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AFRICA POLIO-FREE

CERTIFICATION CELEBRATION

AUGUST 29TH, 2020

What Nigeria should do to stay polio-free

Dr Tunji Funsho, Chairman Nigeria National PolioPlus Committee of Rotary International

Nigeria has reportedly eradicated the poliovirus. What do you make of that?

The World Health Organisation declared Nigeria a polio-free country on June 18 and what that means is that there is no more wild poliovirus anywhere in Nigeria, either infecting a child or even in our sewage system after it (WHO) did a lot of thorough investigation. So, it's a big milestone; it's a great relief for us because it means that we've come to the end of our struggle to eradicate polio. It is a time of a lot of joy, excitement and gratitude to God and all the people who have come together to make that happen.

How long must a country be without any poliovirus infection to be deemed polio-free?

For any country to be confirmed polio-free there must be no case of the wild poliovirus continuously for three years. You may recall that we went from 2014 to 2016 without any case of polio, and we were hoping we just had only one year to go but unfortunately, the insurgency in the North-East made it impossible for us to reach some children with the polio vaccine and, of course, they got infected with the virus that was circulating in the environment. The virus is transmitted through the faeco-oral route. That last case was in 2016 in Borno State so we are actually edging towards four years without polio. Of course, there are many parameters that the African Regional Certification Commission (ARCC) looks at just to ensure there is no polio lurking anywhere and that we are doing the things that we need to continue doing to ensure that we don't see any more cases of the virus in Nigeria.

Dr Funsho vaccinates a child during a field vaccination activity

Why was Nigeria plagued with polio for so long, even after the rest of Africa had eliminated it?

People who have been in this effort for more than three decades now will understand why Nigeria had the unique problem, apart from other countries that had similar problems. Number one, we have the largest population in Africa. We have the kind of terrain most parts of Africa don't contend with. In the South, we have a riverine terrain, which is a major logistic challenge. In the North, we have distances and also water terrain in high season. We also have desert environments; we have issues of accessibility by road. And then of course, we've had issues of rejection of the polio vaccine, even by political leaders at some point in time who raised false claims that the vaccine was injurious.

Of course, we all have seen over the years, at least, since all these things came to light, that the vaccine is quite safe and no one has been shown to be sterilised or infected with HIV/AIDS as a consequence. As a matter of fact, the more the vaccine is given, the more the population is growing. So, all those rumours have been debunked. The vaccine has done the job it's supposed to by protecting children against being paralysed by the wild poliovirus. Those are the major challenges and, of course, everything requires money. We need to continue the political will and advocacy to ensure that adequate funding is provided, not only for maintaining a polio-free status, but also ensuring that children are protected against all the other vaccine-preventable diseases like measles and whooping cough.

How much did public-private partnership contribute to the eradication of polio in the country?

Regarding public-private partnership, in talking about contribution, we generally tend to think in terms of money; we don't think in terms of man-hours. Rotary is a voluntary organisation of more than 1.2 million people and they invested their time in this project, getting involved in advocacy, creating awareness, raising funds and actually going into the field to immunise children themselves. And they've put in millions of man-hours.

John Hopkins University did a survey for us. The input in terms of man-hours was estimated at seven million volunteer hours per year, which, quantified in monetary terms, was equivalent to $850m. That is one aspect of it — volunteer hours. We are very unique in all the partnerships because our members are not paid to do these jobs. All our other partnerships, be they government workers, WHO, the United Nations Children's Fund, or the Nigeria Centre for Disease Control are paid people. And that is why we have decided to undertake a study to quantify the number of man-hours we have spent and how those man-hours translate into money.

In terms of actual cash that we have expended, we have raised $17bn across the world and just a little bit over $300m in Nigeria alone in the last 15 years. So, it's a huge expense when you translate that in naira terms.

What measures were taken to change misconceptions about polio prevention?

Rotarians exist in every nook and cranny of this country, so we work in advocacy through our political leadership. So, we have had advocacy to all the presidents of this country in the last 20 years at least. I have been part of the delegation to see (now late Umaru) Yar'Adua, (Goodluck) Jonathan, and before them, (Olusegun) Obasanjo. Even in recent times, we've visited President Muhammadu Buhari. We have recently addressed a meeting of the Nigeria Governors' Forum and started advocating individually to our governors. We'd had an audience with the governors of Nasarawa, Benue and Akwa Ibom states before the COVID-19 pandemic started and we intend to continue doing that. That is the major role we play in order to ensure that we keep the polio eradication effort on track. With the help of our celebrity ambassadors, who are also opinion moulders in our society, we solicit their efforts.

