

WORKING PAPER **261**

Polio Vaccines – Difficult to
Swallow
The Story of a Controversy in
Northern Nigeria

Maryam Yahya
March 2006

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Maryam Yahya

Abstract

Global health and poverty reduction discourses have recognised immunisation as one of the most affordable and effective means of reducing child mortality and in a broader sense, as an essential contribution to poverty reduction efforts. While immunisation comes with countless benefits, it is potentially a complex and difficult health strategy to enforce. Decisions on broader health as well as immunisation goals are often made at a global level to be incorporated and adapted in to national health plans and budgets. Evidently for immunisation campaigns, the journey from the global to the local is a vulnerable and unpredictable one. Indeed ‘anti-vaccination rumours’ have been defined as a major threat to achieving vaccine coverage goals.

This is demonstrated in this paper through a case study of responses to the Global Polio Eradication Campaign (GPEI) in northern Nigeria where Muslim leaders ordered the boycott of the Oral Polio Vaccine (OPV). A 16-month controversy resulted from their allegations that the vaccines were contaminated with anti-fertility substances and the HIV virus was a plot by Western governments to reduce Muslim populations worldwide. Through desk and field research, this paper explores the political and cultural angles of this controversy revealing deeper dimensions and complex factors that have contributed to the rejection of the Oral Polio Vaccine (OPV) in northern Nigeria.

Through the lens of the local northern Nigerian communities, this paper examines and brings to question the roles, responsibilities and actions of global and national actors in implementing effective immunisation campaigns with a view to curbing and managing ‘anti-vaccination rumours’ and informing better practices for international health partnerships. I will argue that while the polio vaccine boycott has proved costly in both economic and human terms, it has opened up important lines of communication at both global and national levels, deepening dialogue, participation and sensitivity.

Keywords: Nigeria, polio, vaccination, immunisation.

Maryam Yahya is a freelance Anthropological Researcher who was employed as a Research Officer at IDS during March–August 2005. This paper was written as a sub-study within a DFID-funded project led by Melissa Leach (Fellow, IDS) and James Fairhead (Anthropology, University of Sussex) on ‘The Cultural and Political Dynamics of Technology Delivery: The Case of Infant Immunisation in Africa’. The idea for the study was conceived in consultation with Melissa Leach and James Fairhead, who also provided guidance on improving an initial literature review and post-fieldwork draft. Further comments are welcome and can be sent to Maryam Yahya at maryamis@yahoo.co.uk.

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1 Introduction

Immunisation is recognised globally as one of the most affordable and effective means of promoting health in communities, particularly in Africa where childhood mortality rates are high. Global health discourses and policies frame it as ‘the most powerful of all preventive health methods for children and a provision central to human rights and poverty reduction’ (WHO 2002a). Indeed, the global eradication of smallpox in 1977 demonstrates the great potentials of well-designed immunisation campaigns.

As a member of the World Health Assembly, Nigeria is committed to playing her role towards the achievement of the Millennium Development Goals, aspirations which include the reduction of childhood mortality by two-thirds by 2015 and the eradication of polio by 2005 as part of the Global Polio Eradication Initiative (GPEI).

The GPEI set targets to wipe out polio in 125 countries by mid-2005. By 2003, polio was endemic in only seven countries including Nigeria. However these hopeful targets came under threat when Muslim and political leaders in northern Nigeria¹ brought the polio immunisation drive to a standstill, in response to fears that the vaccines were deliberately contaminated with anti-fertility agents and the HIV virus. Under the umbrella of the Supreme Council for Sharia in Nigeria (SCSN), strong assertions were made that the Polio Eradication Initiative (PEI) in Nigeria is part of a plot by western governments to reduce Muslim populations significantly worldwide. The delayed immunisation of children resulted in the spread of new polio infections within Nigeria and allegedly to other parts of western and central Africa, jeopardising previous accomplishments of the global campaign.

Influenced by resentment amongst Muslim leaders over US foreign policy towards the Islamic world, the 16-month controversy that unfolded in Nigeria demonstrated an interesting play of political might between the international community and the federal government on the one hand and the northern Muslim states on the other. Nigeria’s nascent and fragile democratic institutions were fiercely challenged to resolve this volatile situation peacefully.

At the same time, the controversy brought to the fore resentment towards top-down decision making around international health and development issues. In this case, resentment focused on the prioritisation of polio over and above other diseases such as malaria, which the majority of Nigerians argue is a more pressing health concern. More broadly, the controversy revealed distrust and dissatisfaction with the federal government in addressing health care provision within broader poverty reduction objectives, partly evidenced in the collapse of the national Primary Health Care System.

Accompanied by intensive dialogue and advocacy, laboratory tests helped to resolve the Oral Polio Vaccine (OPV) controversy at a statutory level, paving the way for the resumption of the PEI. However, the fears, resentment and confusion associated with the OPV boycott continue to linger within Nigerian communities, to varying degrees of intensity.

The Northern Nigerian case, with its high-profile reporting in the global media, is one of the latest in a long line of public controversies around vaccination which extend back to the earliest days of the technology. Indeed the GPEI campaign met with similar opposition to OPV in other African countries in the 1990s (UNICEF 2004) so the Nigerian case is a rich and recent example of more widespread occurrences. Today, global and national policymakers highlight the problem of ‘anti-vaccination rumours’ as a major threat to vaccine demand and coverage. Policy and media commentary on such instances, and the limited social science work which has addressed them, vary in their interpretations. Some write them off as ill-founded rumours grounded in misinformation spread by a few with misguided intent, to be

1 Four years after Nigeria’s transition to democracy from Military rule saw the rise of politically determined Muslim leaders who on winning constitutional state elections, established governance based on principles of Sharia. Currently, there are 12 predominantly Muslim states governed by Sharia, which receive guidance as members of the Supreme Council for Sharia in Nigeria (SCSN).

corrected through education. Others interpret them as collective resistance based on religion or the spread of conspiracy-type theories in (it is implied) a rather unreflective African society (Streefland 2001). Other commentators on vaccination 'rumours' in Africa, however, address how they arise and become logical to parents, whether linked to past experiences with the state and science, or the prevailing dynamics of vaccination provision and the suspicions these arouse. Anthropological and historical works have extended such interpretations to understand anti-vaccination rumours as an idiom crystallising valid commentary on broader political experience in colonial and post-colonial settings (Feldman-Savelsberg *et al.* 2000).

The present paper takes an anthropological approach to the OPV controversy in Nigeria, examining the cultural and political dynamics which led it to unfold in the way that it did. It addresses how the controversy was shaped by local, national and political issues, by cultural understandings of disease and immunisation, and by the relationship between the PEI and routine immunisation services. The paper thus suggests that there is an underlying logic to public anxieties. Rather than delegitimise these as 'rumour', these anxieties need to be taken seriously and their root causes addressed if the controversy is to be resolved effectively.

In the first section of the paper I tell the public story of the polio vaccine controversy, addressing the various roles and responses of key actors and institutions in Nigeria and the international community. The arguments forwarded in the (mainly) media sources on which this section draws begin to give valuable explanations as to why the OPV controversy took hold in the way that it did. These include local political arguments that illuminate the nature of power relations within Nigeria's federal democracy, and also demonstrate the limits, in this context, of international dialogue in dispelling of anti-vaccination allegations.

In the second section, I examine the broader challenges to immunisation campaigns and routine service delivery in Nigeria, to explore how they have contributed to the OPV controversy, and perhaps been affected by it. This section moves beyond the public profile of the OPV controversy, to examine 'background' issues in Nigeria's health systems and in the cultural and political experiences of local communities which shaped the controversy, and public responses to it. This section draws on interviews and observation carried out amongst local communities in Kano, Bauchi and Kaduna states in northern Nigeria. It draws out the diverse notions and perspectives that are shaping immunisation demand in general, and views of OPV in particular. To identify issues concerning service delivery, I examine the routine immunisation services and the door-to-door PEI campaign as experienced by the communities, addressing issues of access as well as knowledge and understanding. An overview of the challenges facing Nigeria's National Programme on Immunisation (NPI), including issues of capacity and patronage, helps show the links between the emergence of the controversy and broader problems of primary health care delivery in Nigeria.

Overall, the paper highlights the ways in which international health campaigns and policies can acquire particular cultural and political meanings within different environments, losing their semblance of neutrality to become significant parts of wider social discourses. While attention to these discourses is a crucial part of the global challenge of addressing anti-vaccination allegations in Nigeria and the wider African continent, this must be linked to attention to the broader challenges to immunisation. The foundation for immunisation campaigns lies in primary health care delivery systems, many of which have become ineffective in Africa, contributing to rapidly declining coverage rates.

The OPV story in Nigeria thus offers valuable lessons to inform practice in dealing effectively with the political and cultural dynamics of immunisation campaigns. In a broader sense, it offers a source of reflection on the manner in which health care issues are prioritised, financed and managed through potentially productive international partnerships.

2 The unfolding of the polio vaccine boycott in northern Nigeria

2.1 The emergence of anti-OPV allegations

Before the polio (poliomyelitis) virus was identified several decades ago, it remained the mystery visitor in many communities across the globe, seasonally infecting children under the age of four and causing life-long paralysis in the limbs. The devastating effects of this disease on the livelihoods and the personal aspirations of those affected cannot be under-estimated.

Launched in 1988, the GPEI represented a unified and powerful international resolve to combat the virus in response to the failure of national governments to contain it independently. The campaign symbolises a collective commitment and determination to bring to an end a disease that indeed can be wiped out. After 16 years of dedication, the GPEI stands as the largest on-going public health initiative in the world, led by WHO, Rotary International, the US Centres for Disease, Control and Prevention (CDC) and UNICEF. Their alliance with national governments and numerous institutions worldwide² has made it possible to immunise two billion children around the world.

