

JUNE | 21

20
TWENTIETH
REPORT

ANOTHER CHANCE:

Don't let it slip away



INDEPENDENT MONITORING BOARD
Global Polio Eradication Initiative

INDEPENDENT MONITORING BOARD

The Independent Monitoring Board (IMB) provides an independent assessment of the progress being made by the Global Polio Eradication Initiative (GPEI) in the detection and interruption of polio transmission globally.

Its members are:



SIR LIAM DONALDSON (CHAIR)

Former Chief Medical Officer of England, Professor of Public Health, London School of Hygiene and Tropical Medicine.



DR ALA ALWAN

Regional Director Emeritus, WHO, Professor, Department of Global Health, University of Washington, and Professor of the Practice of Global Health, London School of Hygiene and Tropical Medicine.



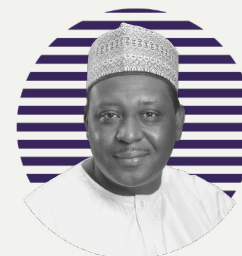
DR TOM FRIEDEN

President and CEO of Resolve to Save Lives (an initiative of Vital Strategies, USA) and former Director, The Centers for Disease Control and Prevention, Atlanta, USA.



PROFESSOR SUSAN GOLDSTEIN

Deputy Director SAMRC Centre for Health Economics and Decision Science, School of Public Health, University of Witwatersrand, South Africa.



DR MUHAMMAD PATÉ

Global Director, Health, Nutrition and Population and Director, Global Financing Facility for Women, Children and Adolescents the World Bank. Former State Minister of Health, Nigeria.

The IMB's reports are entirely independent.

No drafts are shared with the Polio Programme prior to finalisation.

Although many of the data are derived from the GPEI, the IMB develops its own analyses and presentations.



01 INTRODUCTION

In our last (19th) report, published in December 2020, we described the Polio Programme as “at a pivotal moment in its history”.

From a position two years previously, that felt close to global interruption of poliovirus circulation, the Polio Programme had regressed to such an extent that wild and vaccine-derived polioviruses were running rampant again in Pakistan and Afghanistan; moreover, vaccine-derived poliovirus outbreaks were assailing 26 countries during 2020 at a cost of \$190 million.

The 19th IMB report agreed with many observers that the repurposing of polio staff, assets and ways of working had helped enormously in the fight against the coronavirus pandemic.

Within the leadership of the Polio Programme, the IMB heard many references to a “silver lining”. There seemed to be a growing certainty among leaders that COVID-19 benefits – such as the formation of stronger multi-agency working relationships, the dissolution of silos and boundaries and, above all, the creation of an emergency response programmatic culture were being transferred to a new polio eradication modus operandi.

The 19th IMB report produced 16 recommendations calling for action in key strategic areas, including:

- sustaining the post-COVID-19 momentum of resumed polio activities and the vaccination of polio workers to protect them against the pandemic virus;
- resetting the Pakistan Polio Programme to strengthen performance

and embed a culture of real-time programmatic working between national and provincial leadership;

- achieving a breakthrough in access for the Polio Programme in Afghanistan and resolving problems of dysfunctional teamworking;
- making more rapid, scaled-up progress in providing integrated models of service delivery and making good on promises to transform the sanitary and service infrastructure of multiply-deprived communities;
- treating the vaccine-derived poliovirus outbreaks as an emergency and dealing with them more effectively and efficiently, as well as bringing the benefits of the new oral polio vaccine to outbreak-affected areas quickly and safely.

The 19th IMB report's assessment ended when the Polio Programme had resumed its activities after the COVID-19 pause and at a time of uncertainty about the likelihood and timing of future pandemic virus waves. It was during the polio low season in Pakistan and Afghanistan when case numbers usually fall as part of a natural epidemiological cycle.

The IMB ran a modified approach for its 20th meeting at the request of the GPEI's strategy committee. The GPEI had asked for more time to fully implement the recommendations of the 19th IMB report. Also, the COVID-19 related workload was still very high and the burden of oversight

and planning meetings involving the polio global leadership in summer 2021 was heavy.

Although the format of the 20th IMB meeting, from which this report follows, was different to normal, it was still based on extensive information gathering and discussion. The IMB members met with representatives of the Pakistan Federal Government, four Pakistan provincial governments, the Afghanistan Government, the polio donors and polio extended partners. In addition, the IMB chairman and members had individual discussions with a wide range of Polio Programme leaders, managers and experts.

This report has not produced a fresh set of recommendations but, rather, assesses progress, gives further advice and highlights certain weaknesses in the response to the recommended action in the last (19th) IMB report, given that most of this action was designed to address deep-seated barriers to polio eradication that must be definitively and permanently surmounted.

The new GPEI strategy for 2022 to 2026, *Delivering on a Promise*, has been published. It includes two overarching shifts around re-establishing an emergency orientation and expanding integration efforts and unified partnerships. The strategy has been approved by the Polio Oversight Board, noted by the World Health Assembly in May 2021 and formally launched from the National Emergency Operations Centre in Pakistan in June 2021.



02

PROGRESS: REPORTS AND ASSESSMENT

In the latter part of 2020 and the first half of 2021, polio campaigns, suspended because of the pandemic, resumed their activities.

The sections that follow describe progress since then, particularly focusing on what the Polio Programme believes has been achieved and what the IMB's independent view is.

THE PAKISTAN POLIO PROGRAMME

The IMB heard and discussed a progress report from Dr Faisal Sultan, the Pakistan Federal Health Minister (formal title Special Assistant to the Prime Minister on Health), and his team.

The minister began by describing the mitigation measures for COVID-19 as the Polio Programme in Pakistan resumed its vaccination campaigns in the second part of 2020. The focus had been on making sure that communities and front-line polio teams, remained safe. Priority was given to COVID-19 vaccines for health workers.

When the minister spoke to the IMB in mid-May 2021, approximately 607,000 health care workers out of 757,000 had been given at least a single dose of a COVID-19 vaccine, and 335,000, both doses. There had been no reported cases of pandemic coronavirus transmission, arising from polio staff operating within communities.



The minister expressed “cautious optimism” that the goal of stopping vaccine-derived poliovirus circulation and controlling wild poliovirus before the end of 2021 could be achieved.

He considered that the reintroduction of the trivalent oral polio vaccine to respond to the outbreak of vaccine-derived poliovirus had been smooth and effective. The number of vaccine-derived cases has come down. The number of positive environmental samples has also fallen.

In its 19th report, the IMB recommended that the Pakistan Polio Programme should have a fresh

look at its policies, practices, staffing structure and coordination mechanisms, especially in the light of new working relationships forged during the pandemic. The new federal health minister has overseen the “reset” called for by the IMB. Changes to the senior leadership team have been made and came at a time of natural progression, with the head of the National Emergency Operations Centre having been promoted to a more senior government role. There is now a new head of the National Emergency Operations Centre (who was in the Nigeria Polio Programme), a new national head of essential immunisation, and new WHO and UNICEF country officers for

Pakistan. The new National Emergency Operations Centre Coordinator is working closely with his counterparts in the key provinces.

The minister said that he was hearing less about community resistance and more about the involvement of community and religious leaders to address mistrust. He pointed out that vaccine refusals had steadily reduced with each campaign.

The Polio Programme in Pakistan has begun a new form of research to understand reasons for missed children. The research is similar to the KAP

(knowledge, attitudes, practices) surveys that were last done in 2017 but with additional elements. It is called “KAP plus E”, knowledge, attitudes, practices, plus experiences. The “experience” aspect reflects on caregiver’s past relationships with the Polio Programme. It is a mixed-methods study, using qualitative and quantitative approaches. Since December 2020, qualitative data have been collected from two high risk districts in each of the four provinces. Although Punjab does not contain any super-high-risk union councils, it has been included because there are persistently missed children in Lahore and Rawalpindi.





IMB ASSESSMENT

The polio epidemiology in Pakistan at the time of IMB discussions with national and provincial representatives in mid-May 2021 looked favourable. Of course, the reduction in the number of cases caused by both wild and vaccine-derived polioviruses was achieved during the low season and at a time when population movement was reduced because of the COVID-19 pandemic. The high season will be an important test.

The changes to personnel at national level have brought fresh pairs of eyes and a diversity of experience from elsewhere. They appear to have been beneficial to the Pakistan Polio Programme.

When this new guard came to their posts, it was somewhat surprising for the IMB to hear that certain technical programmatic basics were

deficient. For example, simple things like the cold chain, the vaccine-carriers, the ice packs, were not in place everywhere that they were needed. Some vaccinators did not have vaccine-carriers and were transporting vaccines in bags of their own with a few accompanying ice cubes. The Polio Programme has had to supply 75,000 vaccine-carriers. Having remedied this problem, the National Emergency Operations Centre found gaps in the availability of freezers and the absence of some electricity supplies and dealt with them too.

There were also populations missing from microplans, so the new team has had to start listing the villages from different sources, such as local environment planning, the police, and the security agencies. Microplans have been strengthened as a result.

In some provincial teams, vaccinators have huge workloads and so cannot finish their work until late afternoon. Children cannot be kept indoors in the height of summer to await vaccinators. They go out to play, they go to the school, they go to the market, and then the vaccinator arrives and is only able to vaccinate a proportion of the children that they should.

While the size and nature of these problems vary from province to province, the new national team is working with the provincial Polio Programmes to fix programme basics – maps; workload; team composition; listing of villages and incorporating them into microplans; cold chains and training – in order to aim for excellence in campaign quality. This appears to be reflected in improvements of operational management, but continued improvement will be essential to success.

The IMB has long been frustrated by the Polio Programme’s failure to mainstream social data at all levels in its work. It is now paying the price as large numbers of persistently missed children stand in the way of success. The number of missed children in the 2021 vaccination rounds is still higher than it was in 2018 and 2019.

Whilst each of the provincial Polio Programmes has actions in place to address the problem of missed children, particularly those “still missed”, the country’s Polio Programme will begin to get further and deeper insights from the anthropologist who is working in all four polio-affected provinces. She is conducting a new wave of research amongst communities to try and develop novel ethnographic studies of the reasons behind missed children.



PROVINCIAL GOVERNMENT POLIO PROGRAMMES

The IMB met with each of the four Pakistan provincial government teams.

Sindh

During the second half of 2020, Sindh was the province in Pakistan with the highest number of COVID-19 cases. The upsurge of vaccine-derived polio cases in Karachi was also a major concern.

The Sindh Health Minister reported to the IMB that the provincial Polio Programme has been able to restart successfully polio activities postponed because of the pandemic. Progress has been made using back-to-back vaccination campaigns.

By mid-May 2021, there had been no wild poliovirus cases reported since July 2020. Moreover, environmental samples were testing negative for poliovirus in a higher proportion than in 2020.

The health minister attributed gains to new communication initiatives and interventions, together with a greater focus on the high-risk districts where there has been a programme of outreach for routine immunisations.



Other new and strengthened action includes: workload rationalisation (resulting in raised team morale – whereby motivation among the team increased the same day vaccine coverage – and improved campaign quality metrics); new community vaccination sites; realignment of administrative boundaries within the Karachi jurisdictions (yielding increased involvement of union council secretaries and local influencers); revitalised training (reducing operational failures and the number of missed children); extensive social profiling and mapping of refusals (followed by engagement in communication activities and conversion of refusals by Pashtun tribal leaders, and religious, political and other local “notables”).

