

Public trust in vaccines: A Global View

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A questioning public

The history of public questioning of vaccines is as old as vaccines





The NEW ENGLAND JOURNAL of MEDICINE

Perspective
JANUARY 13, 2011

The Age-Old Struggle against the Antivaccinationists

Gregory A. Poland, M.D., and Robert M. Jacobson, M.D.

Since the introduction of the first vaccine, there has been opposition to vaccination. In the 19th century, despite clear evidence of benefit, routine inoculation with cowpox to protect people against smallpox was hindered by a burgeoning antivaccination movement. The result was ongoing

Since the 18th century, fear and mistrust have arisen every time a new vaccine has been introduced

breaks of infectious disease threatening the public, more vaccines being developed and added to the vaccine schedule, and the media permitting widespread dissemination of poor science and anecdotal claims of harm from vaccines, antivaccine thinking began flourishing once again in the 1970s.¹

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Anti-Compulsory Vaccination League -1878

THE NATIONAL ANTI-COMPULSORY-VACCINATION REPORTER.

"Only by the most resolute resistance will legislators be brought to realize into what frightful injustice and inhumanity they have suffered themselves to be betrayed by a domineering Trades' Union, which, although it lives upon the diseases of mankind, has yet, with comical simplicity, been constituted guardian of the public health; 'the goat,' to use a German proverb, 'being thus appointed head gardener.'"—Count Zedwitz.

Vol. III., No. 4.]

JANUARY 1, 1879.

[PUBLISHED MONTHLY.]

The Exceeding Wickedness of the Compulsory Vaccination Law, and of other Medical Legislation connected with it.

The edit by Sir Rowland Hill and others against

experience, for contagion to spread there must be communication between persons either by exhalations from the body or by actual contact. *Five or six feet would be the utmost limit of distance over which contagion would spread.* He knew of no case in which a doctor had conveyed contagion from a

A questioning public

Almost 200 years later...



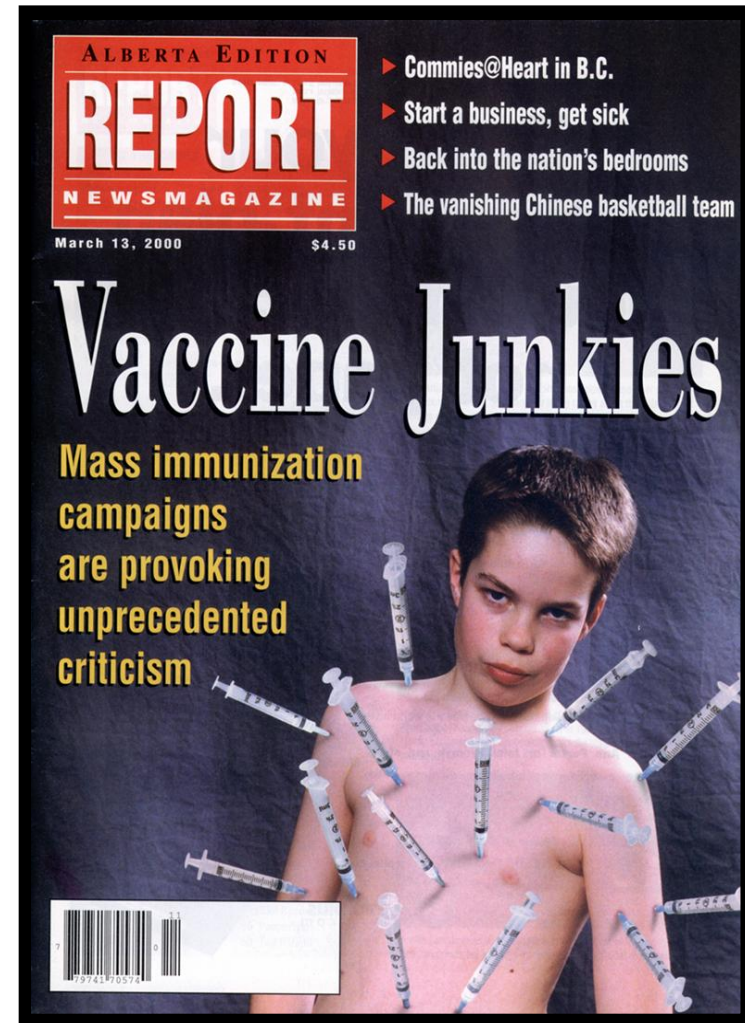
how
safe
are kids'
vaccines?



Provocative titles for highly speculative articles flood media.

Allegations from fringe “experts” given equal or greater coverage than mainstream medical scientists.

Controversy sells papers and TV



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Changed Global Environment

- Broader environment of distrust
- Stronger rights-based, “right to know” environment - growing civil society demands on access to information
- The public is increasingly challenging “quality” and “safety” of commodities
- **Increased and more rapid communication channels, more global media - Internet, satellite TV**



Today's Random Medical News

from the New England
Journal of
Panic-Inducing
Gobbledygook

JIM BRESNAN



CAN CAUSE IN

ACCORDING TO A REPORT RELEASED TODAY...