By mid-October 2003, the GPEI launched what it hoped would be a final drive aimed at immunising more than 15 million children in west and central Africa. Particular concerns were expressed about the high number of cases in Nigeria, attributed to insufficient coverage during previous campaigns. The WHO reported that more than 40 per cent of the 677 new cases of polio recorded worldwide in 2002 were in Nigeria. Re-asserting the feasibility of polio eradication in Nigeria, Dr Walter Orenstein, Director of the US Centers for disease control and prevention (CDC) said,

... the challenge now is to increase the quality of the polio campaigns in the key endemic areas of Nigeria and reach all children during activities.

(Polio Outbreak in Nigeria Spreads Across West Africa, Afrol News.com – 30 October 2005)

GPEI targets however were to become more distant when the political leaders of Kano, Zamfara, Bauchi and Niger states in northern Nigeria brought the immunisation campaign to a halt.³ They called on parents not to allow their children to be immunized, cautioning that the vaccine could be contaminated (*Islamic Leaders' Fears of US 'Plot' Put Millions at Risk for Polio*, CNSNews.com – 28 October 2003).

The early cries against the vaccines by a number of religious leaders in northern Nigeria found a platform when taken up in July 2003 by the chairman of the Supreme Council for Sharia in Nigeria (SCSN), Dr Datti Ahmed. He alleged that there was a strong likelihood that the vaccine had been contaminated with anti-fertility agents and that it should therefore not be administered to children until full investigations had been conducted (*'Reps And the Polio Vaccine Controversy' – Daily Trust Newspaper, Nigeria at All Africa.com – 30 December 2003*).

2 These include private foundations such as the (e.g. United Nations Foundation, Bill and Melinda Gates Foundation); development banks (e.g. the World Bank); donor governments (e.g. Australia, Austria, Belgium, Canada, Denmark, Finland, Germany, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Russia, the United Kingdom and the United States of America); the European Commission; humanitarian and nongovernmental organisations (e.g. the International Red Cross and Red Crescent societies) and corporate partners (e.g. Sanofi Pasteur, De Beers).

3 Bauchi, Niger and Zamfara only boycotted one round of National Immunisation Days and then resumed. Kano State continued the boycott for over a year.

In an interview with Reuters, Dr Ahmed said,

... a lot of documents have come into our possession indicating there are grave doubts and concerns about the safety of the oral polio vaccine being used in Nigeria. We therefore called on the authorities to suspend the immunisation program and investigate these fears.

(Three Nigerian States Halt Polio Vaccinations Over AIDS Fears, CNN international.com – 27 October 2003)

Dr Ahmed, who is a medical doctor, claimed that his suspicions about the vaccine did not originate from Nigeria but from reliable documents including Internet sources (Muslim suspicion of polio vaccine lingers on – IRIN News.org – 19 February 2004). Using stronger words, he stated:

We believe that modern-day Hitlers have deliberately adulterated the oral polio vaccines with anti-fertility drugs and contaminated it with certain viruses which are known to cause HIV and AIDS.

(Vaccine Boycott Spreads Polio, News 24.com South Africa – 11 February 2004)

These allegations acquired strength because the wild poliovirus is endemic in parts of Nigeria (northern) that happen to be inhabited by a predominantly Muslim population. Thus to target these northern states through the administration of the polio vaccine would carry a certain logic.

As fears grew within Muslim communities, a new outbreak of polio infections occurred. According to the World Health Organisation (WHO), strains of the virus in Kano state were soon traceable to other parts of Nigeria, as well as several west and central African countries, including Benin, Togo, Ghana, Burkina Faso, Cameroon and Central African Republic. Inevitably, this raised great concerns among international health experts that 'the world might be slipping in its efforts to wipe out polio by 2005' (*Polio Makes Comeback in Africa, News 24.com South Africa – 22 October 2003*).

Despite warnings of a 30 per cent increase in polio cases in January, The Governor of Kano state, Ibrahim Shekarau in an interview, stated that he views the boycott as

... a lesser of two evils, to sacrifice two, three, four, five even 10 children (to polio) than allow hundreds or thousands or possibly millions of girl-children likely to be rendered infertile ...

(‘Polio Vaccine: Our Boycott is Lesser Evil, Says Gov Shekarau’, Vanguard Newspaper, Nigeria – 27 February 2004)

In other predominantly Muslim northern states where the immunisation went ahead, it was not surprising to find that many families were unreceptive and threatening towards health officials. Shaba, a member of the Muslim community in an interview stated,

So many families won't go to hospitals again. They prefer to die ... we are suspicious of people who come to our doors with liquid for our children's mouths. We don't know who they are or what they want.

(Vaccine Boycott Spreads Polio, News 24.com South Africa – 11 February 2004)

For many it remains ironic that countries like Saudi Arabia, Syria, Iran, Jordan Kuwait, Morocco, and Oman were some of the first to eradicate polio in their countries. Those who view the Middle East as the core of the Muslim world are unable to make sense of an alleged agenda by the West to target northern Nigerian Muslims.

2.2 Foundations of anxiety in earlier drug and vaccine encounters

For many in northern Nigeria, anxieties about OPV were not just shaped by perceptions of global religious politics. They also made sense in relation to past incidences concerning alleged malpractices in vaccine delivery by the international health community. In particular, the Pfizer-meningitis uproar remains etched in the memories of affected communities in northern Nigeria where the disease thrives. As one newspaper report described:

Nigerian Muslims have become increasingly suspicious of vaccine initiatives since 1996, when families in Kano accused New York-based Pfizer Inc. of using an experimental meningitis drug on patients without fully informing them of the risks.

(*Nigeria Orders Polio Vaccine Tests*, CNN International.com – 29 October 2003)

Pfizer Inc. is currently facing a U.S. federal lawsuit by 20 disabled Nigerians alleging to have taken part in the study. Earlier dismissed, the case has been revived by an appeals court in America (ibid).

Dr Ahmed has made further claims that investigations by the Supreme Council for Sharia in Nigeria recently found documents that showed that the WHO and UNICEF have been 'actively involved' for more than 20 years in the development of anti-fertility vaccines administered to women as part of tetanus toxoid (*The Fear of Vaccines*, *New African*: 50–1, April 2004). The administration of tetanus toxoid vaccines to women between the ages of 15 and 45 caused controversy in Mexico and the Philippines for this reason. Women in Tanzania and Nigeria are also alleged to have fallen victim (Miller 1995).

2.3 National and international responses

In the midst of the significant concerns being expressed by the Muslim community, there was equally a sense of urgency around a health dilemma that was becoming less manageable with each new infection in the region. Having made so much progress battling polio over a number of years, and understanding the critical implications of allowing the virus to spread further, the GPEI partners were greatly concerned. The Nigerian federal government was faced with the major challenge of asserting its limited constitutional authority over the defiant Sharia state governments and pacifying the Muslim communities, without very much success.

In the early days of the controversy, Carol Bellamy, UNICEF's Executive Director, strongly requested high-level government cooperation to ensure that the campaign ran smoothly. President Obasanjo promised that he would personally hold the Ministry of Health and his government accountable for ensuring that polio transmission was halted in Nigeria by the end of 2004. 'We will do all it takes to ensure that this happens,' he said, and promised personally to promote the National Immunization Days in Kano, scheduled for September 2003 (*Real Lives, Nigeria's Rendezvous With a Polio-free Future* – UNICEF 2004).

In a UNICEF press release, Carol Bellamy diplomatically stated,

Nigeria is the most populous nation in the region, and in many ways it has been a good neighbour, contributing to peacekeeping in West Africa. Now it has another crucial role to play in the region, and that is stomping out polio once and for all. We need all Nigerians, particularly community leaders, to step up and do their part to end polio.

(*15 Million Children to be Immunized Against Polio in Nigeria as Disease Spreads*, UNICEF press release: unicef.org 22 October 2003)

At a high-level meeting in September 2003, the Nigerian Minister of Health, Professor Eytayo Lambo, assured senior epidemiologists from the GPEI of his commitment to eradicate polio in Nigeria by the end of 2004. He outlined the steps the country would take to 'dramatically' improve polio campaigns in the first half of 2004, particularly in the northern states where the virus continued to circulate widely.

The confidence displayed publicly by the federal government did not speak of the great hurdles they faced in trying to convince the Muslim community of the safety of the vaccines. By January 2004, Nigeria was identified as 'the number one reservoir and polio transmitting country in the whole world' (*Opinion: The Controversy Over the Polio Vaccine*, vanguard-ngr.com. Nigeria – 8 January 2004).

Admitting how difficult it has been in trying to convince the Muslim community otherwise, Dr Heymann said,

We are very concerned that these leaders are convinced that these vaccines are safe. The manufacturers of these vaccines have all written to the governors of these states indicating that the vaccines are safe and giving them the evidence of this.

(The World Health Organisation (WHO) is Trying to Reassure African Countries Where Polio Cases Have Reappeared, That the Vaccines to Eradicate the Disease are Safe to Take, BBC News – 20 January 2004)

Expressing fears about the increase in polio cases, Gerrit Beger, spokesman for UNICEF, warned that Kano's suspicion could foil the great gains made by the GPEI reducing global polio cases from 350,000 in 1988 to less than 1000 by 2003 ('Global Campaign to End Polio Shifts Strategy-Countries With Highest Risk Targeted for Immunization', *NPR Health & Science – Morning Edition*: www.npr.org. 14 May 2003).

Having tried the diplomatic card unsuccessfully, Carol Bellamy (UNICEF) could no longer keep a lid on her frustrations over the polio vaccination boycott. By February 2004, she stated that 'The children of northern Nigeria have the right to receive the life-saving vaccine now!' She branded the decision of the northern governors responsible as 'unforgivable' and grounded in 'baseless rumours' (*North Nigerian Polio Boycott Unforgivable*, AFROL News: www.afrol.com – 26 February 2004).

2.4 Testing Nigeria's polio vaccine

When it became abundantly clear that the supreme Council for Sharia would not back down from its position regarding the suspension of the Polio Eradication Initiative (PEI), the federal government proposed that samples of the vaccines being administered undergo testing to prove their efficacy and purity.

Dr Datti Ahmed welcomed the decision but expressed concerns over transparency, stating,

We are partially happy the government has accepted the need to test and investigate the vaccines, but we're worried the people they're asking to do the tests are interested parties like UNICEF, who have been bringing the vaccines into Nigeria.

