; so-called 'volunteers'; and social mobilisers contracted by UNICEF. Each of these groups has different backgrounds, motivations, and needs. The chapter concludes with a discussion of factors that motive social mobilisers and vaccinators including how to support their commitment and dedication to Polio and routine immunisation.

The sixth chapter presents a series of '**Key considerations**'. Based upon what we know currently about the growing number of Polio cases in Pashtun communities and the socio-cultural dimensions, public health conditions and political context, the need to continue vaccination efforts among Pashtun communities is evident. It is also clear that the campaigns need to be designed more critically to address the unique socio-cultural and political contexts in which they operate. This should include both new approaches to programming and a rededication of other efforts. Key recommendations are discussed: i) take a more

holistic approach to health, particularly in Pashtun areas where health services are already limited; ii) move towards more flexible methodologies that take into consider local community differences; iii) acknowledge that OPV refusal is not about culture in the sense of a series of static beliefs or traditions, but comes from evolving and unstable political and social conditions that shape individual choices about health; iv) understand attitudes towards international events that are shaping the local realities of residents in FATA and KPK; v) take into account the social and political situations of many of the Pashtun tribes living along the border; vi) ensure that programmes are specifically tailored for displaced Pashtun tribes; and vii) build on Pashtun values and norms to make campaigns more relatable.

The concluding chapter considers '**Next steps**'. Given the challenges polio vaccination campaigns are facing among certain Pashtun communities, there is a need to gather more systematic data about specific communities and how they interact to polio vaccination campaigns. The chapter summarises suggestions and key questions in relation to conducting qualitative research on polio with Pashtun communities in FATA and KPK. The chapter addresses methodological issues, particularly aspects of research design and poses specific gaps in knowledge that future fieldwork could attempt to resolve including questions about the local cultural and socio-economic contexts; local and regional differences and similarities; and programme effectiveness. It concludes by asking a series of broader questions about the positioning of UNICEF in polio vaccination, research and programming.

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Introduction: Polio in Pakistan

Poliomyelitis in Pakistan: overview and epidemiology

Poliomyelitis is a severely debilitating disease, causing permanent paralysis in many affected children and sometimes death, and remains endemic in Pakistan. The incidence of poliomyelitis cases in Pakistan is largely seasonal: cases predominate from October to January, despite intensive vaccination campaigns in the low season to halt transmission (O'Reilly et al. 2012). Since approximately 2005, cases of poliomyelitis have become increasingly geographically restricted, and regions within Balochistan, the Federally Administered Tribal Areas (FATA), Khyber Pakhtunkhwa (KPK) and some areas of Karachi have reported the majority of cases (Farag et al. 2014, 973-977). The geographical restriction of cases became even more extreme in 2013-2014 when 69% of all cases were reported within FATA. With the recent expansion of environmental surveillance, however, there is increasing evidence for extensive circulation of poliovirus in most regions of the country (Alam et al. 2014).

The crisis created by widespread polio transmission in 2010-2011 led to the development of the 2012 Enhanced National Emergency Action Plan (NEAP). Owing to continued transmission of polio in several regions and persistently low population immunity despite many immunisation campaigns, increased governance has been advocated (IMB 2014). 2014 saw the development of an additional 2014 NEAP, superseding previous versions (Ministry of Health 2011). Additionally the Prime Minister of Pakistan has created a Focus Group and National Emergency Operations Centre. This and additional provincial Emergency Operating Centres are now operational and are guided by the National Emergency Action Plan for Polio Eradication 2015-16, released in May 2015.

Poliomyelitis is prevented through vaccination. In Pakistan, the Oral Polio Vaccine (OPV) has been the vaccine of choice. The OPV formulation that protected against all three serotypes, the trivalent OPV, was used exclusively until 2005, but owing to its low efficacy against protection from paralysis, OPV specific to either serotype 1, 3 or both have been introduced (Ministry of Health 2011). Although these vaccines have improved efficacy, several doses of vaccine are required to provide substantial protection. Using the estimated efficacy of the bivalent vaccine in Pakistan of 23% (O'Reilly et al. 2012), on average six OPV doses will provide protection against paralysis in 80% of children. Recent evidence from a high transmission setting in India suggested that mucosal immunity, measured by examining the duration of poliovirus shedding in stool, may wane with time, potentially requiring more doses to maintain strong immunity (Grassly et al. 2014). Seroconversion of children that have received OPV can be low, especially in malnourished children, and a recent study in Pakistan reported seroconversion of children receiving approximately 10 OPV doses of 94.1% in normal infants and 85.6% in malnourished children (Saleem et al. 2015). For transmission to be prevented in an environment with high population density, frequent population movements and poor sanitation and hygiene, everybody, but especially young children, require several OPV doses to ensure that poliomyelitis is not contracted. Population immunity must remain high to prevent transmission.

One of the most effective ways to reach young children with vaccine is through routine immunisation (RI). In Pakistan, the national estimates of coverage of children with the DPT3 vaccine (used to measure OPV through routine services) have varied from 72-82%. Where data are available, the regional variation is substantial. A recent study indicated that in 2010 only 30% of children in Balochistan and FATA reported receiving OPV through routine services, compared with 64% in KPK.[1]

A majority of vaccine doses in Pakistan are administered through use of supplementary immunisation activities. These vaccination campaigns are intended to reach beyond the current limits of routine services,

[1] DHS summary data and analysis in O'Reilly et al. 2012.

and also serve as an additional source of surveillance for acute flaccid paralysis (AFP). Active surveillance for AFP is carried out during house-to-house visits. The number of campaigns in Pakistan have steadily increased, totaling 26 between January 2013 and August 2014, including seven national campaigns (MMWR 2014, 63: 43). Despite substantial efforts to co-ordinate the planning of these campaigns and to visit and vaccinate every child during supplementary immunisation activities (SIA), substantial gaps in vaccination coverage are apparent. Measuring campaign coverage is notoriously difficult and the estimates from different sources often vary. Current opinion is that Lot Quality Assurance Sampling (LQAS) provides a good indication of campaign quality where 'rejected lots' indicate poor campaigns. LQAS cannot, however, be carried out in insecure areas, and here 'market surveys' are used as a real-time indicator of poor coverage. The reasons for poor campaign quality can vary by region and even by union council. This is an issue not only in Pakistan but elsewhere where polio has been endemic, particularly in high-risk settings. Understanding the causes of low polio and routine vaccination coverage and identifying workable solutions is key to improving this critical aspect of disease eradication.

In 2015, the inactivated polio vaccine will be introduced into Pakistan (GPEI SP 2013-2018). This is, in part, to ensure that population immunity against serotype 2 is maintained during the planned withdrawal of the trivalent vaccine from both the routine and supplementary immunisation activities. It is also in response to an apparent increase in the acceptance of Inactivated Polio Vaccine (IPV) in some communities. Recently, there have been clinical trials to assess acceptance of both vaccines and several localised SIA campaigns (in Quetta, Karachi, Peshawar and Bannu) that consisted of OPV administered with IPV resulted in high immunisation numbers and increased community engagement by social mobilisers (WHO 2014).[2] Additional campaigns are planned in the latter half of 2015. IPV will be administered alongside the third dose of OPV in the national routine immunisation schedule, and is due to occur in late 2015.

Since 2006, however, there has been a decrease in estimated vaccination coverage, as estimated via parental recall from non-polio AFP data in specific regions of Pakistan, Balochistan, FATA and KPK (O'Reilly et al. 2012). There are several sources of campaign coverage data from Pakistan: administrative coverage data, independent monitoring, LQAS surveys, AFP data and, more recently, market surveys (summarised in Cutts et al. 2013 and Mushtaq et al. 2010). Broadly speaking, the data all point towards there being substantial gaps in campaign coverage within key areas where poliovirus persists.

The reasons for compromised campaign coverage within Pakistan are complex, and are determined by socio-cultural, economic, political and military contexts, inclusive of community-level factors. As a result, UNICEF has selected several groups of high-risk populations to be the focus of this study: the Afridi, Suleman Khel, Dawar, Wazir, Mohmand and Bajauri. The majority of these Pashtun communities are based in or originated from certain regions within FATA, and to a lesser extent KPK, in particular Waziristan, Peshawar, Mohmand and Bajaur.

Polio in FATA and KPK

Much of the polio circulation in Pakistan is concentrated in FATA and KPK: of the 242,424 polio cases so far in 2015, 16 have been from those areas (within the districts Khyber, South Waziristan, Charsada, Lakki Marwat, Peshawar and Tank). In 2014, the surge in cases nationally was likely to have resulted from movement out of FATA and KPK, and increased susceptibility in areas where infected people moved. In previous years, cases in Karachi have also been tied to populations from FATA and KPK, either through reported travel from the area or through genetic sequence similarity.

The majority of poliomyelitis cases are of serotype 1, whereas wild serotypes 2 and 3 have not been observed since 1999 and 2012 respectively (Kew et al. 2013). Circulating vaccine-derived poliomyelitis serotype 2 (cVDPV2) has emerged on several occasions in Pakistan, most recently in 2012. This virus strain

[2] https://clinicaltrials.gov/ct2/show/NCT01908114?term=polio+vaccine+pakistan&rank=3 [results not yet available].

is known to emerge in areas with low RI and low quality SIAs, and the clinical severity is equivalent to wild poliovirus strains (Jenkins et al. 2010). There have been 86 cases of cVDPV in Pakistan since 2012, with 48 cases being reported in 2013 and most (78%) of these were reported from children in North Waziristan (WHO (WER) 2013). Most (>50%) children with paralysis had not received any does of the OPV from either RI or SIAs, and this occurred at a time when a ban on poliomyelitis immunisation was issued by local authorities in North Waziristan. As of June 2015, there have been no cVDPV cases in Pakistan but positive environmental samples in Gadap Karachi, Lahore and Peshawar. Circulation of VDPV, coupled with a surge of WPV1 in North Waziristan, led to extensive vaccination at transit points for people leaving North Waziristan and increased investment in strategies specific to the area.

Poorly conducted routine and supplementary immunisation activities, leaving large portions of the population susceptible to poliovirus result in cVDPV. The mutating live attenuated virus contained in OPV adds another layer of complexity to the efforts to eradicate polio.[3] There has been some concern that emergence of cVDPV in Pakistan may confuse the message of OPV protecting against all forms of poliomyelitis, as the bivalent OPV which is frequently used in SIAs does not protect against cVDPV (as bOPV protects against serotypes 1 and 3 and cVDPV in Pakistan is of serotype 2). However, SIA planning responds to the local epidemiology, and the trivalent OPV (protecting against all serotypes) has increasingly been used in areas with low RI and cases of cVDPV. As most cVDPV cases have been in zero-dose children the message should remain clear, but in under-immunised children (especially those who have not received OPV via RI), many doses may have only limited immunity against cVDPV.

One important factor sustaining polio transmission in these areas is the impact of conflict and insecurity. Another is the fact that health systems in FATA and KPK are generally weaker than in other areas of Pakistan. This weakness contributes to the transmission of polio in many ways, but several aspects are particularly important: first, low rates of RI coverage; secondly, operational gaps in polio campaigns even in accessible areas; and thirdly, community distrust of a poorly functioning health system that does not provide many basic needs. Water and sanitation coverage in these areas is limited and in KPK, many households do not have improved toilet facilities or an improved source of safe drinking water. In a recent survey, nearly 60% of respondents in FATA reported that the lack of clean drinking water was a serious problem (HSPH 2014, 26). In addition, local populations face challenges in accessing and utilising the public health system and negative experiences (the use of expired or sub-standard medicines, limited treatment opportunities and potential medical malpractice) may compound communities' concerns for the quality and effectiveness of the polio vaccine.

Polio eradication systems, services and personnel

Polio eradication is officially directed by the Government of Pakistan and its structure is tied closely to the Ministry of Health. The work of immunising children with OPV during campaigns is largely carried out by government health staff, with some additional 'volunteers' hired during the campaign on a daily rate basis.

A number of international partners are also involved in polio eradication and provide much of the funding and administration for the programme at national, and sometimes sub-national, levels. Surveillance for polio is carried out by the World Health Organisation (WHO) and its employees, with the cooperation and collaboration of district health offices. The WHO also undertakes much of the organsiation of campaigns. Social mobilisation and vaccine supply is the purview of UNICEF, which has its own social mobilisation staff in key areas in the country. Other international partners including the Centre for Disease Control (CDC), Rotary International, the Bill and Melinda Gates Foundation and Gavi, provide key inputs to the programme but deploy fewer in-country staff and have less on-the-ground involvement than WHO and UNICEF.

[3] http://www.who.int/immunization/diseases/poliomyelitis/endgame_objective2/oral_polio_vaccine/VAPPandcVDPVFactSheet-Feb2015.pdf

As discussed below, the significant international involvement in the polio eradication programme has contributed to its targeting by militant groups. There is much talk of 'rebranding' polio as a Pakistani and Muslim project aimed at protecting Pakistani citizens (BBC March 2, 2015). Yet, given the current structures and long history of foreign involvement in polio eradication, transforming the national polio eradication effort into one that is perceived by communities as a Pakistani and Muslim endeavor will not be simple.

Refusals and Under-Vaccination in Pashtun Communities

The mistrust of public health interventions and the fear that they may cause sterility, (Murakami et al. 2014, HSPH/HORP/UNICEF 2014) is not without precedent, particularly given the prevalence of sub-standard or counterfeit medication, as well as the history of health programming in the region. Speaking very broadly, fears and rumors about sterility across Asia and Africa likely have their roots in historical population control and family-planning interventions, which at times involved forced and covert sterilisations (Connelly 2008, OHCHR et al. 2014). Looking more specifically at Pakistan, communities' concerns about the safety and efficacy of medications have some merit, given the high percentage of sub-standard, counterfeit and expired pharmaceuticals that are on the market in Pakistan.