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Public questioning of vaccines is part of a larger environment of distrust

New Statesman The War Against Science

Why human progress is under attack



THE CROWD ❖ ❖ ❖ EXTRAORDINARY POPULAR DELUSIONS



TWIN CLASSICS
OF CROWD PSYCHOLOGY
Gustave Le Bon / Charles MacKay

TRUE ENOUGH



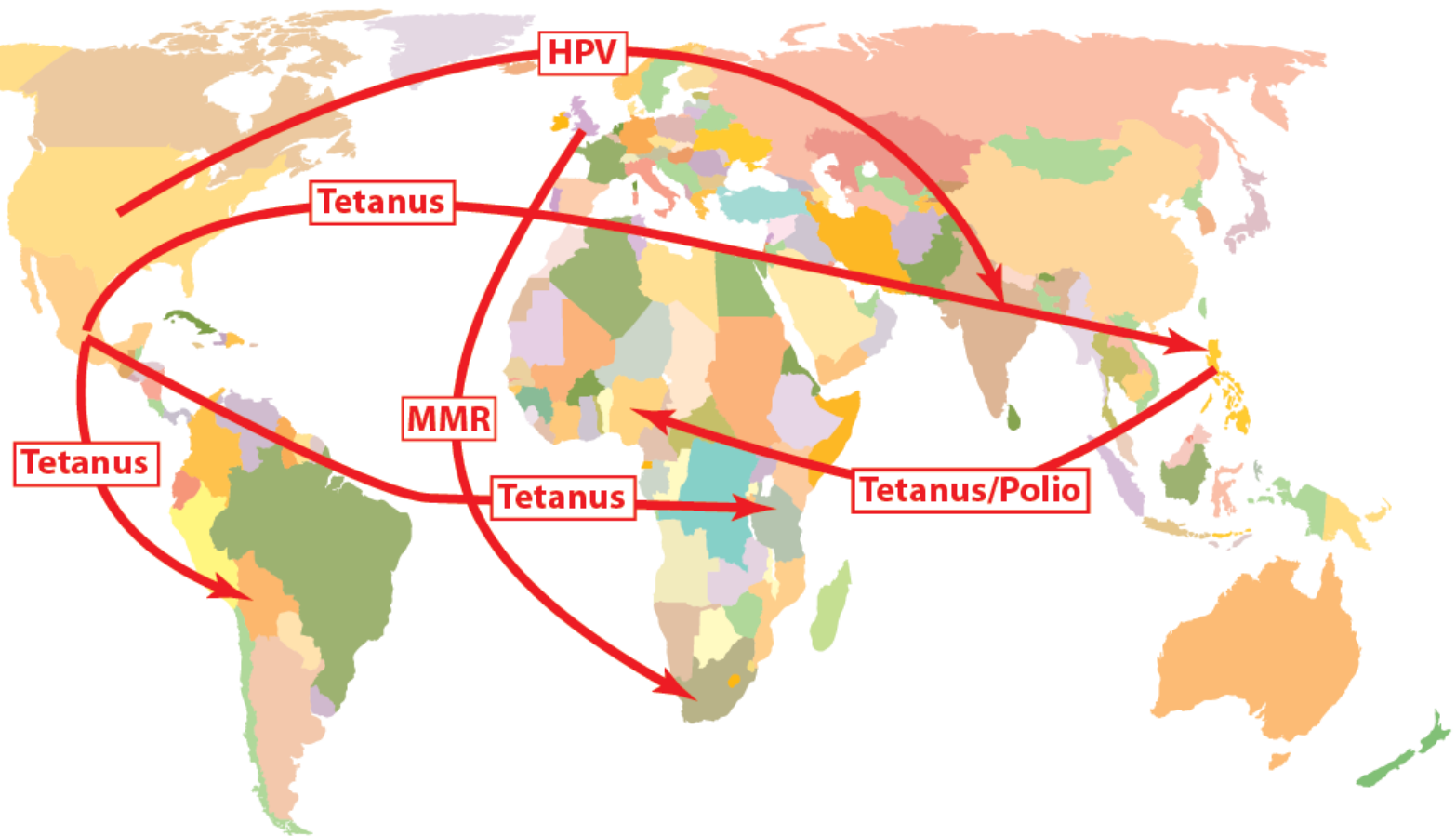
Learning to Live in a
Post-Fact Society

FARHAD MANJOO

An Epidemic of Fear



Spreading of vaccine scares globally



The Impact of Vaccine Confidence Gaps

- In the Philippines, fears that tetanus vaccines cause sterilization lead to a **45% drop in coverage between 1994 and 1995**
- In 1998 France suspends Hepatitis B vaccination in schools exacerbating public concerns --low levels of hepatitis B vaccination persist today
- In 1998, Andrew Wakefield publishes later refuted research linking MMR vaccine to bowel disease and autism. MMR coverage rates in England had **dropped from nearly 93% in 1997 to 79.9% in 2003-04.**



Who is not trusting?

Parents (for childhood vaccines)

Adults (eg.flu vaccines)

Civil society groups

Some physicians

Politicians



Why?