(Nigeria Orders Polio Vaccine Tests, www.cnninternational.com – 29 October 2003)

Nonetheless, the federal government went on to present test results at the November 27th Consultative Meeting at the National Programme on Immunisation (NPI) headquarters in Abuja, where it was declared that 'there is incontestable evidence demonstrating that OPV (Oral Polio Vaccine) is safe ...' (ibid.).

In celebrating their findings, in January 2004, a Federal Government/WHO delegation led by the minister of health embarked on an advocacy tour in northern parts of the country to reassure the Kano State Government and other traditional and religious leaders (*Polio Vaccine Controversy Rages On*, Weekly Trust, Nigeria at www.allafrica.com – 24 December 2004). The experts stated that the level of contamination of the vaccines with anti fertility agents was 'insignificant and therefore certified the polio vaccines as 'safe' for administration to Nigerian children (ibid.).

The delegation described the amounts of the anti-fertility agent detected as 'insignificant' and incapable of affecting the fertility of women. Their advocacy campaign however did little to pacify the Sharia council (SCSN).

The National Assembly in August 2004 mandated a special committee to carry out a more thorough and transparent investigation of the polio vaccines. This was pertinent in addressing the on-going health emergency. The investigative process to be coordinated by the National Assembly was expected to respond most importantly to questions about whether there are indeed undeclared agents in the polio vaccine. If in actual fact anti-fertility agents in the form of oestradiol hormones were detected, the immediate question would be, 'what is the scientific explanation for these quantities' and what impact if any do they have on the female reproductive system? Further key questions spoke to whether there was 'basis for suspicion in the stupendous spending on polio by donor agencies in spite of the presence of more destructive diseases'⁴ (*Reps and the Polio Vaccine Controversy*, *Daily Trust Newspaper* at www.allafrica.com – 30 December 2003).

Nigerians were pleased with the federal government decision to conduct a thorough investigation. However the eroded confidence of the people in the National Assembly created fears as to whether their final judgements over the polio vaccine controversy would be ethical and dependable. Would the legislature have the courage to display a position contrary to the federal executive arm of government?

In a push to demonstrate higher levels of transparency, the federal government nominated a team comprising health officials, members of Jama'atu Nasril Islam,⁵ and key Muslim leaders.

Nafiu Baba-Ahmed accused president Obasanjo's government of insincerity in the matter, telling reporters that his group 'will not accept whatever result' the delegation brings back. Baba-Ahmed stated,

... the government hired some traditional rulers as members of the team who lack the scientific knowledge to tell if the vaccines were contaminated.

(*Muslim Suspicion of Polio Vaccine Lingers On*, www.IRINNews.org – 19 February 2004)

In defiance of the federal government's initial stance on the polio vaccines, the SCSN established a committee to conduct independent tests.

On their return, the federal government team which carried out verification on the vaccine in South Africa, India and Indonesia declared the vaccine safe and free from HIV/AIDS virus, anti-fertility and cancerous elements (*Polio Vaccine Okay, Northern Governors, Sultan Endorse Report*, *The Daily Sun-Nigeria* – 18 March 2004).

4 By the year 2002, the international immunisation campaign had made a US\$ 3 billion investment towards the eradication of polio (Relief Web – 16 April 2002).

5 The Jama'atun Nasril Islam (JNI) is a long standing umbrella of Muslim groups in Nigeria.

The hard line positions of religious and political leaders were somewhat tempered by the views of the Sultan of Sokoto, Alhaji Muhammadu Maccido⁶ who spoke of his disappointment with the initial suspension of the vaccine campaign in three northern states. He declared,

We accept the conclusions of the committee's report that Oral Polio Vaccine is safe and support the declaration on Polio Eradication Initiative here presented by the vice president (ibid).

The Kano state technical committee on polio immunisation returned, however, with counter claims of anti-fertility agents detected in samples of the vaccine which were not declared on the labels of the bottles and vials ('Traditional Rulers in Northern Nigeria Call for Halt to Polio', *British Medical Journal*: www.bmj.com – 7 February 2004). Dr Haruna Kaita, who was part of the team, stated that the vaccines contain 'undeclared contaminants that can cause malfunctioning of the testes and cause infertility in women' (*New African*, April 2004). Further illustrating his position in an interview, Dr Kaita stated:

They have always taken us in the third world for granted, thinking we don't have the capacity, knowledge and equipments to conduct tests that would reveal such contaminants. And very unfortunately they also have people to defend their atrocities within our mist ...

(*Nigeria – Polio Vaccine Found Contaminated* – Josef Hasslberger: www.newmediaexplorer.org – 10 March 2004)

The leader of the National Assembly House committee investigations, Dr Lawal Alhassan Bichi, also explained that Oestradiol, an anti-fertility hormone, was present in the vaccines ('Reps and the Polio Vaccine Controversy', *Daily Trust Newspaper* at www.allafrica.com – 30 December 2003).

In making his stand to the committee, Dr Bichi stated,

I believe there is polio, I believe we must vaccinate our children, but where polio vaccine is seen to contain something that has not been declared, then I find it unethical to recommend that the vaccine be used (ibid.).

2.5 Wider political debate

Following the unfolding developments, a number of groups and individuals expressed their opinions in support of and against actions taken by the SCSN against the polio campaign in Nigeria. The SCSN is perceived by a great many to be waving the flag of Islam in a polarised world where the West is perceived to be at war with the Muslim world. Ali Guda Takai, a WHO doctor, attempts to explain the logic behind the protest in northern Nigeria explaining that

What is happening in the Middle East has aggravated the situation. If America is fighting people in the Middle East, the conclusion is that they are fighting Muslims.

(*Muslim Suspicion of Polio Vaccine Lingers On*, *Irin News.org* – 19 February 2004)

6 The Sultan of Sokoto is considered by many as Nigeria's Islamic leader. The Sokoto Caliphate which the sultan heads is a pre-colonial Islamic empire that represents the core of Islamic culture amongst the Muslim community in Nigeria. Hitherto in recognition of their political influence, the Caliphate as with other traditional empires in Nigeria enjoyed the support of government and was often consulted on policy issues. With the growth of democracy however, their influence has been curbed to reflect the superiority of democratically elected governance.

Dauda Abubakar, a pharmacist based in Kano, linked the polio campaign to the September 11 attacks and the US invasion of Iraq and Afghanistan. According to him, Some radical Islamic groups see opposition to polio vaccination as a means of expressing their anti-Western feelings ... the best known of these organisations is the SCSN. In line with these notions, the SCSN has gone a step further to campaign against the implementation of some United Nations human rights conventions in Nigeria on the grounds that they are offensive to Islam, undermining the strict application of sharia law⁷ (ibid.).

In efforts to challenge some of these perceptions, Dr Heymann stated, 'WHO has enlisted the support of the Organisation of the Islamic Conference (OIC), the African Union and the Arab League to urge a resumption of the Nigerian immunization drive' OIC (*Nigeria Dispute Endangers Global Polio Drive*, Africa Recovery at www.un.org – February 2004).

In November 2003, the OIC adopted a resolution to pressure Islamic countries to make greater efforts to eradicate polio in their countries (ibid.). Nigeria is one of 17 OIC member states in Africa.

Similarly, a segment of the international Muslim community as represented by the *International Fiqh Council* declared their strong disapproval of the stance of the SCSN in Nigeria. Scholars attending the 15th annual conference of the Islamic Fiqh Council⁸ in Muscat spoke strongly against the northern Nigerian boycott of the polio vaccines. The prominent Muslim scholar, Sheikh Yusuf Al-Qaradawi expressed his disappointment, stating:

In fact, I was completely astonished at knowing the attitude of our fellow scholars of Kano towards polio vaccine. I disapprove of their opinion, for the lawfulness of such vaccine in the point of view of Islam is as clear as sunlight.

(*Preventing Child Vaccinations: Permissible?*, Islamonline – 18 March 2004)

Sheikh Qaradawi asserted that the same polio vaccine has been effective in over 50 Muslim countries, and went on to blame the SCSN for creating a negative representation of Islam:

They distort the image of Islam and make it appear as if it contradicts science and medical progress (ibid.).

In his conclusion, Sheikh Qaradawi stated,

Should the scholars of Kano refuse to follow the advice of their fellow scholars in the Muslim ummah (community), which I doubt they would, I would turn to the people of Kano themselves and call upon them to vaccinate their children against polio according to the fatwa⁹ of the majority of Muslim scholars in that regard (ibid.).

7 These include the Convention against Cruel, Inhuman and other Degrading Treatment or Punishment, the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and the Convention Against Child Abuse. Over the past five years 12 states in northern Nigeria states have adopted strict Islamic or Sharia law stipulating punishments including stoning to death for adultery, amputation of limbs for stealing and public flogging for drinking of alcohol and pre-marital sex (IRIN NEWS.ORG – 19 February 2004).

8 The aim behind the 'Islamic Fiqh Council' is to have a common forum for the intellectual interpretation and reflection ('Ijtihad') on Islam to provide the Muslim community with answers to questions arising from developments in contemporary life. This conference brings together Islamic lawyers, scholars and philosophers from all over the world. The 15th annual conference of the Islamic Fiqh Council took place in March 2004.

9 The purpose of a fatwa is to offer an opinion against silence. The weight of the *fatwa* is determined by who is offering the opinion. In this case it represents the opinion of the highly recognised Fiqh Council. 'Fatwa however is not a binding rule; rather, it is a recommendation. The answer (fatwa) may be opposed, criticized, accepted, or rejected. In addition, the answer (fatwa) may itself become the subject of debate or questions' (The Institute of Islamic Education – www.iiie.net/Articles/DemystifyFatwa).

An Igbo businessman based in Eastern Nigeria, supported these views, stating:

This is the 21st century and we all know the benefit of vaccinations. Most Muslim people in the north on the other hand are illiterate and uneducated you see. If they knew the benefit of these vaccines they wont be running away. They are not even grateful that the vaccine is being given free of charge (Lagos, 25 June 2005).

In alliance with the Muslim states, a Nigeria based English man, holds a contrary view, urging the general public not to judge them too harshly.