It is worth noting that across the whole country, polio refusals in Pakistan are as low as 1% of the population—lower in fact than in many high-income countries. Pockets of refusals in areas of ongoing polio transmission remain a real concern, however, particularly those in conflict-affected, politically unstable and difficult to reach populations. Pashtun communities that refuse OPV can be considered as three main categories:

a) Refusals of all vaccines: This group constitutes a very small fraction of the population. In a national KAP survey of attitudes toward routine immunization, only 3-8% of parents in KPK and FATA said they had negative attitudes towards immunization in general; reasons for low routine immunization coverage had much more to do with supply-side problems such as convenience of getting immunizations, and low levels of awareness of the benefits of vaccines, than hard refusals of vaccinations. However, some parents did have specific concerns about OPV (Government of Pakistan 2015). So, while studies in a Pashtun community and in other ethnic groups in Pakistan have documented rumors that vaccines are harmful, cause sterility amongst children, and/or that vaccines are manufactured in a dubious manner (Saint-Victor and Omer 2013; Cockcroft et al. 2009), wholesale refusal of all vaccines is not a primary cause of low rates of vaccine coverage in Pakistan.

b) Under-vaccinated children: This group includes children for whom vaccination has been initiated, but they have not received all the age appropriate vaccines. In Pakistan, as worldwide, families with low socio-economic status and difficult access to immunisation services are more likely to be under-immunised. These factors, along with limited knowledge about vaccination benefits and increased migration, account for high rates of under-vaccinated children among Pashtun communities. Moreover, weak civic infrastructure and democratic institutions, a lack of economic opportunities and ongoing conflict against Taliban, all contribute to under-vaccination and vaccine refusals. Increased migration in this community also makes children more vulnerable to missing RI and SIAs. Currently, approximately 1.4 million people from FATA and KPK have been displaced due to the security situation (USAID 2015) and many are living in camps for internally displaced persons (IDPs) established by Pakistan military and government.

c) Refusal of OPV during Polio Supplementary Immunisation Activities (SIA): This group consists of parents who refuse the polio vaccine during SIA but may continue to access RI services for their children. These refusals may be "active" or "passive"—for example, a study in Afghanistan and Nigeria found that the majority of refusals were passive, when, for example, the families stated that the child was sleeping, ill or out of the house (Saint-Victor and Omer 2013). One fairly small study in Karachi found that non-participation in a polio SIA was 15.4%, with 73.9% of those being active parental

refusals, 21% teams not visiting the house, and only 4.5% child not at home or potential passive refusals (Khowaja et al. 2012). However, great regional variation and variation over time exists, and passive refusals are particularly difficult to quantify, both for polio administrators and for researchers.

Parents in this group tend to cite several common reasons for refusing. Many say that the polio vaccine is a 'Western' or 'Jewish' conspiracy to cause sterility among Muslims in order to control the population and reduce their number, and that the polio vaccine is un-Islamic (Closser et al. 2015; HSPH/HORP/UNICEF 2014). Thus, concerns about the vaccine are voiced in ways that reflect anxieties about Western, specifically American involvement, discussed later in the report.

More generally, community fear and refusal of polio vaccination is also reinforced by repeated polio vaccine campaigns. This includes campaign fatigue and concern for children who have received repeated doses of OPV, some as high as 50 doses by their fifth birthday, during SIAs. In a study in Karachi, concerns over repeated SIAs were tied to distrust and frustration with what parents perceive to be misplaced priorities in government service provision. They asked why polio, a disease that has a less negative health impact in Pakistan than other conditions, was given such specialised attention (Closser et al. 2015).

The inability of Pakistan's public healthcare system to provide quality curative services, especially in FATA and KPK, has resulted in its low credibility. In addition, communities' experience of infant mortality among vaccinated children, in large part due to the failure of the public healthcare system plus individual determinants (Mosley and Chen 1984), adds to the mistrust of vaccines. This anxiety feeds into the seeming plausibility of the conspiracy theories described above. The state of the health services has a great impact on people's reaction to SIAs. Polio vaccines are not experienced in a vacuum; people's reactions to polio vaccines are clearly tied to their experiences within the broader health system, and in relation to the government in general (Closser et al. 2015).

In turn, medics have expressed concern that while the polio vaccine may be easily available, other vaccinations for high-risk diseases are frequently unavailable, especially in the public sector (Dawn 2014). Vaccines available for sale in the private sector are unaffordable for poorer families (Brenzel et al. 2011). Because of the high burden and persistence of life-threatening communicable diseases, such as malaria, leishmaniasis, typhoid, cholera, tuberculosis and hepatitis (Afridi et al. 2014) local communities may consider polio and its eradication to represent a comparatively less urgent focus or area of public health concern. Community strategies might therefore benefit from addressing communities' enduring concerns not only for polio, but those diseases which remain unmitigated or untreated by public, private and non-governmental sector initiatives.

A number of other factors also affect refusal dynamics. Cultural norms around gender further complicate healthcare choices. Mothers refusing OPV for their children often state that the decision was not theirs but was made by their husbands. Such gender bias is perpetuated by low investments in education, economic opportunities for women and the absence of pro-gender laws and law enforcement. Finally, lack of trust in the people providing vaccinations feeds into SIA-specific refusals. If vaccinators are perceived to be too young or of the wrong gender, ethnicity or class to be trusted, this impacts the acceptability of the vaccine. These concerns are addressed further below.

The Public Health Sector in KPK and FATA

Overview of the public health sector in KPK and FATA

The public health sector is administered by the Department of Health in KPK and by the Directorate of Health in FATA. The Federal Government provides some tertiary services, financing, and communicable disease support. At the District level, the Department of Health (DoH) provides primary and secondary level health services, along with their staffing and management (Government of Khyber Pakhtunkhwa, December 2010, 15). Preventative healthcare services, such as polio and routine immunisation, are managed at the provincial level but implemented at the district level. The Directorate of Health services in FATA are organised similarly to those in KPK.

In 2011, the Federal Ministry of Health and the majority of formerly centralised vertical programmes, including the Expanded Programme on Immunisation (EPI), were devolved to the provinces (CDPI 2014; PAIMAN 2008). In 2012, the KPK Local Bodies Bill led to additional devolution to the district-level, whereby district healthcare systems and services have expanded in importance and coverage (Government of Khyber Pakhtunkhwa, December 2010). It was hoped that devolution would enable faster and more effective decision-making in the health sector.

Ambiguities and uncertainties concerning the transfer of power from federal to provincial and then district level health systems have meant that the process of devolution has been erratic and fraught with challenges (CDPI 2014; Nishtar, Boerma, Amiad et al. 2013; USAID and RADS 2013). Recent studies also confirm that because district health systems are frequently under-resourced, under-staffed and mismanaged, they are unable to fully or effectively act on the expanded responsibilities allocated to them through the process of devolution (PAIMAN 2008). There has been little corollary emphasis on the importance of civil society engagement for expanding and strengthening local health systems and services, or reducing the socio-economic, political, ethnic or gendered inequalities which inhibit collaboration between the health sector and local populations. The Department of Health in KPK and the Directorate of Health in FATA are yet to develop sufficient community feedback and accountability mechanisms.

Public health sector services: coverage, quality and cost

The coverage of public sector services in KPK and FATA is limited in comparison to other provinces and regions of Pakistan. The majority of public health sector services are characterised by moderate to acute resource shortages including under-staffing and the non-availability of essential medicines and equipment. There is also a focus on curative rather than 'promotive, preventive or rehabilitative care' (Government of Khyber Pakhtunkhwa 2010). In 2013, Pakistan allocated only 2.7% of its GDP to health (WHO n.d.), one of the lowest total expenditures on health in South and Central Asia. At all levels of the public health sector, there are insufficient resources in place to effectively meet population health needs. There is an average of 1,383 persons per hospital bed in KPK (Government of Khyber Pakhtunkhwa 2010), while in FATA there is one bed per 2,179 persons and one physician per 7,670 patients, as compared to 1,226 patients per physician in Pakistan overall (Tradoc 2010; FATA Basic Health Programme n.d.).

Of the estimated 380 Rural Health Centres (RHCs) and 1,280 Basic Health Units (BHUs) required to ensure coverage for the rural population of Khyber-Pakhtunkhwa, only 86 RHCs and 784 BHUs were operational in 2010 (Government of Khyber Pakhtunkhwa, 2010). The situation is particularly challenging for rural communities, where residents face difficulties in accessing primary healthcare services. In KPK the average distance from home to a health facility is 10 kilometers in rural areas, three times the distance faced in urban areas of the province (Government of Khyber Pakhtunkhwa 2010).

In turn, weak organisational links between KPK's Department and FATA's Directorate of Health contribute to a lack of integration between primary, secondary and tertiary level health services. When combined with the failure of the health system to effectively treat patients at primary care facilities, this has led to the over-referral of patients to, and over-utilisation of, secondary and tertiary healthcare facilities (Government of Khyber Pakhtunkhwa 2010).

Health service coverage in FATA is particularly uneven because the majority of senior staff posts are vacant, and inexperienced staff serve at the low-resource health centres most accessible to the region's predominantly rural population (Response International n.d.). The majority of specialised in- and out-patient services are available at District Headquarter or Civil Hospitals, where the provision of care is also complicated by chronic resource, personnel and equipment shortages, and by administrative mismanagement, medical malpractice, and corruption (Hearthfile 2007; Nishtar 2010, 874). A high level of absenteeism among key personnel, including hospital administrators, physicians and paramedical staff has also been reported (Government of Khyber Pakhtunkhwa, 2010).

A DFID-funded study of health facilities identified key gaps in general and specialised physician and paramedical staff coverage, the infrastructure required to ensure regular access to basic or advanced treatment, and necessary 'equipment, drugs and supplies' (TRF 2012). Such deficiencies were found to be comparatively greater in FATA, Kohat and Peshawar Frontier Regions than in KPK. The study noted that few staff were aware of their job descriptions or clinical protocols and found infection control practices were lacking. The repeated occurrence of blood-borne infections among patients and providers has been associated with improper medical treatment and poor protection practices, particularly in the public health sector (Jiwani and Gul 2011). For example, a 2008 study found that 30% of healthcare personnel in a teaching hospital in KPK tested positive for Hepatitis C (Sarwar et al. 2008).

Although the Governments of KPK and FATA have introduced Health Management Information Systems (HMIS) for use by the Department and Directorate of Health, providers are hesitant or unwilling to document medical or resource omissions, 'accidents' or errors.

These problems are compounded by the provision or informal sale of sub-standard, counterfeit or expired medications (Nishtar 2012; Qayym et al. n.d.). Because of the unavailability or uncertain quality of essential drugs in most public healthcare facilities, the majority of patients purchase them from private dispensaries or clinics. A 2004 survey found that only 9% of patients receiving care from a government facility had received all their prescribed medication (CIET 2005).

When direct, indirect or informal medical expenses are combined with the incidental costs associated with treatment at 'free' public sector services (transport, food and/or accommodation costs) patients from across the socio-economic spectrum face significant out-of-pocket expenditures to access care (JPMS 2013; Nishtar et al. 2010; Saksena et al. 2010). A 2012 study found that in 2010, 67% of total expenditures on health in Pakistan were out of pocket (Malik and Syed 2012), while a 2014 study identified that the public health sector covered only 25.1% of the total national health expenditures (Rehman et al. 2014). Medical costs increase when patients delay or avoid necessary care due to concerns about the quality, affordability and the acceptability (both social and geographic) of services (Chagani 2014). For poorer populations, the informal and indirect costs associated with public sector facilities can lead to catastrophic health expenditures and an increased burden of household debt. Yet, for communities that are acutely impoverished or geographically isolated affected by conflict or natural disasters, the public health sector is often the first or only feasible treatment option.

A 2002 study by Transparency International found that 95% of surveyed individuals believed the health sector to be among the most 'corrupt' of Pakistan's public sectors (TI 2002; TI 2010). Administrative corruption for monetary gain takes a range of forms, from illegal fees to nepotism in staffing (Gadit 2011). Studies have confirmed that 96% of patients report being solicited to make informal payments to providers in order to expedite their treatment or ensure a better quality of care (JPMS 2013). Patients were less likely to make informal payments if they had pre-existing 'connections with medical personnel' (Gadit 2011).

Such connections may be social, economic, political or familial, and/or associated with ethnicity or caste (Mumtaz 2012).

Studies have identified high rates of patient dissatisfaction with government health services and the poor quality of public sector services can reinforce community beliefs that the state, particularly at the national level, is disinterested and disinvested in their health and well-being (HSPH/HORP/UNICEF 2014; Irfan et al. 2012; Naseer et al. 2012). Such concerns may negatively affect communities' perceptions of the Polio Eradication Initiative, and the quality and safety of the polio vaccines.

In response to public sector gaps and deficiencies, many people in FATA and KPK do try to seek care from private services, including dispensaries and hospitals, clinics, chemists or medical stores as well as homeopaths and practitioners of Yunani Tibb (Akbari et al. 2009). A 2009 study found that in urban areas of KPK, only 31% of patients sought care from a public dispensary or hospital, while 56% attended a private dispensary or hospital, 9% went to a private chemist or dispenser, and the remainder received care from a homeopath, *hakim* or 'other' source. In rural areas of KPK, the reliance on public sector services was slightly lower (22%), while the proportion of patients using private dispensaries and hospitals remained consistent (52%). Because of the unavailability of private, non-governmental and even public hospitals and clinics in rural areas, comparatively more rural residents used private chemists or dispensers (19.9%) than in urban areas (Akbari et al. 2009, 143).

The Governments of KPK and FATA regularly organise mobile medical camps in hard-to-reach areas (Frontier Post 2015; Relief Web 2014). Many are implemented in conjunction with non-governmental or faith-based organisations (Al-Khidmat Foundation Pakistan 2014). Medical camps are, however, a poor substitute for reliable, accessible and effective routine or advanced medical care. Similarly, Community Health Worker (CHW) programmes such as the Lady Health Worker (LHW) and more recently the Community Midwives (CMW) programme were intended to reduce the distance between communities and service provision, but due to a lack of provincial training centres, updated training curricula, and secure and reliable financing at programmatic, training and deployment levels, KPK and FATA have struggled to retain recent cadres of CHWs (Mumtaz 2015; PAIMAN 2010). This is especially true for CMWs who – like LHWs a generation before – face logistical, structural and cultural barriers to their provision of simple maternal health services at the community-level, particularly in religiously conservative and insecure or conflict-affected areas (Sarfaz and Hamid 2014; Hafeez 2011).