- **Sometimes legitimate vaccine safety concerns**
- **Vaccine relevance** questions (*Why do we need this vaccine when we are no longer seeing the disease? Why do we need this new vaccine when we don't even have the basic vaccines?*)
- Questioning about the vaccine is not always about the vaccine—there are often **other underlying issues**



Project to Monitor Public Confidence in Vaccines

Goals and objectives:

- To build an information surveillance system for early **monitoring and detection of public concerns** around vaccines;
- To apply a diagnostic tool to data collected to determine the risk level of public concerns in terms of their potential to disrupt vaccine programs;
- To **provide analysis and guidance for early response** and public engagement.



PREMISE #1:

***There are many more reasons than just safety concerns
that drive public distrust around immunisation***

PREMISE #2:

***Even if public concerns are not factually correct
they need to be addressed***

PREMISE #3:

***Do not assume communications will fix a problem without first understanding
the problem***



Polio Vaccines – Difficult to Swallow

The Story of a Controversy in Northern Nigeria

Maryam Yahya
March 2006

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.

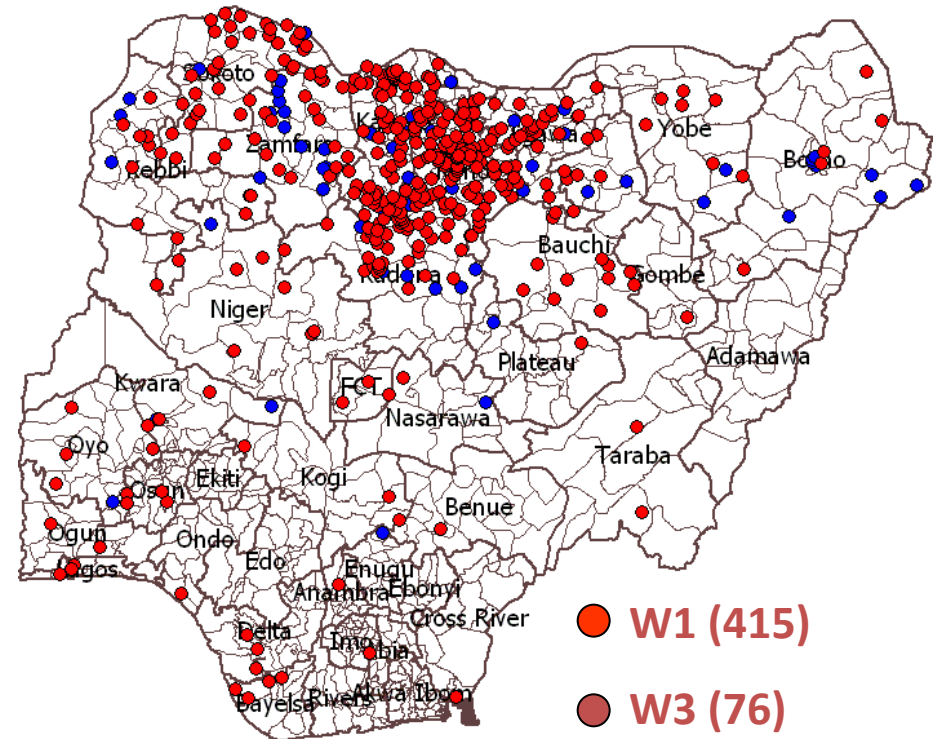
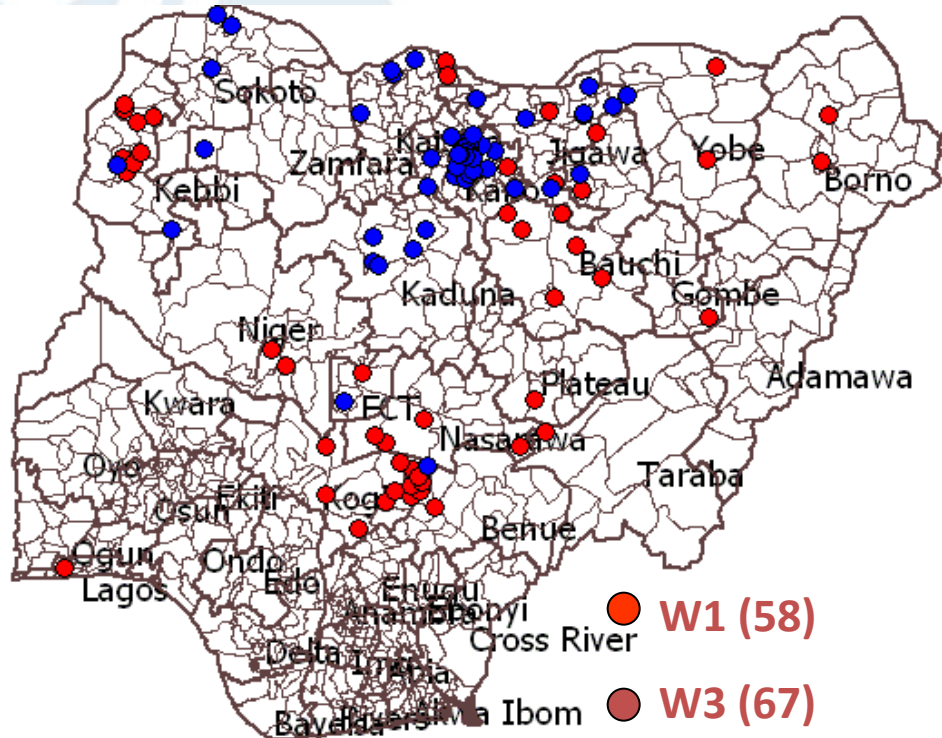