I believe that it is a responsibility of government and opinion leaders within society to bring to question the safety of the vaccines. Perhaps if international bodies like WHO had followed the right procedures for involving communities and explaining things properly, then people wont be so suspicious. After all, democracy is about participation and to participate one has to ask questions, no? (Kaduna, 4 July 2005).

In a similar vein, a UK based social researcher, commented:

Well the fact that the Nigerian people are afraid in the first instance means that something is wrong somewhere. If they have fears then someone is not doing their job properly, therefore these fears must be investigated (Interview, Brighton, 14 June 2005).

Blessing Mensah, a Nigeria based Ghanaian doctor, went a step further, stating:

We all know that WHO is just an extension of the US government, we also know that the US feel they can control the rest of the world. At least the Sharia states are telling the Americans that they cant just do what they like. They have to satisfy our curiosities before we can cooperate this time (Interview, Kaduna, 15 July 2005).

A mixed bag of opinions, globally, thus shows opposing views of the WHO as a neutral and respected international healthcare institution on one hand and as an agent of Western domination on the other. A great number believe that vaccines are strictly a health issue in the hands of doctors and medical scientists in the same way that politics remains in the hands of politicians and social scientists. However it is glaring to see how as in the case of Nigeria, western medical science in the form of an international health campaign has the potential to lose its cloak of neutrality, acquiring significant political and cultural meanings reflective of a global political climate.

2.6 Sourcing OPV from a trusted source

Having halted the PEI for 16 months, Kano State and the SCSN came under increasing pressure to reach a compromise. Procuring vaccines from reputable companies in Muslim parts of Asia seemed a viable solution. Ya'u Sule, Kano state's Minister for Health, emphasised that potential OPV supplies from Asia would also be tested to ensure safety (*Nigeria Seeks Asia Polio Vaccines*, www.news.bbc.co.uk – 9 March 2004). Demonstrating the purity and safety of vaccines produced in a Muslim state would also further justify the political position that informed the boycott. Satisfied by the quality and process of production of polio vaccines, the Kano state team returned with a seal of approval for Biopharma, an Indonesian company which was to become the new source of polio vaccines for the predominantly Muslim states (*Head of Mostly Muslim State in Nigeria Revokes 11-month Ban on Polio Vaccine*, www.mediresource.simpatico.ca – 19 July 2004).

They were soon to discover, however, that Biopharma is one of the companies licensed to contribute to the pool of polio vaccines produced and supplied to the GPEI for global

redistribution. With this finding, and with the increasing intensity of advocacy involving some of the most prominent Muslim leaders in northern Nigeria, Kano state eventually approved the resumption of the polio eradication campaign. In opposition to their decision, the Secretary to the SCSN, Nafiu Baba-Ahmed, alleged that the Muslim states were pressurised to cooperate with the GPEI campaign and stated publicly that the SCSN maintained its primary position on the dangers of OPV to Muslim families in northern Nigeria (Nafiu Baba-Ahmed, Kaduna, 4 July 2005).

2.7 Polio immunisation resumes

The Governor of Kano State, Mallam Ibrahim Shekarau, reaffirmed the safety of the OPV. Thus the re-launch in Kano came to symbolise the end of the polio controversy in the country. The Emir of Kano, Alhaji Ado Bayero, speaking on behalf of the Sultan of Sokoto¹⁰ and the Jamatu Nasril Islam (JNI), declared their commitment for polio eradication with a promise that traditional rulers 'would ensure quality National Immunisation Days so that our children can achieve their dreams' (*2004 Synchronised National Immunisation Days for West and Central Africa Flagged Off*, www.afro.who.int/country – 10 October 2004). The Emir and the Governor publicly immunised their own children to demonstrate the safety of the vaccines.

Two months after the resumption of polio immunisation, about 150 Muslim clerics and traditional chiefs from Chad, Cameroon, Niger, Togo, Benin and Burkina Faso met in Kano on 22 September 2004 to discuss the way forward in respect of the polio immunisation campaign. Hosted by WHO and UNICEF, the meeting was held to 'inform religious and traditional leaders about issues that affect children, with emphasis on polio', to share knowledge and experiences and to generate an advocacy agenda to ensure that the right messages are delivered to the people (*Muslim Leaders Meet Over Polio Vaccines*, www.lincolnshirepostpolio.org.uk – 24 September 2004). The WHO expressed the intention to spend \$100 million over the next two years intensifying its vaccination campaign.

The National Programme on Immunisation (NPI) lunged back on to the campaign with enthusiasm, reaffirming its commitment to the global eradication of polio. Three immunisation rounds in September, October and November were scheduled in the form of a massive cross-border, door-to-door campaign to immunise children against polio in Africa. The campaign planned to reach every child under five years old with emphasis on remote communities (*2004 Synchronised National Immunisation Days for West and Central Africa Flagged Off* – WHO Press: www.afro.who.int/country – 10 October 2004). The WHO announced this emergency vaccination campaign of 74 million children across Africa in an effort to put back on track its goal to eradicate polio worldwide by 2005 (*ibid.*).

Hosting health ministers of the six affected neighbouring countries in Abuja at the end of July, the Health Minister 'apologised on behalf of the Nigerian government pledging to make polio history by the end of the year' ('Nigeria Apologises to Neighbours for Spread of Polio', *British Medical Journal*: www.bmjournals.com – 13 August 2004).

A very significant polio eradication resolution was made in June 2004 at the 10th session of the conference of the Organisation for Islamic Conference (OIC). Apart from influencing member states to work harder at eradicating polio, some OIC member states have begun to make financial contributions in support of global polio eradication efforts (*ibid.*). For instance, the Malaysian government supported the global campaign with \$USD1 million in August to support immunisation in 23 West African countries, 17 of which are OIC members including Nigeria (*ibid.*). Such efforts demonstrate significant solidarity amongst Islamic states towards polio eradication and more importantly confirms their belief in the safety of the polio vaccines procured through this global initiative.

¹⁰ The Emirs of Kano and Borno and the Sultan of Sokoto are recognised as the paramount Islamic leaders of Nigeria.

An intense advocacy campaign coordinated by Dr Ezio Murzi, UNICEF's representative in Nigeria, generated the involvement of governors, traditional and religious leaders (ibid). A number of Islamic leaders were seen to demonstrate support in heading local government social mobilisation committees in allegiance with the paramount Muslim leaders – the Sultan of Sokoto, the Emir of Kano and the Shehu of Borno. State and local government officials were urged to work hand-in-hand with religious and community leaders to kick off local immunisation campaigns, while reassuring their communities of the safety of the polio vaccines.

3 Old and current challenges to Nigeria's polio immunisation campaign

An introduction to Nigeria's immunisation activities through the lens of the political controversy leaves one with the impression that it stood as the sole impediment to what would otherwise have been a smooth running immunisation programme. However beneath the high-profile political turmoil of the controversy, and the various views of institutions, groups and individuals who have observed it, often from a distance, studies have revealed layers of existing challenges to polio eradication and routine immunisation as a whole in Nigeria. These challenges in turn bring into question the commitments made by the federal government to eradicate the virus by 2005.

Indeed it has become evident that the steady increase of polio cases in northern Nigeria started long before the boycott of polio vaccines by northern Muslim states. In 2000, reported polio cases were below 50 and by 2003 they had risen above 350 (*Reviving Immunization in Nigeria* – September 2004). More broadly, national coverage rates for full childhood immunisation have been on the decline since the 1980s with current rates as low as 13 per cent in Nigeria, as reported in the Nigerian Demographic Health Survey (NDHS 2003)¹¹ and the Nigeria Immunization Coverage Survey-NICS 2003 (NPI 2003). Nigeria's coverage has been reported to be one of the lowest in Africa and indeed in the world. The same studies indicate that current immunisation coverage in some states in northern Nigeria is below 1 per cent, and the average for the North West Zone where Kano is situated, is as low as 4 per cent.¹²

Shortly after the resumption of the polio campaign, UNICEF reported that independent monitoring of health workers and volunteers confirmed that nearly 75 per cent of children were vaccinated against polio in northern Nigeria, the highest numbers ever recorded for the area (UNICEF 2004). Dialogue with communities however does not suggest enthusiastic uptake of polio vaccines.

It is to community perspectives that the paper now turns, drawing on fieldwork to examine the meanings of Nigeria's Polio Eradication Initiative (PEI) in local terms, and how both local officials and parents reflect on the boycott and its aftermath.

11 Conducted by Nigeria's National Population Commission.

12 Ibid.

3.1 Perspectives on polio immunisation since the resumption of the Polio Eradication Initiative (PEI)

The political campaign that resulted in allegations that the polio vaccines were contaminated with anti-fertility agents was very successful in creating lasting fear in the minds of a great number of Muslims in northern Nigeria.

While the polio controversy was eventually resolved at a statutory level, its impact continues to linger within communities. This is reflected in the harsh manner in which vaccinators continue to be treated as they carry out the door-to-door PEI campaign, particularly in remote rural communities. Fear of the vaccines pervades the words of even traditional and religious leaders, many of whom remain sceptical of vaccine safety even while they publicly stress their roles as Advocates for the polio campaign. Within communities however, perspectives on the vaccine differ from house to house, and amongst individual household members.

A middle-aged woman was engaged as a vaccinator in Kano during the last three rounds of the polio National Immunisation Days (NIDs) since the resumption of the PEI. She describes the reactions to the vaccines as diverse but emphasises the rejection of OPV amongst a majority of households. Of her experience she stated,

When we visited homes in Goda village, the women would run inside with their children to hide. In one home, a man threw multiple abuses at us and warned us never to come back (Interview, Kano, 30 June 2005).

In Itas-Gadau local government in Bauchi, a female health worker commented: 'Even some of the religious leaders do not agree to have their kids immunized let alone us. They say it is harmful to families' (Interview, Bauchi, 7 July 2005).

An NPI official in Bauchi state re-affirmed how difficult it has been to persuade predominantly Muslim communities such as Katagum, Jama'are and Itas-Gadau to accept that the vaccines are safe. Communities such as Bogoro and Dass with significant Christian populations have been more receptive to the PEI.