The impact of conflict on health systems and services

There remains a lack of capacity at provincial and district levels to respond effectively to 'emergencies, epidemics and disasters' in FATA and KPK (Government of Khyber Pakhtunkhwa 2010). The public health sector struggles to meet the increased demand for routine, advanced and emergency health services following the 2010 floods, regional insurgencies, military operations, and terrorist attacks.

Due to the effects of these recent conflicts and natural disasters, the health infrastructure across KPK and FATA has sustained extensive and costly damages. The Khyber Pakhtunkhwa Health Strategy identifies that 29% of its health facilities, including BHUs, RHCs and hospitals, have been damaged by conflict (Government of Khyber Pakhtunkhwa 2010). In FATA, nearly a third of health facilities have been damaged. Furthermore, public health service delivery in conflict- and disaster-affected areas of KPK and FATA have been reduced by more than 50% due to the non-availability of essential medicine (Government of Khyber Pakhtunkhwa 2010). In some instances, the deliveries of medical supplies or equipment to facilities in sensitive areas of KPK and FATA have been taken or destroyed by militants (Planning and Development Department, FATA Secretariat 2009).

Conflict and disaster have forced migrants from FATA to flee to IDP camps in KPK, where their health needs are poorly met by the numerous programmes and interventions implemented by provincial, federal and international health services. Outside the IDP camps, KPK's public health sector is additionally burdened by

a high influx of non-local patients seeking healthcare at all levels due to FATA's weak or non-functioning health infrastructure. A study in January 2015 found that upwards of 50% of hospital beds in and around Peshawar were occupied by patients from FATA (Dawn 2015). As a result of these challenges, conflict-affected populations surveyed in FATA reported that health ranked second only to security as the main service they expected the government to provide to them (Shinwari 2012).

Health indicators

Women and children in KPK and FATA face some of the highest rates of morbidity and mortality in Pakistan. The situation is especially precarious in rural or remote communities, and for impoverished, socially excluded and marginalised populations. In 2009, the under-five mortality rate in FATA was 104 per 1,000 live births, while the infant mortality rate was 86 per 1,000 births (Government of FATA 2009). The MICS 2001 in KPK found that the infant mortality rate was 79 per 1,000 live births and 116 per 1,000 for under-five children. While neonatal deaths are almost wholly due to birth asphyxia, perinatal sepsis or prematurity, deaths in the immediate post-natal period and up until 12 months are usually due to diarrhoea or pneumonia. Additional causes of death include measles, meningitis or injuries.

The maternal mortality ratio (MMR) in FATA is also higher than that of KPK. The 2009 MICS determined FATA's MMR to be 380 per 100,000 live births, which is significantly higher than the national MMR of 276 or 275 for KPK (Government of FATA 2009). The primary causes of maternal mortality include postpartum hemorrhage, sepsis, complications from unsafe abortion, prolonged or obstructed labour and eclampsia (ibid). Infant and maternal mortality are sensitive indicators of the incidence and degree of poverty, socio-economic development and gender inequality. The 2009 FATA MICS confirms the region's IMR and MMR are determined by gender inequality and 'poverty, economic, social and cultural status, conflict, uncertainty, the quality of public health systems, [and] demographic structure[s] and behaviour'.

Childhood malnutrition is common in KPK and FATA, and poses devastating and lasting impacts on childhood, adolescent and adult well-being and longevity (for more see Saleem 2015). In KPK, the 2001-2002 National Nutrition Survey (NNS) found that 37% of children were underweight, 43% suffered from stunting and 11% were wasted. The 2011 NNS found that malnutrition rates in KPK and FATA had worsened in recent years, especially among children (Planning Commission 2011).

In KPK in 2010, only 64% of children between the ages of 12 and 23 months were fully immunised, while 70% of children aged 12–23 months received the BCG vaccination. If children's arms were checked for the BCG scar, however, the number dropped to 62% (Government of Khyber-Pakhtunkhwa December 2010). The percentage in FATA according to the 2009 MICS was 57.5% (Government of FATA 2009, 20). Although Pakistan began providing Tetanus Toxoid (TT) vaccines as part of its national RI programmes in 2000, by 2011 only 13% of 'high risk' districts across the country had been reached by the government's TT mass campaigns. Of the 25 districts in KPK surveyed in a 2015 study, two were low risk, 13 were medium risk and 10 were high risk for Maternal Neonatal Tetanus (MNT). In FATA, all 7 districts were identified as high risk for MNT. The persistence of maternal and neonatal tetanus is an indicator not only of RI coverage, but also the provision of clean delivery techniques, clean umbilical cord care and the attendance of Skilled Birth Attendants (SBAs).

Health-seeking behaviours

There is a significant lack of qualitative and ethnographic data concerning community-level priorities in relation to primary healthcare services, or individual and family health-seeking behaviour, in both KPK and FATA (Government of Khyber-Pakhtunkhwa 2010). Despite these gaps, some insights may be gained from recent baseline surveys, monitoring and evaluation research, and post-intervention impact assessments in FATA, KPK and across Pakistan more generally.

The majority of health services used by patients in KPK and FATA, whether traditional or allopathic, are curative rather than preventative. The affordability of care and out of pocket expenditures, rather than traditional beliefs or 'customary' practices, are often the key barriers to health service access and uptake. For instance, a 2010 study concerning healthcare accessibility in Swabi and Buner Districts in KPK identified that for 52% of interviewees, the primary constraint to health service access was financial (Medicins du Monde 2010).

Whilst low levels of education and/or unfamiliarity with the signs or symptoms which warrant basic or more advanced medical care may lead to treatment delays (Ul-Haq 2015), even after reaching health services, patients may be subject to exclusionary or differential treatment on account of their ethnic and sectarian identity (Mumtaz et al. 2013; Varley 2015).

In FATA and KPK, where the degree of gender inequality is comparatively greater than in many other parts of Pakistan, younger women and wives are frequently dependent on their spouses and/or senior male and female relatives for their well-being, and require these individuals' consent and support in order to access and pay for necessary care (Javed 2012; Jalal 2011; Rizvi et al. 2014). This is particularly true for women from lower income households and/or those communities in which women's social mobility and access to education as well as health services are restricted. Although women may possess considerable autonomy in their ability to care for themselves and their children at the household-level, studies have shown that women in northern Pakistan are often as constrained in their efforts to seek care beyond the household for their infants and children as they are for themselves (Sheikh 2014; Shaikh 2011; Khan 2013). Post-menopausal women, and those with supportive adult sons especially, often enjoy increased if not total autonomy in their health decision-making, even if their access to existing services may remain constrained by economic or geographic factors.

Regardless of women's educational status and position in the broader socio-economic spectrum, and their corresponding ability to access and use available care, the barriers to existing health services may also involve family or community concerns regarding 'honour'. In northern Pakistan and in socially conservative communities in particular, women's honour, or '*izzat'*, is largely contingent on women's modesty and segregation from unrelated men including, in some instances, the male healthcare providers working in mixed-gender facilities. In and of itself, however, the absence of a female healthcare provider does not seem to be a strong determinant in household decision-making for women's health. For instance, a survey in KPK found that only 1% of families avoided or refused services because women providers were not present (Government of Khyber-Pakhtunkhwa 2010). Honour is also connected to women's avoidance of travel outside the home and into the larger community, including for matters of preventative or routine healthcare (Mumtaz and Salway 2005; Purdin et al. 2009). Exceptions may be made in cases of medical emergency. Adolescent girls and adult women up until and sometimes beyond the age of menopause, are usually accompanied to seek medical treatment by male relatives. In contexts marked by extreme conservatism and where restrictions are placed on women's social mobility beyond the household, women who seek care without the permission or support of their relatives may sometimes face severe social sanctions or punishments, including divorce or death.

In more conservative communities, work outside the home or alongside unrelated men may be considered to be dishonourable for women (Mumtaz 2003). Such views have been found to shape community perceptions of women CHWs, and negatively impact the social acceptability of the services they provide (PAIMAN 2010; Sarfaz and Hamid 2014). This should be taken into consideration with regard to their service provision in Polio and routine immunisations. Patients may also distrust healthcare providers who hail from different tribal or ethnic, sectarian or even caste affiliations than themselves (Purdin et al. 2009; Mumtaz 2012; Varley 2015).

As discussed above, the under-utilisation of existing health facilities in FATA and KPK has been shown to reflect a lack of confidence in the health sector among patients, their families and community members overall. This under-utilisation is particularly acute at the peripheral, primary level of the health sector (John

Hopkins n.d.). The PDHS 2006 found that among women receiving antenatal care (ANC), 92% saw a doctor, 8% a paramedic and only 1% visited a LHW (National Institute of Population Studies 2008).

Studies confirm that rather than being antagonistic to biomedicine per se, even the most socially or religiously conservative communities in KPK and FATA demonstrate considerable knowledge concerning the appropriateness and need for biomedical care, and regularly seek clinical medical services. When resistance to clinical services occurs, it often reflects patients' and their families' concerns and uncertainties regarding the quality, affordability and social acceptability of services, the healthcare providers and the institutions in which treatment occurred (Shaikh 2005; CIET 2005; Shaikh and Hatcher 2004). For instance, even when basic services are accessible, one resident in the Bajaur Agency suggested 'there is no concept of shifting our women to dispensaries during delivery times, as our women cannot get good treatment at these dispensaries' (Rahmanullah 2013). Concerns for the quality and appropriateness of care may also hold true for household or community-level reticence concerning the Polio vaccine and eradication campaigns.

In the same way that cultural traditions or beliefs may influence some communities to be positively inclined to use biomedical services, reluctance, avoidance or resistance to use health services can also reflect dominant community mores and values (Varley 2012). On account of the increasing enforcement of conservative social norms during the recent conflicts in KPK and FATA, and the risks posed to women and the male relatives who accompany them for care, recent studies have found that women face greater restraints on their access to health services beyond the household or community level. Also, social constraints associated with Taliban ideologies and practices detrimentally affected women healthcare providers' ability to work in Swat (Din 2012). The deployment of fewer women healthcare providers leads to reductions in the availability of services (Wazir n.d.).

Rather than reflecting 'irrational' beliefs or hesitancies concerning biomedical services, household- and community-level anxieties about the nature or source of treatment may reflect germane fears for the risks, debilities and harms – medical as well as social – accompanying specific forms or types of medical care (Sarfaz and Hamid 2014). These choices also reflect much about the political and social reality of these individuals and the manner in which these conditions are shaping attitudes and cultural norms regarding how individuals in FATA and KPK understand and interact with government and international programmes.

Socio-Cultural and Political Context for Select Pashtun Communities in FATA

This section looks at the cultural, political and socio-economic lives of the Afridi, Wazir, Dawar, Suleman Khel, Mohmand and Tarkani tribes of Pakistan's Federally Administered Tribal Areas in light of the challenges that Polio vaccination programme have faced among these populations. One of the challenges of looking at these social groups is the extent to which migration, both international and domestic, particularly to KPK and urban centers, has moved many individuals from the areas that they are associated with historically. This is particularly an issue when considering how such movement may impact Polio reservoirs. While there is only limited ethnographic material on these groups within FATA, it is possible to begin asking questions about what shapes these communities' attitudes towards vaccination campaigns. For example, polling suggests that IDPs from FATA have similar views to other populations in Pakistan on many issues, but are far more likely to associate vaccination programmes with international organisations and to be suspicious of these groups (HSPH 2014). They are also more likely to believe rumours about the links between vaccination and infertility, as well as questions over what the vaccination is made from. Combined with the poor state of healthcare systems and healthcare indicators in FATA and KPK, this presents serious challenges for Polio vaccination programmes.

Instead of some culturally predetermined condition that makes these tribes particularly resistant, evidence suggests that social practices, coupled with deep historical trends and more recent economic and political upheaval, have made these groups more resistant to outside national and international health campaigns. In particular, vaccination programmes need to consider the ways in which the past decades of conflict have intensified the fragmented social and political nature of these groups and what this may mean for health initiatives.

An ethnographic picture of some of the Pashtun tribes in north-western Pakistan is difficult to produce, in part because of the rather uneven data that exists, as well as the diversity of groups in this relatively insecure and inaccessible region. The rather rich array of accounts gathered during the 1950s, 1960s and 1970s by anthropologists, geographers and historians has not been sufficiently updated. Furthermore, more recent reports do not do enough to differentiate between the diverse experiences of various Pashtun groups, as well as other minority groups, particularly given recent disruptions and displacements.

Tarzi and Lamb (2011) suggest that there is a need to move beyond typical stereotypes of Pashtun groups, particularly since the majority of work done in recent years on Pashtuns in Afghanistan and Pakistan 'has been produced to respond to specific military or policy requirements'. The recent American drone war in the area, Pakistan's on and off military campaigns in various parts of FATA and KPK, and the widespread displacement of Pashtun groups in other parts of the country mean that this variety of experiences must be taken into account. This section attempts to build on the small but growing body of work by scholars, journalists and research organisations that moves beyond views of the local population as static and FATA and KPK 'as a closed system resistant to change' (Hayat 2009).

The FATA context

Socio-economics

With 60% of the population under the poverty line and a literacy rate of 17% (compared to 56% nationally), the Pashtun tribes of FATA are poor and underserviced (Orakzai 2013). Historically the Pashtuns are a mix of pastoralists and agriculturalists. The recent growth of urban centres has contributed to an increase of Pashtuns in the Pakistani military and working in the transport industry. The area includes extremely fertile valleys, generally with limited irrigation in comparison with other parts of the region, and barren mountains. Wheat and corn are most common with sugarcane and other crops following behind. Poppy is another important cash crop. Logging and timber smuggling produces key resources in certain areas, as does the extraction of lower-value minerals (Zia 2012; Government of Pakistan 2014).