Nigeria: wild poliovirus dot map, onset Jan – 11th Jul, 2003/04 *

2003

2004

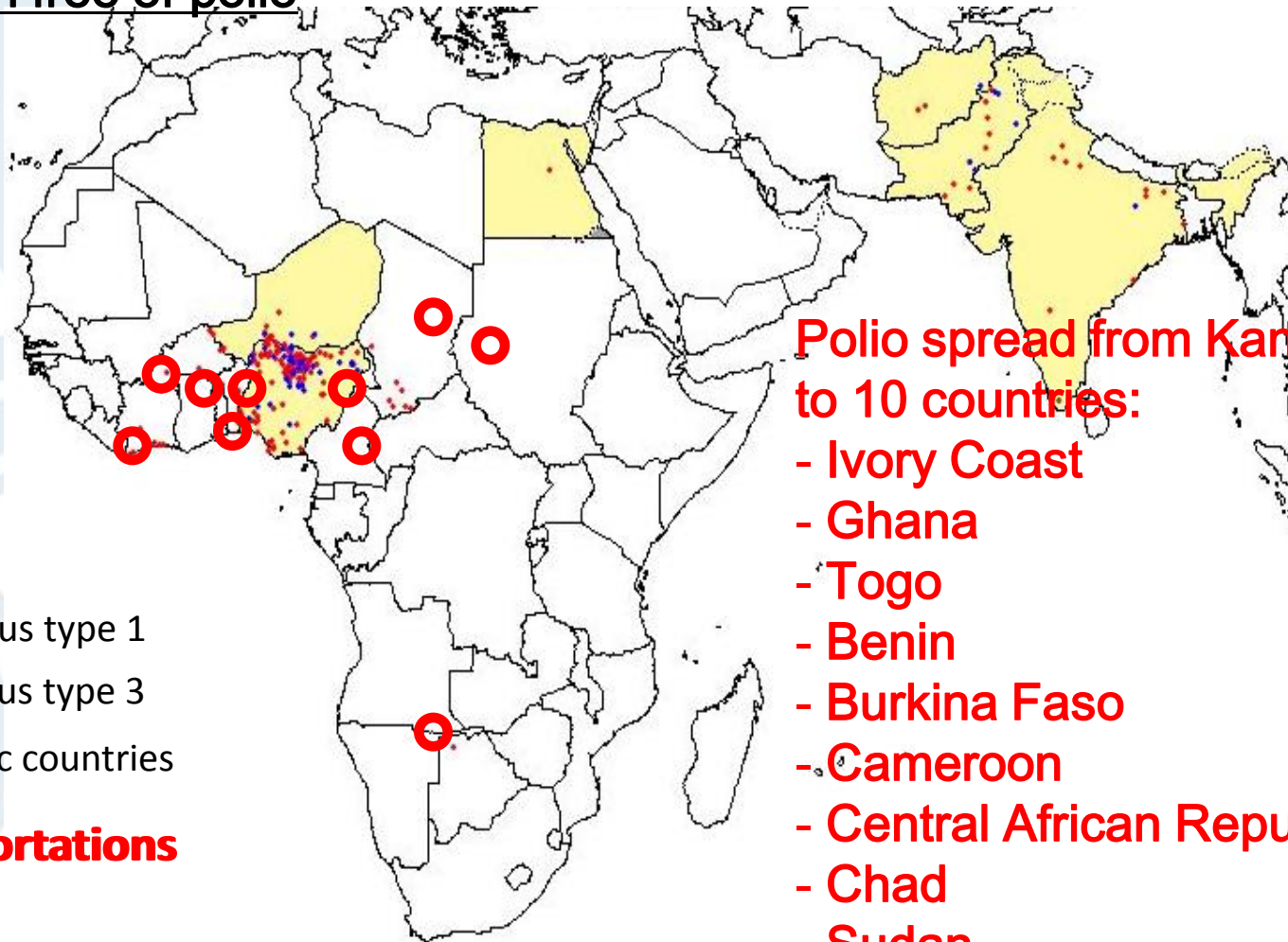


In 2004, the number of WPV cases is more than 3 times as compared to 2003

* Onset of most recent case on 11/07/2004

Nigeria: Kano state: from local to international impact

Soon after boycott started, Kano became epicenter of big and fast growing outbreak of polio, spread to whole country: 83% global cases from Nigeria then to neighboring countries, including 10 that previously had been free of polio