Amongst neighbours and household members that have turned down the vaccine, some have allowed their children to be vaccinated. A housewife and a mother of two, shares a house with two other families. She and her husband stood alone in their decision to vaccinate their children. She stated:

We believe that God protects all and therefore we do not need to fear the vaccine. There is no point trying to convince the others. They think we are lost (Interview, Kaduna, – 2 July 2005).

A barber and a father of three commented:

If the White man really wanted to destroy us, there are many other easier ways to do it. They can poison our coca-cola, the biscuits we buy, the sweets and even panadol that you can buy in the kiosks for headaches. That is why I am not afraid to vaccinate my children (Interview, Kano, 29 June 2005).

Some respondents distinguished between the vaccines found in antenatal clinics during routine immunisation sessions and those administered by roaming vaccinators who come to the home, emphasising their trust in the former but not the latter. A middle-aged housewife in Gandarwawa village stated:

My husband would not allow them to touch our son but he gave me permission to do the polio vaccine in the antenatal clinic at the local government headquarters. At least

there, we know everybody. Malama Rakiya has been there for many years so I know she would not give something that would hurt my baby (Interview, Kano, 30 June 2005).

Indeed senior male members of the household such as husbands, brothers and uncles tend to have the final say as to whether a child is vaccinated. Some female respondents stressed however, their role in persuading their husbands to approve that their children be vaccinated. A mother a two stated: 'Like everything else, you must at least negotiate with your husband, especially when it concerns your children'.

Beyond rural communities, there are a number of Western educated professionals who harbour similar fears about the polio vaccines. A young female banker in Kaduna, speaks of her initial scepticism but re-echoes the theme of trust when asking her private doctor for advice on whether to give her son the vaccine:

I am well educated, and I know the value of vaccines, but these days many things are happening in Nigeria and in the world at large, so one really has to be careful. I was not willing to take risks where my son was concerned but my doctor was very re-assuring. He delivered my son and so to an extent, I trust his judgement (Interview, Kaduna, 15 July 2005).

Asked whether she would allow her son to be vaccinated by the door-to-door vaccinators, she said she would not take that risk with her son.

It resonates in the local and international media and generally amongst Western educated people that the response of the Muslim people to the polio vaccines is born of a lack of education, illiteracy and ignorance. Rejecting these suggestions, Muslim leader and elder in Minjibir (Kano) stated:

It is as a result of education that we ask questions as to what medicine is being brought in to the country, what it contains and how it will affect us. It is due to education that we can insist that these medicines are tested to make sure they are safe for our people. In the past we just take anything that is given to us. That is what an uneducated society does (Interview, Kano, 11 July 2005).

In a contrary view, Hussain Abdu, coordinator of CDRA¹³ in Kaduna responded to these comments, stating:

Yes it is true, an enlightened society is one that asks questions, however this does not absolve northern governments of their total neglect of education. Yes Quranic education is also education and it is important for development, but equally so is Western education which broadens awareness and enables our diverse society to be integrated. If the rate of education in the north was higher, the polio problem will not have gone to this extreme (Interview, Kaduna, 4 July 2005).

There are also many traditional healers in these northern Nigerian communities. Some of these resent the polio vaccines, and are thus promoting traditional cures to polio. A traditional healer in Igabi local government expressed his concerns, stating:

We have to be very careful when the White man comes with medicine and claims to cure a disease like polio. It is easy for us to believe that these vaccines are in fact meant to cause infertility because from my experience, you cannot cure polio with drops in a baby's mouth. It is all pretence to cover up what they are really trying to do (Interview, Kaduna, 1 July 2005).

13 Centre for Development Research and Advocacy.

Indeed what became apparent in the course of various discussions was an almost irreconcilable difference between Hausa and biomedical definitions of polio. These differences have led to clashes of perspective which have significantly contributed to worries about the polio vaccines.

3.2 Cultural understandings of polio as *Shan-inna*

Shan-inna is the Hausa¹⁴ name for polio. The understandings and meanings given to this disease differ between western science/biomedicine and Hausa culture. In biomedical terms, polio is caused by a virus and is preventable through scientific methods of immunisation. In Hausa culture, *Shan-inna* (polio) is an ailment of the spirit world.

Amongst Hausa communities, it remains a strong belief that *Shan-Inna* is a powerful female spirit that consumes the limbs of human beings. Traditional healers are greatly respected in the Hausa community and are believed to have special powers that enable them to interact with the spirit world. They are usually the first point of call when one has been affected by *Shan-inna*/polio.

Traditional healers adopt a variety of challenging and time-consuming methods for its treatment, which often begin with séances with the female spirit, *Shan-Inna*. The traditional healer tries to appease her and eventually she may make certain demands in return for a person's limbs. A traditional healer explained that this is often a specific type of food such as milk or millet and livestock such as a ram or a cock. This is accompanied with lengthy prayers, burning of incense and massaging of the limbs with herbal preparations (Interview, Kano, 30 June 2005). When patients do not have the use of their limbs restored it is understood that *Shan-inna* could not be appeased. These séances serve to reinforce community understanding and beliefs in spiritual manifestations of sickness. He also spoke of Hausa 'immunisation' against *Shan-Inna*/polio, in the form of a special preparation made with beans, which in the past would be given to a whole community on the request of community leaders (ibid.).

For many, particularly those living in the rural areas, traditional healers are the only doctors they visit. Estimates have shown that 80–85 per cent of Nigerians and Africans as a whole rely on traditional healers for health education and health care (WHO Traditional Medicine Strategy 2002–2005, 2002b). They greatly outnumber modern health practitioners and usually play leadership roles within their communities (ibid.). Their thorough understanding of the local culture and their role in issues of governance, family and health issues, places them in variable positions of influence. It is not surprising to find therefore that notions around *Shan-inna*/polio are defined and sustained by traditional healers, particularly in remote communities where other forms of health care are unavailable.

A significant number of Nigerians use a combination of both western and traditional cures depending on numerous factors including cost, accessibility and the effectiveness of a particular treatment. Those with a Western education however are in the minority and amongst the lowest users of traditional methods of healing.

For those who believe strongly in the spiritual manifestation of certain diseases, it is inconceivable that a few drops of liquid in a child's mouth (whose limbs are in good working order) could appease or ward off the female spirit, *Shan-inna*. Nevertheless in speaking with a broad spectrum of Hausa people and minority ethnic groups in Kaduna, Kano and Bauchi states, it becomes apparent that notions around *Shan-inna* vary slightly from one community to another.

14 The Hausa are a people of northern Nigeria and South-eastern Niger. Hausas can also be found in most West African cities. The Hausas have been Muslims since the 14th Century and have converted many other Nigerian ethnic groups to the Muslim faith through trade and Jihad. Hausa language is spoken as a universal language in most parts of northern Nigeria.

A middle-aged street-side shoe repairer in Bebeji local government commented:

We the Hausa people do not believe they have a simple cure for polio because we know how we have suffered trying to deal with it. All types of traditional healers go through lengthy forms of treatment. Then they bring medicine that comes in the form of drops saying that they can stop the spirit. We find this hard to believe (Interview, Kano, 11 July 2005).

A few respondents who hold rigid beliefs about *Shan-inna* have also used it to further justify their fears around the alleged contamination of the polio vaccines. In Misau, a rural community in Bauchi state, a mother of 11 stated firmly:

There is a mistake in what the white man understands polio to be. We know what it is and we have our own way of handling it ... I will not allow any one to put anything in my baby's mouth. We are very aware of what they are doing ... we know that it causes infertility in women (Interview, Bauchi, 8 July 2005).

Even amongst those that believe in *Shan-inna*, the polio vaccine has not been rejected in its entirety. For instance, the leader of traditional healers in Chikun local government in Kaduna state maintains that *Shan-inna*/polio is a spiritual ailment but unlike a number of believers, he regards the polio vaccine drops as a *spiritual* cure produced by the White man. In this, he explains,

The white man is also very advanced in spiritual understanding and healing. Indeed these drops are their own spiritual treatment for *Shan-inna*, just like we have our own (Interview, Kaduna, 15 July 2005).

Amongst suggestions as to how the PEI campaign can become more acceptable, recommendations were made for the acknowledgment of traditional healers in health campaigns. A livestock farmer stated:

Our traditional healers have been with us from time. Sometimes their treatments are better than the white man's cures for certain diseases and vice versa. In fact doctors in the clinic will sometimes refer you to a traditional healer for certain illnesses. The government must therefore give them some respect when they are sending people to our houses because they can easily persuade people that the polio vaccine is harmful or safe (Interview, Kano, 11 July 2005).

Belief in *Shan Inna* also exists amongst Christian minority communities in northern Nigeria, as affirmed by a chief of the *Kataf* community who explained:

There are still a number of my people that believe so strongly that Shan-inna is a supernatural disease and therefore they do not accept that these vaccines (polio) can make any difference. Even I cannot tell them that it is not so. Anyway, these beliefs are changing slowly in my community (Interview, Kaduna, 15 July 2005).

While many dismiss these beliefs, linking them to ignorance, one cannot ignore their potential impact on the PEI and MDG targets. It is, however, very difficult to assess to what extent cultural beliefs, specifically or generally, influence the response towards western health initiatives for they are usually accompanied and impacted by a combination of other factors. In the case of polio in Nigeria, it is evident that both polio and routine immunisation coverage rates started to decline around 1990, long before the political dilemma (*Reviving Immunization in Nigeria* – September 2004). The rapid increase in polio cases since 2001 prior to the political boycott of 2003 can be attributed to numerous factors related to issues of health systems and service delivery as well as culture.

4 Primary Health Care and immunisation in Nigeria

Polio immunisation began as a national programme in 1996. Since 1988 however, National Immunisation Days (NIDs) and Sub-NIDs for the eradication of the virus became the centre of attention for the National Programme on Immunisation (NPI) for several years (FBA 2005). The enormous human and financial resources consumed by the PEI have taken their toll on the already limited capacity of the NPI and wider primary health care system.