Industry is limited in the area and local markets are dominated by imported goods (Bergen 2013). Remittances from both Pakistan's urban centers and further abroad, from the Gulf States in particular, play an important economic role. While there has been an increase in both local and international NGO efforts and international funding on various levels, the financial sector in the area remains particularly underdeveloped compared with other parts of the country (State Bank of Pakistan 2010; USG Accountability Office 2014).

More importantly for socio-political issues, the area has been shaped by the strategic nature of its mountainous location and the ease with which outsiders can access it. The result has been a divide between tribes in the mountain who, as one Pashtun proverb suggests, are consumed by *nang* or honour while tribes in the valleys are concerned with *qalang* or rents and taxes (Ahmed 2013; Ahmed 1976). Ahmed (ibid.) suggests this means that Pashtun groups in the lowland, fertile areas based on agriculture, tend to be more settled and hierarchical, while those in the mountains prize individualism more and are less likely to form permanent alliances. While economic developments and migration, both forced and voluntary, has undermined some of this division, it still has some impact on the shape of local politics, attitudes towards the current conflict and mobilisation strategies.

Religion and beliefs

The tribes considered in this report all tend to be socially conservative, but not strict in performance of religious duties. While most Pashtun tribes are Sunnis of the conservative Hanafi School, minority populations of Shia and more informal Sufi groups have also lived in the area historically, along with smaller pockets of Sikhs, Hindus and Christians. These minority groups have been increasingly attacked in many areas and have suffered disproportionately during recent years, particuarly in Sunni-dominant areas of FATA (Ahmed 2013).

With the increasing media attention on Islamic fundamentalism and terrorism in the border region, there has been a good deal of confusion about the relation between Islamic orthodoxy and tribal practices. In fact, Pashtuns in the area tend to be far from religious literalists, historically tolerating local diversity in practice even while emphasising their collective identity as Muslims. Historically, Deobandi Sufi groups in the area have promote austerity and socially conservative values, but their influence has shifted over time. As a result, Ahmed argues: 'the tribesman equates tribal custom with Islamic faith, which together form his identity. By contrast, the literalist finds tribal custom un-Islamic and thinks it should be removed from Islam's pristine message and practice' (Ahmed 2013). This tension is reflected in the status of Muslim clerics and mullahs who historically often had a relatively lower status, living on subsidies from tribal leaders, except for in times of conflict when they used their religious status to transcend tribal divisions. More recently, the increasing influence of Wahhabism and other more literalist schools of Islamic thought in the area has created tensions with Deobandi schools in the area.

Pashtunwali or the Pashtun tribal code, emphasises egalitarianism reinforcing social structures by the competing values of *nang* (honour) and *sharm* (shame) (e.g. Barth 1959a and b; Glazter 1998; Linholm 1982). Pashtunwali should not be thought of as a monolithic, prescriptive code. It varies from area to area and serves as a flexible framework for addressing (or in some cases, not addressing) social and political identity, but, at the same time, is also enshrined as part of the Frontier Crimes Regulation that governs the area (Khan 2011). This pluralist legal system can be a source of adaptability, but can also easily be manipulated, particularly by those in power (Roder and Shinwari 2015). For example, disputes over the nature of Pashtunwali are more likely to be severe when crossing social boundaries or over significant resources. In other cases, particularly when Pashtunwali contradicts Sharia or Islamic code, such differences may be quietly ignored (Coburn 2013).

The values that make up Pashtunwali have been contested and manipulated during the recent years of conflict. The concept of *azaadi* or political freedom, for example, applies to the ability of tribes to move back and forth across the border (Ahmed 1981). Al Qaeda and other foreign groups have used the concept

of *panah* or refuge to gain the protection of local tribes in the Banjaur Agency (Badshan et al. 2012). Less culturally nuanced accounts of Pashtun communities dismissing them as 'unruly tribesmen', tend to miss more benevolent Pashtun values, such as *melmastia* or hospitality. Overall, these values should not be thought of as culturally determinative, but as norms that are continuing to be contested and employed as useful political rhetoric at key moments.

Women and family structure

There is a particular emphasis on preserving family honour both through the seclusion of women and respect for elders. Historically, marriages are ways to establish alliances, and are usually endogamous at the tribe or clan level, but there is often flexibility here, especially given recent upheaval and displacement.

Women in Pashtun societies are directly linked to the honour of their families. This has led to the prevalence of *purdah* or segregation by gender. The practice of purdah varies significantly by socio-economic position and tribe, with the use of the veil actually less prevalent in some rural areas where most men are close kin. However, the continued disadvantaged position of women has as much to do with the current conflict as cultural practices. For example, under more secure conditions, Pashtun men are more in favour of education for females, particularly when it is for the 'well-being of the community' and increases the number of female doctors (Jamal 2014). Displacement and the movement of families to urban centers where there are significant non-kin men surrounding them, can lead to an increase in the restrictions on female mobility. As discussed in the section above, these practices also shape the way that individuals are able to access health services and make health decisions.

Internal social and political relations

Descent and division

All Pashtuns share a claim of decent from Qais Abdur Rashid. Despite this, the subdivisions into tribes, sub-tribes and clans shape their social and political worlds. Tribes, sub-tribes and clans generally have shared territory, often marry endogenously and organise together militarily in tribal militia called *lashkars*.[4] Boundary disputes between tribes and clans over cultivation, pastoral or boundary transit rights are common and often have persisted for decades, in part due to the nomadic origins of many tribes. *Jirgas,* local gatherings of elders, the kin of those involved and often local government officials, are used as attempts to resolve these disputes, though the success of these gatherings varies.[5] Historically, some tribes in FATA have practised regular land redistribution (*wesh*) as a means of balancing relations between tribes and sub-tribes (see works by Barth and Ahmed). This mechanism of group integration has faded, however, with the increasing consolidation of resources among certain individuals and groups.

The social divisions between tribes and sub-tribes also shape political organisation and the nature of conflict in a manner referred to as segmentary opposition. Ahmed defines this process as a '(a) highly egalitarian segments of a genealogical charter, and within them smaller and smaller segments, all claiming descent from a common, often eponymous, ancestor; (b) male cousin rivalry and a council of elders to mediate conflict; (c) recognition of rights to territory corresponding to segments, as acknowledged by tradition; and (d) a normatively acknowledged set of customs that includes a code of honour and a distinctive language' (Ahmed 2013). This oppositional system contributes to long lasting feuds between certain groups, but also, in ideal cases, puts social pressure on disputants to resolve their conflicts. As a

[4] These militias continue to be exploited by various groups, including the Pakistani Taliban and the U.S. military.

[5] The continued importance of institutions such as the jirga is apparent in the extent to which these gatherings have been targeted by insurgent attacks, such as the suicide attack that killed over 100 in Mohmand Agency (Kerr 2010). For several extended case studies of jirga and dispute resolution, see Khan 2005, 106-112.

result, these structures have helped maintain a level of social stability and autonomy from Pakistani government structures.

Others have argued that the key divisions within society should be thought of as primarily class-based, particularly among the heavily studied Swat Pashtuns who reside in KPK (see for example, Asad 1972). Social membership to certain sub-tribes and clans shapes the prestige and power of individuals. This model suggests that weaker groups are more likely to be disadvantaged economically and politically. Weaker groups also seem to be more likely to rise up during insurgencies to challenge the current order. Recent cases, such as that of Mangal Bagh, one of the leaders of the insurgency in the Khyber Agency who is also from one of the weakest Afridi clans, seems to confirm this (IRIN May 30, 2011).

The tensions between such opposing approaches to social organisation are likely to remain in the immediate future. Access to resources, particularly among those that are displaced is likely to exacerbate class-like divides (de-emphasising clan relations and the links between territory and clan). At the same time, for those actively fighting in tribal *lashkars*, tribal divisions are likely to be re-affirmed. With political tensions and fighting continuing across FATA, it is far more likely that leaders will continue to exploit these competing modes of social organisation, rather than having one strictly replace the other.

Leadership

In his overview of Waziristan, Akbar Ahmed suggests three distinct category of leader among the Pashtun tribes of FATA, which hold for other parts of FATA and KPK as well: '(1) the tribal elder, or *malik*; (2) the religious leader, or mullah; and (3) the political agent representing the central government. These are the three pillars of authority in tribal society. Each has a symbiotic relationship with the others while using them as a foil'. (Ahmed 2013). Several earlier studies of Pashtun leadership suggest that tribal leaders dominate politics in times of peace, but that religious leaders can unite various tribal segments during times of conflict (see for example works by Barth). In the past fifty years, however, increasingly wealthy elders and *maliks* have been accused of corruption, human rights abuses and simply the failure to represent their people, while simultaneously the Islamisation process under General Zia ul Haq in the 1970s and 1980s increased the prestige of mullahs (Kerr 2010). Leadership approaches shifted significantly during the 1980s, when tribal leaders were given resources in exchange for recruiting young men to fight the Soviets in Afghanistan. As one recent study suggests, involvement in politics during the current conflict has meant that the political motives of religious leaders are increasingly being questioned by the local population (Lee 2012).

Tribal positions are nominally assigned by government political agents in a system designed during the British colonial period, and the political agent has the power to grant *malik* status to local elders (Orakzai 2013). More recent work questions whether *maliks* are not better conceived of as colonial administrators (Hayat 2009). In many areas, however, with limited government control, the process is more complex than this and can lead to disputes over leadership and position.

The position of leaders in Pashtun communities has shifted significantly in the last decade of conflict. While elders often maintain influence when communities relocate, the roles that they play may be greatly altered. Many of those leaders remaining in FATA have been targeted both by Tehrik-e Taliban Pakistan (TTP, often referred to as the Pakistani Taliban) and government forces (discussed further below), and religious leaders have similarly either been supported by insurgent elements or targeted, depending on the religious beliefs they preach and the groups they represent. The skills required for these leadership positions have also changed as the elders who have been effective at reaching out to NGOs to secure funds and those who have formed alliances with al Qaeda and other groups, have both advanced their positions for very different reasons (for more specific examples see below, as well as Bergen 2013, and related cases Coburn 2011).

External factors

Historical context

The current instability in FATA has deep historical roots tied to the colonial history of South Asia and Cold War militarisation. Conceiving of these issues without such historical context misses some of the more important historical trajectories which influence the ways in which many Pashtuns view the current political situation (e.g Nichols 2001, Lindholm 1996).

The Pashtun tribes in the FATA and KPK areas have a long history of migration and displacement. The series of conquests and skirmishes that marked the settling of the area in the fifteenth century has led to continued feuds and tensions between tribes today (compare Caroe 1958 with Bergen 2013). Although it was a strategic trade route for centuries, the area gained increasing prominence with the British push towards Afghanistan in the twentieth century. In the years leading up to the first Anglo-Afghan war, the British Empire conquered certain groups, coopted others and bypassed some completely. The British, for example, were particularly attracted to the marshal approach and bravery of the Afridi tribesmen. In contrast, the Mohmand tribe was known as one of the groups that held out the longest against British forces. This approach gave certain tribes more influence and power, while others were marginalised creating resentment between the tribes and towards the British Empire and later the Pakistani state.

The importance of the border

The area has also been shaped historically by the close proximity of the border between Afghanistan and the British Empire (and later Pakistan), and the fact that the Pashtun population is essentially divided between Afghanistan and Pakistan. Historically, many of the pastoral tribes considered in this report would winter on the British side of the frontier, taking their flocks to the mountains of central Afghanistan during the summer. Conflict and international politics have made such migrations less regular, but not actually ended them. This has given the Pashtuns on both sides of the border certain economic and military advantages, but has also brought conflict to the area, shaping their perceptions of ethnicity, nationalism and their relationship to the state.

The 1940s drive to establish 'Pashtunistan', was supported by the Afghan government, but strongly opposed by Pakistan. The divided nature of Pashtun movements, which was more nationalist on the Afghanistan side whilst nationalism was suppressed on the Pakistan side, led to what Shah Mahmoud Hanifi called a 'blended' narrative of tribalism, ethnicity and nationalism (Tarzi and Lamb 2011). This divide has further been marked by the fact that the Afghan state has historically been dominated by Durrani Pashtuns, while in much of the border area Ghilzai groups are most prominent. The continued importance of the border and smuggling, along with periods of militarisation, including the 1948 incursion into Kashmir and the 1980s Afghan jihad against the Soviets, has meant that the ability to mobilise and control violence has continued to be an important aspect of FATA's political economy.

Over the past decade the border has continued to play an important role in the area politically, with tribes on both sides using the other side as a safe haven from attacks either by the Pakistani military or NATO forces in Afghanistan. As a result, whilst most analysts draw a firm line between the so called Afghan Taliban and the Pakistani Taliban (TTP), Brian Fishman argues that this divide is misleading and does not take account of both the relative lack of internal cohesion in the two groups and the close ties between cross-border elements (Fishman 2013). More recent reports of ISIS presence in the area also seems to suggest a constant reworking of the labels used by insurgent groups rather than the actual framework of the movement itself (Waraich 2015). To understand these dynamics, it is necessary to approach groups from a transnational perspective that takes into account the porous nature of the border and how this shapes even those groups that do not cross it regularly.

Relations between the Government of Pakistan and the international community

The history of the area has done much to shape relations between the tribes that inhabit it, the Pakistani government and international groups. In 1947 when Waziristan joined Pakistan, part of the negotiation process for entry granted the tribes autonomy, meaning that they paid no taxes and were allowed to continue to use tribal customs to resolve disputes. Military garrisons were also removed from Waziristan. This also meant that initially, virtually no roads or schools were built in the area. The banning of political parties in KPK, then named the North-West Frontier Province (NWFP), also ensured that political advocacy was difficult (Ahmed 2013) and the Political Parties Act of 1954 still does not apply in either area (Hayat 2009). While local agency council elections were held in December 2005, many have concluded that these were a 'sham' and unlikely to devolve any real political power (Hayat 2009).

