

POLIO ERADICATION IN NIGERIA: – CONTROVERSIES AND WAY FORWARD.

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ABSTRACT:

With the commitment to global goal of Polio eradication by the year 2002, Nigeria embarked on the Polio Eradication Initiative (PEI) campaign in 1996 using the fixed post and later house to house strategy on days designated as National Immunization days (NIDs). The National average coverage reached between 40-60million children by 2002-3.

The strength of these successes had always been in the un-relented political support of the various levels Government, as well as the continued financial and material support of the International agencies – WHO, UNICEF, Rotary Int., BASICS and EU.

But despite this achievement, Nigeria currently poses the highest risk to the global target on Polio eradication. In 2003, Nigeria had the highest number of polio cases anywhere in the world (cumulative total of 302 as at Jan 2004), and accounted for 45% of all confirmed cases globally. Intense transmission of Wild Polio Virus (WPV) continues in Northern Nigeria especially the mega Kano state accounting for 47% of all cases. Unfortunately also, there has been a 25% increase in the number of cases of wild polio virus with at least a confirmed case in 15 States.

Controversies based on unfounded rumours about alleged adverse health effects, vaccine safety, contamination, overdose as well as promotion of anti OPV sentiments by political and religious opinion leaders motivated by political sentiments have led to decline in service demand and acceptance. These have further resulted in the previous cancellation of polio-vaccination campaigns in several key Northern Nigeria states. The outcome of various governmental and religious committees on the said controversies at a point in time recommended outright suspension of the exercise, while the OPV testing was being carried out in International laboratories outside the country. Despite the assurances on the safety by both the WHO and the Federal Government after the result of the testing was released, controversies on the authenticity of the results, country of testing as well as court cases are now emerging particularly in the northern states.

The consequences of these are the enormous additional financial resources as well as re-infection from the North of the previously polio free areas within and outside Nigeria, thereby threatening the children in the southern Nigeria as well as across west and central Africa.

This situation therefore calls for urgent actions to attain the goal of Polio eradication. These includes restoration of public confidence on OPV safety, immediate restart of National immunization campaigns, active commitment of all stake holders at all levels, improved quality and coordination of campaigns, sincere commitment of traditional, opinion, religious leaders, community ownership, integrated social mobilization and Information disseminations.

In conclusion, there is a need for a strong consensus among all stake holders, regaining public confidence on vaccine safety, building on previous experiences, high quality manpower, committing more resources, and improved quality and coordination of vaccination programme for Nigeria to overcome the current situation.

KEY WORDS: POLIO ERADICATION, CONTROVERSIES, WAY FORWARD.

INTRODUCTION.

Nigeria is a signatory to the declaration of the survival, protection and development of children, which was articulated by the 49th World Health Assembly in 1988 and reinforced by the World summit for children held in New York in 1990. (1,2) This declaration established the challenges for global immunization, which include eradication of Poliovirus from the world by the year 2002.

Poliomyelitis has been known for at least 3,000 years – ancient Egyptians engravings pictured the crippling efforts of Polio. At its peak, Polio paralysed or killed about 500,000 children each year. It is highly infectious disease transmitted through oral faecal route usually in children less than five years (3).

Unfortunately, there has been no known cure and its paralytic effect is irreversible. Between 5-10% of the cases of Poliomyelitis die of breathing muscles paralysis while paralysis occurs in less than 1% of cases and 90% will have no distinctive symptom at all. About 200 children are at the risk of being infected before a paralytic case finally signals an outbreak (3).

With the development of an effective vaccine, prevention of Poliomyelitis became possible in majority of countries around the world. It was the development of an orally administered vaccine that made poliomyelitis the logical choice for a global eradication programme after the successful story of small pox (4).

This logic is particularly relevant in many developing countries where limited resources, poor existing infrastructure as well as constrained local health care services are very important limiting factors in childcare including immunization services. This logic was envisaged feasible because of availability, affordability and ease of administration.

The Global Polio Eradication (GPEI) spearheaded by National Governments, and many international agencies – WHO, UNICEF, CDC, Rotary International is the largest public health initiative the world has ever know. In the last decade, through improved immunization efforts and strategy, the global coverage has reached over two billion children around the world in more than 200 countries with over 20 million participating volunteers including Nigeria. There was also a corresponding significant decrease in polio cases from about 350,000 in 1988 to less than 4,000 by the end of the year 2000 .⁵ This is with a view to eradicate the sufferings, paralysis and death associated with the disease and to save about 1.5 billion US dollars annually for other health issues (6).