The central role of PEI in Nigeria's Immunisation programme is no doubt a creation of the Global Polio Eradication Initiative (GPEI) and subsequently a key objective of the Millennium Development Goals (MDGs) towards the reduction of child mortality by two-thirds by 2015. It is expected that immunisation will play a key role in achieving this objective, with targets set for national immunisation coverage at 90 per cent for every country by 2010 including certified polio eradication. The Global Alliance for Vaccines and Immunisation (GAVI) has pledged its support towards the achievement of these targets.¹⁵ With 'health systems and services too weak to support such targeted reduction in disease burden' (NEPAD Health Strategy 2003), this represents for Nigeria and Africa at large a very distant goal.

For many decades, global health policies and agendas have influenced the development of health care provision in developing countries such as Nigeria through direct engagements with governments and relevant local institutions. Arguably, ever-changing donor strategies to combat deteriorating health conditions have indeed contributed to the creation of dysfunctional health systems, constantly challenged to meet current global visions of well-being. Despite the changing goal posts, however, over the years public health approaches have moved gradually away from a narrow medical slant to a view of health that takes into consideration social and economic determinants. The 'Health For All' (HFA) strategy adopted inter-sectoral and systems approaches to health care in line with broader poverty reduction strategies.

The relatively stable governance essential for effective programming has been very much absent on the African continent in recent decades. This is certainly the case in Nigeria, which after a long period of authoritarian military rule is currently showing a determination – even if varied – to sustain and nurture what can be described as a fragile democracy. The struggle between deep-seated corruption and political will are reflected in the wear and tear on Nigeria's public services, not least in the health sector.

In acknowledgement of the inter-relatedness of health with poverty and sustainable development, Nigeria has couched health objectives in the broader framework of poverty reduction strategies which have been defined in the National Health Policy (NHP), the National Economic Empowerment and Development Strategy (NEEDS), New Partnership for Africa's Development (NEPAD) and the Millennium Development Goals-MDGs-2015 (WHO Country Cooperation Strategy: Federal Republic Of Nigeria 2002–2007, 2002a).

The deplorable state of Nigeria's Primary Health Care system has given birth to the current Health Sector Reform Programme. This constitutes a review of the institutional framework of the Federal Ministry of Health (FMOH) and how its parastatals can work productively and harmoniously with federal, state and local government bureaucracies. Partnerships with other public service sectors, private and voluntary sectors as well as international governments are also to be examined.

The collapse of Nigeria's health sector does not stand in isolation, however. Primary health care systems across Africa have become incapable of responding to the needs of their people.

15 The Global Alliance for Vaccines and Immunization is an historic alliance between the private and public sector committed to saving children's lives and people's health through the widespread use of vaccines: www.vaccinealliance.org/home/index.php

Having reached levels of positive transformation in the 1970s and 80s health systems began to deteriorate, as indicated by the decline in immunisation coverage rates and maternal health (NEPAD Health Strategy 2005). African countries had fallen in to an economic crisis brought on by the global economic depression in the 1980s and a combination of factors including the mismanagement of local resources. The effects of IMF and World Bank Structural Adjustment Programme (SAP) loan and reform packages made it increasingly difficult to allocate resources to the sustenance and development of public services for the most basic of needs. Additionally the market driven health policies of the World Bank have led to the total deregulation of the pharmaceutical industry and the liberalisation of drug prices, rendering health care provision extremely expensive for weak economies. As a result, SAPs in most African countries served to benefit Western markets instead, which many argue was the original intention of the World Bank and IMF in efforts to safeguard western capitalism (Samba 2004).

In the case of Nigeria's health sector, recurrent expenditure for the payment of salaries, consumables such as medicines and disposable materials and the maintenance of health facilities and equipment were drastically reduced as a result of low allocations to the health sector by state governments. Corrupt practices continue to erode the quality of primary health care, amongst other important public services. This general decline in primary health care systems has had a number of impacts on Nigeria's capacity to sustain immunisation services.

4.1 Nigeria's National Programme on Immunisation (NPI)

Initiatives to challenge poor levels of immunisation coverage began in 1979 under the Expanded Programme on Immunization (EPI) managed by the Public Health Department of the national health ministry (FBA 2005). Unsuccessful in achieving national immunisation targets, the EPI became the National Programme on Immunisation (NPI) in 1996. Re-established as a sister arm to the Ministry of Health, the NPI acquired the power to have a direct relationship with communities in supporting immunisation programmes nationally.

As well as polio, Nigeria's vaccination schedule targets Tetanus, Pertussis (Whooping Cough), Tuberculosis, Measles, Cerebro-Spinal Meningitis, Diphtheria and more recently Hepatitis-B and Yellow Fever. Despite volumes of international and local support, the NPI failed to reverse the rapidly declining coverage of childhood immunisation; indeed coverage rates have worsened since its establishment. At the rate of \$56 per fully immunised child, Nigeria spends double the amount of money other developing countries spend per child on immunisation and yet coverage rates are lower than poorer neighbouring countries including Mali, Togo, Ghana, Niger, Cameroon and Benin and even war torn countries such as the DRC¹⁶ (NDHS 2003). At the current coverage rate of 13 per cent in Nigeria, up to 200,000 children each year die from Vaccine-preventable diseases (22 per cent of childhood deaths).

Despite the NPI's primary responsibility to ensure the supply of vaccines and equipment to states and local governments, the most prominent complaint amongst communities is the unavailability of vaccines followed by the great distances people must travel to reach the nearest vaccination posts for routine immunisation services (Dunn 2005). Indeed immunisation services have been inaccessible to a significant proportion of rural communities where 80 per cent of Nigeria's population resides. Jummai, a mother of four, walked for two hours with her baby on her back from Goda village to Minjibir local government to attend the weekly immunisation session only to find that the measles vaccine was unavailable. This occurred during a severe measles outbreak in the region. Asked whether she would be able to return the following week, she said:

16 Coverage rates of 18 per cent in Niger (1998), 29 per cent in Mali (2001), 31 per cent in Togo (1998), 36 per cent in Cameroon (1998), 59 per cent in Benin (2001) and 69 per cent in Ghana (NDHS 2003).

That depends on my husband. He already told me today that I am wasting my time because very often, they have told me to come back another time (Kano, 29 June 2005).

In an attempt to resolve the issue of availability, in 2003, UNICEF took over responsibility for vaccine procurement for the NPI, however, distribution remains in the hands of NPI. To address the persistent problems associated with accessibility, President Obasanjo has requested a review of NPI's distribution system.

4.2 Children as vaccinators for polio eradication?

During fieldwork, community members expressed considerable concern about the age and competence of vaccinators. Numerous people across Bauchi, Kaduna and Kano states expressed alarm in that girls ranging between the ages of 9 and 14 were selected to administer OPV to babies. This was discouraging to many otherwise willing parents, who rejected the polio vaccines on the grounds that vaccination is a task for qualified health professionals. While these girls are recognised as members of the communities, they are not considered by many to be mature or competent enough for the task. To a number of parents, the employment of such girls for the task of immunisation was disrespectful on the part of the health authorities and a relegation of a very important service.

A mother of five expressed her dissatisfaction stating:

I can't believe that they would send these small, dirty girls who normally sell groundnuts in the streets to come and vaccinate our children. It is either they just think we are stupid or they themselves do not know what they are doing (Interview, Kaduna, 1 July 2005).

Members of the community were also quick to point out that the employment of such girls is beneficial to acts of patronage. According to a local trader:

You see, when the NPI officials employ these small girls, they pay them a fraction of what they are supposed to get and keep the rest of the money for themselves and their colleagues. If they were to employ adults or proper health staff, they can't do this because these people know their entitlement (Interview, Bauchi, 9 July 2005).

In contrast, NPI officials argue that the young girls have been employed so that they may have access to homes that do not permit the entry of men, in accordance with Muslim culture.

A number of parents who opted for the polio vaccine nevertheless discriminated against door-to-door girl-child vaccinators in favour of immunisation services at the local health centres, which they believe to be more trustworthy.

4.3 Raising awareness about immunisation

One of the NPI's responsibilities is to provide adequate support to the states and local governments for them to run continuous awareness-building initiatives, as an important aspect of community mobilisation. But rather than provide support, NPI often exceeds its mandate, subjugating the important role of the communities as leaders in this process. The poor impact of these grassroots awareness-creating interventions is reflected in the limited knowledge and understanding of immunisation amongst parents.

There are a number of parents that subscribe only to traditional forms of immunisation. In rejection of Western immunisation, a mother of 9, commented:

I have never immunised any of my children and I don't wish to. They are under the protection of Allah. Out of 9 I have 8 surviving children, so praise be to God (Interview, Bauchi, 8 July 2005).

Asked whether she used traditional forms of immunisation or medicine, she stated:

When ever they fall sick, I take them to the traditional healer who prays for them and gives them medicine ... They wear *laya* (amulets) and from time to time they drink *rubutu*¹⁷ (ibid).

Focus group discussions in Kaduna, Kano and Bauchi states were revealing in that mothers who had tried Western immunisation felt it was more effective than traditional methods. A mother of five, commented:

My two youngest sons have been taking immunisation. They are much healthier than the other five when they were young ... two of them died when they were babies. It is Hauwa who persuaded me to start immunising my children (Interview, Kano, 29 June 2005).

She commented further:

It is very easy to differentiate between children that are immunised and those that are not. Some of my friends and neighbours are always surprised that my children are healthy. I tell them it is because of immunisation. There is nothing anybody will say that will stop me from bringing my child because I have seen the benefits with my own eyes (ibid.).

Despite their choice of western immunisation for their children, these two mentioned mothers amongst numerous others had limited knowledge of the various vaccines and the diseases these vaccines protect children from. Discussions also demonstrated very limited knowledge on the dosage and frequency for each vaccine.

Mothers and fathers who are not literate in English tend to use their hospital cards as a passport to treatment rather than as a reminder as to what dates they are to return and for which vaccines. Asked how she remembers when to take her children for routine vaccination, a mother of three stated: 'I don't have to write it down, I just remember ... when it concerns the health of your child you remember...you just do' (30 June 2005).