In some ways, the promotion of Pashtuns as 'unruly' tribes was highly effective for Pakistan and its allies. Post-1947, militant groups from the area were deliberately militarised in order to assist the underdeveloped Pakistani army in its campaign in Kashmir (Orakzai 2013). Even more notably, the area saw the influx of weapons funded by the American and Saudi Arabian governments to arm the *mujahideen* in Afghanistan in the 1980s. This all contributed to the suspicion with which tribes in the area approach the international community and fuelled the assumption that there are ulterior motives behind many international programmes. For example, in a recent survey, 30% of respondents stated that they did not trust the international community, as opposed to just 1% in non-Pashto-speaking parts of the country (UNICEF, C4D Programmatic Narrative).

Recent instability

While it is important to keep these historical and cultural premises in mind, the past fifteen years has created vast social and political upheaval that is reshaping the area. As one analyst described it: 'Musharraf set the Tribal Areas ablaze with forest fires [with his incursions starting in 2004], while the drones poured gasoline on them' (Ahmed 2013). Subsequent political shifts to dominance by the Pakistan Peoples Party (PPP) and Pakistan Muslim League-N (PML-N) have done little to lessen this conflict. The nature of the engagement, the division within groups and the high numbers of displaced people also make generalisations about social and political changes increasingly difficult. This section looks at the conflict between tribes, insurgents, the government and the America military.

The insurgency in FATA

The American-led invasion of Afghanistan in late 2001 set off a series of conflicts among FATA's already militarised tribes and among groups fleeing Afghanistan. These Afghan and international groups called on Pashtun values, such as hospitality and refuge, in order to seek protection. Such moves have changed the frame of the conflict, and Orakzai has argued that 'with the shifting of Al Qaeda leadership from Afghanistan to the tribal areas after the US-led war on Afghanistan in October 2001, meta-narratives have been employed to advance local grievances', connecting the fights on the ground with larger global struggles over Islam (Orakzai 2013). This has made the conflict both local and global simultaneously.

Currently, there are numerous insurgent groups operating in the area with various orientations and supporters. Rather than being a coherent political and military force, the largest group, TTP, is more of a loose umbrella group that other local groups have joined when convenient (Bergen 2013). Drawing on international funds and support (at times) from groups like al Qaeda and the Afghan Taliban, the TTP's relationship with all of these groups have shifted over the past decade. TTP attacks on Shia and other minorities have increased sectarian hostility and suspicion between groups that historically have co-existed in close proximity (Ahmed 2013).

While Pashtun tribes may agree with the social conservatism of TTP, al Qaeda and other international Islamist militant groups, they are reluctant to give up local autonomy or merge with other tribes with

whom they have deep feuds. It is notable that while many tribal uprisings in the area have historically sought increased autonomy, more recently the declaration by TTP and Al Qaeda of the 'Islamic Emirate of Waziristan' undermines the very notion of the Pakistani State and presents a different political paradigm than the historical rhetoric traditionally used to mobilise groups.

TTP has also actively attacked the tribal system of elders, *maliks* and local *ulema* councils. Eight hundred local elders have been reportedly assassinated by TTP and allied groups since the Pakistani government's incursion into Waziristan (Ahmed 2013).[6] Reports by Amnesty International (2010) and Campaign for Innocent Victims in Conflict (2010) suggest that although this has increasingly intimidated local tribes, it has also cut off their historical links to the government. Other attacks may be economically motivated or be used to settle older feuds, but these all combine to create a political atmosphere of distrust, making the future resolution of the conflict even less likely.

The relationship between insurgent groups and the Government is complicated by Pakistan's history of funding militant Islamist groups as an alternative to using their own forces. Inter-Services Intelligence (ISI), the Pakistani security service, has also had a close relationship to many of these militant groups and their precursors (Waldman 2010). As these relations worsened, the government started using tribal *lashkars* to fight insurgent groups in areas where they were struggling to maintain a presence (in turn making these tribal groups more of a target for insurgents). This process has been facilitated by the fact that Pashtuns make up the second largest group of Pakistani military officers and soldiers (Amnesty International 2010).

In recent years, TTP, in particular, has made it clear that their primary target is the Pakistani Government. In response, President Musharraf launched an initial incursion into Waziristan in 2004 and by 2010, the Pakistan government had 140,000 troops on the ground in FATA (Khan 2011). This triggered a flood of internal and external displacements, in some cases reversing the previous movement of refugees, as with 100,000 refugees moving from Waziristan to Khost in Afghanistan (IANS July 2, 2014). The 2007 government attack on Lal Masjid (Red Mosque) in Islamabad further turned opinion against the Pakistani government in more religious sectors of the Pakistani population. 70% of madarassah students at the mosque were from tribal areas, however the raid fuelled the growing sense of a war on the Pashtun way of life (Ahmed 2013). More recently, in 2014, Operation Zarb-e-Azb deployed another 30,000 Pakistani troops into northern Waziristan and deepened the sense that this is an area under siege (Santana and Shahzad 2014).

America's drone war

America's drone campaign in FATA has contributed to regional instability as drone attacks increased drastically in the second half of last decade (from two in 2005 to 51 in 2009 (Amnesty 2010)). These attacks have killed hundreds or low thousands and the ongoing presence of drones has deeply impacted social and political life in the area.[7] In some instances, tribes, particularly Waziris and Mehsuds, have manipulated intelligence to direct drone strikes to settle local scores (Ahmed 2013). The Pakistani and international media attention, particularly to the killing of innocent civilians has increased the focus on these attacks and deepened local suspicion (Ahmed 2013).

While supporters of the drone policy have argued that drone use actually reduces civilian causalities, a report by Stanford University and New York University highlights the social and economic harm caused by such persistent attacks (2010). In particular, they highlight how attacks have undermined respect for rule of

[6] Numbers on these issues are notoriously inconsistent and difficult to track and a 2010 study suggested that at that point between 600 and 1,000 elders had been assassinated by various insurgent groups (Kerr 2010, 7).

[7] Due to the highly political nature of the debate around drone use and the difficulty gathering data, the numbers of strikes and causalities is highly disputed. A review of approaches by Stanford University and NYU concluded that The Bureau of Investigative Journalism had data sets "more thorough and comprehensive" than other key centers (IHRCRC and GJC 2012, 14). Between 2004 and August 1, 2012, they estimated that between 482 and 849 Pakistani civilians had been killed in strikes.

law and international legal protection, and, most importantly for this report, have made FATA residents less likely to trust international or Pakistani government programmes (IHRCRC and GJC 2012). The attacks have also complicated local understandings of the conflict, with communities unsure about whether attacks are directed by the American government with or without consultation with the Pakistani government (cables released by *Wikileaks* suggest Pakistan initially covered-up US involvement in strikes (IHRCRC and GJC 2012).

These attacks have also de-located the conflict in many other ways and by 2012, TTP was conducting attacks in Karachi, Lahore, Rawalpindi and elsewhere across the country. Often these attacks are directly linked to attacks by American drones or the Pakistani military in tribal areas and, for example, the November 2006 bombing of a military camp in Dargai was said to be in direct response to a drone strike in Bajaur (Ahmed 2013). Polio vaccination campaigns have similarly become targets with both doctors and health workers assassinated in recent years amid accusations of spying in connection with drone strikes (e.g. Boone 2014).

The current strategies on both sides of the conflict may be further destabilising the area by eliminating the older generation of leadership, such as the drone attack on 1 November 2013 that killed Hakimullah Mehsud, leader of TTP. Such leadership vacuums mean that a new generation of leaders is coming to power that are even more radicalised than the previous one.

All of this has led to local social and political upheaval that is reshaping the social landscapes of FATA and KPK and impacting an array of issues, including access to health services. The following section considers some of these key issues.

The effects of the recent instability

The image of Pashtun areas in FATA and KPK as being isolated and static is false on many levels. Increased road access has brought great economic shifts in the past fifty years as has significant out-migration to other parts of Pakistan and further abroad, all increasing the links between the areas economically, politically and socially to the rest of Pakistan (Hayat 2009). Despite this, Pashtun communities have suffered increased disenfranchisement and have, if anything, been moved further to the margins of Pakistani political society.

Migration and displacement

There is a long history of displacement of Pashtun groups on both sides of the border. Concrete data is limited, but the more qualitative descriptions that do exist (e.g. SRSP 2011) confirm the ways in which such displacement upends historical markers of identity and social organisation, as seen in earlier waves of displaced Pashtun tribes (Centlivres and Centilivres-Demont 1988).

Fighting over the past decade has displaced millions from the region either temporarily or permanently (Orakzai 2013, 33).[8] Complicating the management of these displaced groups is the fact that the vast majority do not join formal government IDP camps, but join relatives or find other places of refuge (Government of Pakistan, July 13, 2014), and many have chosen to join family on the less accessible Afghan side of the border.

[8] UNHCR says that there are currently 1.2 million internally displaced people within Pakistan, along with 1.5 refugees from Afghanistan (2015).

Suspicion of Government and international efforts

In the wake of these displacements, blame for the current conflicts in FATA and KPK is spread surprisingly evenly by Pashtun respondents. A 2012 survey in FATA showed 79% opposing the presence of the U.S. military in FATA, 68% opposing the presence of Al Qaeda, 64% opposing the presence of Afghan Taliban and 63% opposing the presence of TTP (Aziz 2012). This suggests a desire for autonomy, with interventions of all types and by all sections being perceived as intrusion. For example, in South Waziristan a recent road-building project raised concerns among many in the community. Ahmed (2013) argues that despite being 'one of the largest development schemes in the history of Waziristan, tribesmen see the road not as bringing commerce, trade, and visitors to their land but as a means to deploy large numbers of troops across the agencies. To them, it is more than an intrusion— it is a deliberate provocation'. Other local NGOs, such as the Sarhad Rural Support Programme (SRSP) have managed successful infrastructure and social development projects in the area. More work needs to be done to study what approaches have been most effective.

Projects like this, the constant threat of drone strikes and unstable political conditions have unsurprisingly led to an increase in conspiracy theories as Pashtun struggle to make sense of the chaotic political world around them. These theories are linked to all international programmes in the area, including Polio campaigns. Most of the rumours put the blame squarely on the United States. A 2010 New America Foundation poll found that 80% of respondents in FATA believed that the real purpose of the American war on terror was 'to weaken and divide the Islamic world, while ensuring American domination'. Only 10% of respondents thought the U.S. 'was motivated to defeat Al-Qaeda and its allies'. These attitudes have had serious repercussions for internationally-sponsored health programmes (or even those simply perceived to have international support).

Relationships between communities and health programmes

Attitudes towards health programmes seem to be shaped primarily by security, the dire state of existing health services and some of the shifting social attitudes created by the current instability. Conflict and displacement also affects SIAs, with 100,000 children missed in any given campaign because they are out of district (UNICEF, C4D Programmatic Narrative). This has had an impact on actual cases with 86% of all new Polio cases from insecure, inaccessible areas of FATA and KPK. Moreover, this problem appears to be getting worse since the number is up from 76% in 2013 and 31% in 2012 (ibid).

The uneasy relationship between tribes, insurgents and the government affects health choices made in the area. The most notable example of this was the fatwa (edict) issued by Hafiz Gul Bahadar, a key insurgent leader in Northern Waziristan, banning Polio campaigns in tribal areas. This ban was tied directly to drone strikes (Gul 2012) and came in the wake of Osama bin Laden's death, which raised questions about vaccination programmes being used as surveillance more widely (discussed further below). In response, the Pakistani government imposed a ban on the payment of honorariums to tribal elders and called a halt to the recruitment of government and development employees in the area, with the Political Agent stating that it was the responsibility of the tribes to provide security for the vaccination teams. This clearly demonstrated to local communities the entanglement of the state, the American attacks, the Taliban and vaccination programmes.

Furthermore, widely circulating accounts about Shakil Afridi, the doctor who worked for the CIA and used the hepatitis B vaccine to gather the DNA of Osama bin Laden's family, have raised suspicions about the true intent of health programmes among local tribes at odds with the government. In particular, suspicions have been raised about the use of technologies associated with surveillance, such as Global Positioning System (GPS) trackers attached to Polio vaccine coolers (McGirk 2015). It is unsurprising, therefore, that in a recent survey, 48% of FATA respondents had heard destructive rumours about Polio vaccination programmes as opposed to just 18% of non-FATA respondents (UNICEF, C4D Programmatic Narrative). The fact that Shakil Afridi's role in the operation is now being questioned in the Western media, suggests that regardless of his true involvement, suspicions about the intersection of vaccination programmes, and

international and local military interventions are likely to continue and to be manipulated further by insurgent groups (Brumfiel 2011; Shah 2011).

Profiles of Select Tribes

This section focuses on six distinct groups of Pashtuns from the FATA and KPK area and considers how social norms and recent history may be shaping attitudes towards Polio vaccination programmes. Since the majority of these groups originate from and still reside in FATA, the focus is on this region, although reference is also made to the growing number of these communities now residing in KPK and elsewhere in Pakistan. The lack of tribe-specific data and thorough recent ethnographic studies makes the available information uneven. These profiles are therefore provided primarily as a means for raising questions and key considerations about local socio-cultural and political conditions and how these link to and influence attitudes towards vaccination programmes.

The Afridi

The Afridis are based primarily in the Khyber Agency and have been shaped politically and socially by the territory that they control, particularly the Khyber Pass connecting eastern Afghanistan to Pakistan. Most Afridis live on the Pakistan side of the border, but the Shinwaris that also inhabit the area are divded across the border, increasing cross-border social and economic interactions (Caroe 1958). The Khyber Agency that the Afridis dominate is fairly barren, and the area has little irrigation outside the Tirah valley. Historically, the Afridis have derived significant income from smuggling and kidnapping for ransom. More recently, narcotics cultivation and trafficking has increased in the area, and a significant number of Afridis are involved in transportation of the military. The proximity of the group to Peshawar has meant more government penetration than in other Agencies, along with access to certain economic resources that other groups may lack (Abbas 2007). In 2005, one assessment reported that there were 66 doctors, two dental surgeons and 426 para-medical staff in the Khyber Agency with four hospitals for 550,000 residents, which is relatively better than some other nearby Agencies (Khan 2005).

