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Polio Eradication: How the War on Terror Has Led to the Persistence of Polio in Afghanistan, Pakistan, and Nigeria

John Michel Rouhana

March 23rd 2013

Polio Eradication: How the War on Terror Has Led to the Persistence of Polio in Afghanistan, Pakistan, and Nigeria

Introduction: In 1988, the World Health Organization (WHO) initiated a campaign to eradicate the polio virus from the world population (Bari 2006). Since 1988, the WHO has used polio vaccines to successfully interrupt transmission of the disease to new individuals in all but three countries: Afghanistan, Pakistan, and Nigeria (WHO 2012). This paper examines how The War on Terror, stated by President George W. Bush to be a war against every terrorist group of global reach and the governments that support these groups, has led the populations of Afghanistan, Pakistan, and Nigeria, as well as vaccinators and health officials in these countries, to adopt the culture of war (Bush 2001). The purpose of this paper is to examine how this culture, marked by insecurity, hostility, and distrust, has affected the polio eradication campaign. The insecurity felt by the populations of Afghanistan, Pakistan, and Nigeria led Muslim and Taliban leaders in these countries to act out against all Western activity within their borders, including the polio vaccination campaign (Jegede 2007). Although Nigeria is not directly linked to the War on Terror, it participated in the culture of war through its shared Islamic faith with Afghanistan and Pakistan. By participating in the culture of war, Afghanistan, Pakistan, and Nigeria have harmed eradication efforts and have allowed the polio virus to persist within their countries. If the war continues, it risks potentially unleashing the virus, paralyzing hundreds of thousands of children every year (Walsh 2012).

The campaign to eradicate polio was officially initiated by the WHO in 1988; at the time, there were 350,000 cases of polio worldwide. Although the effort failed to eradicate the virus by

the year 2000 as it had intended to, by the year 2004 the number of cases had been reduced to 1189, reaching an unprecedented low that warranted excitement about potentially eradicating the disease (Bari 2006). In 2006, Egypt and Niger dropped off the list of countries that are polio endemic, and India, which was regarded as one of the greatest challenges with regards to tackling the polio eradication initiative in the campaign's early years, dropped off the list in early 2012 (Bari 2006; Walsh 2012). As of November 2012, the only countries that remain on the list of polio endemic countries are Afghanistan, Nigeria, and Pakistan (WHO 2012). Of these three countries, Afghanistan and Pakistan have been directly and continuously tied into the War on Terror which was initiated in the early 2000s. In these countries, insecurity and distrust toward Western medicine and power created by the war have established a number of difficulties maintaining the vaccination campaign. Northern Nigeria, although not directly a part of the war, has participated in the culture of war by adopting these same insecurities on the basis of its religion, Islam. Evaluating the situation in these three countries makes it apparent that the War on Terror has created an insecure and distrustful culture within their borders, and their participation in this culture is at least partially responsible for the fact that they are still polio endemic countries. Contrasting these countries with countries that have successfully removed themselves from the list of polio-endemic countries further establishes this assertion.

Comparing Afghanistan, Pakistan, and Nigeria to other countries that have managed to eliminate polio within their borders makes it obvious that although it is possible that other factors have contributed to these countries remaining polio endemic, there is probably a single trait that these countries share in common that causes them to continue to be polio endemic. To make this point clear, in 2001, India had more cases of polio than Afghanistan, Pakistan, and Nigeria combined, but by February of 2012, India had gone a whole year without any new polio cases