During the same period, the repeated polio immunization campaign had interrupted polio transmission throughout the southern Nigeria and most especially the mega city of Lagos. The strength of these successes had always been in the un-relented political support of the various levels Government, as well as the continued financial and material support of the International agencies – WHO, UNICEF, Rotary Int., BASICS and EU (7).

Fifteen years has elapsed since the decision to eradicate polio was passed and we are now in the last phase. The end of any global eradication campaign is the most complex. At the end stage, there are usually very few cases of the target disease left and sometimes question the rationale for commitment of both enormous financial and human resources as it were in the beginning. This is coupled with personnel as well as public apathy due to programme fatigue, mistrust and dose safety. Several regions of the world among them the Americas, Western Pacific and Europe have already been certified polio free and are now awaiting the rest of the world for global

eradication. Polio free zones are also emerging in Africa particularly the Southern and the Eastern zones (4,7,8).

However, there are seven remaining polio-endemic countries in the world. The three critical ones are India, Nigeria and Pakistan. The eradication initiative has continued to be a success story in both India and Pakistan. However, this PEI success story has been difficult to sustain with the advent of the democratic dispensation. The recent cancellation of polio-vaccination campaigns in several key Northern Nigeria states where poliomyelitis is endemic (9) has focused attention of the whole world on the unfortunate reversals in the fight to eradicate polio.

Nigeria currently poses the highest risk to the interruption of poliovirus circulation and global target for eradication. In 2003, Nigeria had the highest number of polio cases anywhere in the world (302 as Jan 2004), and accounted for 45% of all confirmed cases globally. Intense transmission of Wild Polio Virus (WPV) continues in Kano state accounting for 47% of all cases. There has been also a 25% increase in the number of cases of wild poliovirus with at least a confirmed case in 15 States (10).

Polio Eradication Initiative in Nigeria

With the commitment to global goal of Polio eradication by the year 2004, one major step taken by Nigeria in achieving this was the restructuring of the Expanded Programme on Immunization (EPI) in 1997. This led to renaming the EPI to National Programme Immunization (NPI) and its establishment as a parastatal of the Federal Ministry of Health (11).

Nigeria implemented the PEI with days designated as National Immunization days using the fixed post strategy between 1996 and 1998. The objectives of this strategy were to immunize all children aged 0-59 months and active acute flaccid paralysis (AFP)

surveillance. The National average coverage reached 108% by 1998 (12). But despite these achievements, there were still identified cases of wild poliovirus. This obviously necessitated a change in the strategy in 1999 to the house to house.

The objectives of the new strategy included (12)

- Immunization of all children under the age of five with oral polio vaccine.
- Strengthening of routine immunization.
- Concept of revisiting all missed houses.
- Active surveillance to detect cases of AFP.
- Mop-up vaccinations campaigns in areas where WPV has been isolated.

This strategy led to remarkable achievements and progress in the Nigeria PEI and by the end of 2002, between 40 and 60 million Nigerian children under the age of five years were already immunized (13) using part of the over 10 billion doses of OPV in worldwide polio campaigns (14). This was also coupled with the reduction of AFP cases from over 100 to only 63 in 2001 (15). This is an affirmation of both potency and safety of the OPV used in the Nigeria campaign.

During the same period, the repeated polio immunization campaign had interrupted polio transmission for least 18 months throughout the whole of southern Nigeria and most especially the mega city of Lagos (16,17). The strength of these successes had always been in the un-relented political support of the various levels Government, commitment of the NPI Agency, as well as the continued financial and material support of the International agencies – WHO, UNICEF, Rotary Int., BASICS and EU.

CURRENT TREND IN NIGERIA

Between January and July 2003, a total of 75 wild polioviruses have been confirmed, with 45 cases being type 3 while 29 cases are type 1. About 72%(54) of the cases were below the age of three, while 64%(48) had received less than 3 doses of OPV.¹⁰

There has been a 25% increase in the number and the spread of cases of wild poliovirus between Jan-July 2003, when compared to the same period in 2002. Also at least a case of confirmed wild poliovirus has been isolated in 15 states compared to 12 states of 2002 during the same period. Nigeria has now more than 302 cases of WPV and may be the largest last reservoir of polio virus on earth. Twenty states are infected with varying levels of virus load in 2004 (10).