What are stakeholders doing to ensure there is no resurgence of polio cases?

Stakeholders include everyone. But if you are talking about those who try to fill the demand, that is, Rotary, WHO, and our other PEI partners, it is to continue what we have been doing to make sure no one thinks the job is done. We've heaved a sigh of relief; we've chased the virus out of our country but our new slogan is 'Keep polio at zero.' And in order to do that, we have to continue with immunisation. We'll also still be doing campaigns as soon as the COVID-19 pandemic is under control. But what is going to get us safe in the long term until the world is certified polio-free is to ramp up our routine immunisation activities.

Being the text of an interview by Tobi Aworinde for punchng.com

FROM EDITOR'S DESK

A time for courage and persistence

These are strange times. It's a time such as few people alive have ever witnessed or lived through. The closest humanity has ever come to such a time has this was in 1918 during the influenza pandemic. There have been few events in human history that have changed history as much as the novel corona virus has. It has sealed up businesses, closed schools and collapsed economies. We all remember a time before the COVID era but no one is actually sure if there will ever be a post-COVID era. Countries have managed the pandemic differently with many developed countries struggling to bring the pandemic under control while some less developed ones have had relatively more success dealing with it. What we thought would be with us for just a few months now appears like it's going to be with us for a long time.

Beyond the obvious long term effects on the economy and the strain it has placed on health systems across the world, there are other silent costs that are less easily appreciated. Recently there has been debate about the potential consequences of the prolonged closure of schools on the education of the kids. As a parent myself, I worry about my children being set back academically and I can only hope that the impact can somehow be mitigated by whatever virtual learning assistance that the schools have been able to come up with in the meantime.

Another silent cost is the adverse effect that it has had on our programme. At the moment all supplemental immunization activities have been suspended while we try to determine the safest way forward within the context of our recent realities. The prolonged lockdown period has also affected our ability to deliver regular routine immunization and outreach services. Concern has risen on the likelihood of outbreaks of vaccine preventable diseases unless rapid, drastic and effective action is taken. The challenge therefore becomes one of ensuring that our remedy for the pandemic doesn't become worse than the pandemic itself. Already, our health teams are trying to scale up routine immunization services while adhering to strict COVID-19 protocols. They are immunizing children, rendering follow-up services, tracking defaulters and trying to ensure that no one drops out and no child is left behind. It has not been easy but they have been trying their best. Every single one of them is a hero who deserves all of our support and our applause. You can support them by ensuring that your children or those of your associates and relatives receive all the routine immunization antigens that they are supposed to at the right time.

Preparations are also on for supplemental immunization rounds to commence once the proper safety protocols have been finalized. Already, many countries are in response mode to cVDPV2 outbreaks especially on our continent. Luckily, we do not have so large a burden as most of them but we cannot afford to be complacent. We will be requiring your help in ensuring that we can respond adequately to this challenge that VDPVs pose to our children. So, please continue to support our programme through fundraising (we still need a whole lot of money), advocacy, awareness and vaccine demand creation as well as your commitment of volunteer man hours in the field. We are counting on you.

Please enjoy this edition of PolioStop. Please take responsibility and stay safe.fe.

ROTN. OLUGBENGA OLAYIWOLE
Editor PolioStop

Kudos to the NEOC and partners! Nigeria's Polio-free status now a reality!

On 18th June 2020, the African Regional Certification Commission (ARCC) accepted all the certification documentation of Nigeria which signaled that Nigeria was now ready to be declared free from the Wild Polio Virus (WPV). This is the culmination of over 3 decades of hard work and dedication of the Nigeria Polio Eradication Initiative (PEI) which has resulted in Nigeria going more than 40 months without any case of WPV. However, the actual celebration of this achievement will be done in the month of August 2020 whereby the entire WHO Africa region will be declared free of the WPV.

This is expected to be a grand celebration that will bring together various countries to commemorate and appreciate the significant contributions of the national governments, bilateral and multilateral donors, Civil Society Organizations (CSOs), Non-governmental Organizations (NGOs), partners and agencies that led to this epoch-making achievement.

Now that Nigeria has been declared free from WPV, it is necessary to properly celebrate this important milestone through critical, impactful activities that will not only showcase this laudable feat but also enable the documentation of the strategies, approaches and innovations that resulted in this achievement.

Through working with partners, the communication Working Group of the National EOC has been at the forefront of developing and implementing novel approaches that were used to counter different communication challenges that came up at various stages of Nigeria's journey to Polio-free certification.

These communication approaches and innovations need to be documented in various formats that can be saved and stored for posterity. These innovations and strategies will be celebrated through print and electronic media; multiple platforms like radio and TV shows, interviews, lectures and documentaries etc. that will let the world know what it took to get to this historic milestone.