A few parents however, particularly fathers, complained that the cards are not user friendly because they are in the English alphabet. A middle-aged father of five stated:

You see, if the cards are written in *Ajami* (The use of the Arabic alphabet to write in Hausa language) our wives will be able to simply read the card instead of trying to keep it in their heads. If they are very busy, at times they will forget of course (Interview, Bauchi, 9 July 2005).

NPI can boast a media campaign that saw influential political and religious leaders raising awareness and encouraging polio immunisation. However the radio, which is the greatest

¹⁷ A drink formed of Quranic verses written in soluble edible ink.

medium for news in northern Nigeria, has become a luxury in very poor rural communities. This is accompanied by recurring complaints of a lack of resources to conduct outreach awareness campaigns at the local government level. A nurse working in a local government antenatal clinic, stated:

I feel they should do it as in the past when professional health workers will go to the traditional leader, gather people and do it out in the open. This way people can discuss and ask questions and all will be explained to them. We do awareness sessions when the women come here for immunisation, but really we need more resources to reach those in the village who are not coming (Interview, Kano, 30 June 2005).

A manager of a rural agricultural bank in Kano, commented:

Of course people are justified to refuse any medication if they are not fully aware of what it is for. I am educated and I am a scientist so I know everything about immunisation but even in the cities where people are educated, if you ask ten parents to tell you the name of all the different types of immunisation available for their child, they will not know (Interview, Kano, 11 July 2005).

Studies have shown that mothers with Western education are more likely to have a fully immunised child. Nevertheless it is evident that amongst uneducated as well as educated parents, there are varying levels of understanding as to the types of immunisation available, their correct doses and frequency. Not surprising, therefore, are prevailing notions that one vaccine prevents all diseases; that vaccines prevent diseases such as malaria, pneumonia and cholera, and that one dose of a vaccine is quite sufficient for any one disease. Such misconceptions serve to create distrust and confusion when they do not play true.

In relation to the polio campaign it was therefore not surprising to find a number of parents complaining that their child has already been vaccinated for polio once, questioning how many times vaccinators wish to administer the same vaccine? For those more aware, there was confusion as to whether a child can receive more than four doses of the oral polio vaccine, particularly those who had already received doses of the vaccine as part of the routine immunisation service at their local clinic. Many were told by door-to-door vaccinators that there is no limit to the number of doses a baby can receive. A number of parents, however, spoke of their resentment of such medical advice coming from an 11-year old vaccinator.

Awareness, understanding and clarity on immunisation amongst communities is undoubtedly essential for the success of immunisation delivery. The centrally driven nature of NPI, however, does not encourage community-driven approaches. State governments have strongly expressed the need to have a leadership role over their immunisation programmes, complaining that NPI's excessive control of immunisation services has rendered state governments mere assistants.

4.4 Safety and management issues

NPI has also been accused of slipping in relation to international best practice regarding the storage and handling of vaccines and the inefficient resourcing and use of syringes, safety boxes and other equipment. It has been a tug of war between UNICEF and the Nigeria government in the assertion of international safety standards. As an independent machinery of the Federal Ministry of Health, NPI has often been criticised of lacking in the attributes that generate effective teamwork and partnership in programme administration. This helps explain the unruly manner in which the programme often exceeds its mandate unchecked.

Monitoring, evaluation and reporting, key responsibilities of the NPI, have proved to be amongst its greatest weaknesses. Thus annual reporting, essential to keeping immunisation

targets within reach, have been severely delayed, leaving partners to guesswork concerning planning and human and financial investments.¹⁸ Indeed the political boycott of polio vaccines camouflaged the previously declining rates of polio and routine immunisation until the revelations of recent studies. The oldest and most challenging obstacle to effective monitoring lies in the low capacity of primary health care staff to monitor immunisation activity effectively. While short-term consultants for this role may save the day, an investment in building the capacity of local staff would be an invaluable resource in the long-term.

Currently the NPI fights a battle to sustain its role in national immunisation delivery. Caught in a 'catch 22 situation', the Nigerian health sector cannot seem to live with NPI nor without it. While the NPI has failed in perilous ways to deliver its mandate, the severely neglected Primary Health Care system lacks the capacity to take over the role. This is partly due to the fact that the NPI has consumed the lion's share of health care resources for a great number of years. Above all, resources have been consumed by the biased attention given to the polio eradication campaign.¹⁹

4.5 Patronage

The decline of routine immunisation services over the last three decades thus reflects the gradual collapse of Nigeria's health care system. A closer look at local government primary health care services signifies a low capacity to carry out its functions effectively. This is partly to do with internal factors such as the poor allocation of resources informed by poor judgement, or the familiar attempts of elected leaders to demonstrate service to the people by erecting clinic structures as symbols of accountability and commitment.

The high levels of patronage associated with the abundantly resourced health sector are very pronounced. Political appointments and the frequent cabinet re-shuffles at federal, state and local government level have significant implications for who has access to what resources and in which ways. This has been particularly significant in the well-funded PEI National and sub-National Immunisation Days, where key appointments such as NPI Managers and cold chain officers at the local government level are central to the chain of patronage.

The large number of health workers taken away from their posts to serve as supervisors and vaccinators during National and sub-national immunisation days for up to 35 days at a stretch, six times a year, takes a heavy toll on an already poorly-staffed primary health care system. They are a very lucrative source of patronage in that they consume massive administrative costs and the daily allowances of each frontline health worker taken away from their posts to support the PEI campaign is 5,000 Naira a day just under the monthly minimum wage. To provide a sense of the volume of resources expended, Nigeria's 36 states currently hold a total of 776 local government areas/districts constituted by 9,555 wards.

Such positions potentially serve as fodder for strengthening and building political allegiances, or as alternate reservoirs of income shared with appointed frontline health workers and campaign administrators. It is common knowledge that beneficiaries of the polio immunisation view the PEI as a windfall that will hopefully last a long time, even if to the neglect of routine immunisation and the wider primary health care system. Parallel efforts by government officials towards employing qualified staff, adequately equipped facilities and constant medicine supplies for primary health care services are often absent. In this light, one can appreciate the (overly) positive feedback on PEI coverage given by field staff, which may potentially be framed with the intention of sustaining the lucrative door-to-door campaign.

18 Since 1999, one report was produced by NPI in 2003 due to pressures from the federal health ministry (FBA 2005).

19 WHO support to Disease Prevention, Eradication and Control covers the prevention of vaccine preventable diseases, as well as diseases earmarked for elimination and eradication. In the 2000–2001 biennium, up to 43 per cent of the regular health budget and 77 per cent of the total allocation, including extra-budgetary funds, was spent on this area (WHO Country Cooperation Strategy: Federal Republic Of Nigeria 2002–2007).

4.6 Why polio?

WHO and UNICEF have been recognised as the forefront players in driving the PEI in Nigeria, in partnership with the Federal Ministry of Health and the NPI. The role of UNICEF as a champion of child health in Nigeria and the role of WHO as a long standing partner in the development of Nigeria's health sector has been brought to question in light of the recent polio eradication campaign. Having worked hand in hand with Nigerians for many years, many do not understand why the WHO and UNICEF were so adamant at pushing the polio eradication campaign through a system that clearly lacked the capacity to manage it. Assertions that resources diverted to the PEI have been detrimental to Nigeria's Primary Health Care system abound.

A number of local and international health professionals in the voluntary sector have commented that the polio eradication campaign in Nigeria has turned in to an obsession of GPEI core partners, consuming endless resources and pushing relentlessly in a clearly unresponsive environment.

A senior Development Advisor at DFID-Nigeria (Interview, Abuja, 5 July 2005) provided an overview of the situation, explaining that within the global vision of the polio strategy, the door-to-door campaign was in effect meant to ride alongside a well functioning basic health care system, thus serving as a mere booster service. The almost non-existent primary health care system in Nigeria however, has served to magnify the door-to-door polio campaign and quite logically bring question to it.

Arising from almost all discussions amongst communities in Bauchi, Kaduna and Kano states, was great concern as to why polio was receiving so much attention. The Nigerian people are astonished that the federal government with the support of the international community is spending huge resources on *free* polio vaccines, when basic medicines to treat even minor ailments are beyond the reach of the average person. A neighbourhood security guard commented:

... If I go to the hospital, even simple panadol (paracetamol) for a headache, I cannot buy and these people are following us in to our houses forcing us to bring our children for free medicine for polio. What kind of humiliation is this (Interview, Kano, 13 July 2005).

Some of those affected by polio are seen at markets and street corners crawling on their hands and knees or moving around in specially adapted tricycles going about their business. This is a sight far less common now and thus not a preoccupation of society. Popular opinion views those affected by polio as healthy and active members of the community, able to manage their daily chores even if somewhat limited by their physical capabilities. Far more concern goes to those that are unwell and in need of treatment and medicine. A tailor from Shanono community commented:

There are worse diseases than polio. If someone has polio, they can still live a normal life. You can have a family and even look after your children. With other illnesses you are restricted to bed and are more useless than someone who has polio (ibid.).

A local butcher, further asserted that:

Some people have never even seen polio but yet they keep giving us medicine for it. If you look around it is hard to find 2 or 3 people with polio but it is easy to go to the hospital and find 50 people sick with no money to buy the medicine they need to be treated with. Help them instead, but No! You find a small baby who is well and drop medicine in his mouth, for free! (Interview, Kaduna, 15 July 2005).

There are clearly strong sentiments and concerns about health care priorities in terms of who decides what they should be and why. People became even more resentful due to the

neglect of other vaccine preventable diseases by the National Programme on Immunisation (NPI). Between February and May 2001 for instance, there was an outbreak of 100,000 cases of measles nationally (FBA 2005). In the face of this, the polio campaign met with even more ridicule as it went from house to house to administer polio vaccines as parents mourned the deaths of their children from measles.