The strategic location of the Khyber has helped raise the status of the Afridis despite the relative lack of resources in the area. The British used the Khyber Pass during the first Anglo-Afghan war and then occupied it more permanently after the second Anglo-Afghan war. The Afridis seized the Pass in 1897 during a tribal uprising that was eventually defeated, but this led to a series of agreements with the British Empire, involving allowances for tribal elders (in lieu of tolls) and compensation for roads and camps in the area until the First World War (Caroe 1958). It also led to the formation and incorporation of the Khyber Rifles Military Corps into the British army as a para-military unit of tribesmen, and began a history of negotiated autonomy afforded to the Afridis by the British and later the Pakistani government, in contrast to some of the other tribes in the area.

Located across from the Tora Bora cave complex in Nangahar Province, Afghanistan, the area was an important arms conduit during the 1980s war against the Soviet-back government in Kabul and more recently, numerous insurgent groups have been active in the area, taking advantage of the porous border. Haji Namdar, the initial leader of the insurgency in the Agency, spent time in Saudi Arabia, returning to set up an FM radio station preaching conservative values. He enforced bans on music and dress codes (including head coverings for women and beards for men) that were much stricter than previous religious norms in the area (IRIN May 30, 2011).

The Afridis, perhaps due to the comparatively significant resources available and the proximity of insurgent groups in Afghanistan have remained divided, and the insurgency is at its most complex here. In particular, Mangal Bagh, from one of the weaker clans of the Afridis, has attacked the elder system that was supportive of TTP, leading to numerous small-scale skirmishes. Other factions, including Ansar al-Islam and Lashkar-e Islam also have sizable militias and form shifting alliances (Abbas 2007).

A recent unpublished case study of conflict in the Afridi village of Qasem Khel, reveals the local dynamics of these ongoing conflicts. In the village there was a significant dispute over a newly discovered coal mine that raised questions about the nature of both individual and group resources. A series of *jirgas* were held that have brought together government officials and local elders in attempts to resolve the tensions through multiple mixed *jirgas*, including both formal and informal leaders. Zaman (2011) argues that while the mine brought economic growth to the area, the deep distrust of the local management committee and accusations of corruption undermined social relations.[9] Such cases suggest that for health programmes operating in the areas, the growing distrust of both government officials, but also any tribal leader affiliated with them, means that it will be increasingly difficult to find trusted leaders to partner with.

All of this suggests that Afridi social lives have been seriously disrupted by the past decade of conflict and, in particular, leadership remains divided. The fact that Shakil Afridi (the doctor whom the CIA purportedly used to secure DNA from bin Laden's family used a fake Hepatitis B vaccination programme) was an Afridi, has fuelled local suspicion about many different components of international programmes. Despite this, Afridis continue to maintain certain economic and geo-strategic advantages compared to their neighbours, making them easier to access and more likely to recover from ongoing conflict.

The Waziri

The Wazirs are originally from Birmal in Afghanistan, moving eastward in fourteenth century (Caroe 1958). They are primarily pastoral, with limited amounts of agriculture on un-irrigated land. The extreme geography of Waziristan is good for the seasonal movement of flocks, but also makes communities difficult to access (Ahmed 2013). As a result of the rugged terrain, they were largely left alone by the British (ibid). Waziris are also heavily involved in the transportation business and historically, have profited from kidnapping for ransom. It is worth noting, that there are more Waziris in the Pakistani military than members of any other Pashtun tribe (Abbas 2006).

The Waziris have historically feuded with their neighbours, the Mehsuds, over land and other resources. Since the Mehsuds were the core of TTP in its early days, this has shaped the Waziri approach to the current conflict. Partially due to this antagonism, Waziris seem to have concentrated most of their efforts on attacking NATO and ISAF targets in Afghanistan, supporting Mullah Omar, instead of assisting TTP (Ahmed 2013). At Omar's request they attacked militant Uzbeks fighting for the Islamic Movement of Uzbekistan in the area (a jihadi group with a particularly international orientation who called for a restoration of the caliphate), in part because they were drawing the attention of Pakistani military forces. This was the first of a series of deals, both direct and indirect, with the military earning the Waziris the label 'the good Taliban'(Ahmed 2013). Although fighting continued between Waziris and Pakistani security forces on a variety of levels, the tribe was never as enthusiastic in their support of TTP as other tribes were.

All of this has led to an uneven relationship between the government of Pakistan and the Waziris. Historically the presence of Waziris in the Pakistani military has facilitated relations between the tribe and the State (Abbas 2006). Despite this, Musharraf launched an attack on Waziristan in 2004 that displaced most of the population. Later, Waziri leader Nek Mohammad Wazir signed a ceasefire with the government of Pakistan, but was killed in a drone strike two months later (Ahmed 2013, 81), demonstrating some of the tensions between American and Pakistani policies towards FATA leaders.

Hafiz Gul Bahadar, the Waziri leader mentioned above who issued a fatwa against Polio vaccinations, is indicative of some of the complex socio-political terrain in the area. Bahadur, a Deobandi educated cleric, has carefully cultivated a network of allies in various tribes around Waziristan (Gopal et al. 2013). He also has links with TTP, but has been careful not to associate himself too closely lest he incur a backlash from the Pakistani government. His fatwa against Polio vaccination suggests that international health

[9] For case studies of other land disputes involving Afridis, see Khan 2005, 106-112.

programmes are considered legitimate targets in response to drone attacks or Pakistani military action. Protecting health workers in the future may require careful negotiation around these constructs.

The Mohmand

The Mohmand inhabit a fertile area in FATA. Due to the productiveness of the Mohmand Agency, land values are high and this has shaped political divisions in the area. The value of the land has contributed to feuds with neighbouring Shinwaris and Yousufzais (Caroe 1959). Historically the Mohmand practised the periodical redistribution of land in order to lessen land disputes and promote egalitarianism among individuals and various clans. This practice was much reduced by the end of the nineteenth century, which helped solidify the landowning class as dominant within the tribe. Ahmed (1976) suggests that these shifts have greatly heightened the tendency towards conflict and the breakdown relations since 'the individual no longer neighbours, and therefore confronts, his collaterals and agnates across the boundary of his land. More recently, the area has seen an increase in poppy cultivation further increasing the value particularly of irrigated land.

Like other groups in the area, the Mohmands migrated from Southern Afghanistan to their current area in the fifteenth century. They were said to have given the British some of the most trouble they encountered in the area, fighting primarily under religious as opposed to tribal leadership (Abbas 2006). In the 1970s development schemes built roads and schools in the area. This made the Mohmand better integrated into wider Pakistani society and the area hosted millions of Afghan refugees in the 1980s, in part due to the area's infrastructure (Fishman 2013).

The Mohmand have ties to international groups while continuing to assert their autonomy. Several key leaders come from the Mohmands. Maulvi Faqir Mohammad, Baitiullah Mehsud's right hand man and one of the original founders of TTP is Mohmand (Rahmanullah 2013). Al Zawahiri, the current leader of al Qaeda is believed to be married to a Mohmand, part of a wider strategy of international jihadis attempting to integrate themselves into local tribal society (Abbas 2006).

Yet, on several occasions Mohmand tribal militias have gone out of their way to assert their local autonomy and a Mohmand lashkar was given credit for arresting TTP spokesman Maulvi Omar in 2009 (Mohmand 2009). Similarly, attacks have been aimed at the Pakistani government, as in 2007 when 70 men stormed a mosque in Mohmand Agency, renaming it the Red Mosque in response to Musharaff's assault on the Islamabad mosque of the same name earlier that year (Hasnain 2007). In the follow up, Omar Khalid, their leader, declared 'we are local' to affirm their independence from other transnational terrorist groups (Ahmed 2013). Other analysts, however, suggest that tribal leaders have hesitated to confront Pakistani military forces directly (Abbas 2006), suggesting that many may be simply waiting for the conflict to move closer towards resolution before choosing allies. This would make it less likely that they would take a strong political stance without further clarity about the future.

During a 2008 truce with the Pakistani government, Khalid agreed to not attack Pakistani government or military forces in exchange for essentially allowing Khalid to set up a shadow government, complete with a sharia court system. At the same time, he banned the work of international organisations in the district, but allowed women to continue working, as long as they were veiled in public (Roggio 2010).

There have been clear socio-economic repercussions for members of the tribe. During the current instability, the inability of the Mohmands to access the land they historically used for agriculture has led to a significant rise in unemployment and financial hardship (Amnesty International 2010). In turn, this had resulted in displacement for economic and military reasons and Polio cases among tribe members have recently presented in individuals now residing in KPK and Karachi. Additionally, health facilities in the Mohmand Agency have been targeted by militants and in 2007, a hospital was blown up near the Agency headquarters, primarily due to its link with the government. (Abbas 2007).

Bajaur (The Tarkanis)

Bajaur is the smallest and least accessible of the agencies in FATA. The areas that are cultivable are fertile and historically local groups have not practised land redistribution as was the practice in other areas (Ahmed 1976). Due to the relative lack of government presence in past decades, the area has seen a large growth in poppy cultivation (Abbas 2007). The agency is dominated by the Tarkanis, who make up roughly half of the agency's million inhabitants. Originally settled in Laghman in Afghanistan, the Tarkanis moved to Bajaur in the fifteenth century (Caroe 1958).

It was only in negotiations around the formation of the Durrand Line between Sir Mortimer Durand and Abdur Rahman Khan that the king of Afghanistan ceded control of Bajaur. Even then, the boundary was neither demarcated on the ground or made into a formal boundary. Rather it was simply referred to as the boundary between the Bajaur watershed and the Kunar watershed, simply a line beyond which both the king of Afghanistan and the British agreed to not exert any influence (Caroe 1958). The border has continued to dominate social and political trends in the region and during the 1990s, Afghan refugee camps in the area were a source of recruits for the Taliban who then returned to Afghanistan to fight against the coalition government (Abbas 2007).

Bajaur's position across the border from Kunar, a strategic, fertile region north of Jalalabad, meant that following the American-led invasion, Taliban and al Qaeda fighters crossed this mountainous border and used Pashtun codes of hospitality to be welcomed as guests (Rahmanullah 2013). President Musharraf's decision to assist the American war in Afghanistan was decidedly unpopular locally and led to a rise in number of Bajauris crossing the border to fight in Afghanistan, following similar routes to those fighting in the 1980s and 1990s. As a growing number of these fighters were killed or detained in Afghanistan (where prisons are notorious for their radicalising effects), fewer Bajauris volunteered to fight on the other side of the border and concentrated their efforts at home. Still, the Agency has continued to be a place where al Qaeda and the Taliban organise terror attacks including attacks in London and Barcelona (Rahmanullah 2013). Similarly, Al Qaeda members and other foreign fighters continue to use Pashtun tribal values, such as hospitality, to secure protection in the area.

In part due to its remote location and the difficulty that TTP has had in making inroads with the local population, tribal elders continue to be stronger than in some other areas, and maintain powerful lashkars that have occasionally fought against Taliban groups perceived as outsiders (Rahmanullah 2013). These tensions have, in several cases, led to more overt terror and violence – local elders attending a jirga that had decided not to side with TTP were beheaded in 2008 (Ahmed 2013). Maulvi Faqir Mohammad, the leader of TTP in Bajaur has publicly expressed his support for both the Taliban's Quetta Shura and al Qaeda, yet most of the Bajauri Taliban targets have been associated with the Pakistani government or military (Rahmanullah 2013).

In response to this activity, there have been numerous drone strikes in the area, particularly targeting al Zawahiri, who was believed to have been living in the area (Rahmanullah 2013). The Pakistani military followed this with a largely ineffective summer offensive in 2008 that ultimately spread the conflict. In an article entitled, 'Battle of Bajaur,' The New York Times linked the Islamabad Marriott bombing as 'an extension of the battle in Bajaur, a strike by the militants deep into the heart of Pakistan and one meant at least in part to deter the government from pressing the campaign further' (Khan and Gall September 22 2008). Some reports suggest that local communities believe that the Government of Pakistan has primarily used America's War on Terror as an excuse to invade and extract their revenge on local groups (Badshan et al. 2012). The conflict displaced half a million residents in 2008, most of whom have subsequently returned, but tensions between the Taliban, the Pakistani government and local tribes in Bajaur continue. This recent series of displacements has meant that Polio cases among Bajaur communities are found in central KPK and Karachi, as opposed to in FATA.

Case studies suggest that the continued conflict has seriously undermined tribal structures (e.g. Badshah et al. 2012 and Ramanullah 2013). Groups on all sides of the conflict have targeted both maliks and other

tribal elders. This has led to reports that the jirga system is largely ineffective in resolving local disputes and has resulted in the growing local perception of elders as corrupt and ineffective (Badshah et al. 2012).

For local residents, the fighting has meant further economic hardship. In a spiral of conflict, this has resulted in increased numbers of unemployed young men who have joined local Taliban groups, attracted by their generous salaries. Displacement and conflict has also prevented health services from reaching residents. The agency only has only one hospital and seventeen clinics. That the Taliban continues to target government schools in their ongoing campaign, emphasises the link between the conflict and disrupted government services for local residents (Ramanullah 2013).

The Dawar

The ethnographic record on the Dawari tribe is very thin and some consider them simply a sub-tribe of the Waziri. Originally settled in Shawal, they were driven out by the Uthmanzai Waziris in fourteenth century. More agriculturally-dependent and settled than some of their neighbours, this has perhaps led to them being considered more pious than some other groups (NPS n.d.).