The Sindh Government has put particular emphasis on building alliances with all sectors. It believes that this has fostered a more enabling environment for polio vaccination campaigns.

The health minister cited the Pakistan Islamic Medical Association as an example. It has been

of particular help in dispelling myths and rumours about the polio vaccine. It has also championed the importance of immunisation in communities and has converted many refusals. The provincial Polio Programme has also strengthened links with industry associations and the corporate sector more generally; some official memoranda of understanding have been signed.

The provincial Polio Programme believes it has engendered a more positive media stance on polio and has also engaged with public representatives and community-level influencers, especially the Pashtun influencers (whom they say are now actively supporting polio campaigns).

This is excellent work but it will take time to make an impact. It must be given full backing by the GPEI leadership. It is an addition not a substitution to the up-to-the-minute social data that the provincial Polio Programmes must have in planning every single vaccination campaign.





Khyber Pakhtunkhwa

The Health Minister for Khyber Pakhtunkhwa gave the IMB an account of the improved performance of the Polio Programme in his province. He reminded the IMB that in 2019 the province contained almost 64% of the total polio cases in Pakistan. He reported that by the time of the 20th IMB meeting (mid-May 2021) there had been no wild poliovirus cases so far in that year. The number of vaccine-derived poliovirus cases had also fallen to only one in 2021, as compared to 42 reported during the same period in 2020.

In 2020, 60% of polio cases were in Bannu and Lakki Marwat. At the time of the IMB meeting, the last reported case from either of these districts was in April 2020 and the last positive environmental sample was reported from Bannu in July 2020.

The minister told the IMB that his team had three current challenges.

The first challenge is south Khyber Pakhtunkhwa (especially Bannu and Lakki Marwat districts). This has remained the province's top polio eradication priority since the last IMB meeting. Here, the minister identified problems ranging from the frequent movement of population to vaccine hesitancy for both polio and other antigens as well as health service delivery gaps. They have triggered improved planning and execution, and meaningful engagement of communities in vaccination. Community elders and influencers have been helping in boundary verification, selection of local female teams and identification of the right influencer to address refusal clusters. The province has started health camps in Bannu and Lakki Marwat during polio vaccination campaigns with the support of partners. Law enforcement agencies have provided extensive support in creating a safer and more secure environment for polio workers and ensuring access to each house.

The second challenge for the provincial Polio Programme is Peshawar, especially the 18 super-high-risk union councils. Action has been taken to try to transform the situation. In the super-high-risk union councils, the provincial government, with the support of partners, has opened nine new health facilities. Their locations were chosen in consultation with local communities, especially to ensure that geographical distance is not a barrier to access. The government also held health camps in the super-high-risk union councils during the March 2021 vaccine campaigns.

The third challenge that the minister spoke to the IMB about was the provincial Polio Programme's work to strengthen the tracking and vaccination

of missed children. The minister pointed to the number of "still missed" children having reduced over the campaigns; for example, their number dropped from over 200,000 in August 2020 to less than 118,000 in March 2021. The provincial Polio Programme also piloted the validation of the vaccination status of "not available" children in Bannu, Lakki Marwat, Khyber and Peshawar. Overall, 74% of the children who returned to their homes had proof of vaccination in other places. To further strengthen strategies to catch the remaining 26% of the unvaccinated children, work is underway with transit teams to increase the chances of being able to vaccinate children on the move, as well as reaching "guest" children in houses more effectively.





Balochistan

The Special Secretary of Health for the province of Balochistan told the IMB at its 20th meeting that the Polio Programme has continued to battle on three fronts: the threat of COVID-19, with a high number of cases during the third wave; continued circulation of vaccine-derived poliovirus; and the circulation of wild poliovirus. The IMB's discussion with the special secretary and team was held in mid-May. By that time in 2021, Balochistan had reduced circulation of both wild and vaccine-derived polioviruses compared to 2020.

There have been regular, mostly province-wide, polio vaccination campaigns since August 2020. All vaccination activities were undertaken with strict COVID-19 protocols to protect front-line workers, children and families. The special secretary said that initial community concern and reluctance to

accept vaccination for fear of COVID-19 infection had largely dissipated.

The provincial Polio Programme has taken action to improve campaign quality (a new communication strategy and a revamped training programme), resulting in increased coverage and a decrease in the number of “still refusals” in the March 2021 campaign. There is now better coordination amongst all law enforcement agencies, including the army, which has improved security considerably. At the border with Afghanistan, fencing is almost complete, and vaccination posts at authorised crossing points have been strengthened. Activity monitoring has been enhanced. The IMB was told that international staff are now facilitated to travel all across Balochistan, including high-risk areas.

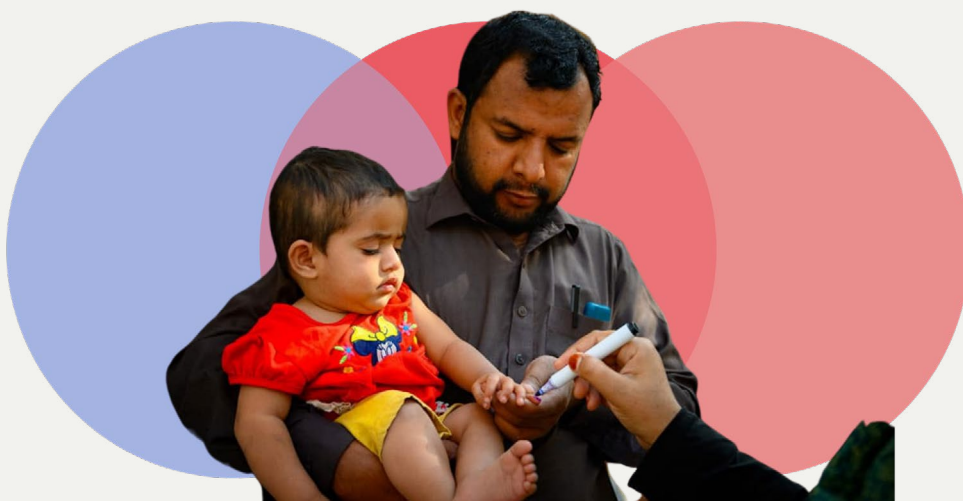
Punjab

The Minister of Health for Punjab began by emphasising the strong commitment and leadership engagement of the provincial government. As evidence of this, she informed the IMB that more than 90% of pre-campaign meetings, readiness meetings and intra-campaign, evening reviews directly involved the deputy commissioners. Moreover, the chief minister has stated that judgements on the overall performance of the districts will depend upon the performance of the Polio Programme.

At the time of the IMB meeting in mid-May 2021, no polio cases had been reported from Punjab in the year so far. The minister also wanted to emphasise progress with environmental samples: for example, in Lahore, more than 93% were positive in 2020, but they have been reduced to

32% in 2021 by the time of the IMB meeting. The overall number of infected districts in Punjab had been reduced to five in 2021, compared to 15 in 2020.

After the post-COVID-19 resumption of polio vaccination, the campaigns improved in quality. The biggest challenge is “still missed” children, where the provincial Polio Programme has struggled to reduce the number to match national targets. In Lahore, specifically, in the last few rounds it remained about 2%. Lahore is a hub, with a great deal of population movement and children moving in and out. The Punjab Polio Programme has devised a web portal to track and trace the children that are going out of the district and so are not included in the normal data counts.





A consistent focus has been kept on Lahore. Meetings have been headed by the chief minister, chief secretary and health minister. Other, special, meetings have been convened by the secretary of health. There has been enhanced volunteering to ensure that the maximum number of volunteers are deployed pre-campaign, intra-campaign and post-campaign and that reviews are properly conducted. This all helps to improve campaign quality.

The provincial Polio Programme identified 79 high-risk union councils in Lahore, based on the environmental samples and risk assessments. Both oral and inactivated polio vaccine rounds were carried out in these communities.

Major communication initiatives have addressed the problem of missed children.

The provincial Polio Programme is also establishing seven essential immunisation sites for priority communities with the help of the Bill & Melinda Gates Foundation and in partnerships with the local university and the Pashtun Welfare Trust.

At least three vaccine rounds were conducted in all the districts of Punjab to combat vaccine-derived poliovirus. The Faisalabad division had been the worst hit and, after a further vaccine round, no case or positive environmental sample for vaccine-derived poliovirus had been reported by the time of the IMB meeting.

There have been inactivated polio vaccine rounds to boost the immunity of children in the selected union councils.



IMB ASSESSMENT

When the IMB had its meetings with the Pakistan provinces in mid-May 2021, in most cases, there had been no vaccine round since March 2021 through which to assess progress (a gap of nearly three months). For this reason, the IMB held back the draft of its report until it had early sight of the June 2021 vaccination campaign data. The latest data on vaccination campaign quality and “still missed” children have been added to our account of progress in this, the final, version of the report.

At the time of the IMB meeting, each of the provincial teams gave strong statements of commitment and the impression was of greater coordination between the political, administrative and technical leadership than previously. Each of the provincial Emergency Operations Centre

Coordinators spoke of regular conversations with their national counterpart, suggesting improved local to national cohesion at the technical level. The ultimate aim must be for a “one team” national-provincial approach at the political, administrative and technical levels.

The accounts given to the IMB of problem solving were particularly strong in the Khyber Pakhtunkhwa Polio Programme. Provincial missions have been deployed to hotspot districts on a regular basis. It is striking that essential immunisation levels in the province are now beginning to approach those of Punjab. This is a story of managed improvement and building the systems as well.



In Sindh, the IMB heard about the discovery of some missing populations. Although worrying, at least this shows that the teams in the provincial Polio Programme are “getting into the weeds” and finding problems. The alternative – of going into such districts and never finding anything – would suggest a performance culture that is merely “going through the motions.”

The last two IMB reports highlighted several specific concerns about the provincial Polio Programme in Balochistan, including gaps in campaign quality in Quetta City and pockets of vaccine refusal there; an inability to control security and local elements in Killa Abdullah; the need to stop virus carriage across the border in Chaman District; and restriction on international staff movement. The provincial Polio Programme has worked hard to fix these problems.

In past IMB meetings, Punjab Province’s representatives have marked their interventions by expressing pride in the quality of their Polio

Programme’s performance. They were regarded as the “solid citizens” of the polio eradication initiative, even while other parts of their country were floundering. It was a surprise to see them entering the grim ranks of the worst performers. It is perhaps a lesson to all, at this crucial point in the history of polio in Pakistan, of the dangers of complacency.

When the June 2021 vaccination campaign quality assessment data became available, they showed a variable picture, sometimes at odds with the compelling statements of progress made at the IMB meeting.

In the Khyber Pakhtunkhwa province, the Peshawar and Khyber results were good (in the 85-100% range) but in the south of this province, the Swat district, largely inhabited by Pashtun people, scored 30%, Lakki Marwat was 60% and there were no results for Bannu. IMB follow-up enquiries suggest that, after some delay, these districts were partially covered by the June 2021



vaccination campaign. Apparently delay was caused by a local political matter, not related to polio. Although it has been stated that this has been resolved, any delay or failure of quality assurance in the August 2021 round will be very bad news.

Southern Khyber Pakhtunkhwa is one of the health minister's three strategic priorities, and the polio situation there needs a continuing very sharp focus. There are still barriers to success including refusals and communities frustrated by lack of services. However, the south of this province is not a core reservoir. It is equally important for the provincial Polio Programme to sustain the gains that have been achieved in Peshawar Valley and Khyber. In addition to the south, the minister, the chief secretary and the deputy district commissioners must not

take their eyes off Peshawar and Khyber, where the four "reservoir" union councils lie. This will require consistently high quality programmatic performance over a longer period.