(WHO 2012; Walsh 2012). This remarkable victory over the polio virus has been largely attributed to India's aggressive agenda deployed to fend off the disease: even now, after India has been free of new cases of polio for over a year and a half, the country continues a vigorous vaccination campaign intended to keep immunity against the virus strong in the country (Polio Global Eradication Initiative 2012). India, which had once been regarded as one of the toughest cases for polio eradication, overcame the challenge and eliminated the virus from the country through an organized vaccination drive. This suggests that the other countries that failed to eliminate the virus have not been able to do so because of their failure in establishing or maintaining such a drive. It has been proven that establishing a successful vaccination program, and thus eliminating the virus, is possible in densely populated areas with well established economies as well as in countries with barely developed economic systems where the population lives in sparse nomadic groups: Egypt and Niger, both of which were taken off the list for polio-endemic regions in 2006, are an example of each of these respectively (Bari 2006). These countries are also examples of primarily Islamic nations (both have a population that is 80-90% Muslim) that have managed to defeat the polio virus, indicating that the religion itself is not the cause for the failure of the vaccination drives (CIA 2012). Ruling out population density, economic establishment, and religion leaves a short list for possible reasons that these three countries have been unable to eliminate the virus, and their participation in the culture of war seems to be, at least, one of the more credible of these possibilities. Once it is understood how this participation in the culture of war has interacted with the polio eradication campaign, there is little doubt that it is responsible for the failure to eradicate the polio virus.

In Pakistan and Afghanistan, war-induced actions have had direct effects in hindering the polio eradication process, but, more importantly, they have established insecurity and distrust

within all parties involved in the vaccination campaign, severely hindering progress. Local Taliban leaders have issued *fatwas* claiming that the polio vaccination campaign is an American plot to avert the will of God and to sterilize Muslim women (Warraich 2009). Furthermore, there have been instances recorded of the Taliban actually capturing and beating vaccinators (Warraich 2009). Vaccination officials, including Abdul Ghani, who in 2004 was the head of the polio initiative in a county subdivision of the Federally Administered Tribal Areas (FATA) in Pakistan called the Bejaur Agency, have been assassinated (Ahmad, 2007, p. 247). Significantly, the attack on Abdul Ghani in particular was not intended to assassinate him because he was a representative of the polio eradication campaign; according to health officials in the country and elders in Bajaur, the attack was merely one in a series of attacks against officials and pro-government leaders in the country because the government was cooperating with the USA to fight Taliban and al-Qaeda groups within Pakistan (Ahmad, 2007, p. 247). Regardless, these actions have clear implications toward the vaccination campaign: because vaccinating is, essentially, hazardous, vaccinators and pro-vaccination officials have to risk their lives in order to deliver vaccines, and this makes it difficult to maintain the vaccination campaign. The effects of the war-induced actions do not end at the risk for the vaccinators, however. In 2007, the head of the National Polio Certification Committee in Pakistan was quoted as saying that "it is quite feasible to interrupt the transmission of poliovirus in Pakistan in the next few months, but NWFP and FATA, and Balochistan are the greatest threat to this goal" (Ahmad, 2007, p. 247). In these regions, bombings, Taliban and Al-Qaeda presence, and anti-American propaganda delivered by these two groups has taken their toll. There is a mass insecurity, both on the part of the vaccinators and on the part of those who would be receiving the vaccines, created, directly, as fallout of the War on Terror (Ahmad, 2007, p. 247). Even if the war were to be declared over

tomorrow, it is uncertain whether the distrust created by sterilization rumours pertaining to the polio vaccines or the insecurity felt by the vaccinators in dangerous regions of Pakistan and Afghanistan would be alleviated, and, as such, we would have no assurance that the course of the campaign would advance any differently because the culture of war would persist even after the war has ceased. By participating in this culture, vaccination officials and vaccine recipients in Pakistan and Afghanistan are ensuring the persistence of the virus.