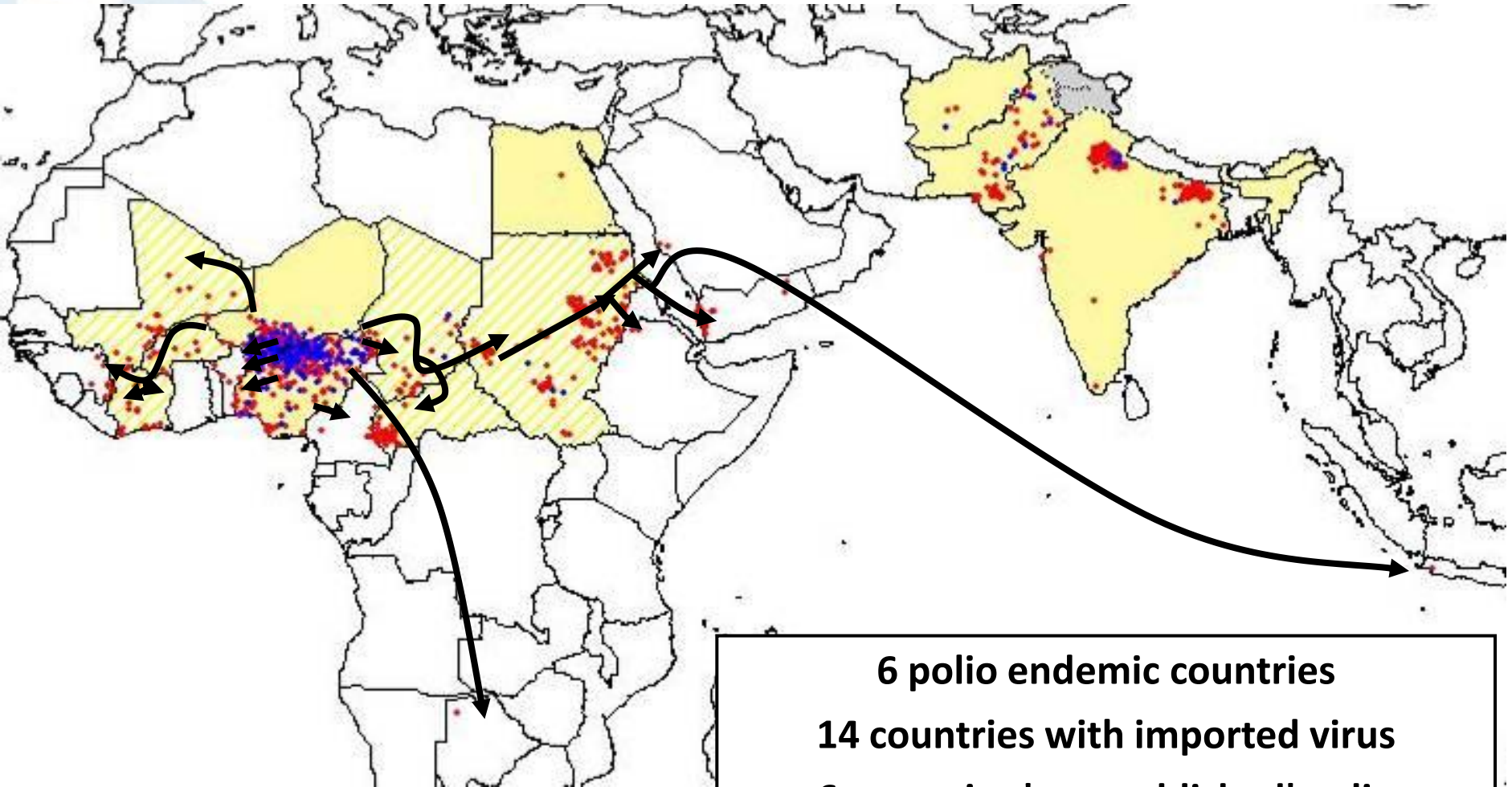


- Wild virus type 1
- Wild virus type 3
- Endemic countries
- Importations

Polio cases as of June 15, 2004

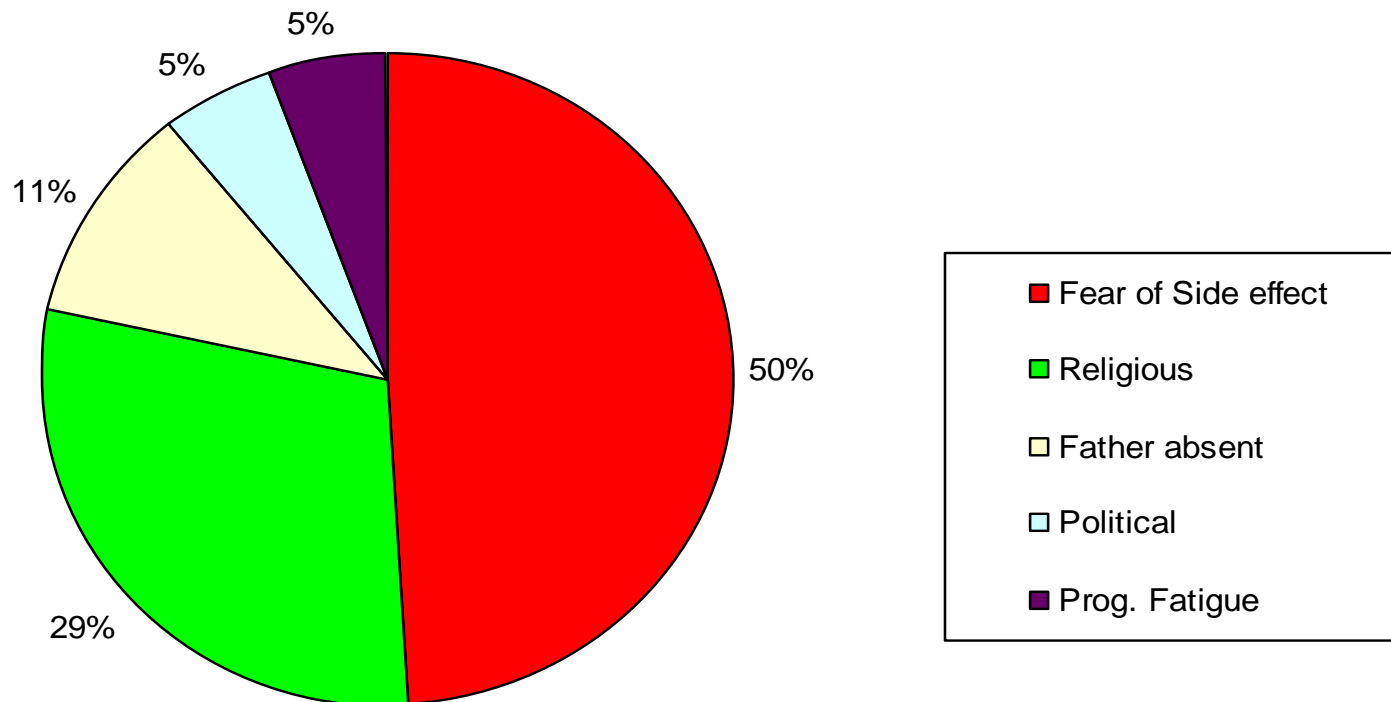


Spread of wild polio virus 2004-2005



6 polio endemic countries
14 countries with imported virus
