The world has witnessed great strides towards eradication of polio worldwide, but the job is not yet complete. Questions including “What would it take to achieve eradication?” and, subsequently, “What happens when it’s done? What can we learn from the polio eradication campaign?” were discussed on 2 September 2016 in Oslo at a public event entitled Polio Eradication: Balancing Resilience and Legacy. This was jointly organized by the Centre for Global Health at the University of Oslo and the Global Health Centre at the Graduate Institute, Geneva, as part of a larger research effort on the social and political barriers to polio eradication and the challenges of transition.

WHERE IT ALL BEGAN
Polio, a disease caused by the poliomyelitis virus, mainly affects young children and can cause damage to the nervous system leading to permanent paralysis. There is no curative treatment for polio, but the disease can be prevented by immunization with oral or injectable vaccines developed in the 1950s. Following a resolution of the World Health Assembly in 1988 aiming to eradicate polio globally by 2000, the Global Polio Eradication Initiative (GPEI) was established as a global partnership, initially involving the World Health Organisation (WHO), United Nation Children’s Fund (UNICEF) Rotary International and the United States Centers for Disease Control and Prevention, with other organizations including the Bill and Melinda Foundation joining later. At the time of the formation of the GPEI in 1988, more than 1000 children were paralysed by polio daily. The strategy for polio eradication involved interrupting transmission via routine and supplementary immunization efforts and surveillance of polio outbreaks. By the year 2000, polio incidence was reduced by 99% and surveillance of potential outbreaks was significantly improved, but the eradication target was not met and subsequent eradication deadlines were not achieved.

PROGRESS AND SET-BACKS
By 2007 all but four countries had succeeded in eradicating the virus. In 2011 India saw its last case of polio and the next eradication target for the remaining three countries – Pakistan, Afghanistan and Nigeria – was set at 2015. By the middle of 2015, it became clear that the target would not be met and it was put back to 2016. By late August 2016, there had been 23 wild polio cases (14 in Pakistan, 9 in Afghanistan) and three new cases of polio caused by wild type virus were reported in Nigeria with in July-August, in children from areas newly liberated from Boko Haram control. “The return of Nigeria to being classed as a polio-endemic country was a big set-back for the whole programme and emphasised the necessity of building resilience everywhere”, said Professor Stephen Matlin, Senior Fellow at the Global Health Centre and one of the research project leaders.
WHAT ARE THE KEY CHALLENGES TO ACHIEVING ERADICATION?
Tackling the remaining 1% of polio cases had proved to be very difficult. Professor Matlin outlined key barriers standing in the way of reaching the finish line of eradication. These include: conflict and insecurity; inability to reach certain populations due to geographic regions being wholly controlled by armed groups; attacks on medical workers that were seen as recently as January 2016 in Pakistan; families not accepting vaccination; and porous borders (especially those between Pakistan and Afghanistan), where cross-border transmission occurs due to refugees and other migrant populations. Thus political, environmental and sociological factors are the hurdles of the last stages of eradication.

WHAT IS TRANSITION?
The polio eradication campaign was set up largely as a vertical program. In order to successfully achieve transition, assets that have been acquired over the years of running the programme need to be incorporated to help strengthen national health systems, thus contributing to robustness of health systems and moving towards the global goal of universal health coverage. The global health community can also absorb some of the legacy from polio, including the knowledge, experience and systems approaches that were accumulated in organizing, financing and operating the largest public health programme in history, which could benefit future disease eradication programmes and other global health initiatives.

POLIO TRANSITION: WHAT ARE THE ISSUES AT STAKE?
Strong political will from the receiving national governments is required to both internalise and maintain the assets that the polio campaign had established long-term, including the surveillance and tracking systems, the vaccine provision and cold chain systems and the cohorts of trained, community-based vaccinators. While local health issues are likely to be prioritised, it is imperative to keep the momentum both by keeping employees motivated during the last stages of eradication and by supporting governments to transition. “Although polio may be seen as not valuable because it is on the back end of diminishing returns”, stressed Professor John-Arne Røttingen from the Norwegian Institute of Public Health, “if we do not achieve eradication, then a lot of the investment already made will be lost”.

Associate Professor Trygve Ottersen from the University of Oslo suggested that the push for greater financing towards the “global public good” creates a niche for high-income countries to offer support towards funding global health initiatives, such as polio. This also allows a shift from international ‘donors’ to ‘partners’, as they also share the benefit from a global public good.