The Dawaris are closely related to their neighbours, the Waziri, who have tended to dominate them politically and economically, and this relationship has shaped their current political situation. Dawaris make up 40% of the population of Northern Waziristan, but in recent years have been displaced at a higher rate than neighbouring Waziri tribes, making them disproportionately represented among IDPs (Yusufzai 2014).

In the recent past, militants among the Dawaris have been more likely to join TTP than other groups, although others have affiliated themselves with Hafiz Gul Bahadur who has substantial support in Northern Waziristan (Yusufzai 2014). Bahadur's most important commander is from the Dawar tribe (Gopal et al. 2013).

The Suleman Khel

Historically nomadic, many of the Suleman Khel did not go through the process of sedentarisation until the 1970s and 1980s, later than many other traditionally pastoral tribes (Ahmed 2004). As a result, they continue to be scattered across both Afghanistan and Pakistan, occupying a good deal of territory in the area between Kabul and Paghman, as well as in Paktia and Kunar (Anderson 1975; Spain 1962). The Suleman Khel are one of the smaller tribes of South Waziristan (Ahmed 1981).

Living in close proximity to Waziris and Mehsuds, who were frequently in conflict with each other, the Suleman Khel have avoided significant government attention, potentially due to their politically weak position and the degree to which the Waziris and Mehsuds have preoccupied the American and Pakistani militaries. Recent cases of Polio among the Suleman Khel have come from members of the tribe residing in South Waziristan and in parts of Karachi.

Suleman Khel have historically taken political advantage of the border, as Ahmed (1981) argues they 'live in the administrative and social interstices of the larger states not by accident but by choice…as part of a political strategy which expresses explicitly a desire to live free'. Some were forcefully settled in Kunar (across from the Bajaur Agency) and elsewhere by Abdur Rahman in the twentieth century, in part to serve as a buffer against tribes on the British side of the frontier (Christensen 1980). Due in part to their nomadic tendencies, the Suleman Khel are said to be more fragmented that other groups, with fairly weak democratic leadership (Anderson 1975). There is no reliable contemporary data on their views about the current conflict.

Polio community 'reservoirs'

Looking at the current increase of Polio within this socio-cultural and political context reveals some concerning trends. Amongst the complex factors discussed above, the Taliban's ban on Polio vaccination has contributed to an increase in cases in FATA, and, through migration, an increase elsewhere in the country as well (Ahmed and Yousuf 2015). The ban affected about 350,000 children between June 2012 and early 2015, and created an important reservoir of unvaccinated children (Alexander et al. 2014).[10] However, it is important to put this reservoir in the perspective of the millions of children in the rest of Pakistan who are accessible but poorly immunised. While North Waziristan harboured a remarkable 70 Polio cases in 2014, the other remaining 236 cases in Pakistan were in accessible districts, and in 2015 to date all 24 cases have been from accessible districts.

Insurgency affects Polio eradication efforts in other ways besides closing off children to vaccination. In particular, the targeting of ground-level health staff by militants has impacted the programme across the country. It is impossible to know exactly how many OPV refusals and Polio cases such lethal targeting has caused, but given that ground-level staff were commonly frustrated and de-motivated even before lethal targeting began, it is likely that this militant action has significantly and negatively affected campaign quality across the country.

While conflict is an important contributor to the dynamics sustaining Polio transmission in Pakistan, it does not act alone. Poor health and sanitation systems, a lack of accountability at many levels, inequality and poverty, all these are also contributing factors. If levels of immunisation in places like Karachi and Peshawar were sufficiently high, they would not be susceptible to imported Polio from Taliban-controlled areas. This observation offers a way forward for health policymakers who have no power over the large-scale factors driving insecurity and conflict: there are many other variables driving Polio transmission where intervention is possible.

The phenomenon of entire villages or neighbourhoods refusing Polio vaccines is now rare or nonexistent. The ultimate choice to accept or refuse OPV is nearly always made at the individual or household level, suggesting the need for a more targeted approach to refusals. Numerous studies on parental perceptions and attitudes towards Polio vaccination suggest that low-income individuals of Pashtun ethnicity are more likely to refuse OPV compared to low-income non-Pashtun individuals. The former group also accounts for 77% of Polio cases nationally (TAG 2012) and 90% of cases in cities like Karachi (Khowaja et al. 2012). There is a need to better understand the socio-cultural dynamics of OPV refusals among both Pashtuns in FATA and KPK, and those who have migrated to other parts of the country. In parallel, there is a need to identify population groups and individual families that accept OPV despite chllaneges associated with access to preventative healthcare services. This may help clarify the programmatic practices that are the most effective.

Polio Campaigns: interventions for conflict-affected areas and populations

Two recent innovative and creative programmes attempt to address Polio eradication in conflict-affected areas and populations. Both of these efforts go beyond the traditional campaign mode to address Polio in its broader context. Since Taliban and other anti-government targeting and opposition to Polio vaccination is primarily political and driven by Polio eradication's high profile, these programmes make an important attempt to place Polio vaccination back in the context of broader health services (Amimbola 2013).

[10] http://www.endpolio.com.pk/media-room/media-releases/254-pakistan-is-on-course-to-defeating-polio-ayesha-raza

The first, *Sehat ka Insaaf*, was developed by the government of KPK. The programme was multi-pronged, including very strict security regulations (such as a ban on motorcycles), and an expansion of the number of health services offered during campaigns. Along with a wide range of other vaccines, the programme also offers hygiene kits with items like soap (Patel and Patel 2015) and was considered a success by external observers (Independent Monitoring Board for Polio Eradication 2015).

A second, conceptually related initiative is the expansion of Health Camps that would provide not just Polio vaccines but also routine immunisations and a wide range of other health services, from provision of ORS to treatment for malaria (UNICEF 2014). This approach avoids the politicisation of Polio vaccines, and provides parents who might otherwise refuse a reason to embrace Polio campaigns.

Other Polio-specific initiatives also exist. Another early-stage initiative is Continuous Community Protected Vaccination. In this programme, Polio staff work full time rather than on a short-term campaign basis, and are selected and shielded by community members (UNICEF, personal communication). Social mobilisation that focuses strategies on 'high risk' populations, tailor media messages using appropriate language, promote thought leaders, and target groups through purposive on-the-ground education efforts.

A number of additional interventions are less far-reaching but still aim to address important gaps.[11] First, in an attempt to vaccinate children in the no-go area of North Waziristan, over 700,000 people of all ages were vaccinated leaving North Waziristan at major transportation hubs in KPK and Khost, Afghanistan in 2014. Secondly, some mobile populations exiting North and South Waziristan in mid 2014 were given mobile phones and access to credit in exchange for details about their location. The idea was that this information could identify areas where displaced persons were located and could assist with targeting for additional vaccination efforts. Vaccination at border crossings has particularly targeted Pashtun populations (although in light of communities' fears regarding targeted drone attacks, such initiatives may cause further disruption). Thirdly, UNICEF has created social maps of both migration and community influencers in the areas served by COMNet. Finally, in some areas security personnel accompany vaccination teams going door-to-door.

Motivating social mobilisers and vaccinators: supporting healthcare workers and volunteers' commitment and dedication to Polio and RI

The people who do the work of door-to-door social mobilisation and vaccination in Pakistan fall into three major categories: employees of the government health system; so-called 'volunteers'; and social mobilisers contracted by UNICEF. Each of these groups has different backgrounds, motivations, and needs.

The discussion below relies primarily on unpublished data collected as part of research conducted in SITE Town, Karachi, in January 2012 (Closser et al. 2012 and Closser et al. 2014), an area with large numbers of Pashto-speaking migrants. Issues specific to workers in FATA and KPK may be somewhat varied, as administrative structures are different, and as many workers in the health system in Sindh are Urdu-speaking, even those that serve Pashto-speaking populations. That said, the concerns here echo issues raised in research done for UNICEF in all four provinces in June 2011 (Closser 2011) and it serves as a starting point for considering how similar issues may arise in KPK and FATA.

A major issue affecting the well-being and job satisfaction of all Polio staff in Pakistan is lethal targeting, numerous frontline Polio workers have been murdered over the last two years. To our knowledge, no research with ground-level health staff has been done since lethal targeting began in December 2012, so

[11] See Presentation made by Ms Ayesha Raza Farooq, Prime Minister's Focal Person on Polio Eradication, Ministry of National Health Services, Regulations and Coordination.
http://www.polioeradication.org/Portals/0/Document/Aboutus/Governance/IMB/11IMBMeeting/5.1_11IMB.pdf

the information in this review relies on information collected shortly prior to that. The issues identified here are likely to have been intensified by this lethal targeting and workers are likely to have additional concerns about security.

Employees of the Government health system

Many frontline Polio staff are employees of the government health system, and work on Polio during campaigns. In most areas, the majority are Lady Health Workers (LHWs) who receive additional per diems for their work on campaigns. Underlying issues with overall job dissatisfaction strongly affect the satisfaction and performance of these workers. Female vaccinators face additional risks and have been singled out in attacks (McGirk 2015). Workers in the SITE Town study were largely unhappy with their jobs. The following key issues related to their work in general:

- Higher-level, well-paid officials were often perceived to not be working hard and/or to be corrupt. Frontline workers complained of inaction by 'those superior people who sit in air-conditioned rooms'. Complaints about the significantly higher salaries provided to some senior supervisors were common.
- Pay arrived late. In January 2012, regular non-Polio worker salaries in SITE Town were 5 months in arrears.
- Lady Health Workers were upset about lack of job security and benefits. LHWs are organised nationally and have been striking and agitating to receive these benefits since 2010. Their demands, to receive the same benefits that male employees of the health system receive, are reasonable. Recent action by the Government of Pakistan to extend benefits to LHWs could address these problems.
- Political connections often determined job advancement and postings. Most LHWs saw job advancement as impossible, meaning there was little recognition of their efforts, or encouragement and motivation to perform better. One LHW noted, 'Here no one will say anything to the one who is doing a good job and working, or to the one who is not working at all'. Although one supervisor noted that performance targets and reviews existed, most frontline workers did not experience their jobs this way.
- Overall pay was inadequate. 'Prices are high, my responsibilities are many, and my husband is jobless so the money is not enough' one LHW explained.
- If workers were motivated, it was primarily because they saw the work they did as important. One LHW concluded, 'The knowledge that you provided relief to someone is very mentally satisfying'.

Workers' issues regarding Polio campaign work were tied to the problems they had with their jobs overall. Complaints about Polio pay being too little and coming too late were common, as were complaints about inaction and corruption at higher levels. Since this research (when Polio pay was Rs. 250/day), Polio pay has been increased in some areas of the country, and efforts have been made to ensure that Polio payments are timely. These are excellent steps that should be monitored and supported.

That said, the potential distorting effects of receiving a reliable salary only for Polio, but not for providing other routine services, are significant. As one district level official in Karachi said, 'PHC/RI and Polio are two different tiers. PHC/RI don't get the money or their salaries. Polio gets lots of money and the salaries come on time. Of course one activity will suffer this way'.

Volunteers

Because there are insufficient government health staff to carry out door-to-door Polio campaigns, the Polio programme also relies on 'volunteers', people contracted on a daily wage. The majority of 'volunteers' are people living in poverty who accept the low wages associated with Polio work as a way to feed their families. Health staff at all levels reported that volunteers' levels of motivation were suboptimal. They also reported that it was very difficult for them to recruit qualified volunteers, especially women.

Low pay was repeatedly mentioned as a reason for this low motivation and difficulty in recruiting workers. A supervisor pointed out that their salary was 'neither enough for rent nor food'. Late payments were also an issue. 'They get excited that they get a job and then they don't get paid. It is demobilising and demotivating', one supervisor reported.

Social Mobilisers

Based on data collected during the 2012 study in SITE Town (Karachi), it was found that social mobilisers in the area were contracted by RSPN, a project funded by UNICEF. Social mobilisers received over Rs. 8,000 for 13-15 days of work. The study team interviewed only a few social mobilisers working for RSPN, but those that did participate in the study seemed motivated, especially by their high salaries**.** One woman concluded, 'Everyone wants to be involved in this campaign, the government gives Rs. 700 per day. I love my work, everyone gives me respect because of my job.'

There is, however, a complicated side to this story. The same high salaries from UNICEF that motivated the social mobilisers were demotivating to government employees, who complained bitterly about the fact that social mobilisation frontline staff received more than they did. One low-level supervisor echoed many when he said, 'This is injustice. How are we expected to keep our workers motivated and also keep our workers from joining other programmes?' The solution, according to the study's interviewees, was not to decrease the RSPN salary, but to raise the salaries of government staff to the same amount.

Demotivating effect of refusals

Many workers told us that dealing with hostile or refusal families was a particularly demotivating aspect of their job. One worker added 'Strong refusals break our feelings'. Another noted, 'I am exhausted… what is my fault if people refuse?' He added that campaign work was particularly difficult in areas of the city where 'There are no health centres and those that open are continuous failures'. Some said that these issues made it hard to retain good 'volunteers'.

Concerns Specific to Women

Interviewees noted that finding qualified women to be Polio workers from Pashto-speaking communities was difficult. In Karachi, many Urdu-speaking respondents attributed this on the conservative culture of those communities. As one city-level official said, 'They won't let their women work this way'. A local-level worker concluded, 'Most women here get married around the ages of 16 to 17 and most are not allowed by their husbands to get involved with Polio campaigns… Most men also do not like their wives to go street to street and work alongside men'. That said, many Urdu-speaking female field-staff without Pashtun heritage also found working on Polio campaigns difficult for them as women, particularly work taking place in the evening. Further research is needed to better understand the barriers and drivers to recruiting and retaining female vaccinators (LHWs, volunteers and social mobilisers) in FATA and KPK.

Key Considerations

Based upon what we know currently about the growing number of Polio cases in Pashtun communities and the socio-cultural dimensions, public health conditions and political context considered above, the need to continue vaccination efforts among Pashtun communities is evident. It is also clear that the campaigns need to be designed more critically to address the unique socio-cultural and political contexts in which they operate. This should include both new approaches to programming and a rededication of other efforts.