6 countries 're-established' polio
1,256 cases '04, 555 cases '05

Katsina, NIDs 2, 2004: Reasons for Rejection



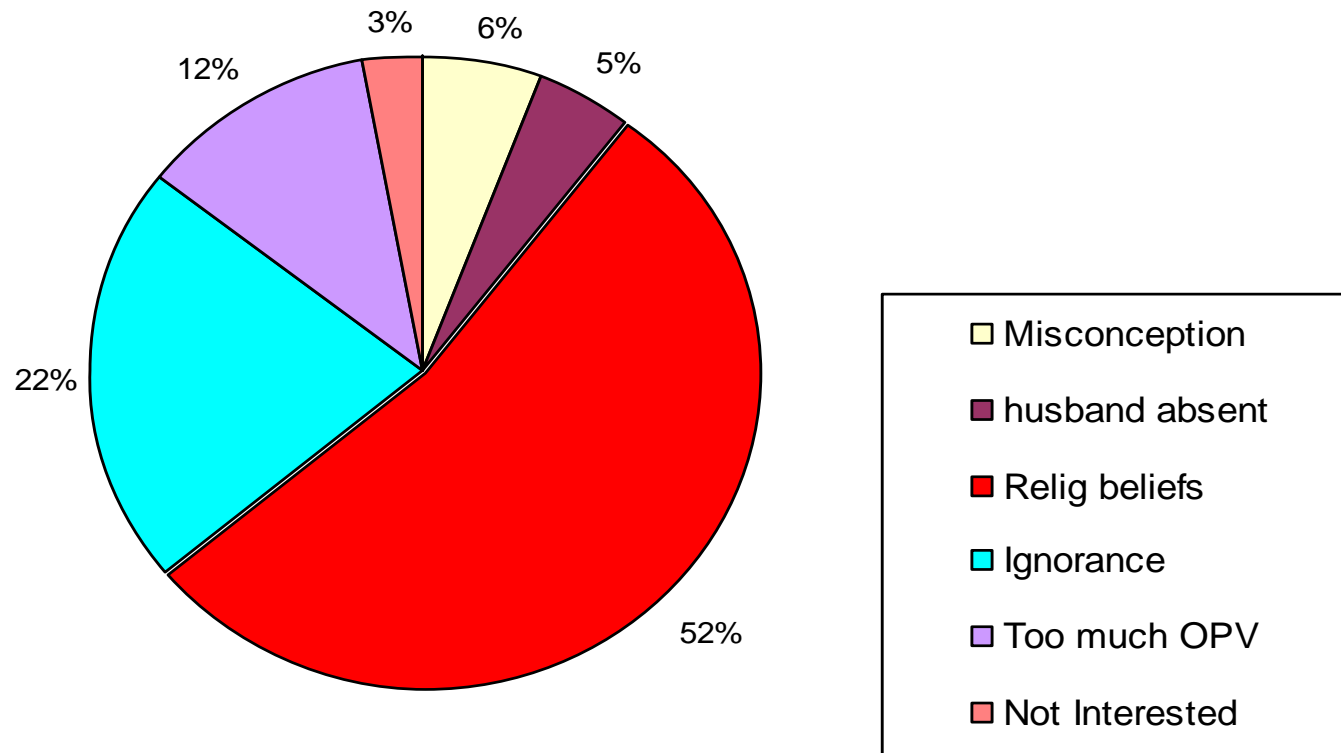
PEI endorsement by Nigeria Medical Association, Muslim Medical Doctors Association, Pharmacists, Midwives Boards etc. important