"Certification that Africa has completely stopped wild poliovirus is both a historic milestone on the road to polio eradication and an incredible public health achievement for the continent"- UNICEF.

Global Polio Update

Ø Wild Polio-virus (WPV) cases

Total global cases in 2020: 87 (compared with 64 for the same period in 2019)

Total global cases in 2019: 174

Ø Circulating vaccine-derived poliovirus (cVDPV) cases

Total global cVDPV cases in 2020: 211 (compared with 69 for the same period in 2019)

Total global cVDPV cases in 2019: 367

AMINU MUHAMMAD
NATIONAL PROGRAMME COORDINATOR

How we came to have the vaccines that changed the world

Funerary Stele of the Egyptian priest Ruma showing a withered leg

Only two countries in the world have never interrupted the transmission of the wild polio virus. Early in the 20th century, this didn't even seem possible. You will remember that at the launch of the Global Polio Eradication Initiative in 1988, there were at least 350,000 annual cases of polio globally. At that time, polio was in at least 124 countries of the world affecting mainly children but also crippling and incapacitating susceptible adults. Polio was ubiquitous plaguing many parts of the developed world. There was a time when everyone knew someone who had been infected or affected by polio. In many places in the world today, majority of the population has never seen anyone with the polio virus.

The history of polio may extend to a time even before we had records. For example, we know that the funerary stele of the Egyptian priest Ruma from around 1400 BC contains depictions of a shortened and withered leg which is thought to be one of the earliest depictions of polio. The spread of polio in much of the western world seems to have coincided with the spread of industrialization when people came to live clustered together in towns and cities and perhaps began to interact more with filth and waste in less than sanitary living conditions. It was in 1789 that physician Michael Underwood provided the first clinical

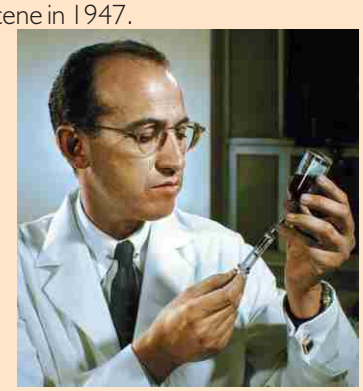
description of the disease and people began to understand that polio was a major health problem.

Fifty years later, around 1840, Jacob Heine a German doctor was able to detail the features of the disease and specify its connection to the spinal cord. This represented the first medical report on the disease and thus made it an official disease. At this point in history, polio was basically spreading silently in populations with very many victims. In 1894, there was an outbreak of polio in Vermont U.S.A. which affected 132 people and caused 18 deaths. This insidious disease was no respecter of persons. In 1921 even the President of the United States, also known as the most powerful man in the world, President Franklin Delano Roosevelt contracted the disease and would remain confined to a wheelchair for the rest of his life.

Rare photo of President Roosevelt in a wheelchair

It swept through much of the western world that summer became known as the "polio season" and as it approached, many people felt a sense of dread that they or their loved ones could become its victims.

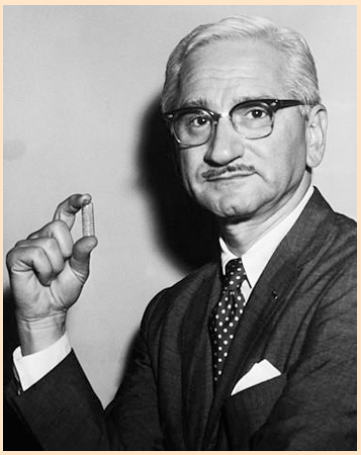
Attempts to create a vaccine against polio were unsuccessful at first. An example is the attempt by Maurice Brodie and John Kolmer which had serious negative consequences. Many people in the scientific community were already losing hope when a medical hero came to the scene in 1947.



Dr Jonas Salk

The University of Pittsburgh had recruited Dr. Jonas Salk who was a graduate of New York University's School of Medicine who had dedicated himself to vaccine studies and making a positive impact in the world to lead a research programme that would develop a vaccine by growing the virus in a culture medium. During the course of his research, the United States was hit with the worst polio epidemic in its history in which over 60,000 people are believed to have contracted the virus while 3,145 people died. The importance of finding a vaccine that would stop the virus in its tracks could not have been more obvious and it was in this atmosphere that Dr. Salk and his team worked. By 1953, they had developed a potentially safe polio vaccine and when this was made public, it heralded the start of what was at the time the largest human vaccine trials in the history of mankind. Nearly 2 million children participated in the field trials. The success of these trials and the availability of a safe and effective vaccine against this virus was announced on April 12, 1955. That was coincidentally the 10th anniversary of the death of the most prominent polio victim, President Franklin Roosevelt. Dr. Salk's vaccine was made from killed viruses and was delivered through an injection.