Despite the fact that Nigeria is not directly linked to the War on Terror, it has, similarly to Afghanistan and Pakistan, suffered of war-induced insecurity and distrust toward Western medicine. The difference is that in Nigeria, the insecurity had existed prior to the War on Terror, and this insecurity seemed to lend credibility to rumours created and spread by the war. First, as Ayodele Samuel Jegede puts it in his article titled "What Led to the Nigerian Boycott of the Polio Vaccination Campaign?", access to basic healthcare in Nigeria is very limited, and vaccinators walking from door to door offering families medicine that will supposedly protect them from crippling disease is a bizarre, foreign concept that does not seem credible (Jegede, 2007, p. 73). Secondly, in 1996, a meningitis drug trial conducted by Pfizer in Nigeria did not obtain official approval before testing began, and at least one of the patients whose condition worsened after being placed on the experimental drug was not switched over to the gold standard drug once it was clear that the experimental drug was not helping, as ethical guidelines suggested ought to be done (Wise 2001). Once Nigerian officials began to look into this, families sued Pfizer over the drug trials, and as the Nigerian population became aware of the study, suspicions toward Western medicine began circulating in Nigeria, and there is no doubt that these suspicions were still fresh in their minds with the initiation of the War on Terror (Jegede, 2007, p. 73). Thus, when the war began and rumours circulated pertaining to polio vaccinations, these

rumours almost definitely drew credibility from Nigeria's past experience with Western medicine and the population's perception of the concept of door-to-door vaccination, and both of these factors enhanced the insecurity and distrust that Nigerians felt from perceived dangers created by the war. As is the case with Afghanistan and Pakistan, what Nigerians feel toward polio vaccinators and the vaccination campaign has a significant impact on the progress and success of the polio eradication effort, as it becomes increasingly difficult to protect a population from the polio virus if they are resistant to the eradication effort.

The reason Nigerians became a part of the culture of war is fairly straight-forward and the ramifications have been, perhaps, the most evident over time: the northern part of Nigeria was historically colonized by Islamic Jihadists, and, because they perceive the War on Terror as war against Islam, they fear that they will somehow become a target of America. This almost directly translates into fear of the polio vaccination campaign: in an article reported by News24, a man speaking for the governor of Kano (a northern Islamic state of Nigeria) is quoted as saying that "Since September 11, the Muslim world is beginning to be suspicious of any move from the Western world…Our people have become really concerned about polio vaccine" (Jegede, 2007, p. 73). An important thing to note is that southern Nigeria was historically colonized by the British; lately, the government of Nigeria has been shifting toward the south (Jegede, 2007, p.73). In the 1980s, the Nigerian government established a population control law that limited the number of children a woman may have to four: with the shift of the government, some have come to regard this population control law as an attempt to comply with the will of the West, as the Western world is who colonized southern Nigeria (Jegede, 2007, p. 73). This creates a direct claim that the West, America included, is trying to reduce the number of Nigerians (this perception is actually shared by southern Nigerians) (Jegede, 2007, p. 73). Coupled with the

insecurity and distrust toward Western medicine and the beginning of the War on Terror, Nigerians' fear of the West, particularly in northern Nigeria, has manifested itself in the form of rumours that the polio vaccination campaign is spreading infertility, AIDS, and carcinogens (Jegede, 2007, p. 73). Soon into the 2000s, the northern Nigerian political and religious leaders issued a ban on polio vaccines on this basis, and by 2003, the World Health Organization was sounding the alarm that "a halt to immunisation programmes and a resulting surge in polio cases in northern Nigeria is threatening the entire global polio eradication campaign, jeopardising 15 years of work, US$3 billion of investment on vaccines and surveillance, and the efforts of 10—20 million volunteers" (Kapp, 2003, 1631). In that same year, the number of cases of polio in Nigeria rose to over 200, meaning that Nigeria hosted about half the world's cases of polio because of the vaccination ban (Kapp, 2003, 1631). There was much effort made by the Nigerian government to dispel rumours that the polio vaccination was unsafe, but efforts were unsuccessful: the internal insecurity and distrust toward America and the Western world in Nigeria was so great that many, if not most, northern Nigerians thought they were safer allowing polio to spread than they were accepting the WHO's vaccines. As a matter of fact, in 2004, the Kano state government even called their actions "…a lesser of two evils, [a sacrifice of] two, three, four, five even ten children to polio [rather] than allow hundreds of thousands or possibly millions of girl-children likely to be rendered infertile" (Jegede, 2007, p. 73). This, if nothing else, shows that although it is not literally a part of the War on Terror, northern Nigeria, through its shared Islamic faith with the countries that are a part of the war, participated in the culture of war and allowed fear of the Western world because of the war to build on their distrust and insecurity toward Western medicine. Again, Nigeria's participation in the culture of war is

directly jeopardizing the polio vaccination campaign and possibly ensuring that the virus persists for years to come.