Vaccination campaign quality data has again shown weak performance in Karachi. Quality declined from an already low base of 60% in March 2021 to 50% in June 2021. Problems in quality are affecting all districts. Positive environmental samples have broadly matched geographically this pattern of low campaign quality. Karachi is a big place. People from everywhere come there. It is a longstanding endemic area, but also a major hub and distribution point for the poliovirus. This means that the demands on Polio Programme quality in Karachi are surely the highest of anywhere in Pakistan.

Three high risk districts in Balochistan- Quetta, Killa Abdullah and Pishin- have been a constant cause for concern. It is a very complex and insecure setting for polio eradication. A female polio worker was killed and her colleague injured when two men on a motorcycle drove by and shot them in April 2019. The numbers of “still missed” children went up in each of these districts between the March 2021 and the June 2021 vaccination rounds, the increase doubling in Quetta. The June 2021 vaccination campaign quality data showed more encouraging results in Killa Abdullah (90%) and Pishin (100%), but Quetta fell short (79%).

In Punjab, previous polio problems have tended to be concentrated in the south of the province, whereas recent outbreaks were in the vicinity of Lahore. The June 2021 vaccination campaign quality data showed rates were struggling to reach 80% in Faisalabad, Lahore and Rawalpindi. The problems in these areas must be sorted out quickly. In particular, if Lahore does not stop transmission in the next three or four months, it will sit alongside Karachi as a very serious concern.

Despite all provinces’ focused efforts to reduce the numbers of “still missed” children, there are still far too many especially in key areas and hotspots. This is giving the poliovirus a springboard from which to resurge.

The provincial Polio Programmes in Pakistan all know that they must deepen their understanding of the reasons why children are missed in vaccination campaigns. The ability to connect and listen to the communities with missed children successfully, definitively and sustainably will be the defining measure of each of the provincial Polio Programmes.

Each of the provincial Polio Programmes is now focusing strongly on the factors leading children to be missed in vaccination campaigns and going deeper into the root causes. For example, the Sindh Polio Programme is classifying and social profiling each missed child. They have worked in depth on refusals and discovered how many are misconception-based and, if they are, to identify the nature of misconception, and whether there is any religious background to it. Tackling





the problem of “still missed” children is one of the three core objectives of the health minister and his team in Khyber Pakhtunkhwa province. In Balochistan, much programmatic effort has also gone into their missed children analysis. The quality of data recording refusals and other reasons for non-vaccination has improved. The Punjab Polio Programme has also carried out social profiling of each “still missed” child and also of all recorded refusals. Social profiling of high-risk, mobile populations has been added to this work. “Still missed” children are spread across Punjab Province, but the majority are in Lahore and Rawalpindi. The provincial team told the IMB that the problem is mostly because of the non-availability of the children. Out-and-out refusal is less common. Refusals are mainly in Rawalpindi where there is a large Pashtun population.

Each province is then using the detailed profiling data they have gathered in social mobilisation and communication activities. The most promising

work seems to be where refusals are matched directly to an influential person from their own community. This use of influencers, in some cases highly tribe-specific, is happening to a greater or lesser degree in all the provincial Polio Programmes. For example, the Sindh provincial Polio Programme has started some good work in Karachi. For the first time, they are mapping refusals by tribe and language. The importance of identifying these tribal differences is that action can be sensitively tuned to cultural identity and choice of influencer. This will be vital to reducing the number of missed children in Karachi.

Influencers can increase and enhance the acceptability of the vaccines. Social profiling also helps to identify areas where social mobilisers are needed, and reveal, for example, where more Pashto-speaking people are required. Local NGOs and the Pashtun population in that area can help in this regard.

ENVIRONMENT, SANITATION AND SERVICES IN SUPER-HIGH-RISK UNION COUNCILS

We are still waiting for the transformational benefits of proper sanitary infrastructure to be delivered to the poorest communities.

A recommendation in the IMB's 16th report (October 2018) inter alia stated:

The Polio Oversight Board members should use the stature of their offices urgently to convene key development partners and donors ... to plan a rapid, locally-based assessment of the needs of multiply-deprived and polio-vulnerable communities in the three endemic countries; [they] should follow through with an action plan to provide a sustainable level of infrastructure and basic services (including water, sanitation, hygiene, and refuse disposal) ...

A year later, a recommendation in the 17th IMB (November 2019) report pressed the case again for action on this potentially transformative area. Within Pakistan, this was taken forward as part of a government initiative for the development of the universal health coverage essential package of health services. It was implemented in 2019–2020 through collaboration with the Disease Control Priorities 3 (DCP3) and support from the Bill & Melinda Gates Foundation. Responding to the IMB's recommendation, one of the objectives of the collaboration was to develop a sub-package of basic health services and water and sanitation interventions for fast-track implementation in polio high-risk areas of Pakistan.

The 18th, then the 19th, IMB reports found that, while some action had been taken within the super-high-risk union councils in the Sindh, Balochistan and Khyber Pakhtunkhwa provinces of Pakistan, this was not commensurate with the urgency, scale and tenor of the IMB recommendations.

The polio sub-package was developed and costed through collaboration with UNICEF in 2020.

The specific objectives of the minimum water and sanitation intervention package are that the population of the 40 super-high-risk union councils should:

- have some of their most pressing water and sanitation concerns addressed adequately;
- experience marked improvements in their water supply situation;
- use a basic sanitation facility at home;
- be enabled to practice improved hygiene;
- live in an environment with reduced exposure to human waste and indiscriminately dumped refuse.

These specific objectives address at least the three water and sanitation issues most often highlighted by the communities during the focus group discussion, which are:

- visible human faeces in open drains and sewers;

- indiscriminate dumping of solid waste and no (or poor) collection;
- insufficient and/or irregular supply of safe drinking-water.

The aim of the programme was to respond to the three water and sanitation actions most often requested by the communities, which are to:

- cover open drains and sewers and construct septic tanks;
- provide waste bins and containers and establish a solid waste collection service;
- extend the piped water supply systems and increase the frequency, quantity and quality of water provided.

These objectives fall short of the lowest ambitions of relevant United Nations Sustainable Development Goals but the programme considers them “realistic” given the population’s needs and the scope and ambitions of the minimum water



and sanitation intervention package in support of the Polio Programme.

When the polio sub-package was developed in 2020, it was recommended to the Pakistan government that it be systematically and comprehensively piloted in selected super-high-risk union councils and that discussion should be initiated with partners and potential donors to mobilise resources for this purpose. This has not yet happened but still could.

In preparation for the 20th meeting of the IMB, the chairman requested detailed information about progress on the integrated service delivery programme, particularly with the water and sanitation measures. This was not available and thus one member of the IMB facilitated the production of a full set of monitoring data.

This showed that, despite some service development, progress overall has been fragmented. There have been some gains in relation to essential immunisation and a limited number of other services. Much less has happened in other priority areas, like maternal and child health and nutrition. Most worryingly, in most union councils little action of any substance has addressed the water and sanitation objectives. Initiating serious action to mobilise funding and build stronger management and coordination mechanisms are key priorities. The total funding required for implementation over a period of

three to five years is not unrealistically expensive, especially since the recommendation is to implement in a stepwise manner through a progressive universalism approach.

There is some hope that the second and complementary recommendation that the IMB made on multiply-deprived communities will make an important contribution to polio eradication. In October 2020, the government approved a newly developed and more comprehensive essential package of health services for implementation at the district level in Pakistan. This will be piloted in selected districts with support from the World Bank's Global Financing Facility and development partners, including the Bill & Melinda Gates Foundation and Gavi.

It focuses on reproductive, maternal, child and adolescent health; family planning; nutrition; and non-communicable and infectious diseases. It will contribute to the achievement of universal health coverage in Pakistan by 2030.

A key reform is the integration and sustainable financing of health programmes that are currently vertically delivered. A model of patient-centred, integrated care will be promoted. Within this, increasing the efficiency and effectiveness of delivery of polio vaccination services within integrated primary health care will be appropriately prioritised.



IMB ASSESSMENT

Following the criticisms in the last two IMB reports (18th, 19th) of the extraordinarily slow progress in implementing the recommendations to target resources at sanitary infrastructure and other services in the 40 super-high-risk union councils in Pakistan, the IMB asked the Polio Programme for a comprehensive assessment of the situation.

Although this request resulted in information gathering, it was clear that no systematic monitoring and open reporting process had been initiated by the programme itself. This is such a basic part of normal project management that it is a rather surprising omission.

When the IMB looked at the data, there was some encouraging progress in essential immunisation coverage, but not in all the super-high-risk union councils. The most disappointing aspect of the programme is the poor progress in water and

sanitation and the apparent lack of even the most rudimentary data on what the target is for improved water and sanitation points. The IMB looked with growing dismay at the coloured “traffic light” chart covering the 40 union councils. Water and sanitation performance showed red (i.e. worst position) in a high proportion of them. It is only slightly better for the work to strengthen maternal and child health services, and to a lesser extent also nutrition.

This was mirrored in the meetings the IMB had with the provincial government teams. All acknowledged the potential benefits through reducing poliovirus-friendly environments, helping communities and creating goodwill. They pointed to some isolated examples of work with Rotary International, UNICEF and others for installing water filtration plants and basic facilities. Few have been transformational to the extent



that communities own them and feel like their government has made a huge intervention for their benefit.

When the IMB put to some provincial teams stories that it had heard of children playing in water contaminated with raw sewage, they did not rebut such accounts.

This is very worrying in light of the fact that the highest priority for the communities themselves is to rapidly improve standards of water supply, sanitation and waste management. Everyone involved in the Polio Programme acknowledges the benefits in promoting community goodwill in reducing the chances of poliovirus circulation, yet where is the urgency?

The IMB was advised that reaching full population coverage with basic water and sanitation

infrastructure and effectively addressing drainage and solid waste management will require huge effort, large multi-year investment and unshakeable political will. The minimum package of water and sanitation interventions for an integrated approach in support of the Polio Programme will, therefore, only be able to make incremental improvements to the water and sanitation situation in the 40 super-high-risk union councils. The interventions under the minimum water and sanitation package, therefore, focus on addressing priority areas that significantly reduce the exposure of the population to human waste, and addressing the most strongly felt water and sanitation needs of the population.

All this is deeply disappointing and the IMB continues to advocate a more dynamic, modern project management approach to implementing this polio sub-package.

THE AFGHANISTAN POLIO PROGRAMME

Dr Wahid Majrooh, the health minister (formal title: Acting Minister of Public Health and Deputy Minister for Health Care Services Delivery) led the Afghanistan Polio Programme team in discussion with the IMB at its 20th meeting.

Dr Wahid Majrooh has held various posts in the ministry over recent years and has been engaged in different parts of the Polio Programme during this period. When he took office, the president asked him for very comprehensive reform, covering the approach to polio eradication, as well as the Sehatmandi project's role in that. A fuller description of how the Sehatmandi scheme provides health services in Afghanistan can be found in the 18th IMB report.

Polio vaccination campaigns, particularly house-to-house ones, have been banned for more than three years. The minister reminded the IMB that in anti-government-controlled areas, especially in the southern region, lack of access is preventing millions of children from being vaccinated.