Within the next 3 years, the incidence of polio in the United States fell by as much as 90 percent. It is noteworthy that despite the importance of the vaccine, Dr. Jonas Salk refused to patent it preferring to make it accessible and available to everyone who needed it. This makes him truly one of the notable visionaries and humanitarians that walked this earth



Dr. Albert Sabin

Almost simultaneously as Dr. Salk was carrying out his research, another prominent researcher was also busy at work, trying to produce an effective vaccine against polio. His name was Dr. Albert Sabin.

Dr Sabin migrated with his parents to the United States in 1921 and became an American citizen in 1930. He trained at New York University where he began research on polio. He joined the Rockefeller Institute for Medical Research in New York City in 1935 where he was the first researcher to show the growth of poliovirus in human nervous tissue outside the body. He 1939 he started working at the University of Cincinnati College of Medicine in Ohio where he was an associate professor of pediatrics. It was here that he disproved the theory that the poliovirus entered the body through the nose and respiratory tract and demonstrated the polio was primarily an infection of the digestive tract. He postulated that live, weakened (attenuated) virus administered orally would provide immunity over a longer period of time than killed, injected virus. By 1957, he was able to isolate strains of the virus that would not cause disease but would produce antibodies. He carried out experiments in Mexico, the Netherlands and the Soviet Union and was able to develop a vaccine which was safe and effective in children. It was approved for use in the United States in 1960 and became the main defense against polio throughout the world. Dr. Sabin was consulted and provided advice which helped to start Rotary's PolioPlus programme which was the precursor of the Global Polio Eradication Initiative (GPEI) and was an Honourary Rotarian until his death in 1993.

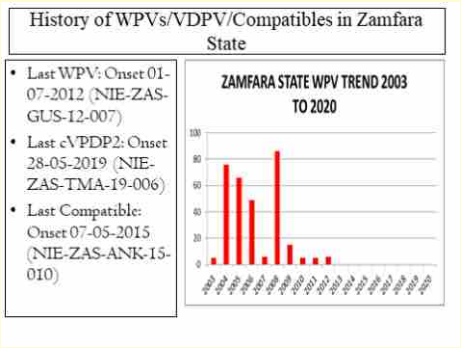
Since the establishment of the GPEI, global polio cases have dropped by 99.9 percent. In 2017, there were just 22 cases globally and although we have had setbacks which resulted in 174 cases in 2019 and 87 cases as at August 12 2020, there is hope that with improved accessibility and efficiency in the affected countries, polio will soon be a thing of the past. We have come a long way from 350,000 cases in 125 countries in 1988 and we still have some way to go but if we pull together consistently, we can be confident of leaving a polio-free world for the next generation of human beings.

Sources: Encyclopedia Brittanica, passporthealthusa.com, World J Virol. 2012 Aug 12; 1(4): 108–114

Sustaining the Pace to End Polio in Zamfara

Brief background information:

Zamfara state is located in the north western Nigeria and shares borders with Niger Republic and 5 other states in the North West of Nigeria. It is bordered to the north by Sokoto state and an international border with Niger republic, to the south by Kaduna, Niger and Kebbi states and to the east by Katsina state. It comprises 14 LGAs and 147 wards. Zamfara state has been Wild Polio Virus free since July 2012. Between 2003 and 2012 there were 319 cases of polio recorded in the state.



State Support for the program:

The state government and its management intensified efforts to bridge the gaps in SIAs and RI quality implementation through reactivation of the State Task force on Polio Eradication(STFI) under the leadership of His Excellency the Deputy Governor of the state Barrister Mahdi Aliyu Gusau to provide a high level of stakeholders engagement in achieving an adequate level of immunization coverage for the state.

The permanent Secretary of the state's ministry of health stands as part of the government's commitment to provide intensive supervision for quality implementation of healthcare activities in the state.

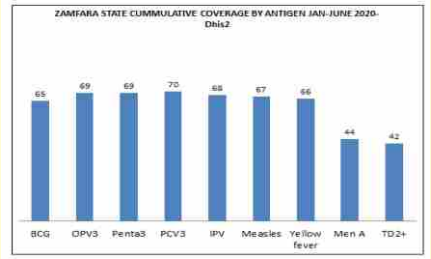
The state has also initiated strategies to promote the involvement of traditional and religious leaders in demand creation activities.