Take a more holistic approach to health, particularly in Pashtun areas where health services are already limited.

- Programmes would benefit from a wider provision of health services along with the Polio vaccine. This is already being attempted in some pilot programmes but is likely to significantly address OPV refusals.
- Since education level shapes health-seeking behaviour, a more integrated approach to health education, where it exists, may be more cost-effective than strictly Polio-oriented approaches.
  - This could mean greater health education in schools. Also the correlation between literacy and vaccination suggests that investments in literacy programmes may help reach some of the same goals as vaccination programmes, particularly if these programmes added a health focus.
  - Further information and evidence is required concerning the existence, coverage and/or content of existing public, non-governmental and civil society sector Behaviour Change and Communication (BCC) and Information, Education and Communication (IEC) campaigns in the communities targeted for Polio eradication activities. Whilst local NGOs may not assist in vaccination efforts, successful local programmes may be used as models and it may be worth adopting certain local techniques and strategies for community mobilisation.
- Increased support to health workers is required:
  - There is a need to improve payment, timeliness of payments and accountability to address worker motivation issues.
  - There is a need to continue efforts to recruit workers from local communities, who understand local social and cultural issues. Increasing wages for workers specifically from difficult to reach communities in order to improve recruitment could be considered.
  - Where culturally appropriate, more women health workers should be recruited from Pashtun communities and the appropriate resources allocated.
  - The quality of training for vaccinators commissioned for door-to-door visits during SIA could be improved. This cadre of health workers come into direct contact with families reluctant or actively refusing OPV. They need a clear understanding of the vaccine preventable diseases, appropriate answers to common questions and concerns regarding Polio disease and vaccine, and good communication skills for approaching and convincing families. Vaccinators may not have the key competencies required to fulfil this stressful frontline role.

Move towards more flexible methodologies that take into consider local community differences.

- Greater localisation in terms of programming would likely be beneficial.
- While certain decisions should be made at the national level, it may be worth considering whether other decisions, such as the timing of campaigns, reliance on local leaders etc, could be made at a more local level.
- While local hiring of health workers may take into account tribal differences, there could be benefits to ensuring that workers are from specific clans within the tribe.

OPV refusal is not about culture in the sense of a series of static beliefs or traditions, but comes from evolving and unstable political and social conditions that shape individual choices about health.

- A better understanding of local political and social dynamics would enable a more contextualised approach. For example, the extent to which tribal elders or mullahs may be trusted in some communities whilst being held in lower regard in others should be explored.
- Studies should identify the degree to which household or community non-compliance with fatwas countering Polio eradication activities may be accompanied by social, economic, or political sanctions or violence.
- Additional mapping exercises could focus on identifying who the key stakeholders and decision-makers are at household and community levels, particularly with regard to the acceptability and take-up of Polio and routine immunisations. Such exercises should pay careful attention to issues of gender, in-family status, socio-economic and political standing. These dynamics may be complex: for example, women may make decisions about their children's or grandchildren's immunisations without their husbands' knowledge. Similarly, prior studies have shown that in certain areas, whilst families take clerics' opinions and edicts (*fatwas*) into consideration when determining which health services are socially acceptable and medically necessary or effective, such opinions are not always the primary determining factor in decision-making.
- Considering that confidence has eroded in local leadership in many areas and that some leaders have been killed or displaced, has resulted in a need to reach out to more informal influencers.
    - Mistrust of many of the historical leaders in tribal areas also suggests the need to find alternative advocates and sources of information. One recent report suggests using more 'democratic' spaces like barbershops and mobile apolitical figures such as taxi drivers and travelling salesmen to spread information about OPV (Lee 2012), particularly amongst men.
- More detailed understanding of local-level perceptions and interactions with CHWs and volunteer vaccinators tasked with providing Polio immunisations at the community level is required. Particular attention should be paid to exploring the positive and negative views held by households and communities regarding these service providers.

Attitudes towards international events are shaping the local realities of residents in FATA and KPK.

- The association of Polio vaccination campaigns with the Government of Pakistan and the international community also means that insurgents attempting to target the government are turning towards health workers. Disassociating vaccination campaigns from the international community and the Pakistani government is crucial.
    - Media campaigns should deliberately avoid any references that promote links with the government and instead emphasise the ways in which these programmes are important for the health of local communities.
    - Health workers' use of technology that may be associated with the international military, such as iPads and mobile phone (particularly smartphones), may cause unnecessary suspicion since they are thought to be used to target zone strikes.
    - A de-emphasis on donor branding would also help disassociate campaigns from the international community.
- The suspicion of the Pakistani state and the international community may also translate to suspicions of the mass media that campaigns employ. This in turn could lead to more refusals. Recent studies have shown that many media sources lack credibility in tribal areas may be perceived as a mouthpiece of the state (Lee 2012).
    - UNICEF's approach emphasises 'increasing mass media noise' but it is not clear that this is effective in the most insecure areas.

- Confirmed cases of Polio among vaccinated children and those due to cVDPVs result in elevated fears against OPV. CVDPVs, in particular, can be addressed through improved RI service delivery for enhancing immunity. Negative experiences leave a lasting impression on individuals and communities: everyone will vividly remember a vaccinated child developing paralysis. Health behaviour messages to counter this category of mistrust need to act fast but caution how to address the issue. The strategy need not highlight the small number of cases due to cVDPVs but focus on the millions of children saved by timely and repeated doses of OPV, using audio-visual messages resonating with households from low socio-economic strata.
- While there may be little that can be done about the current military conflict in FATA, a clearer, public message internationally from UNICEF and other organisations, linking the rise of Polio to drone strikes and military incursions, could help pressure both sides to lessen engagement.

Take into account the social and political situations of many of the Pashtun tribes living along the border.

- Programmes may need to be more mobile and less restricted to certain geographic areas to help populations that are also mobile or displaced.
- There should be increased coordination and cross-border efforts with vaccination programmes in Afghanistan, including communication not just between country offices, but also teams on the ground working on either side of the border.
- There should be increased inter-agency and inter-provincial coordination in order to help identify, track and provide vaccination services to Pashtuns migrating among and between areas within FATA and KPK, as well as across Pakistan.
- There should be increased coordination with Municipal Committees, *mohalla* (neighbourhood) and masjid associations ahead of campaigns in order to identify potential roadblocks, barriers to vaccine uptake, or threats to health workers' safety.
- Current publicity campaigns around Polio vaccination do not allude to instability or the unique position of the communities living along the border. More direct reference to attempts by Taliban (or specific TTP elements) to derail campaigns may be more constructive than simply ignoring the situation.
- New and innovative pilot programmes should continue to be evaluated and should directly question some of the key assumptions about vaccination campaigns.
- Increased community engagement in health service delivery and planning prioritisation is needed. Overcoming the years of neglect to provide adequate civic services in FATA and KPK will need a multi-sectorial approach spanning decades, but to encourage immediate improvements in healthcare services at the local level, it is necessary to empower communities and civil society in health planning, delivery and accountability. This will improve quality of and increase demand for health services including vaccines.
- Programmes should be prepared to accommodate community health priorities and provide appropriate and timely services. Providing health interventions such as bed nets or oral rehydration solution with Polio drops will likely increase uptake, but there may be unintended consequences and community input, feedback and oversight is vital. The strategy adopted by UNICEF was successful because communities were able to express what services they wanted prioritised.
- It is important to identify and build on households' and communities' use of both formal and informal social and political spaces for the purposes of knowledge acquisition and consensus building specifically as it relates to Polio and routine immunisation.

Programmes should be specifically tailored for displaced Pashtun tribes

- A general 'one size fits all' approach is not suitable. Pashtun communities residing in major cities like Peshawar and Karachi will have differing health priorities and care-seeking practices compared to those living in North Waziristan or Khyber Agency.

Build on Pashtun values and norms to make campaigns more relatable.

- There is no simple 'cultural' solution if culture. There are, however, certain social and cultural values that may be used to make campaigns more appealing.
- Encourage programming that recruits health workers locally since they are more likely to be welcomed as guests in areas where they have relations.
- Consider working in a more integrated fashion with programmes and interventions that target communities affected by conflict and natural disaster in areas of FATA and KPK.
- Positive elements of *Pashtunwali* and its attendant emphasis on egalitarianism and the values of *nang* (honour) and *sharm* (shame) should be incorporated into Polio eradication activities to enhance the social acceptability of the Polio vaccine. Consider how such values could be employed to enhance solidarity, responsiveness and responsibility among community members, strengthen acceptance of the Polio campaign and reduce dissent or refusals.
- The use of armed security guards to accompany vaccination teams must be carefully and regularly reviewed. Armed guards who are outsiders could easily be perceived as antagonistic. It may be more acceptable to use tribal *lashkars* as guards, if the local population is supportive of this measure. In other situations, practices including *laskhars* have been reworked. Abdul Ghaffar Khan, a pacifist and a prominent historical figure who advocated for the rights of Pashtun men, created 'non-violent *lashkars*' as a means of mobilising youth (Orakzai 2013).
- Certain development programmes, such as the Sarhad Rural Support Programme (SRSP), have included outreach activities at sporting events and poetry competitions in order to promote peace building. Integrating activities that build on aspects of Pashtun culture may also be applicable to health campaigns.

Next Steps

Given this baseline understanding of the challenges that Polio vaccination campaigns are facing among certain Pashtun communities, there is a need to gather more systematic data about specific communities and how they interact to Polio vaccination campaigns. The following is a summary of recommendations and key questions in relation to conducting qualitative research on Polio with Pashtun communities in FATA and KPK.

A) Methodological issues:

- In order to draw out the similarities and differences between communities in FATA and KPK, researchers should look at different communities with different experiences. This means looking at communities that are relatively conflict free and those that have experienced significant instability, those that have relatively good access to government resources and those that do not, etc.
  - Within FATA and KPK there is the need to better understand what makes communities different, considering the fact that certain communities actually have very low refusal rates.
- The research should draw out the different experiences between communities of origin in FATA and KPK, and in IDPs in other parts of the country.
  - Research should look at how the process of displacement has changed or maintained attitudes about vaccination.
  - Is it possible to make better use of the Harvard polling data considering the fact that it is primarily taken from IDPs in particular?
- The research needs to take into consideration the various vaccination programmes (other internationally and government sponsored health programmes and other local NGO efforts) to understand available resources and current best practices.
- There is a need to make sure researchers attempt to track group movements to better understand the mobility / accessibility issues of communities who are displaced and potentially mobile.
- It is necessary to ask the following questions about instability and security issues:
  - How do researchers access more remote communities? If this is difficult or if the data collected from these areas is less reliable, how do we best analyse it?
  - How do we maintain a flexible research design that takes into account security, changing political conditions and other in-country concerns?
  - Is it possible to develop a clear mapping of leadership and key influencers in these areas?
- Given time constraints, the team feels there is the need for deep, ethnographic research techniques, favouring qualitative interviews over more quantitative tools, such as questionnaires.

Research design points of emphasis:

There is a need to make sure that the research:

- Is comparative
- Attempts to use anthropological research methods that holistically look at issues of culture, economics, politics and security
- Focuses on community health seeking behaviour and how health decisions are made
- Maps decision making in the context of what resources are available
- Considers the role that insecurity plays in health decisions by looking at communities who have been effected to varying degrees by the ongoing conflict
- Considers both areas with high and low refusal rates
- Studies both those in position of power and more marginal populations
- Looks at the role of health workers in various communities
- Looks at the Polio campaigns in the border context of health, particularly maternal and child health.

B) Specific questions the fieldwork could attempt to resolve:

- Questions about the local cultural and socio-economic context:
  - There is a need for better mapping of development local NGOs, international NGOs and other groups working in the region, what their practices are, and their successes and challenges.
  - There is need to better understand culture and daily life among the tribes and how this might shape the decisions they make about vaccination. This would include looking at local rituals, birthing traditions, etc.
  - Need for a better understanding of what cross-border issues are and what challenges are similar on the Afghan side of the border.
- Questions of local and regional differences and similarities:
  - Given the fact that the majority of cases are from a few select districts in FATA and KPK, is it possible to isolate the factors that make these districts unique?
    - Are different communities more or less likely to believe specific rumours about sterility and Western propaganda, etc?
    - How are key socio-economic, political and historic specificities of the different groups shaping how they interact with specific health programmes?
  - What is the role of internal and external migration?
- Questions of programme effectiveness:
  - What are the primary drivers of under-vaccination and vaccination refusals?
    - To what extent is this led by current political and conflict-based issues, and to what extent is it more reflective of cultural differences?
  - If suspicion of vaccination campaigns is high, for what reasons?
  - We need a better understanding of the challenges faced by health workers in FATA and KPK.
  - What impact has logistical challenges, vaccine supply, poor quality of medication etc had on how programming is perceived?
  - What effect does preventative versus curative approaches have?
  - How effective are current programs and is it possible to identify better predictors of future success?
  - Can researchers identify positive deviants within each tribe and understand triggers and motivation for repeatedly vaccinating children?

C) Broader questions about this research, Polio vaccination, programming and steps ahead for UNICEF:

- Many of the suggestions for improving the program (emerging from the brief and other documents) involve some form of localisation. There is a need to better understand:
  - How we map out local differences.
  - How we can localise a programme operationally.
  - How we can respond to local political differences, e.g how are various types of leaders respected?
- How can research explore approaches and better inform approaches that UNICEF has not previously implemented? What can on-the-ground research tell us about the potential success of alternative options, such as:
  - Consider doing more international advocacy about links between conflict and Polio in Pakistan.
  - Consider radically rethinking health service delivery so that vaccination campaigns are not isolated (vertical) but are part of a complete integrated set of medical services made available at certain locations.
  - Rethink the relationship between international agencies, such as UNICEF, the Pakistani government and local communities.
  - Question whether there are particular assumptions that should be challenged, e.g. the role and positioning of UNICEF sometimes appear to be contributing to challenges, rather than assisting.
  - Consider partnering more locally with tribal elders or other community leaders that might normally be resistant to working with the state.

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