The minister informed the IMB that the resumption of polio vaccination campaigns in July 2020, after five months off imposed by COVID-19, rapidly and effectively controlled the spread of vaccine-derived poliovirus in accessible areas. Despite COVID-19 constraints, the programme successfully implemented, nationwide, two targeted and three case-response campaigns in 2020, delivering over 36 million doses of oral polio vaccine. The programme had also conducted two nationwide polio vaccination campaigns in 2021 by the time of the IMB meeting in mid-May 2021 and was preparing for a third nationwide campaign in early June.

The programme has been effective in the accessible areas by successfully limiting the explosive vaccine-derived poliovirus outbreak and stopping wild poliovirus, especially in newly infected areas.



The minister pointed out that environmental sample reports attest to the limited circulation of wild poliovirus but noted that this favourable position was reached during the low transmission season. That said, he believed that intensive efforts in the last two years on both sides of the epidemiological block, coupled with the integrated service intervention in inaccessible areas, appear to have had an impact on the epidemiology of wild poliovirus. However, vaccine-derived poliovirus circulation within inaccessible areas is still prominent because the ongoing ban on polio vaccination campaigns and is severely limiting the necessary use of type 2 oral polio vaccines.

The Afghanistan Polio Programme has made positive interventions with communities. These have included cluster-based community engagement activities supporting the greater use of influencers, community elders, schoolteachers,

politicians and the media in vulnerable polio-endemic provinces. In Kandahar City, a programme to recruit female front-line workers gradually increased their proportion in teams. Indeed, in line with the National Emergency Action Plan 2021, efforts are being made to ensure gender equity at all levels particularly at the level of frontline workers (including volunteers, cluster supervisors and district coordinators). The recruitment of female frontline workers was halted in the east region after the terrible murders in Jalalabad City. The number of female workers actually declined after this incident.

In other regions, there has been improvement and this has greatly contributed to increased coverage through ready access to households and direct interaction with a child's mother reducing the likelihood of missing children. Increases of female frontline workers have been achieved in cities such as Kandahar, Kabul, Herat, and Mazar.

Dialogue has so far not been successful in negotiating house-to-house access. As a result, the southern region consistently remains the polio reservoir and has accounted for nearly 70% of all polio cases in the last decade. The minister said that the southern region is “riddled with competing socioeconomic crises” ranging from very poor access to basic health services, through low routine immunisation coverage, to poverty and deprivation at the highest rates in the country.

By mid-May 2021, only one wild poliovirus case had been reported in the country in the previous seven months and the 38 cases of vaccine-derived poliovirus were limited to inaccessible areas.

The minister also spoke of the launch of the integrated service plan with interventions in inaccessible areas of Helmand, Uruzgan and Kandahar. He described three main strategic actions.

Firstly, the National Emergency Operations Centre, with the support of partner agencies, carried out a mapping exercise in Helmand and Kandahar to determine the extent of underserved areas and communities currently out of reach of essential immunisation programmes and access to health facilities.

Secondly, there was an assessment of the existing resources available to partners in other relevant sectors, such as water and sanitation, nutrition, education, and health system strengthening. This enabled interventions to be better aligned with the objectives of the integrated service plan and focused on polio high-risk areas in the south.

Thirdly, there was the expansion of health services in the south through the establishment of some health centres in areas previously deprived of access to health services and immunisation.

This new initiative is showing early impact. Under the umbrella of the integrated service package, 72



out of a target of 115 health facilities have been successfully established in very high-risk polio areas of the provinces of Kandahar, Helmand and Uruzgan. The basic package of health services (BPHS Plus) controlled facilities delivered 80% coverage with oral polio vaccines and 70% with inactivated polio vaccine.

The distribution of promotional items (such as soap and hygiene kits) to communities has also been successful. Data from the pilot project in Helmand Province shows that Penta 3 vaccine uptake increased by 35% in the health facilities where such items were distributed. Four rounds of multi-antigen vaccine campaigns were conducted in all very high-risk districts of Uruzgan and eight districts of Kandahar. Local access discussions in Zabul Province for implementation of multi-antigen campaigns also seem promising.

In the medium-term, the minister considers it essential to reform Sehatmandi by working with the World Bank and donors to convince them to focus further on areas related to polio. The aim is to ensure that, three years from now, it is not necessary to set up yet another short-term plan for integrated service delivery.

The minister asked all polio partners to join forces with the Afghanistan Government and encourage all donors and the GPEI leadership to adopt and invest strongly in the integrated services plan. He called on the GPEI to look beyond traditional allocations at a country level and allocate financial resources to bridge existing funding gaps for its implementation.





IMB ASSESSMENT

The improvement of the polio epidemiology in Afghanistan is encouraging but the continuing inaccessibility of 3.5–5 million children is the dominant feature of any assessment of the country's prospects for interrupting poliovirus circulation. An active war and population movement between high-risk populations on both sides of the border with Pakistan are also critical factors that contribute to repeated programmatic setbacks and ongoing poliovirus circulation. Yet, they are only part of the geopolitical forces battering Afghanistan.

The IMB has met with the Afghanistan team over many years now, and particularly over the last three years when there have been major concerns about dysfunctional working in the relationships in the country's Polio Programme.

These included lack of clarity within the government team about who was doing what, and tension between the two United Nations agencies and the Afghanistan Government team, and personality conflicts within the two United Nations agencies – WHO and UNICEF.

This time, the IMB gained the impression that a clearer, better-coordinated programme is in place.

Another major difficulty during the period of the Taliban prohibition of access has been the different attitudes to policy. The United Nations agencies have tended towards a purist view on the inaccessibility, in which they have sought to get back to a house-to-house-delivered programme (later they seemed reconciled to a mosque-to-mosque system) but with no “Plan

B". The Afghanistan Government, some donors and wider polio partners have wished to use the existing health service platforms that are operating in the inaccessible areas to gain access for polio vaccination.

The IMB has also advocated the latter, more pragmatic, approach but recognised the concerns about the capability of the Sehatmandi project. In its 19th report, the IMB recommended strong engagement with the World Bank (which seemed unaware of its potential transformational role in polio eradication). It has been a strange three years of United Nations agency head-scratching while almost all health and health care services in the country were being delivered through the Sehatmandi project and its NGOs; yet polio eradication activities were mainly not.

At the 20th IMB meeting, the minister spoke very knowledgeably and passionately about the potential for integrated service delivery incorporating polio vaccinations.

Following the IMB's recommendations, which repeatedly urged the Afghanistan Polio Programme to make a more concerted effort and take a different approach to reaching children in the inaccessible areas, some progress has been made.

The National Emergency Operations Centre, in close collaboration with partners and donors, developed an integrated service plan in the three polio-endemic provinces of Helmand, Uruzgan and Kandahar. The plan was endorsed by the president of Afghanistan. This has included



expanding the number of health facilities in underserved areas, distributing promotional items, vaccination, supporting children's education, and setting up water and sanitation and nutrition interventions.

The government has taken concrete steps to ensure that the activities and interventions in the plan are implemented systematically.

The Afghanistan Government sees this integrated programme as the only viable solution to mitigating (but not solving) the problem of inaccessibility in the short term.

Going into the medium- and long-term, the solution is still seen as an integrated programme, but one based on a reformed and better-managed model of Sehatmandi-delivered services. The minister asked for full support in achieving a good outcome from this work, speaking of "an

existing mindset and comfort zone where we have lived for long, and is difficult to move out of, especially to the places that the Polio Programme is concerned about, the inaccessible areas".

The IMB was concerned to hear about delays in processing samples, particularly those from remote and insecure areas.

The IMB was told that, at times, samples remained at the border of Pakistan and Afghanistan for weeks and even months, and that the country's polio team is getting no adequate resolution of this problem, despite its endemic-polio status. Delayed testing and delayed reporting do not sit well with stopping the poliovirus. The government is asking for a national laboratory. Technological improvements may permit some culture-independent testing to be performed in qualified laboratories, in addition to the polio reference laboratories.



REGIONAL COORDINATION AND LEADERSHIP

A regional subcommittee for polio eradication and outbreak response has been constituted.

Its main objectives are to have greater and collective regional actions on polio eradication.

The regional subcommittee aims to take a more integrated approach for service delivery alongside other health programmes for underserved and polio high-risk areas in endemic and outbreak countries of the region; and support efforts to gain access in conflict-affected areas.

The first meeting was held on 16 March 2021 and was attended by health ministers (or their representatives) from 11 Member States of the WHO Eastern Mediterranean Region (Afghanistan, Egypt, Iran, Iraq, Lebanon, Oman, Pakistan, Saudi Arabia, Sudan, Tunisia, and United Arab Emirates). The meeting was hosted by the WHO and UNICEF regional directors. The health ministers of the United Arab Emirates and Egypt are co-chairs of the subcommittee.

Member States of the subcommittee agreed on the following areas of collaborative effort:

- evaluate the evolving programmatic and epidemiologic situation and determine what concrete support can be offered to Afghanistan, Pakistan and any other Member State imminently threatened or affected by a polio outbreak;
- involve all relevant cultural, political, religious, and civil society partners as needed and requested by the affected country, and promote the political and social neutrality, as well as acceptance, of the polio eradication programme;
- facilitate access to vaccination of all children in the Region, particularly those living in areas of conflict and insecurity;
- promote the establishment of essential health and civic services in the multiply-deprived communities where polio is entrenched;

- encourage and support polio transition through the integration of essential polio functions and capacities into national health systems, strengthening essential immunisation programmes, enhancing disease surveillance, and outbreak preparedness and response capacities;
- regularly report on outcomes and progress through the official processes of WHO governing bodies (Regional Committee, Executive Board, World Health Assembly).

IMB ASSESSMENT

This action flows directly from a recommendation of the 19th IMB report. It has been implemented rapidly and the Regional Director for the WHO Eastern Mediterranean Region and his UNICEF counterpart should be commended for doing so.



VACCINE-DERIVED POLIO OUTBREAKS

The necessarily measured pace of introduction of the novel oral polio vaccine must be coupled with rapid, robust and scaled-up responses to outbreaks, using existing vaccine where necessary to avoid delay and further spread.

There had been 240 cases of vaccine-derived poliovirus in the six-month period before the IMB met in mid-May 2021. Half of them were in Afghanistan, Pakistan and neighbouring Tajikistan. In Afghanistan, the centre of the outbreak moved from a partially accessible area mainly in the east of the country, to become more centred in the southern region. This worsened the prospects of controlling it.

Shock waves are still being felt within the Polio Programme from the dramatic spread far across west Africa, as well as to the upper part of central Africa, of vaccine-derived polioviruses from Nigeria. Polioviruses responsible for outbreaks in Democratic Republic of Congo spread to the central part of Africa, while cases in the eastern part of Africa are mostly because of western importations, and those then spread from the other countries. The Lake Chad Basin is a source of risk and has worked as an “epidemiological pump” for the region.

By the time of the IMB meeting, 12 countries had reported cases caused by the type 2 poliovirus. This is half the number of the previous year. Numbers of cases were also down, though 110 positive environmental samples had been reported.

In taking action to stop the spread of vaccine-derived poliovirus, the quality of many vaccination rounds has been suboptimal, and that has allowed the virus to slip through and affect other areas. Although the vaccine can be deployed so as to create a very big geographical reach, many vaccination rounds have been smaller geographical responses, almost piecemeal. So, the Polio Programme has often seemed to be chasing the poliovirus rather than getting ahead of its trajectory to block progress.