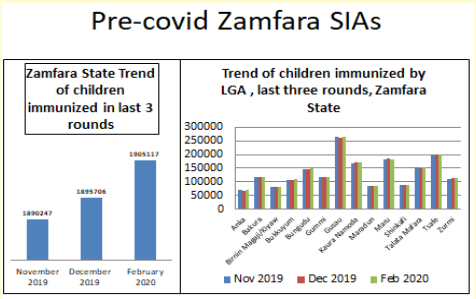
In addition, the sum of one hundred million naira (N100,000,000) was approved by His Excellency the state Governor as support to routine and supplemental immunization activities in the state.

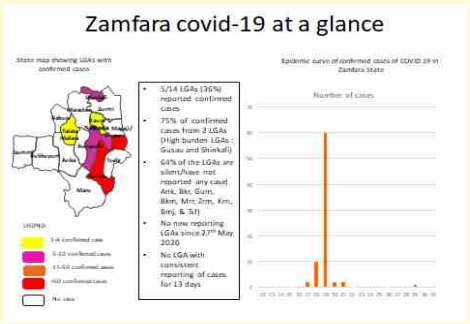
Zamfara state Deputy Governor, Hon Commissioner of MOH and ES ZSPHCB during Flag off at Mayanchi in Maru LG

Deploying PEI resources for Covid-19 control:

With the coming of the covid-19 pandemic to Nigeria in March 2020the state deployed the most reliable structural legacy ever formed- the polio eradication infrastructure, in tackling the outbreak. The already established 7 pillars of the EOC- coordination, surveillance, IPC, Case Management, Laboratory, Risk Communication & Social mobilization, and logistics were used. Meetings were held daily initially but were later adjusted to twice per week. The Covid-19 Taskforce was also formed. This was cascaded to similar structures at the sub-state level with the LGA surveillance teams deployed to the frontline. For all the partners, it was all hands on deck and this caused a lot of disruption of provision of essential health services.







Future plans of Polio Eradication in the state:

The future of the State in Polio eradication is bright. The recent achievement of a polio-free status by the country has given the state an impetus to work even harder to achieve the global goals of polio eradication.

The state via SERRIC/LERRIC has mapped out new strategies to boost routine immunization through targeting communities with high unimmunized children, high Penta 3 dropout rates, underserved communities, insecure communities and communities with low population immunity.

Surveillance continues along with routine immunization and hopefully SIAs amidst the COVID-19 pandemic in an integrated manner as COVID-19 will probably be with us for some time. The State is also planning capacity building, attendance of higher courses, and recruitment of additional personnel to improve the quality of its personnel.

We hope to see more community involvement to target the elite and co-sponsorship of programmes at all levels by the government should also be improved upon. The cooperation of all partners will be required to achieve these objectives.

By Usman K Ahmed- Field Coordinator

The Honourable Minister of Health welcomes Dr. Walter Kazadi Mulombo as the New WHO Representative to Nigeria

While welcoming Dr. Walter Kazadi Mulombo, the new WHO Representative to Nigeria, the Honourable Minister of Health, Dr. Osagie Ehanire has told the new WHO Representative that Nigeria is pleased to have him on board as the Health Team "will count on his experience to continue to calibrate on our response" as he is "coming right in the middle of the storm."

The Honourable Minister of Health also expressed the appreciation of Nigeria to the UN Bodies who have come together to create "One Basket Fund" which he wanted the new WHO Country Rep to get interested in, because the Fund significantly boosted the resources and the assets which Nigeria has to respond; "the first of which was the $2Million consignment that came into Nigeria to kick start everything that Nigeria has to do, just as the other consignments begin to roll in", the Minister said. Dr. Ehanire also disclosed that Nigeria has a good stock in the warehouse along with "what we get from other countries, the EU and the US Government, UK, Global Fund, everybody is chipping in from all sides and giving us support." "We are pleased with the handholding that is going on, and we hope that all that will continue to grow."

The new WHO Representative to Nigeria, Dr. Walter Kazadi Mulombo has been in Nigeria since 18th June, 2020 for his 2nd coming to work. He has been in the country but in isolation as required by the COVID-19 protocol having been deployed from Accra, Ghana.

The new WHO Rep in Nigeria disclosed that he was impressed by the set up at the Airport when he was coming in, as well as the protocol put in place at the hotel he stayed in. He said that Nigeria's administrators who are handling COVID-19 protocols gave him the impression that they surely know what they are doing. Dr. Mulombo congratulates the Honourable Minister of Health, for taking the leadership to make Nigeria certified polio-free. "It is a very big achievement and it paves the way for the whole continent to be certified polio-free; in that we are very proud of Nigeria."