Nafiu Baba-Ahmed (Secretary – SCSN) expressed his views very strongly, stating:

Is polio our major health care problem in this country? No! Every day thousands of children are dying in Nigeria on account of malaria and other water borne diseases. They have been spending billions of dollars but nobody has ventured to say we are going to subsidise parents in areas that are malaria infested to the tune of one kobo for medication for their children. A lot of seasonal diseases like measles and meningitis kill hundreds of thousands of people, but nobody is bothered about it. So why should they (Western Governments) come and seek to order the priorities of our health care delivery system? (Interview, Kaduna, 4 July 2005).

A taxi driver who is currently unemployed gave a similar view of the issue, stating:

There are problems concerning healthcare, housing, hunger, unemployment that bother people. With all these problems, they now say that they want to help us with polio. My people will never be able to understand this (Interview, Kaduna, 2 July 2005).

4.7 Government and western drug companies as ‘partners in crime’

What becomes increasingly apparent in these conversations is a lack of trust in government and the West, portrayed by many as ‘partners in crime’. In northern Nigeria, the memory remains alive of government’s alleged collaboration with Pfizer, an American pharmaceutical company, in conducting drug experiments for the treatment of meningitis on unsuspecting communities in Kano state. A rural farmer recalls one of such incidents, stressing:

We cannot trust the white man or our federal government because many years ago they were in partnership when they brought medicine to poison our people. Our government does not have our interests at heart, that is why these people can come in any time they want and do what ever they want. It is only God that is protecting us (Interview, Kano, 13 July 2005).

Commenting on the Pfizer controversy, Dr Datti Ahmed stated:

The Council harbours strong reservations on the safety of our population, not least because of our recent experience in the Pfizer scandal, when our people were used as guinea pigs with the approval of the federal ministry of health, and the approval of all the relevant UN agencies

(*New African*, April 2004).

‘Pfizer was the wake-up call for many of us,’ stated Nafiu Baba Ahmed. ‘Our enemies are still up to nefarious tricks. We must protect our children at all costs.’ (‘Suspicious Drive Polio-vaccine Boycott in Nigeria’, *Mail & Guardian* online: www.mg.co.za – 21 March 2004).

Lamenting over his daughter who became partially paralysed after taking part in the Pfizer meningitis drug tests, a car mechanic, Isa Mohammed stated: ‘I can never allow my children to be vaccinated. I don’t want them to be used as guinea pigs (ibid.).’

Summarising the various sentiments around this incident, Hussaini Abdu, the Coordinator of the CDRA²⁰ explains,

The Pfizer problem is a good example of how people have lost trust in government. When it occurred, the government did not provide any strategic protection or any information as to what actually happened. It took two years before people even got to learn about it and to also discover that the government actually collaborated with the American company (Pfizer) to conduct drug tests for meningitis (Interview, Kaduna, 4 July 2005).

The perceived negligence of government in demonstrating concern for the victims of the Pfizer drug trials, and its alleged involvement in the conspiracy, leads to great distrust and suspicion of a government that now goes to extra lengths to administer polio vaccines free of charge in people's homes even in remote areas.

In all, it is clear that fears that the polio vaccines were deliberately contaminated with anti-fertility substances found greater justification in the light of people's suspicion of government, and the great attention it gave the polio campaign while unable to run a reliable and affordable primary health care system.

5 Conclusions – ways forward?

Relentlessly, WHO in partnership with UNICEF push on with the PEI, maintaining that northern Nigeria remains the epicentre for the virus and voting close to \$12million for each round of vaccinations. (*Polio: PPPIF to Launch Blue Ribbon Campaign*, This News: www.allafrica.com – posted 19 September 2005). By the end of the year, a total of six NIDs and SNIDs will have been completed. There are projections for a higher number of rounds in 2006 if the campaign sees it fit. The vision for polio eradication in Nigeria remains, and is lent strength by past victories in resolving anti-vaccination allegations in Kenya, Tanzania and Uganda (UNICEF 2004). Meanwhile in the midst of health sector reforms, the Nigerian federal government remains equally committed to the eradication of polio. Debate amongst government staff and donor agencies in the country is now starting to focus on possible shifts of approach that would facilitate the achievement of this goal.

Numerous groups and organisations have argued that polio eradication in Nigeria is not possible through the door-to-door campaign strategy. Indeed trends have demonstrated that anti-vaccination allegations occur and are sustained mostly during NIDs. In a strategic response to previous short falls, Nigeria's president, Olusegun Obasanjo, held talks with senior WHO and UNICEF officials in early October where he disclosed that child immunisation would become routine and integrated into the country's health delivery system from year 2006, as against the current NIDs (*Federal Government Integrates Immunization Into Health Delivery System*, Nigeria First News: www.allafrica.com – 5 October 2005). This disclosure also implies the direct management and ownership of immunisation services by state and local governments rather than the centrally driven programme as the case has been, creating the potential for greater access to immunisation services. Various studies have shown the benefits of a community-centred approach to immunisation campaigns. The National Council on Health passed a resolution in December 2003 to ensure that 'immunization services are community-owned, community-driven and community-operated'.

To strengthen the supply chain President Obasanjo also requested of UNICEF and WHO, advice on vaccine procurement; maintaining global safety standards; effective and timely reporting as well as making immunisation services cost-effective and accessible to all

20 Centre for Development, Research and Advocacy.

Nigerian children. UNICEF has committed to making its recommendations regarding these by early November.

Before his tragic death in the Bellview plane crash on 22 October, the recently appointed NPI Board Chairman, Alhaji Umaru Mohammed, who was also a traditional ruler, emphasised the need for vigorous and continuous awareness building about immunisation amongst all Nigerian communities (*NPI Boss Attributes Resistance to Lack of Awareness*, Daily Trust News: www.allafrica.com – 21 September 2005). Umaru Muhammad declared that the resistance to OPV can be attributed to the lack of adequate mobilisation and awareness creation by government.

Strategies used to challenge similar OPV vaccination allegations in East Africa have similarly emphasised continuous social mobilisation, knowledge and awareness creation, based on the premise that information gaps will be filled by false even if perfectly logical allegations (UNICEF 2004). In this respect, religious and traditional leaders have played important roles as advocates within their communities, particularly during the OPV boycott. Relationships with local communities should endeavour to go a step further by building partnerships with civil society groups and opinion leaders. Sustained communication is the foundation of trust and partnership and lies at the heart of successful immunisation campaigns. Unfortunately, this is an area often neglected within immunisation budgets. Recent commitments to a people-centred approach are promising, but demand significant budget allocations to ensure the success of future campaigns. Civil-society groups such as the Health Reform Foundation of Nigeria (HERFON) are positive examples of initiatives that are capable of generating desired community involvement in health sector reforms and ownership of Primary Health Care.

Is an education-focused strategy to quell what is seen as an ill-founded rumour sufficient, however? Or has OPV also acquired broader meanings, becoming an idiom for wider issues of distrust and anxiety? Beyond its sole objective to prevent poliomyelitis in children toward the global eradication of the virus, the oral polio vaccine can be said to have taken Nigeria on a controversial yet significant journey of cultural and political dimensions.

United States foreign policy towards developing countries and Islamic societies prior to, and more so since, the September 11th bombings has created fertile ground for political polarisation which in the case of northern Nigeria has found expression within a global health crisis.

The boycott of polio vaccines reveals a sense of insecurity in predominantly Muslim parts of northern Nigeria which to a certain extent has its roots in past incidences concerning allegations of unethical medical practices by Pfizer, an American drug company, in conducting illegal drug testing as well as a stigma for US led population control campaigns both of which have been recognised as a ploy to reduce Muslim populations worldwide. At the same time, the reaction of prominent international Islamic bodies such as the OIC and the Islamic Fiqh Council, indicates the absence of a global Muslim solidarity with respect to the concerns of the SCSN in Nigeria.

While the allegations of the SCSN and their followers have more often than not been trivialised on a global level, their impact on Nigeria's federal democracy cannot be underestimated. For the first time in Nigeria's history of democratic governance, state governments have been able to challenge federal level policies through democratic institutions such as the media and the legislature. While the quality of the process is questionable, it was certainly a giant step away from the military approach to dilemmas Nigerian society is used to, and arguably thus a healthy step forward overall.

By subduing the PEI, the northern state governments and communities also brought into question the manner in which agendas are set for western-driven campaigns. It became very clear how decisions concerning international development issues such as the eradication of polio are taken in environments far removed from the local realities of targeted societies, resulting in an awkward clash between grand global objectives and local priorities, practicalities and peculiarities. The latter include the cultural definition of polio as a

supernatural affliction, which remains alive in the realities of a significant number of Hausa people. Such cultural understandings are further strengthened by the presence of traditional healers who defeat bio-medically trained doctors both in number and social power.

Undoubtedly one cannot alter cultural beliefs overnight, however, the journey towards greater mutual knowledge and understanding of scientific as well as cultural explanations by international and local partners can be embarked upon. While traditional and religious leaders are key advocates in promoting the PEI, the youth are potentially an important bridge as Change Agents within their communities not against traditional beliefs but more significantly in promoting clearer understandings about the polio vaccines and immunisation in general. Assuming that all people that reside in rural communities will not understand the science behind vaccines is a mere presumption and a potential threat to future campaigns.

While Bretton Woods policies have undoubtedly contributed to the collapse of health care systems across the continent, the Nigerian government cannot absolve itself as a key contributor to the challenges of the PEI. Questions put towards western health agendas and priorities also rebound to question the political will and failure of Nigerian governance to operate an effective health sector with accessible services. Indeed broader questions ask why some of the poorest Africans come from the fifth largest crude oil producing country in the world.

Beneath the great visions, the power struggles and diverse motivations remain the perplexed communities of northern Nigeria who strongly desire a well functioning and affordable health care system that takes care of malaria, pneumonia, typhoid and polio, even if in that order. While respect and sensitivity towards the needs of Nigerians has fallen short of the noble words of global and national health care strategies, the political boycott of the polio vaccines has served to magnify the shortcomings of Nigeria's immunisation programme and broader primary health care delivery. The future of polio eradication in Nigeria is thus inseparable from a search for solutions to the problems of routine immunisation and primary health care, requiring an unwavering investment in community-centred relationships and programmes by both international partners and the Nigerian government.

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