Intense transmission of wild poliovirus continues in Kano State, accounting for 82 cases of wild poliovirus. Other states namely Kebbi (37 cases), Jigawa, Kastina, Zamfara, Kaduna, Sokoto, and Bauchi also continue to be reservoirs of wild poliovirus. Emerging cases are now being isolated in the once interrupted polio transmission southern states of Kwara, Lagos, Ogun and Edo to mention a few as a result of re-infection from the Northern part (10,16,17).

The performance of the surveillance system continues to be good; all the states in the federation have achieved the target rate of 80% stool adequacy and a non-polio rate greater than 1/100,000 children below 15 years of age (10).

Programme reviews have been conducted and new strategies have been developed and recommended to be implemented for the rest of the year 2004.

CONTROVERSIES

Unfolded rumours about alleged adverse health effects, vaccine safety, contamination, overdose as well as promotion of anti OPV sentiments by political and religious opinion leaders motivated by

political sentiments have led to rejection and or decline in service demand and acceptance (18,19, 20). This has led to free circulation of the wild poliovirus in the Northern Nigeria and re-emergence in the previously free southern part. Most unfortunate of all, the country is now an exporter of the poliovirus (21).

Ironically, some of the early countries to get rid of polio disease are front line Islamic states – Saudi Arabia, Syria, Iran, Jordan, Kuwait and Morocco. Countries facing rigours of war even made cease fire arrangement in-order to make progress in the eradication drive (8)

These controversies are thus always based on un-named “competent” sources mainly and usually subjects of religious sermons; editorials in both print and electronic media as well as journals. The controversies quoted in previous media reports are based on some of the under-listed issues (22, 23, 24,25).

- The result of the initial test that “the vaccines indeed found to contain a congenital steroid” on some of the vaccines at University teaching hospital and National Hospital, where there are more sophisticated equipment.
- Recommendation of further confirmatory vaccine test at International Laboratories in Lagos, which are considered multi-national and seen as part of the agenda.
- WHO and UNICEF official rejections of the positive tests conducted in ABU/Abuja as inaccurate and their readiness to sponsor vaccine test abroad.
- The controversies on composition of investigating team.
- Test on the vaccine to include the SB 40, SIV and HIV.
- Citation of a previous similar experience with WHO in the Phillipines in the 1990s

on the administration of later contaminated Tetanus vaccine.

- Desperation and aggressiveness of WHO to have children immunized despite the irresolution the controversies.
- The spending of billions of US dollars on a disease that recorded only 109 cases in the entire country, when devastating disease like measles killing two million children annually.
- Medical hypothesis reports by renowned scientist and research on the linkage between polio virus and the origin of HIV published in 1994 after the 8th annual Houston conference on AIDS.
- The motive behind introducing a potentially dangerous vaccine, proven, and ban for use in the United States and other European countries.
- American declassified document called national security memorandum 200 on the issue of population control in developing countries to ultimately serve the strategic, economic and military interest of the United States.

THE WAY FORWARD

Today, Nigeria still remains the number one polio reservoir in the world not because the country does not have the expertise, but because of misinformation and deliberate suppression of rights of the underprivileged.(8). This situation therefore calls for urgent consensus to regain the restoration of public confidence on the eradication initiative.

The consensus must be based on safety of the OPV and the principles should include the demonstration of the commitment of Government to work closely with all stakeholders. The strategies should include (13,15,26,27).

- Sustenance of the ongoing dialogue with both the political and traditional leaders of the North through the appointment of Polio Ambassador.
- A grand plan of action on monthly basis should be established and managed under the office of the Minister for Health addressing key issues of social mobilization, advocacies, political, community as well as private ownership.
- The continued broad base financial and technical support of the partner agencies to immediate restart of National immunization campaigns, improved quality and coordination of campaigns.
- Media should come fully on board and their organisational channels should be extended for dissemination of OPV safety information among communities and households.
- Active support of leaders particularly State, local and traditional leaders to take active part and own immunization campaigns, especially in the northern states.
- Doctors individually or as groups particularly those based in the northern part of the country need to join effort with health authorities and international agencies by studying the OPV test report as well as develop a strong advocacy programme in dispelling these rumours.

In conclusion, there is a need for a strong consensus among all stake holders, regaining public confidence on vaccine safety, building on previous experiences, high quality human power, committing more resources, and improved quality and coordination of vaccination programme for Nigeria to overcome the current situation.