He also congratulated Dr. Ehanire for his leadership in many areas", the last one which he recalled, was the successful grant application to global fund through the first window where it was thought that Nigeria wouldn't get it, but Nigeria made it." He told his host that WHO would want to build on the success and to explore other avenues to support the Health Ministry and the Government of Nigeria.

The new WHO Rep also said, even though COVID-19 is a storm as Dr. Ehanire described it, he said "the advantage and lessons learnt from managing Nigeria to a Polio-free country can be built upon, to try and address issues regarding the COVID-19 and other health emergencies."

Source: africanews.com

Vaccinators Rush to Fill Immunity Gaps due to the COVID-19 pandemic

Vaccinators in countries including Afghanistan, Angola, Burkina Faso and Pakistan took to the streets this month to fill urgent immunity gaps that have widened in the under-five population during a four month pause to polio campaigns due to COVID-19.

Campaigns resumed in alignment with strict COVID-19 prevention measures, including screening of vaccinators for symptoms of COVID-19, regular handwashing, provision of masks and a 'no touch' vaccination method to ensure that distance is maintained between the frontline worker and child. Only workers from local communities provided house-to-house vaccination to prevent introduction of SARS-CoV2 infection in non-infected areas.

Although necessary to protect both health workers and communities from COVID-19, the temporary pause in house-to-house campaigns, coupled with pandemic-related disruptions to routine immunization and other essential health services, has resulted in expanding transmission of poliovirus in communities worldwide. Modeling by the polio programme suggests a potentially devastating cost to eradication efforts if campaigns do not resume.

In Afghanistan, 7858 vaccinators aimed to vaccinate 1 101 740 children in three provinces. Vaccinators were trained on COVID-19 infection control and prevention measures and were equipped to answer parents' questions about the pandemic. Through the campaign, teams distributed 500 000 posters and 380 000 flyers featuring COVID-19 prevention messages.

In Angola, 1 287 717 children under five years of age were reached by over 4000 vaccinators observing COVID-19 infection prevention and control measures. All health workers were trained on infection risk, and 90 000 masks and 23 000 hand sanitizers were distributed by the Ministry of Health.

In Burkina Faso, 174 304 children under five years of age were vaccinated in two high-risk districts by 2000 frontline workers. Vaccinators and health care workers were trained on maintaining physical distancing while conducting the vaccination. 41 250 masks and 200 litres of hand sanitizer were made available through the COVID-19 committee in the country to protect frontline workers and families during the campaign.

In Pakistan, almost 800 000 children under the age of five were reached by vaccinators in districts where there is an outbreak of circulating vaccine-derived poliovirus. Staff members were trained on preventive measures to be followed during vaccination, including keeping physical distance inside homes and ensuring safe handling of a child while vaccinating and finger marking them.

"Our early stage analysis suggests that almost 80 million vaccination opportunities have been missed by children in our Region due to COVID-19, based on polio vaccination activities that had to be paused," said Dr Hamid Jafari, Director for Polio Eradication in the Eastern Mediterranean Region. "That's close to 60 million children who would have received important protection by vaccines against paralytic polio."

Over the coming months, more countries plan to hold campaigns to close polio outbreaks and prevent further spread, when the local epidemiological situation permits.

"Our teams have been working across the Region to support the COVID-19 response since the beginning of the pandemic, as well as continuing with their work to eradicate polio," said Dr Hamid Jafari. "We must now ensure that we work with communities to protect vulnerable children with vaccines, whilst ensuring strict safety and hygiene measures to prevent any further spread of COVID-19".

Dr Matshidiso Moeti, WHO Regional Director for Africa, commented, "We cannot wait for the COVID-19 pandemic to be contained to resume immunization activities. If we stop immunization for too long, including for polio, vaccine-preventable diseases will have a detrimental effect on children's health across the region."

"The campaigns run by the Polio Eradication Programme demonstrate that mass immunization can be safely conducted under the strict implementation of COVID-19 infection prevention and control guidelines."

Source: polioeradication.org

Can new polio vaccine avert nightmare of resurgence?

The world is almost wild polio-free, but outbreaks of vaccine-derived polio could bring back the crippling disease. Soon a new vaccination campaign should spring into action. In eight African countries, health workers will mobilise to tackle outbreaks of vaccine-derived polio. The global campaign to eradicate wild polio is facing a setback as this new form of the disease, caused by the virus strains used in polio vaccines regaining their virulence, has emerged. Vaccine-derived polio viruses have been seen in more than 20 countries since 2000 and officials, funders, academics and health workers are racing to stamp them out. Now, they have a promising tool — a new vaccine that is more stable. But, can it succeed, or does the problem with polio run deeper than any technology can tackle?

