Abstract

Investigation of a Measles Outbreak Identified by Front Line Polio Workers, District Shikarpur, Sindh - 2017

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Abstract

Background: An innovative strategy; to identify the vaccine preventable disease cases from the community by the front-line polio workers during door to door OPV campaign, was adopted in district Shikarpur, Sindh. During polio field work training front line workers were also briefed about sign and symptoms of vaccine preventable diseases to identify and report their cases. On January 17, 2017 (1st day of OPV campaign) front line polio teams reported three measles cases including one death from a remote rural village. A team was deployed to confirm and determine the extent of the outbreak and implement preventive and control measures.

Objective: To confirm and determine the extent of the outbreak.

Methods: A case was defined as a child (= 15 years of age) residing in district Shikarpur, with: a generalized rash for three or more days, fever at or above 101°F, and one or more of the associated symptoms, including cough, or coryza, or conjunctivitis from 1st January to March 6, 2017. Active case finding was done from the community and health facilities. Blood samples from fourteen willing cases were collected and sent to NIH Islamabad for Laboratory diagnosis.

Results: Twenty cases were identified with one death (CFR 5%), 55% (n=11) were females. Mean age was 43 months (range: 11 to 108 months). Eight (40%) cases were identified by front line polio workers from remote areas. Eight cases were from two families. Fourteen (70%) cases were un-immunized and 6 (30%) partially immunized against measles. NIH Lab declared thirteen (93%) cases positive out of fourteen.

Conclusions: Cases appeared due to poor vaccine coverage. Mopping-up activities were conducted in the five villages with clustering of cases and in five KM radius surrounding areas. Innovative strategy of identify the vaccine preventable disease cases from the community by the front-line polio workers have proved successful and needs to be implemented across the country.

(piloc 2018;4(1):e10592) doi: 10.2196/10592