No. of LGAs involved=13

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Kaduna, NIDs 2, 2004: Reasons for Rejection

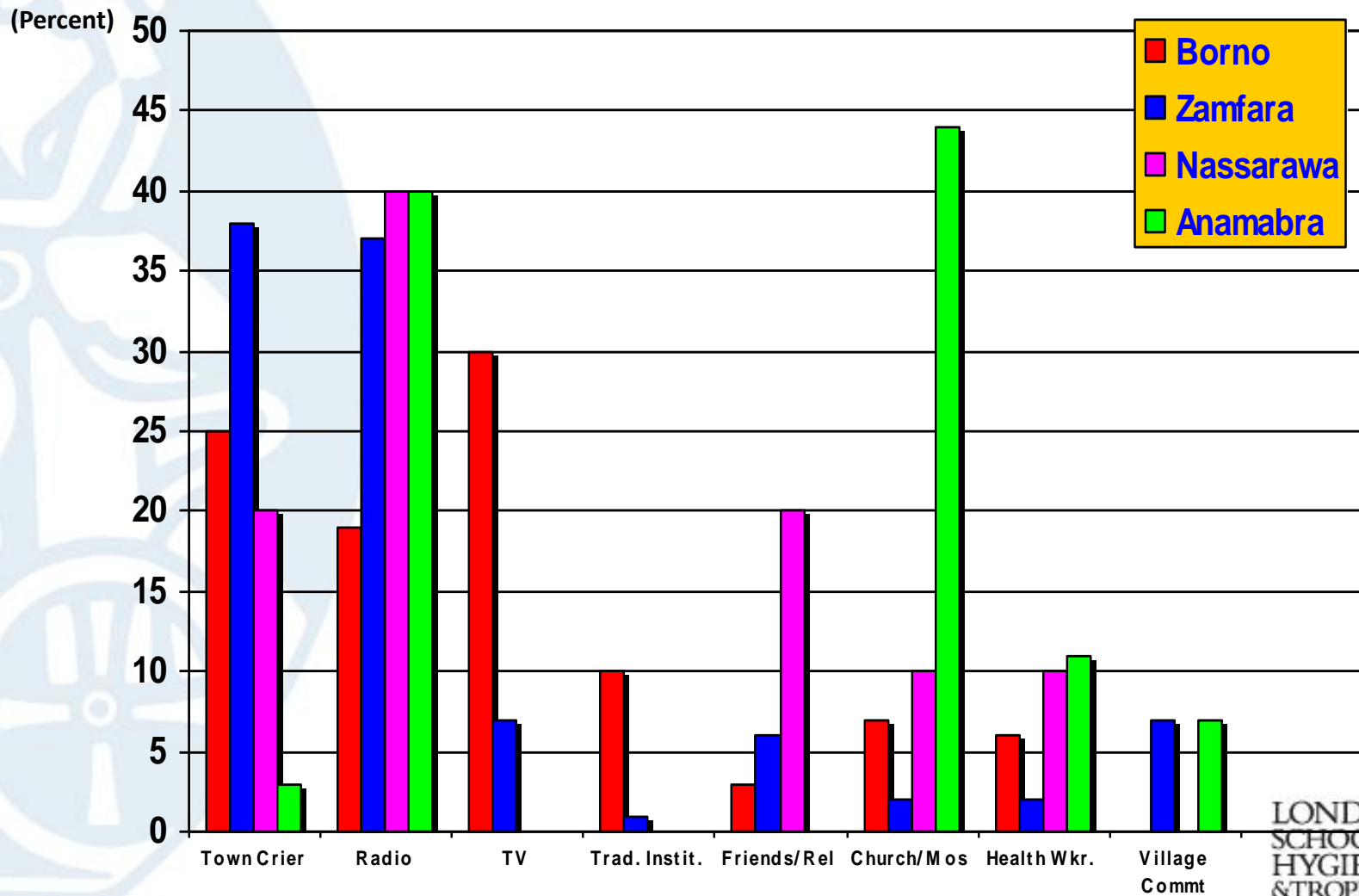


Religious Leaders key to diffusing rejections and promoting compliance



Sources of Information : Caretakers

April 2004



Update

- The Government now has an Emergency Action Plan.
- The plan concentrates on holding people accountable at all levels to make sure that happens.
- May was the best so far, and another in July
- There is strong leadership from political and traditional/religious leaders at national and (most) state levels, there is still hyper-variability and need for micro-planning and monitoring at the Local Government Area (LGA) level.
- The focus in Nigeria needs to move to the local level.