In 2016 the GPEI recorded just 42 paralytic cases, compared with about 350,000 a year in the 1980s. Polio mainly affects children and can lead to permanent paralysis or death.

At the heart of this success lie three oral polio vaccines, one for each viral strain. These are live viruses that have been attenuated — made weaker — to become harmless when administered and they have always carried the tiny risk that they could evolve and regain their virulence. Such mutations were occasionally spotted since 2000, but they died off without infecting anyone, thanks to the immunity conferred by the vaccination programmes. In 2015, however, things changed. Six years had passed since the last confirmed case of wild polio virus type 2. A global polio commission declared it eradicated and the correlating vaccine was withdrawn, to allay concerns about introducing the virus into populations when it did not exist in the wild (vaccination for types 1 and 3 continued).

Quickly, however, vaccine-derived cases started to emerge; about 85 cases by 2017, almost 370 by 2019, and 210 cases so far this year — more than three times the number at the same time last year. Four World Health Organization regions are affected, with Africa recording the highest number of cases. Vaccine-derived polio cases are still rare, says Kathleen O'Reilly, epidemiologist at the London School of Hygiene and Tropical Medicine. But the situation is "unprecedented".

"What we now have is no kids have been vaccinated in routine [type 2] immunisation since 2015 so with all these new births, millions of people essentially have no immunity, and that's why we're very concerned," O'Reilly says.

Precisely how it happened is unclear — the mutated virus may have jumped through gaps in routine immunisation campaigns, or some campaigns may have continued to use the type 2 oral vaccine after the cut-off date, speculates Michel Zaffran, who directs polio eradication for the WHO. Whenever an outbreak of vaccine-derived type 2 polio is detected, health workers swoop in with a targeted vaccination campaign. But each time the previously-withdrawn oral vaccine is used, there is the risk of releasing a new infectious mutation, which could spread beyond the boundaries of the intervention into unvaccinated communities.

Nevertheless, says Pascal Mkanda, who coordinates WHO's Africa polio eradication programme from Brazzaville, Congo, these swoops had been fairly successful — until the arrival of the COVID-19 pandemic. Restrictions this year have prevented spot campaigns aimed at 14 million children in Africa, though routine polio immunisations have continued.

The worst fear, says Andrew Macadam of the UK's National Institute for Biological Standards and Control, is that spot campaigns will be delayed by a "prolonged period", in which case "type 2 will probably establish itself as an endemic virus in parts of Africa". Endemic diseases are those that remain present in a population, with outbreaks continuing to occur. "Months is bad, so a year would be very bad," Macadam says.

This is why there is excitement about the type 2 novel oral polio vaccine — nOPV2, a modified version of the existing mOPV2 — the fruit of nearly a decade of work by a partnership of researchers with a non-profit and a pharmaceutical company to design flaws into the attenuated virus, so that it cannot evolve.

The project is unparalleled say Macadam and fellow consortium member Raul Andino, a virologist at the University of California, San Francisco, because it has been one seamless endeavour from concept to field deployment. It is also the first time, says Macadam, that scientists have "rationally" designed a live attenuated virus vaccine. Altered versions of types 1 and 3 are on their way. The vaccine has raced through human trials in Belgium and Panama. The Indonesian drug firm Bio Farma, in Bandung, is already manufacturing tens of millions of doses. Deployment could start in September, says Mkanda, but only if the WHO grants it Emergency Use Listing in advance of the usual licensing processes.

Mkanda says staff are preparing for "a big assault" once COVID-19 has diminished. "I'm hopeful that we'll really be able to bring the thing to a halt," he says. He is working with national governments, each of which needs to acquaint itself "exhaustively" with the data and consent to be in the first "emergency use" wave. Countries can only participate in this if they have not used the old type 2 vaccine in the last three months, for monitoring reasons. This is why some of those worst-affected by vaccine-derived polio —Angola, Central African Republic, Democratic Republic of Congo — are not included

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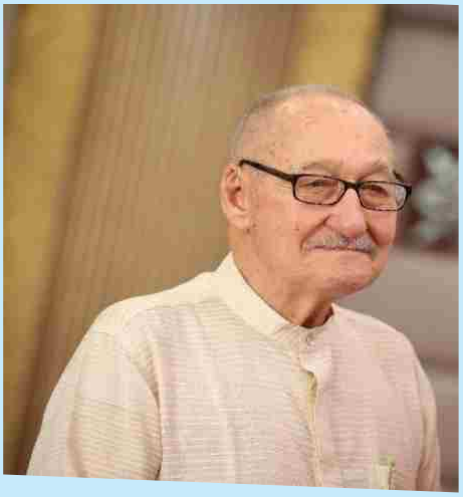
Instead, Mkanda is hoping eight countries will agree: Burkina Faso, Cameroon, Cote d'Ivoire, Chad, Mali, Ethiopia, Congo and South Sudan. Dealing with this setback has increased an already extraordinary price tag. Polio eradication funding for 2021 is $950 million, which includes $110 million for responding to vaccine-derived outbreaks. But it does not include $360 million for supplying the novel vaccine for the next three years. Securing the money is "a major challenge," says Zaffran. "The donors have been extremely generous but the continuation of the efforts and the current economic situation is putting us in a very challenging environment."