The speed of closing down outbreaks has been a concern for some time. For example, Somalia had the vaccine-derived poliovirus for seven years and Yemen for three years; there was little concerted effort to overcome access and political challenges, at both regional or global levels. Two-thirds of emergencies are closed down with two vaccination rounds. Some countries have been very slow to declare an emergency, and have a problem of viewing it that way when COVID-19 is dominating the health landscape.

Nevertheless, in the African Region in 2020, there were approximately 600 vaccine-derived poliovirus cases, but by the time of the IMB meeting there were just over 30 (exact number dependent on data returns being finalised). The COVID-19 pandemic slowed down the timely

detection of cases and created a backlog of laboratory analyses and case confirmations.

In its 19th report, the IMB recommended using the outbreak event as an opportunity to flag up systemic essential immunisation weaknesses and take action to strengthen their levels. The GPEI told the IMB that it was reinforcing regional rapid response teams to ensure that outbreak response activities coordinate with WHO's and UNICEF's essential immunisation teams and immunisation partners such as Gavi. These measures aim to boost performance in outbreak and neighbouring geographies between oral polio vaccine rounds and following the closure of the polio outbreak. Additionally, sufficient surveillance funding has been included in the 2021 GPEI funding and early versions of the new five-year (2022–2026)





GPEI budget, including funding to begin a direct detection initiative, which should speed up virus detection.

The type 2 novel oral polio vaccine was granted Emergency Use Listing at the end of November 2020. Since then, 27 countries have applied for, and worked through, the different criteria to fulfil the initial use requirements under that listing.

The GPEI established a “stage review” of the introduction of the type 2 novel oral polio vaccine and this made three critical recommendations.

Firstly, to strongly encourage all countries at risk of outbreaks to proceed with preparations as early as possible.

Secondly, to adopt a pathway to move from an initial use phase to a more of a ready-to-use

phase (subject to the receipt of all safety and genetic stability data).

Thirdly, to proceed with an outbreak response using existing vaccines when a case is detected if it is not possible to deploy the novel oral polio vaccine because the verification criteria have not been met (this is also a Scientific Advisory Group of Experts (SAGE) recommendation).

By the time of the IMB meeting, five countries had been globally verified as ready to use the new vaccine: Benin, Liberia, Nigeria, Sierra Leone, and Tajikistan. A total of 13 million children in four of these countries have received the novel oral polio vaccine in campaigns.

A large-scale, synchronised response campaign in three epidemiological blocks is planned for the third and fourth quarters of 2021, using 133 million vaccine doses.



IMB ASSESSMENT

In its last (19th) report, the IMB said that the novel oral polio vaccine was not an “immediate silver bullet” that could speedily eliminate the threat of vaccine-derived polio. Although this cautionary judgement has been borne out in the vaccine’s initial period of availability, its potential as a transformational tool in polio eradication remains.

It is true that the new vaccine was designed to have greater genetic stability than its predecessors and not risk creating type 2 vaccine-derived polioviruses and subsequent cases of polio. There is no reason to doubt the science, but the value of the vaccine has not yet been confirmed in field reality through use at population level in a diversity of countries, cultural groups and environmental settings. It is a new vaccine containing a wild poliovirus, and some governments are showing understandable

reluctance to undertake widespread vaccination until safety in actual use is confirmed.

Although there have so far been no shortages and supply problems with the new vaccine, indecisiveness and a lack of consistency of policy on its use in different countries have slowed its introduction. The regulatory complexity surrounding the vaccine’s introduction has also proved problematic.

The authority of the GPEI is not clear-cut in some of the countries that have experienced large outbreaks of vaccine-derived poliovirus. For example, GPEI standard operating procedures for responding to outbreaks are not being consistently adhered to. In those countries that are endemic for wild poliovirus, or have been affected by its circulation during the drive

towards eradication in the last decade, the GPEI has had a close working relationship with national governments. The GPEI's command and control style and funding flows have helped to maintain a unified strategic focus in dealing with polio. However, some of the countries involved in the current outbreaks have their own views, not just on vaccine deployment but on the priority that should be given to dealing with an outbreak compared to the other disease threats to their population. This makes it difficult to create a truly global emergency culture for this aspect of polio eradication.

There are other fundamental problems in controlling these outbreaks. Firstly, the timeliness of detection needs to be speeded up. This means understanding much better the logistics problems. The Polio Programme would be wise to explore

modern technology to detect enteroviruses and their genomic sequences. This could lead to a much more rapid operational response.

Secondly, the emergencies should be promptly reported and urgently addressed. In areas where type 2 oral polio vaccine has already been in use, larger rounds with them should proceed rather than waiting for the novel oral polio vaccine introduction, which may be further delayed.

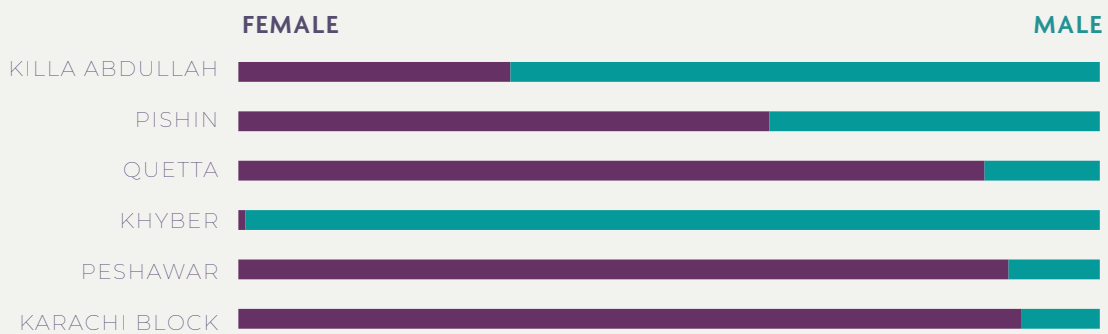
Managing outbreaks by country is a rather inefficient approach and does not meet the need for speed of assessment and early intervention. Managing by emergence and adopting a regionally coordinated response, not just country by country, reduces the risk of the poliovirus flowing across borders while country-based action is still being planned.



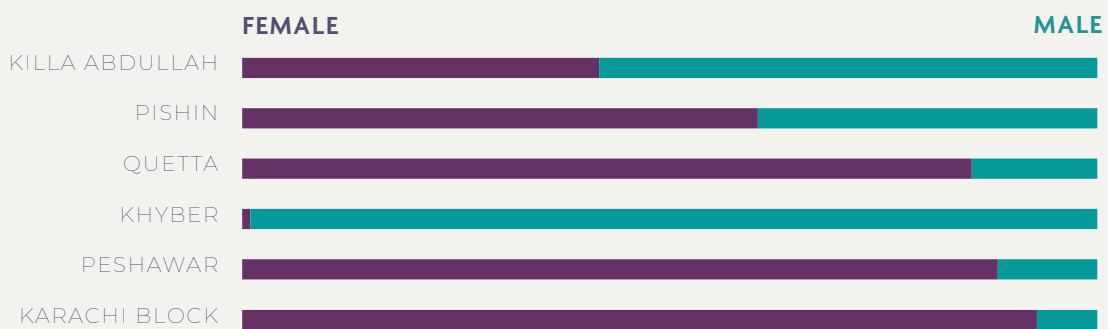
03 DATA INSIGHTS

FRONTLINE WORKERS IN CAMPAIGNS IN PAKISTAN

JUNE 2021

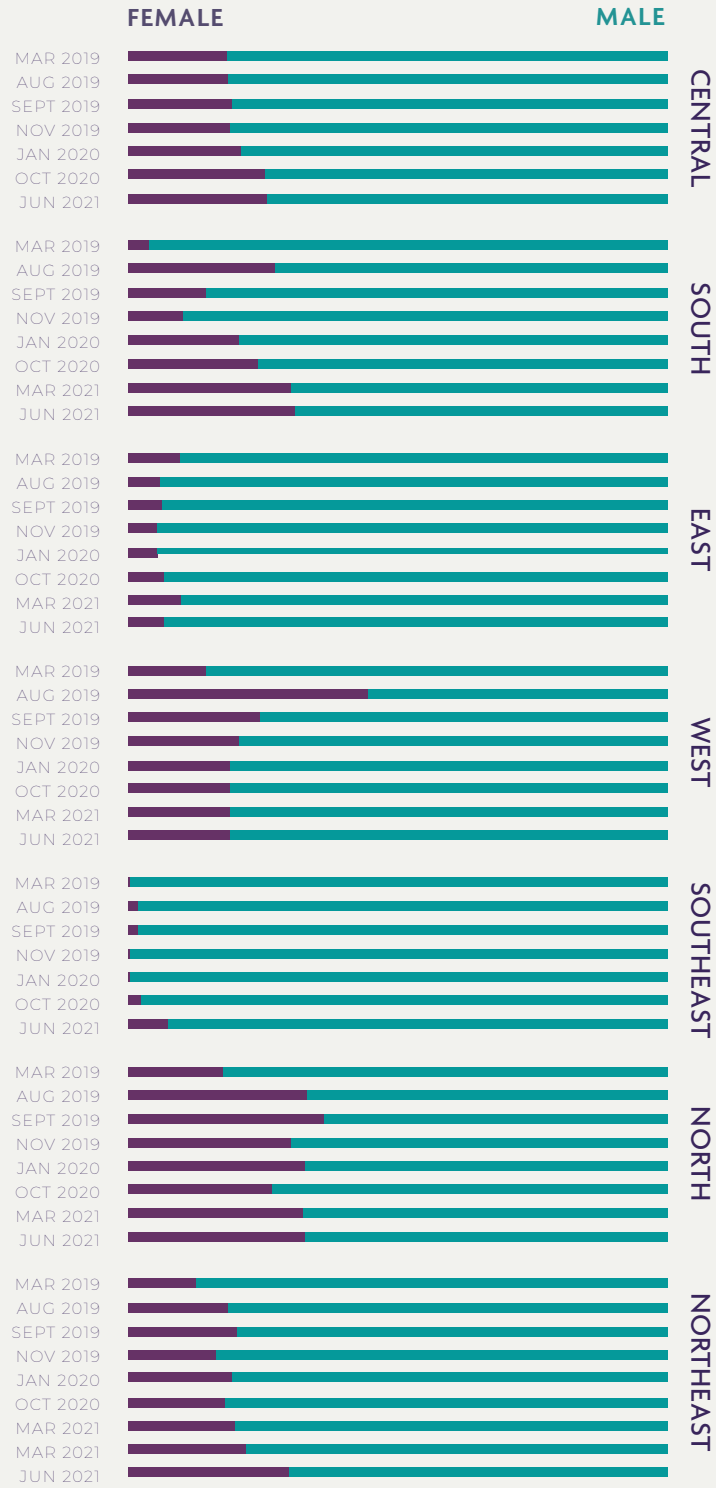


SEPTEMBER 2020



Source: National Emergency Operations Centre

FRONTLINE WORKERS IN CAMPAIGNS IN AFGHANISTAN



Source: National Emergency Operations Centre

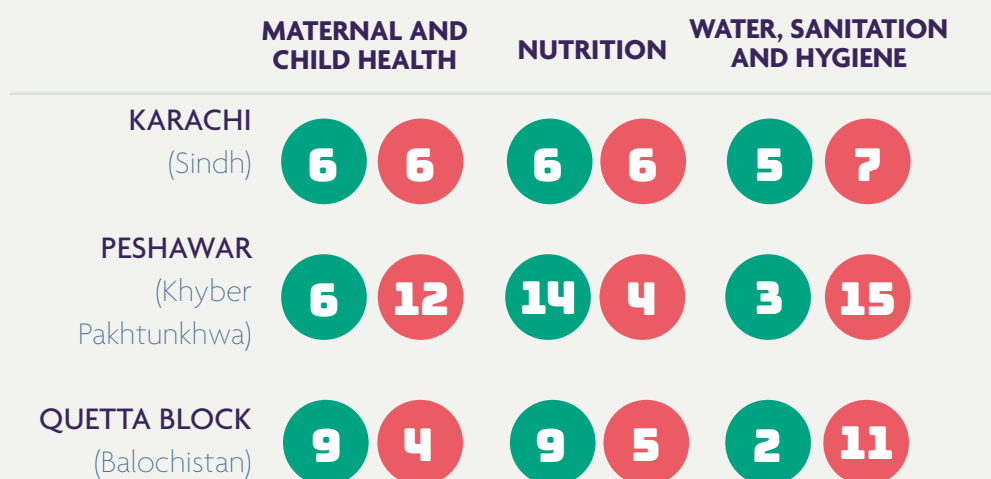
STILL MISSED CHILDREN IN PAKISTAN

PROVINCE	National campaign	Sub-national campaign
	March 2021	June 2021
Balochistan	50,454	84,085
Khyber Pakhtunkhwa	118,156	100,497
Punjab	183,503	135,761
Sindh	185,546	172,589
Other	8,483	8,354
Total	546,142	501,286

