

Pediatrics immunology

Urge Gerema

Jimma University, Ethiopia

Background: Poliovirus isolates detected in persons or in the environment can fall into three major categories: wild, Sabin and Sabin-like, or vaccine-derived. Detection of wild or vaccine-derived poliovirus may constitute an emergency, which can be categorized as an event that can lead to an outbreak, depending on characteristics of the isolate and the context in which it appears. The aim of the study was investigation report of cVDPV2 outbreak in Bokh woreda of Dollo Zone, Somali regional state, Ethiopia.

Methods: A team of experts drawn from different organizations was deployed to Bokh woreda to make detailed field investigation from May 25 to June 17, 2019. By using standard World Health Organization polio outbreak investigation checklist, document review of surveillance, immunization, and clinical data related to the case was made. Key informant's interview was made to health professionals, managers, parents of case, woreda and kebele leaders, religious leaders, and HEWs related to acute flaccid paralysis outbreak. Result. The notified AFP case was a 39-month-old female from Angalo kebele of Bokh woreda, Dollo Zone. On 19th May 2019, the patient developed high grade fever and was taken to Angalo Health Post on 20th May 2019. As per the examination by a health extension worker, the child had high grade fever and neck stiffness with preliminary diagnosis of meningitis for which ceftriaxone injection was prescribed. Contact sample was taken from three children on 28th May 2019 and 29th May 2019 and was sent to Addis Ababa National Polio Laboratory. All contact stool samples were found to be positive for poliovirus type 2 and referred for sequencing in National Institute of Communicable Diseases (NICD), South Africa, the Regional Polio Reference Laboratory.

Conclusion and Recommendation: Clinical presentation of the cases is compatible with poliovirus infection, improving the quality and coverage of supplementary polio immunization activities through proper planning; strict supervision and follow-up can reduce the occurrence of acute flaccid paralysis.