In the context of the broader agenda of universal health coverage and the Sustainable Development Goals (SDGs) enormous tasks are ahead. “Similarly to the SDGs, polio transition needs to be negotiated locally”, said Lene Lothe from the Norwegian Agency for Development Cooperation (NORAD). She further noted that “experts need to find ways to make sure that governments can benefit from the experience and resources of the polio campaign, such as the capacity to reach the least accessible and marginalized populations, mobilizing community workers, surveillance and campaigning”.

Sigrun Møgedal, Member of the GPEI Independent Monitoring Board
THE NATURE OF RESILIENCE

Resilience can be defined as the ability to recover from or adjust to change or misfortune. “Resilience means partnership”, emphasised Sigrun Møgedal, a member of the Independent Monitoring Board of GPEI, “it is very hard to take resilience without a broader concept”. Nigeria’s newly reported cases of polio is a clear example where people were focused on having moved to transition in spite of the knowledge that the virus was somewhere in the environment. “So resilience – making sure that the virus does not reappear – is the big issue” said Sigrun Møgedal, “and that is where those already planning for legacy should come in as partners in order to be stronger together”.

RESILIENCE, ALERTNESS AND RESPONSIVENESS: WHAT ARE THE KEY GOVERNANCE CHALLENGES?

As the remainder of polio outbreaks occur in regions affected by conflict, the challenges in the final steps of eradication are grounded in the political determinants and health governance. Sigrun Møgedal asked “how do we organize ourselves so that we can overcome these challenges?”

There is a need, in the face of conflict, to be seen as a neutral health provider. With vaccinations being highly politicized and losing the trust of local communities, leading to assassinations of medical staff, the dilemma is how to strategically ally with security forces and gain the trust of local partners in order to operate locally in an effective manner. “Engaging and mobilising communities, including local health workers and local leadership are key to solving the issues of access”, advised Naveed Sadozai from the Transition and Strategy Unit at WHO. “Not only does this allow the local governments to understand and synchronise with the eradication programme, but also multi-sectoral and multi-level collaboration are imperative for the success of the campaign. In addition, it was effective to strategically engage local partners, for example the Organisation of Islamic Cooperation (OIC) and national scholars. There is also an opportunity to engage with innovative funding bodies, like the Islamic Development Bank in the case of Pakistan.”

“Obtaining sustainable and equitable financing mechanisms to support robust health systems is a major challenge for the national governments. The polio programme’s capacity to identify and implement such mechanisms is key to success in this resilience and transition period”, noted Andre Doren, a Senior Strategist at GPEI. The notion of country-owned financing is emphasised by the Addis Ababa Action Agenda – the foundation of SDGs. Currently, as funding and strategic planning, but also human resources are outsourced where national capacity is low, it becomes the job of international polio experts to ensure national ownership and adoption of experience and assets of the eradication programme.

LESSONS FROM POLIO ERADICATION

If we knew in 1988 that ending polio would take 30 years and we would have to spend $1 billion per year in the final stages, what would we have done differently? “Certainly, we would have been more innovative”, highlighted Tore Godal from the Norwegian Ministry of Foreign Affairs. “We would have started with the toughest countries first. We would have engaged peace-building teams earlier, which would have helped to avoid attacks on health workers.” In hindsight, the lessons from previous programmes should have been learned earlier.

“We must systematically look at the neglect of learning from each other”, continued Ilona Kickbusch, Director of the Global Health Centre at the Graduate Institute, Geneva. For that to happen, there is a need for forums or platforms where learning from different global health initiatives takes place. “The way forward is to learn from history and from each other. It is another strong contribution that the polio eradication campaign can make towards other global health initiatives”, said Professor Kickbusch.
CONCLUSIONS

Eradication programs have been said to involve three main phases—the attack phase, the consolidation phase and the maintenance phase. The fourth phase, noted Professor Kickbusch, “is transition—when you have reached success what do you do? The key is not only to work on transition strategies, but rather to work on transition strategies together. The last hurdles of the polio eradication campaign are aligned with the changing and reorganization of the global health systems.” As this happens, both polio-affected and polio-free nations, along with the entire global health community, must be resilient by contributing to strengthening, developing and innovating global health initiatives in totality.

There are lessons to be learned from political and governance challenges met and from experiences and assets accumulated in the process of the campaign. The progress that the polio eradication campaign has accomplished so far is one of the greatest achievements of global health. However, there are still three countries that face an arduous struggle against poliomyelitis before we are globally polio-free.

REFERENCES

1. Polio eradication: overcoming the final barriers and ensuring a lasting legacy for health systems. Research project led by the Global Health Centre at the Graduate Institute, Geneva. http://graduateinstitute.ch/ghp/polio