It is important to note that not all of the fear and insecurity felt by Afghanistan, Pakistan, and Nigeria is unfounded: there is evidence that there have been fake health initiatives over the course of the war that were designed for war-related purposes. Despite the fact that these health initiatives were not authentic, they have, just as much as the fake rumours that have spread, taken their part in further contributing to the fear and insecurity felt by these countries and establishing these countries' credibility in evading Western medicine. As a primary example, in 2011, Dr. Shakil Afridi conducted a fake Hepatitis B door-to-door vaccination campaign in Pakistan while working for the American Central Intelligence Agency (Larson 2012). The purpose of this fake vaccination drive was to collect blood samples in order to confirm the location of Osama Bin Laden in Pakistan (Larson 2012). The doctor met trial in Pakistan and was sentenced to 33 years in prison for treason, but this did not reduce the effect of his actions (Larson 2012). Whilst hepatitis B vaccine drives do not typically go from door to door, polio vaccination drives do. In response to his actions, the distrust toward the polio vaccination campaign in Pakistan and Afghanistan intensified: when vaccinators showed up to doors, parents now had palpable reason to believe that these vaccinators could be working for the American government and that they could be trying to harm their families. The results were immediately visible. Vaccinators started having trouble getting the parents to draw their children out, and the governments and WHO officials are still working in joint efforts to assure the populations of Afghanistan and Pakistan that the polio vaccines are indeed polio vaccines and that they are safe (Teepu 2012). The numbers also reveal the consequences of the actions taken by the Central Intelligence Agency: in 2011, the number of cases in each Afghanistan and Pakistan jumped by about fifty, reaching 81

in Afghanistan and 198 in Pakistan (WHO 2012). It is probable that the Central Intelligence Agency may have confirmed Osama Bin Laden's location by other means and avoided damaging the credibility of the polio vaccination campaign in these countries; regardless, it is undeniable that the fake vaccination drive reinforced war-induced perceptions citizens of Afghanistan and Pakistan had about America and the WHO's polio vaccination drive, directly jeopardizing the vaccination campaign.

The evidence presented makes it clear that the polio vaccination drive has been harmed by an insecure and distrustful culture created in Afghanistan, Pakistan, and Nigeria because of the War on Terror: although this paper does not make the claim that this war is the only reason that polio has persisted in these countries, it does make it abundantly obvious that the culture of war created within these countries by the War on Terror is a very prominent reason for the persistence of the virus. Both sides of the interaction have become a part of the culture. On the one hand, you have vaccinators and officials in Afghanistan and Pakistan who are afraid to continue administering vaccines because it potentially puts their lives at risk, and on the other, you have people in Nigeria, Afghanistan, and Pakistan who are being exposed to rumours that polio vaccines are a plot by the American government to sterilize or harm them. The results have been obvious: when Nigeria ordered a ban on the polio vaccination drive, cases of polio emerged in areas in central and western Nigeria where it had previously been eliminated, and the number of cases in Nigeria itself rose incredulously over the next few years (Jegede, 2007, p. 73). Similarly, the numbers in Afghanistan and Pakistan rose noticeably the year Dr. Afridi's fraudulent vaccination drive was exposed, indicating that the war had created certain distrust within these countries and the doctor's actions had enhanced this distrust (WHO 2012). Other countries that have not participated in the culture of war have managed to eradicate the polio

virus from within their borders, and these countries offer examples of diversely populated nations with a varying degree of economic development that have managed to eradicate the virus, and they also show that Islam itself is not in opposition to vaccination. From these observations, we may conclude that the polio virus has persisted within Afghanistan, Pakistan, and Nigeria at least in part because the War on Terror has created a culture of insecurity and distrust within these countries, and this conclusion points toward the very real possibility that we will continue to face the polio virus for years to come if nothing is done to mediate this problem. Failure to eradicate this virus now may have dire implications: allowing it to persist further may cause the virus to mutate, and if it spreads again, it has the potential to paralyze hundreds of thousands of individuals every year (Walsh 2012).