POLIO HOTSPOTS	National campaign	Sub-national campaign
	March 2021	June 2021
Quetta	3,299	6,943
Pishin	434	738
Killa Abdulah	1,767	3,804
Peshawar	5,786	5,421
Karachi East	5,217	5,230
Karachi Kamari	1,799	2,180
Karachi Malir	2,691	3,087
Karachi West	6,591	8,927
Total	27,584	36,330

Source: National Emergency Operations Centre

PATCHY IMPLEMENTATION OF INTEGRATED SERVICES IN SUPER HIGH RISK UNION COUNCILS IN PAKISTAN



Green: Number of Union Councils showing progress

Red: Number of Union Councils showing no progress

Source: National Emergency Operations Centre

Explanatory note :

1. A union council classified **green for nutrition** has the following services:

- Children screened for malnutrition
- Children enrolled for treatment of Severe Acute Malnutrition
- Iron Folic Acid/Multiple Micronutrient supplementation to pregnant & lactating women and adolescent girls
- Children received Multiple Micronutrient supplements
- Mothers/caregivers reached with infant and young child feeding counseling

2. A union council classified **red for nutrition** means there is no nutrition package available.

3. A union council classified **green for maternal and child health** has the following services:

- Ante- and postnatal care
- Nutritional package for mother
- Childbirth package to promote support during labour
- Essential newborn kit to support healthy newborn care practices
- Child health care package to prevent and manage infections

4. A union council classified **red for maternal and child health services** means no services are available.

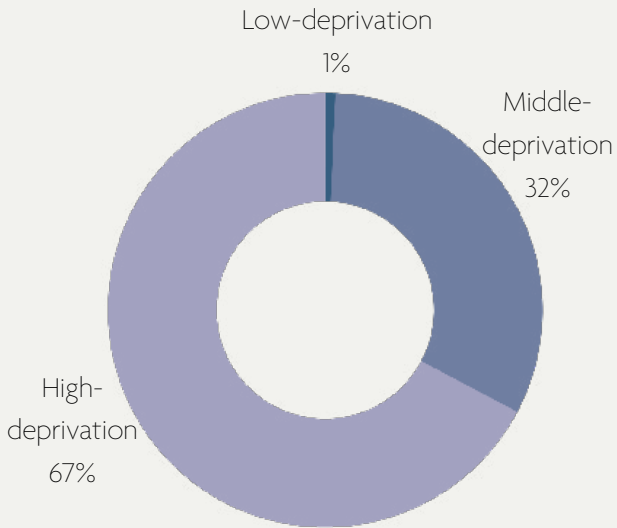
5. A union council classified **green for Water, Sanitation and Hygiene (WASH)** means the services include at least:

- Availability of water filtration plant/Reverse Osmosis plant
- Hand washing stations at fixed health or school sites and sanitation facilities
- At community level, it includes rehabilitation of existing communal water supply schemes and lifting of solid waste

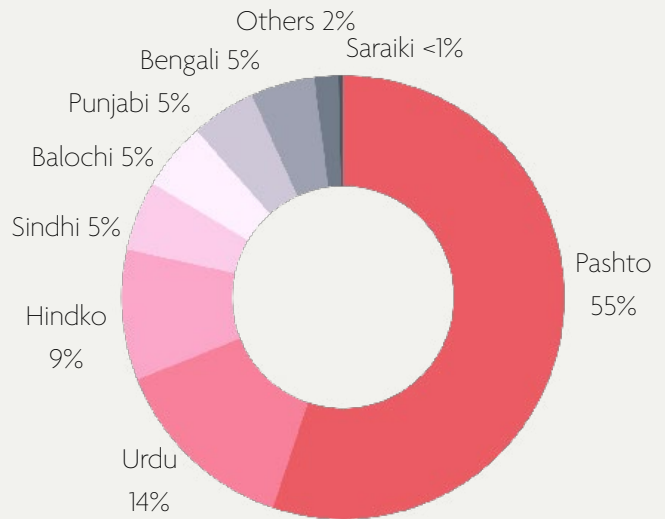
6. A union council classified **red for WASH** means no WASH services are available.

SOCIAL PROFILES OF VACCINE REFUSALS (%) IN SINDH

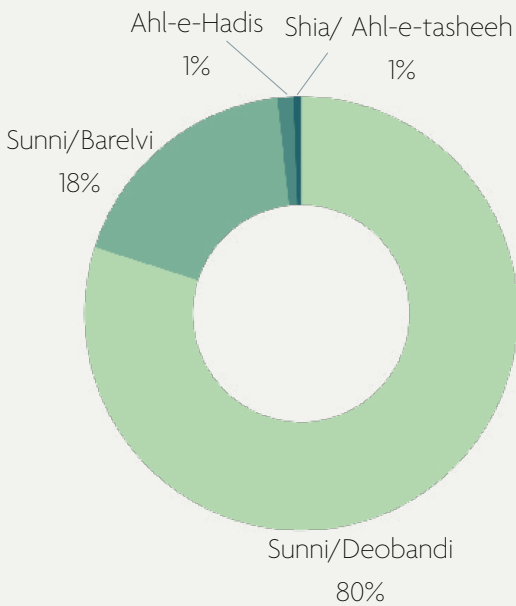
SOCIO-ECONOMIC STATUS



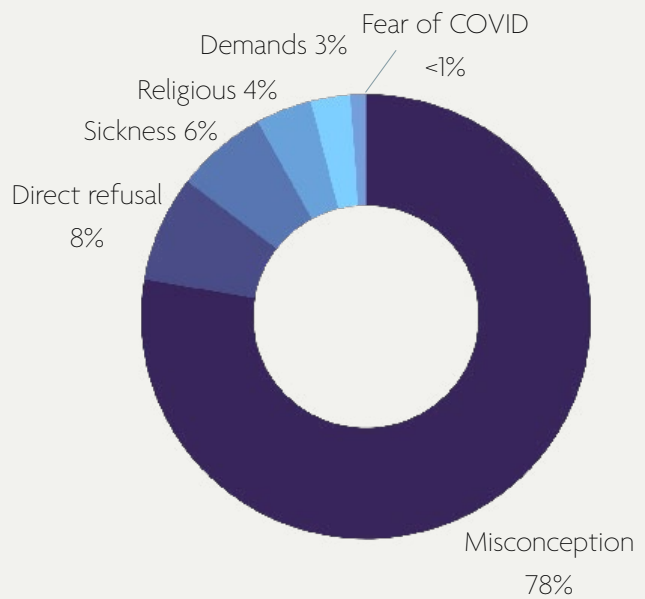
LINGUAL STRATIFICATION



RELIGIOUS STRATIFICATION

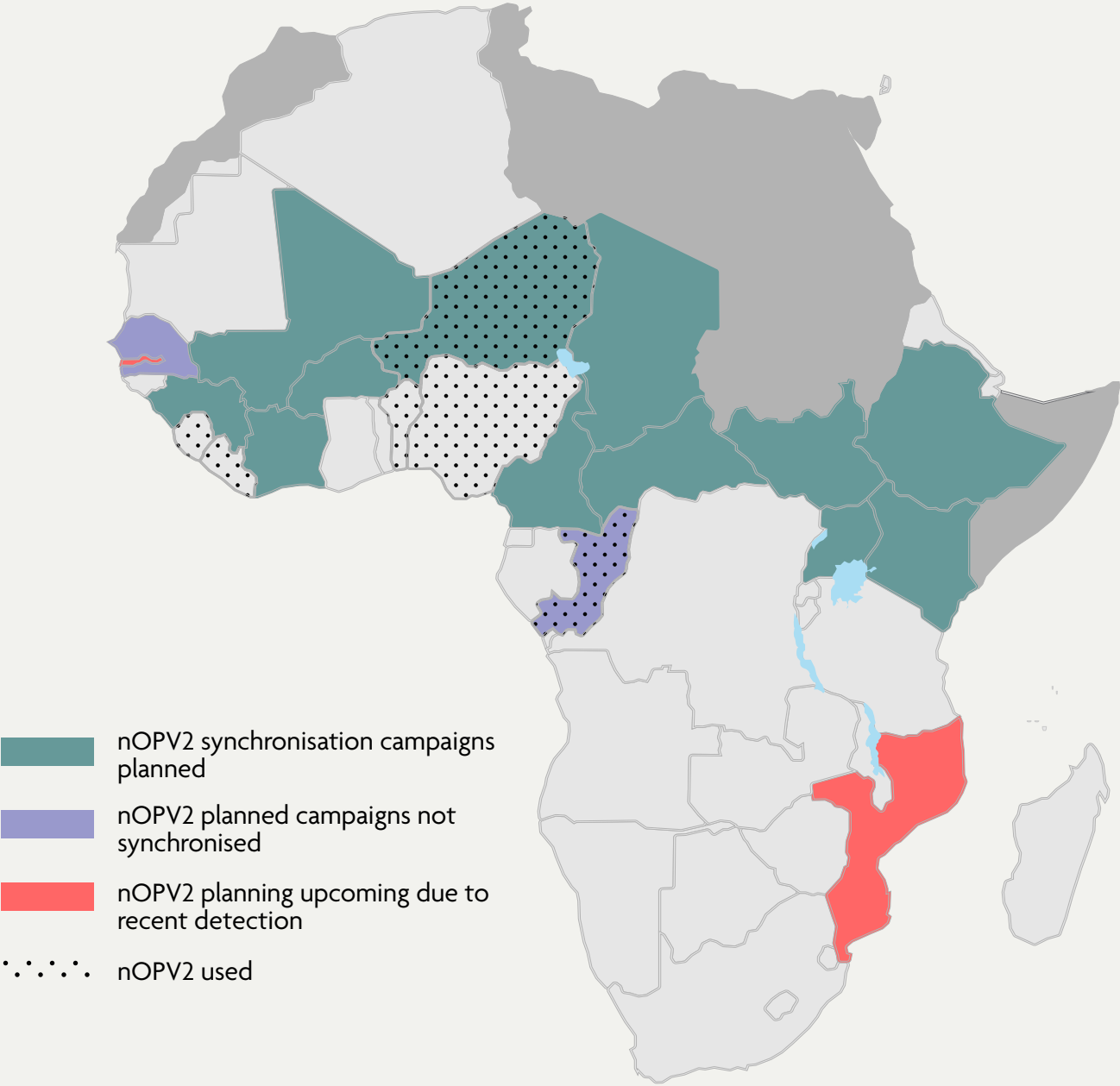


REFUSAL REASON



Source: National Emergency Operations Centre

NOVEL ORAL POLIO VACCINE TYPE 2 (nOPV2) CAMPAIGNS IMPLEMENTED AND PLANNED IN AFRICA



Source: World Health Organization Africa Regional Office

Note: No countries are currently planning to use mOPV2 or other Type 2 vaccines to control outbreaks

VACCINATION CAMPAIGN QUALITY IN PAKISTAN, JUNE 2021 ROUNDS

PROVINCE	Total		Tier-1		Tier-2		Tier-3		Tier-4	
	Pass%	Fail%	Pass%	Fail%	Pass%	Fail%	Pass%	Fail%	Pass%	Fail%
BALUCHISTAN	80%	20%	89%	11%	100%	0%	76%	24%	70%	30%
KP	83%	17%	90%	10%	78%	22%	84%	16%	85%	15%
PUNJAB	85%	15%	<i>Not applicable</i>	<i>Not applicable</i>	90%	10%	87%	13%	77%	23%
SINDH	70%	30%	50%	50%	80%	20%	78%	22%	93%	7%

Source: National Emergency Operations Centre

04 CONCLUSIONS

The Polio Programme is in a better place than when the IMB issued its previous (19th) report. However, the epidemiological gains should be regarded as fragile. The wild poliovirus reductions came during the polio low season. Population movement was reduced because of the COVID-19 pandemic.

