Ending Polio from EMR- A global concern

Globally, Poliomyelitis has been eradicated except two countries Pakistan and Afghanistan of Eastern Mediterranean Region of WHO. Recent upsurge in polio cases has been a global concern. From 2019 onwards until Week 13, 2020 178 WPV1 cases are reported from Pakistan; a highest number in past five years (See table).

Editorial note

“Polio is known to be a highly infectious crippling disease caused by poliovirus wild types 1-3. With wild type 2 eradicated globally in 1999, and wild type 3 not detected since 2012, the current outbreak is suspected to be due to wild type 1 (WPV1). The majority of polio cases are mild or asymptomatic, with only a small proportion leading to potentially fatal Acute Flaccid Paralysis (AFP), making polio detection by symptoms alone difficult. The initial symptoms include fever, fatigue, headache, vomiting, stiffness in the neck, and pain the limbs. Children under five are most likely to contact the virus; transmitted predominantly through the feco-oral route - though some droplet transmission is possible. Making adequate WASH practices vital for disease control. The live attenuated oral polio vaccine (OPV) is highly effective in preventing polio transmission and has resulted into 99% worldwide decrease in polio cases. A high level of vaccination coverage (90%) should be aimed for, to interrupt polio transmission and prevent outbreak escalation.

All 5 WHO regions have eradicated Poliomyelitis while two countries of the Eastern Mediterranean Region; Pakistan and Afghanistan are the only remaining polio-endemic countries. As of Week 13, 2020, a total of 32 cases of wild poliovirus type 1 (WPV1) have been reported from Pakistan and 2 from Afghanistan. The rise of polio cases in Pakistan from late 2018 onwards have made it a global concern and ending wild polio transmission in the region has become a distant dream.

Additionally, in Pakistan, 72 WPV1 positive environmental samples including 4 combined (WPV1 and cVDPV2) with most recent positive sample collected on 25 February 2020 and in Afghanistan only 4 WPV1 positive environmental samples including 1 combined (WPV1 and cVDPV2). This widespread polio virus samples in the environment highly suggests the presence of virus and its further transmission at any time.

World Health Organization, Eastern Mediterranean Region has been providing technical support to the two polio endemic countries in the efforts to eradicate crippling disease once and for all. As immunization is the only prevention for polio, WHO has helped Pakistan to conduct a 5-day nationwide campaign for vaccination in January 2020 that vaccinated 18.3 million children. Similarly, in Afghanistan, a sub-national vaccination round has been completed which targeted about 5.9 million children in selected high risk and infected areas of the country. Additionally, both countries are also increasing the efforts in responding the surge in number of cases and have revised National Emergency Action Plan. However, despite all these efforts, the number of cases are continuously rising.

In depth analysis of this predicament shows that there are many barriers in successful implementation of high quality vaccination campaigns which include the ongoing conflict in the endemic countries, community resistance, population movement, banning of immunization activities by militants and clerics, and the growing attacks on polio workers in the most affected parts of the countries. The most important thing right now are the concerted efforts with the governments to eradicate WPV transmission in the region by removing key barriers in vaccination campaigns to strengthen routine immunization and focus on high risk areas to ensure every last child is vaccinated. Surveillance, mop-up campaigns and care for post-polio paralysis are also crucial which need to be scaled up to eradicated the virus completely.