References

Ahmad, K. (2007, April). Pakistan struggles to eradicate polio. *The Lancet*. 7, 247. doi: 10.1016/S1473-3099(07)70066-X Retrieved November 20th, 2012, from http://www.thelancet.com/journals/lancet/article/PIIS1473-3099%2807%2970066-X/fulltext?_eventId=login

Bari, S., Rosenbauer, O., Hearn, W., Venczel, L., & Hajaj, C. (2006, February). Polio endemic countries hit all-time low of four. *World Health Organization.* Retrieved November 20th, 2012, from http://www.who.int/mediacentre/news/releases/2006/pr05/en/index.html

Bush, George W. (2001, September 20). Address to a Joint Session of Congress and the American People. [Audio/Video Podcast]. Retrieved from http://georgewbush-whitehouse.archives.gov/news/releases/2001/09/20010920-8.html

Central Intelligence Agency. (2012, November 23rd). The World Factbook: Niger, Egypt. *Central Intelligence Agency*. Retrieved November 25th, 2012, from https://www.cia.gov/library/publications/the-world-factbook/geos/ng.html

Children's Vaccine Initiative. (1996, February). Vaccines bring 7 diseases under control. *Unicef*. Retrieved November 20th, 2012 from http://www.unicef.org/pon96/hevaccin.htm

Jegede, AS. (2007, March 20th). What Led to the Nigerian Boycott of the Polio Vaccination Campaign? *PLoS Med*. 4(3): e73. doi:10.1371/journal.pmed.0040073 Retrieved November 20th, 2012, from http://www.plosmedicine.org/article/info:doi/10.1371/journal.pmed.0040073

Kapp, C. (2003, November 15th). Surge in polio spreads alarm in northern Nigeria. *The Lancet*. 362, 1631. doi: 10.1016/S0140-6736(03)14826-X Retrieved November 20th, 2012, from http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2803%2914826-X/fulltext?_eventId=login

Larson, H. (2012, May 27th). The CIA's fake vaccination drive has damaged the battle against polio. *The Guardian*. Retrieved November 20th, 2012, from http://www.guardian.co.uk/commentisfree/2012/may/27/cia-fake-vaccination-polio

Polio Global Eradication Initiative. (2012). India. *Polio Global Eradication Initiative*. Retrieved December 5th, 2012, from http://www.polioeradication.org/Infectedcountries/India.aspx

Teepu, IA. (2012, February 26th). WHO rejects polio rumours. *Dawn.com.* Retrieved November 20th, 2012, from http://dawn.com/2012/02/26/who-rejects-polio-rumours/

Walsh, F. (2012, February 27th). India no longer polio endemic says WHO. *BBC*. Retrieved November 20th, 2012, from http://www.bbc.co.uk/news/health-17178226

Warraich, H. (2009, June). Religious Opposition to Polio Vaccination. *Centers for Disease Control and Prevention*. Retrieved November 20th, 2012 from http://wwwnc.cdc.gov/eid/article/15/6/09-0087_article.htm

Wise, J. (2001, January 27th). Pfizer accused of testing new drug without ethical approval. *National Center for Biotechnology Information*. Retrieved November 20th, 2012, from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1119465/pdf/194.pdf

World Health Organization. (2012, November). Polio Case Count. *World Health Organization*. Retrieved November 20th, 2012, from http://apps.who.int/immunization_monitoring/en/diseases/poliomyelitis/afpextract.cfm

World Health Organization. (2012, October). Poliomyelitis: Fact Sheet N. 114. *World Health Organization*. Retrieved November 20th, 2012 from http://www.who.int/mediacentre/factsheets/fs114/en/