In Afghanistan, the Polio Programme has achieved some incremental gains through the delivery of integrated services in areas of restricted access. Large numbers of unvaccinated children are living in inaccessible parts of the country. The security situation is worsening as the geopolitical context changes.

Outbreaks of vaccine-derived polio remain a challenge despite the launch of a new vaccine with the potential to be transformative.



THE PAKISTAN POLIO PROGRAMME RESET

By the time of the 20th IMB meeting, in mid-May 2021, there had been a major reduction of wild poliovirus cases in Pakistan.

The results from environmental surveillance have also shown a reduction of positive isolates of wild poliovirus, but even at a lower level of positivity, their presence is a serious concern. This is especially so, given that the number of sample sites covers only a small part of a large geographical area.

Environmental samples tell the story of what is happening with poliovirus in a population. They are like flashing red lights, designed to warn of danger in the areas where they can be used to monitor – which is far from all of the areas at risk of the continued spread of polio. In the past, they have been downplayed by the Polio Programme. Ultimately, polio cannot be covered up. Polio will come out. If there are enough immunity gaps, poliovirus circulating within the environment will generate human cases of polio.

The “reset” of the Pakistan Polio Programme called for by the 19th IMB report has been successful in reasserting the ABC of polio eradication throughout all levels of the Polio Programme in Pakistan.

The reset has also established a very strong working relationship between the National Emergency Operations Centre and the provincial Emergency Operations Centres. This is an extremely positive development and one that the IMB urged the Pakistan Polio Programme to put at the heart of its work.

Vaccination campaign quality has consolidated in some of Pakistan’s Provincial Polio programmes but not everywhere. The continued numbers of “still missed” children in the polio hotspots strike a sombre warning note. At the end of the June 2021 vaccination campaign, half a million children in Pakistan fell into the “still missed” category. This is a very large number and it is spread across all four provinces.

The measure used by the Polio Programme for monitoring purposes is the *percentage* of “still missed” children. On this basis the current numbers of “still missed” children, given the base population sizes, would equate to small enough percentages in some polio-affected areas to be regarded as “acceptable” performance. Whatever the rules and conventions, there are times in using statistical data where the absolute number should also be a key metric. The IMB believes that this should be the case in a Polio Programme whose slogan is “Reaching Every Last Child.”

All of the four Pakistan provincial polio programmes have built into their work analysis and surveys of social and cultural profiles of communities, and individual families within them. This is the kind of social and cultural granularity in the approach to microplanning and programme management that the IMB has been advocating

for years. It has been painfully slow to be appreciated or understood by Polio Programme leaders over the years. Despite good work by UNICEF, this approach has not been part of decision-making and planning in the mainstream of Polio Programme policy-making and operational management. At last, the “penny has dropped” and the Polio Programme has realised that this work is mission-critical.

It is vitally important for the provincial Emergency Operations Centre coordinators to show very hands-on, personal leadership in this programmatic area. They should demonstrate to their staff that they give absolute “parity of esteem” towards social data and epidemiological data. They should not think of social data, as one traditionalist in the Polio Programme described it to the IMB Chair, as “the touchy-feely approach.”



The frequency of vaccine campaigns in Pakistan's provinces needs to be looked at urgently, the "less is more" approach (fewer campaigns of higher quality) that had become a programmatic philosophy may not be right for the moment in all areas – with the key variables being, "how much less frequency" and "how much more quality". The lengthy COVID-19 pause is likely to have lost more immunity ground than is fully appreciated at present. The IMB was puzzled by the length of some of the campaign gaps. Does this mean that if there were to be a positive environmental sample in July, nothing would be done? If so, the poliovirus will spread.

There is evidence from some of the provinces of overloaded short schedules making timely arrivals in communities difficult and forcing constraints on catch-up activities. There has to be plenty of staff capacity and capability to do high-quality catch-up work. For example, those who remember the Punjab Polio Programme of the recent past say that the campaign strategy has changed markedly. Punjab used to have extended catch-up days, perhaps covering "still missed" children on the 14th day of the campaign, with the aim of reaching every child, in every campaign. Today, there are usually five-day campaigns, and the time constraints mean that, at their conclusion, very many children have been left behind. There are efforts to track and trace those children through various methodologies, but the seemingly old-fashioned approach of extended catch-up still has enormous potency.

The length and frequency of campaigns as well as vaccinator, social mobiliser and monitor workload need urgent review.

Past experience has shown that a provincial administration that is fully and directly engaged with the Polio Programme is likely to succeed and one which is not will fail to eradicate polio. The whole of a provincial administration reports to the chief secretary. This individual's commitment and active "walking the talk" style of leadership has been decisive in the past and is vitally needed now. A commissioner oversees multiple districts (usually called a division) and every district has a deputy commissioner. The chief secretary has a great deal of influence over commissioners, and commissioners over the deputies. If a chief secretary is engaging the deputy commissioners of priority districts, the focus is where it should be. This important administrative axis also has powers to improve problems with basic health and service delivery, something that often alienates communities and turns them against the polio vaccine. If present in every province, strong leadership and tight coordination between the chief secretary, the commissioners and deputy commissioners, the health minister, and the Emergency Operations Centre Coordinators would almost certainly see an end to polio in Pakistan.

Meantime, taking account of the latest campaign quality data, levels of "still missed" children, and the views of senior GPEI leadership on quality of work and supervision, the IMB's greatest concerns are Karachi, the Quetta block (particularly Killa Abdullah), southern Khyber Pakhtunkhwa and Lahore.

AFGHANISTAN: THE QUEST FOR HUMANITARIAN NEUTRALITY IN THE HEAT OF A GEOPOLITICAL CAULDRON

The wild poliovirus case count and positive environmental samples had also come right down in Afghanistan by the time of the 20th IMB meeting.

The continuing inaccessibility and consequent low immunity levels of populations in Afghanistan – because of Taliban prohibition of house-to-house polio vaccination – remains the dominant feature of polio eradication in this country.

The falling poliovirus case numbers in Afghanistan in the period of vaccination campaign resumption, following the COVID-19 pause, creates an opportunity for the country's Polio Programme to maintain this improvement. It is unrealistic to apply the same expectation as has been placed on Pakistan to now push forward to complete the interruption of wild poliovirus transmission. Until the Afghanistan Polio Programme is able to reach all children in southern Afghanistan through comprehensive, high-quality vaccine campaigns this primary goal cannot be achieved.

The impasse on access of the last few years seems to be becoming more fluid.

Firstly, negotiations to secure mosque-to-mosque vaccination campaigns in inaccessible areas have advanced considerably.

Secondly, the integrated delivery measures introduced by the Afghanistan Government in selected areas of the three polio-endemic provinces of Helmand, Uruzgan and Kandahar have produced some incremental gains in polio vaccine coverage.

Thirdly, the Afghanistan Government is working with academic advisers, the Bill & Melinda Gates Foundation, the World Bank and others to come up with a new version of the integrated package of health services. This work is still falling short of a transformational solution and funding that will embed polio vaccination within the routine provision of health services to achieve high vaccination

coverage and to stop polio vaccines being used as a political bargaining chip.

The Sehatmandi project is due to close on 30 June 2022. The World Bank is working with the Afghanistan Government and development partners on designing a follow-on project (“Sehatmandi 2”) which will take into account the government’s new reform agenda with a focus on an integrated package of essential health services, a greater focus on quality, and strengthening the health system.

Sehatmandi 2 will also establish new tools to strengthen governance, purchasing, and coaching, and seek to empower health administration directorates through management contracting. It will also introduce the single contract to further strengthen donor alignment and harmonisation to achieve greater results and efficiency. Such alignment will include collaboration with the Bill & Melinda Gates Foundation, Gavi and the Global Fund to improve the coverage and quality of essential immunisation services, including for polio, as well as the separate strand to control tuberculosis, malaria and HIV.

The 19th IMB report recommended that the WHO and UNICEF headquarters management teams should take immediate action to resolve the dysfunctional working and conflict between their Afghanistan polio teams.

Following interventions at the regional level, and facilitated by the headquarters of the two United Nations agencies, both country teams have agreed to basic principles of working as one team. In addition, new country representatives

and deputies were recently appointed by WHO and UNICEF.

The relationship of the two United Nations agencies with the Afghanistan government was also in need of repair, as evidenced in the 19th IMB report. Good work has been done on this but formal governance arrangements are still to be signed off.

The prospect of interrupting poliovirus circulation in Afghanistan is clouded by the worrying uncertainty of the geopolitical context. In particular, the security situation after the withdrawal of United States of America and NATO forces is unpredictable. The Polio Programme is planning to sustain surveillance and preparing to vaccinate children whenever possible, especially if there is large-scale displacement of populations.

The IMB learned with deep sadness of the tragic loss of polio staff in Afghanistan during the first part of 2021. The killings of three dedicated female polio workers in Jalalabad City in March 2021 and, later, in June 2021, the killings of six front-line staff and the injury of four others in separate incidents in Nangahar Province cast a major shadow over the Polio Programme and the wider world of global health. Over its 10 years of existence, the IMB has hugely valued the contribution of front-line polio workers in bringing the joy of a polio-free life to millions of children. The dedication, courage and commitment of these front-line workers will remain an inspiration to us all. We stand in solidarity with their families and friends as we mourn their passing.

OUTBREAK RESPONSE: MUST BE EARLIER, FASTER, LARGER, BETTER

The scale and multinational nature of the vaccine-derived poliovirus outbreaks was a moment of crisis for the global Polio Programme.

Cases trebled between 2018 and 2019. They trebled again between 2019 and 2020. These events have dented the confidence of the leadership of the Polio Programme, raising resentment among those who had long warned that this could happen. It has introduced much more uncertainty about the timelines for polio eradication and exposed the inadequacy of many countries' levels of poliovirus immunity. In short, it has exposed serious flaws in the strategic management of the Polio Programme and the quality of essential immunisation programmes.