Nigeria – staff surge to fully implement polio emergency plan

300% increase in staff to support eradication effort in worst-performing areas [Full story](#)

- High Priority Endemic States
- Important and Sporadic Transmission States
- Polio-Free States

Polio eradication this week :

- In Nigeria, a significant surge in field staff continues to be deployed to the worst-performing Local Government Areas in the highest-priority states in the north of the country. At the World Health Organization alone, staff is being increased from 744 professionals to 2,951, an increase of nearly 300%. The bulk of these new staff is already in place, and the full recruitment of the surge is anticipated to be completed over the coming weeks.

[Read full text of Polio this week](#)

<http://www.polioeradication.org/>

9 July 2012





A child in Kano, Nigeria, receiving polio vaccine in June 2010.

Lessons from polio eradication

Ridding the world of polio requires a global initiative that tailors strategies to communities, say Heidi J. Larson and Isaac Ghinai.

Ten years ago all seemed to be going well with poliomyelitis eradication. The number of polio cases globally had dropped by 99% from an estimated 350,000 in 1988 to fewer than 500 in 2001, thanks to the Global Polio Eradication Initiative (GPEI).

But getting rid of the last 1% of cases over the past decade has been a roller-coaster ride including ridding whole nations of the disease and flare-ups in previously polio-free countries (see 'The disease that won't die easily'). Arrayed against the effort have been: logistical barriers, especially in conflict areas; management challenges; uncertain funding; waning political will; persisting anti-vaccine rumours and resistance; silent infections — healthy carriers who spread disease; and rare cases of vaccine-induced polio.

Against these odds, polio eradication has pushed on stubbornly, perhaps too stubbornly, at times, alienating some local populations by seeming overly top-down in its approach. But, the world cannot give up the fight to wipe out the disease that was paralyzing 1,000 children a day 25 years ago and whose eradication is estimated to benefit the world by US\$40 billion–50 billion between 1988 and 2035¹. The alternatives are more costly — long-term measures to keep the number of cases low or risk widespread resurgence of a disabling and fatal disease².

Happily, much has been learned, and is still being learned, from the polio eradication initiative; in particular, why some children remain unvaccinated. Prompted by several years of fieldwork (by H.J.L.) with the United Nations on community acceptance

School of Hygiene and Tropical Medicine has established an early-warning system to detect and investigate vaccine rumours and public concerns before they erupt into widespread vaccine refusals (go.nature.com/rf99s).

Our research points to three key lessons for the endgame of polio eradication and for other immunization initiatives in the developing world. First, integrate social and political analyses into feasibility assessments, strategic planning and steering. Second, find out what is driving rumours and resistance. And third, design and monitor communication and engagement strategies that work hand in hand with technical strategies and enable local populations to feel ownership of their immunization programme³.

THE PROBLEMS

To explore how rumours can snowball into a crisis, events in Nigeria and India are worth a closer look.

What happened in Nigeria in 2003 has become a case study in the importance of getting local populations on side early⁴. Five states in the predominantly Muslim north of Nigeria — Kano, Zamfara, Kaduna, Niger and Bauchi — boycotted polio vaccination when religious and political leaders endorsed rumours that oral polio vaccine was an American conspiracy to spread HIV and cause infertility. The rumours had circulated in Nigeria and elsewhere for many years, but the tense political situation following elections in April 2003 provided motives for state governments in the north to "make things difficult" for the federal government⁵. This happened against a background of intensifying polio-eradication campaigns in May 2003, international conflicts against Muslim countries, and court proceedings in the United States where Nigerian families were suing Pfizer for allegedly unethical proceedings during clinical trials of an antibiotic drug in Kano⁶.

In most Nigerian states, the vaccine suspensions were short-lived. But the newly elected governor of Kano — the most populous state, home to about 10 million people — enforced the boycott for 11 months. This catalysed a resurgence of polio in the country, with more than five times the number of cases in 2006 than in 2002 (reported incidence jumped from 202 in 2002 to 1,143 in 2006). Nigerian strains of the virus spread to 15 other countries⁶, many of which had been previously certified polio-free, and were detected as far away as Indonesia.

In India, resistance to vaccination came from within similar socio-economically



The Vaccine Confidence Project

monitoring public confidence in immunisation programmes

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Confidence Commentary: A blog from Dr Larson

The Hajj: world window on the state of polio (and other vaccine preventable diseases)



This week, Eurosurveillance published a report on health hazards and recommendations for pilgrims preparing for this year's Hajj. It is a poignant capturing of the state of globally

Take part in our survey

Click [here](#) to take part in our survey on public concerns about vaccines.

In the news

1. Phillippines: Peasant groups warn against corruption of rotavirus vaccine fund (13/10/2012)
Peasant groups here welcome the inclusion of an additional PHP 600 million (USD 14.43M) to reduce the incidence of Rotavirus diarrhea among small children in the country through vaccination. The peasant women group Amihan in Southern Mindanao, however, warns against possible abuse of said fund if government is not sincere in implementing the program.
([external link](#))

2. India: Measles vaccination sparks anxiety among school kids (16/10/2012)
As many as 16 students of Marry Mata School of Pramukh Park in Bhedwad area were brought to Surat Municipal Institute of Medical Education and Research (SMIMER) on Monday afternoon after they complained of uneasiness. It was initially feared that



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