Adapted from the writing of Aisling Irwin for scidev.net

A TRIBUTE TO DAVID NEWBERRY: FATHER OF THE CORE GROUP POLIO PROJECT (CGPP)



David Newberry
February 9, 1934-August 4 2020

After making his mark on the eradication of smallpox and guinea worm, David Newberry embraced the challenge to defeat polio. In 1999, David became the first director of the CORE Group Polio Project. He was the driving force behind engaging civil society, particularly the non-governmental organization community, by launching community-based polio eradication efforts through the development of secretariat teams in Angola, India, Ethiopia, Uganda, Bangladesh and Nepal. Even after officially leaving the project, David returned to continue steering the formation of project teams in South Sudan and Nigeria. David had a wealth of more than 40 years of public health experience, having worked at the Centers for Disease Control and Prevention and CARE, including in smallpox and guinea worm eradication programs besides his monumental work in community-based polio eradication.

David Newberry was one of the smallpox warriors and helped spearhead the CDC's successful global smallpox eradication effort, responsible for the planning, coordination and evaluation of the smallpox eradication program.

While at the CDC he also developed programs in T.B, Influenza and Diarrheal disease control as well as for child survival. As CARE's Senior Public Health Advisor, David provided leadership and strategic guidance for primary health care work all over the world. In 1999, he joined as the first director of the CORE Group Polio Project, a USAID-initiated consortium of development agencies spearheading efforts around the world to assist governments through civil society organisations. As a fluent Hausa speaker, David spent countless months, trips and miles working with the vast communities of northern Nigeria in getting polio down to a few handfuls of cases. He had a special affection towards Nigeria and took on an assignment with CDC to return in 2012 to support polio surveillance and SIAs.

David Newberry Meeting with stakeholders towards staring the Core Group Polio Project in northern Nigeria

Again in 2014 he came back on a challenging mission to establish the CORE Group Polio Project in Nigeria. Even in his late 70's David spent enormous time and effort visiting small community leaders in Northern Nigeria who had heard a rumour that polio vaccine caused AIDS or male infertility. David was instrumental in getting Indonesia, an Islamic nation, to manufacture the polio vaccine for Nigeria to remedy these concerns and move the dream of eradication within sight of completion. David was a deeply committed believer with tremendous compassion and empathy for the poor. As a mentor to many around the world, his cross-cultural insights and approach to working with governments and local community leaders were valuable lessons. There are thousands of children that are alive today and particularly are not paralyzed for life, because of David's life. His contribution to the polio eradication in Nigeria is worth a mention in the history of country's fight against polio. It is gratifying that David was alive to witness Nigeria finally achieve a polio-free status. May he rest in peace and may his memory be a blessing.

Source: coregroup.org

From left - DG Bola Oyebade Dr Tunji Funsho and PDG Yomi Adewunmi at the Tree Planting commemorating Polio Free Nigeria

DGE Remi Bello Dr Tunji Funsho and PDG Wale Ogunbadejo at the Tree planting ceremony

Dr Tunji Funsho (left) presenting Certificate of Appreciation to Mr. Akin Tofowomo (AKIIN SHUGA), one of the NNPPC Celebrity Polio Ambassadors

DG Bola Oyebade (middle) presenting Outstanding Service Award to representatives of R.C Mushin Golden D9110

Amb. Aminu Muhammad (right) receiving awards on behalf of all NNPC Field Staff

PDG Wale Ogunbadejo (right) receiving award from Dr Tunji Funsho

Some participants at the Polio Award ceremony in Lagos

Some participants at the ceremony, observing the social distancing.

Representatives of R.C Ojodu D9110 receiving Oustanding Service Award from, DG Bola Oyebade

PAG Busuyi Onabolu former NNPPC Chairman poses with his award

Despite all odds, vaccinators reaching every child

Nigerian vaccination teams giving all it takes to immunise all children

Nigerian Rotarians reaching the last child

CONGRATULATIONS AFRICA

THANK YOU ROTARY!

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