There is no starker illustration of the seriousness of the situation than to know that in the African Region, since 2016, 1,530 children have been paralysed by vaccine-derived poliovirus. Most were under two years of age and about 90% had had no dose of inactivated polio vaccine. It is well known where these “zero dose” children are. They need to be targeted quickly to remove their vulnerability to paralysis.

There had been some reduction in cases of vaccine-derived poliovirus when the IMB met in mid-May 2021 compared with the same time in 2020 but it was still geographically widely dispersed, including in the two polio-endemic countries.

This aspect of polio eradication is not galvanising the kind of emergency response that it deserves and badly needs.

Meantime, the timeliness of detection of poliovirus and the speed and quality of outbreak response is very patchy. Recent responses to vaccine-derived poliovirus outbreaks have been too slow, too small, and suboptimal in quality.

The type 2 novel oral polio vaccine is now available but attitudes to its use among policy-makers in some countries and regulatory complexities are both limiting its deployment. For example, some countries are holding back in responding to outbreaks because they prefer to wait for the novel oral polio vaccine. This is against the advice of SAGE: that the existing type 2 oral polio vaccine should be deployed without delay.

It would be a mistake for the governments of outbreak-affected countries to believe that the current strategy should be an “all or nothing” approach. To hold back on other control measures while awaiting clarity or policy decisions on the timing of the use of the type 2 novel oral polio vaccine. This risks further explosive spread.

At the time of the IMB meeting in mid-May 2021, there was a plan – not then well-defined – for a synchronised type 2 novel oral polio vaccine vaccination campaign across Africa, and maybe beyond, in the last four months of 2021. The IMB was told that there is no interest in integrating with other programmes for this, except “where absolutely necessary”. This may make sense from a polio point of view, but is of concern, given the context of impending measles epidemics and decreased overall childhood vaccination coverage.

The experience of epidemics of vaccine-derived poliovirus cases arising from the type 2 oral polio vaccines means that work to develop novel oral polio vaccines types 1 and 3 should be advanced, as well as studies to determine if there are problems combining these new vaccines.



GETTING A GRIP ON THE PROJECTS TO HELP THE POOREST COMMUNITIES

The initiative for integrated programmes to improve sanitary infrastructure and basic health services in multiply-deprived polio-affected and polio-vulnerable communities followed IMB analysis and recommendations.

Implementation has been slow, spatially fragmented and administratively disjointed. Also, this subject featured little in the presentations given by the provincial government teams to the IMB. They themselves did not seem to have a clear understanding of the magnitude of the problem or its potential pivotal importance to successful polio eradication. When asked, some said that there had been significant action on water and sanitation but this is not borne out by the data given to the IMB.

Coordinating and managing these interventions on a scale to be meaningful and transformational for communities seems to have intimidated the leaders of the Polio Programme. Initially, they recognised its intimate relationship to their goals, but did not see it as their business. Now they are struggling to form the right kind of partnerships to drive forward change.

Part of the problem is a striking degree of fragmentation of the polio-specific elements, even within the wider development community. Programmes and potential partners dealing with other components of basic health care, even within the World Bank teams, consider the Polio Programme as a separate entity, detached from health system and primary health care development pathways. Moreover, in the eyes of many officials in organisations with humanitarian and development roles, polio pales in comparison to the many global health priorities targeting high burdens of disease.

In many ways, the polio eradication programme is reaping what it has sown. By sitting in “splendid isolation” from other global health and development programmes, it does not have the relationships, expertise and influence that it now needs.

The Polio Programme by itself, as a narrow vertical programme, cannot address successfully within the time required, the broader integration strategies that achieving eradication may depend on. The Polio Programme has never “sold” itself to others as a potential point of entry for other programmes for which there would be a reciprocal benefit for progressing polio-eradication objectives. This gap must be closed now. There would be major advantages in asking one of the polio partners to take the lead in this area. Rotary International is greatly respected as having a “can-do” capability in advancing practical action of this kind.

The IMB was told that in the World Bank’s Global Financing Facility, in Pakistan, most of the funds will come from an International Development Agency loan of US\$ 300 million, plus around US\$ 130 million from Gavi and an additional amount (not specified yet) from the Bill & Melinda Gates Foundation and other partners. The national health support programme that the

World Bank is negotiating with the government is supposed to be finalised by these funds which so far are predominantly coming from the loan that the Pakistan Government will be committing to. Money will be used to support the implementation of the essential package of health services in 40 pilot districts with a total population of 60 million. The great majority of project finance (90% plus) will flow directly to the provincial governments under a performance-based mechanism, to support reforms and expanded finance within the routine government health system. It is hoped that this source of funding will also support the implementation of the polio sub-package in the super-high-risk union councils.

A key consideration of the focus of the investments will be equity – particularly in addressing lower health service access and health outcomes in the poorer districts and lower wealth quintiles. By this focus, those areas and populations most affected by ongoing polio transmission should be advantaged.



RECALIBRATING THE MANAGEMENT AND LEADERSHIP CULTURE

The epidemiological position in Pakistan has some similarities to how it stood in 2017. In that year, there was a period (February to mid-June) when no wild poliovirus cases were reported, though there were still positive environmental samples. That year was later followed by the huge reversals of 2019.

In 2018, the IMB was asked by the GPEI to set up a field investigation of the (then) endemic countries of Pakistan, Afghanistan and Nigeria. The experienced team of experts found many areas of concern in Pakistan, including alienated communities, technical programmatic weaknesses, “still missed” children, exhausted front-line staff, and the complete absence of an emergency culture.

The team’s findings and recommendations were captured in an independent report and the implications were discussed in the 16th IMB report and fully debated by the Polio Oversight Board in late 2018. Given the findings of the field investigation, no one should have been surprised when the number of cases in 2018 jumped by 12 times as much the following year.

A major feature of this 30-year programme, which started in 1988, is the external pressure on the system to get the job done. For the front-line polio teams in Pakistan, that means international pressure, national and provincial government pressure and financial pressure.

Like an unseen gravitational force, it can pull the Polio Programme off the correct trajectory if it leads to everybody trying to “manage up” and give their bosses good news, give the spearheading polio partners good news, and give the media good news. In such circumstances, there may be a huge disincentive for staff to express serious concerns or be the bearers of bad news.

For example, on 25 October 2017, the then coordinator of the Sindh Emergency Operations Centre, spoke to The Express Tribune to highlight the results of the provincial government’s action to

eradicate polio. He told the newspaper that they had brought the country “to the brink of polio eradication.” From this favourable self-assessment in 2017, the year 2019 ended with substantial numbers of wild poliovirus cases having been reported.

If 2021 is not to be a rerun of 2017, it is essential that the Polio Programme at every level encourages complete openness and constant feedback. Front-line staff should be praised for raising concerns and insights about the delivery of their local programme, even if they represent difficult problems for their supervisors. It is down to the Polio Programme’s leaders to promote and sustain such a culture at all times. If they do not, 2023 will be the year that the events of 2019 are replayed.

Closely linked to this is the question of country ownership. Since its early days, the IMB has been emphasising the importance of this to the success of polio eradication. In 2020, the then head of polio at WHO finally acknowledged that this was the programme’s major challenge. Yet the global polio leadership does not always behave in a way

that reinforces country ownership. For example, some people have said to the IMB there are so many parallel lines of administration that the Polio Programme does not seem to be being managed by Pakistan. One person’s remark was typical in expressing frustration that the country’s Polio Programme is “being run from somewhere in the clouds”.

There is a great opportunity with a new head of polio at WHO, a new health minister in Pakistan, and a new National Emergency Operations Centre coordinator in Pakistan to recalibrate the relationship between the global polio partners and the Pakistan Polio Programme.

The real power and benefit of the global level of the programme should be through enablement and empowerment, not control. The new head of polio at WHO has begun to address the global-national interface. The new National Emergency Operations Centre coordinator in Pakistan has developed a real-time relationship with his provincial counterparts to provide support and guidance, given his depth of experience in helping to remove Nigeria from its polio-endemic status.





05

IMB ADVICE

Given the extensive focus necessary for the Polio Programme to implement the wide-ranging recommendations in the 19th IMB report, together with the ongoing pressures of the COVID-19 pandemic, by agreement, this 20th IMB report is not making a further round of recommendations.

The formal response of the GPEI to the 19th IMB recommendations is clear and comprehensive. At the same time, the ungainly structure of the GPEI is again apparent, with suboptimal coordination of issues such as the urgency of responding to vaccine-derived poliovirus outbreaks and introducing type 2 novel oral polio vaccine.

Throughout this report, however, we have highlighted areas where we have ongoing concerns and provide advice on how to address them; they include:

- **Looking again** at the frequency and quality of polio vaccine campaigns in each Pakistan province to put more pressure on the poliovirus, and assessing the length of campaigns and workload of staff and other measures to maximise the catch-up of missed children.
- **Engaging, empowering and staying close to the civil administration in the Pakistan provinces;** strong leadership and tight coordination between the chief secretary, the commissioners and deputy commissioners, the health minister, and the Emergency Operations Centre Coordinators in every province is vital to success. In addition, identify things that obstruct their effectiveness – for example, denying them a role in decisions about “hiring and firing” of programmatic staff.

- **Diving deeper** on analysis and solutions to reduce the numbers of “still missed” children in the Pakistan provinces and urban hotspots. Action should concentrate on seeking more granular explanations for why children are being missed and, in response, matching an influencer or respected community or religious leader to the precise tribal origin of the family and community (avoiding any punitive element). It is vital to continue and expand the anthropological research that is bringing more sophisticated understanding of reasons for missing children. Also, it holds the promise of novel methods to provide predictive data. The number of “still missed” children not only the percentage should become one of the key programme metrics.
- **Maintaining progress** on the GPEI gender equality strategy (including increasing female frontline workers) through strengthening technical capacity for implementation.
- **Sorting out** the poor and patchy progress in the agreed programme to transform the sanitary infrastructure of super-high-risk union councils in Pakistan; one GPEI spearheading partner should take responsibility for project oversight, the can-do reputation of Rotary International makes it best placed to do this. In addition to this vital oversight function, what is urgently needed is for the Polio Programme to give a higher level of priority to the



implementation of the polio sub-package in the 40 super-high-risk union councils and to actively engage with partners and interested donors in mobilising funds for this purpose. Additional support from the Global Financing Facility investment case initiative should seek to support the implementation of the water and sanitation minimum package in the 40 super-high-risk union councils during the first set of the pilot districts, which are planned for implementation in the next two and a half years.

- **Recalibrating** the relationship between the global polio partners and the Pakistan national and provincial polio programmes to empower and add value to the latter's work, while promoting a completely open and blame-free culture in reporting problems and programmatic failure.
- **Forming a strong and dynamic partnership** with the World Bank to ensure that the Global Financing Facility investment in Pakistan goes to the communities with the greatest need; also working with the World Bank to ensure swift implementation of Sehatmandi 2 in Afghanistan.
- **Instilling** a much greater urgency and a more consistent strategic approach to closing down polio outbreaks and implementing coordinated, large-scale campaigns for the novel oral polio vaccine.

The performance coming out of the COVID-19 programmatic lockdown has given the Polio Programme another chance to finish the job it started more than 30 years ago. All its many supporters hope that this time it doesn't blow it.





INDEPENDENT MONITORING BOARD
Global Polio Eradication Initiative