

Title: Knowledge and practice of health workers, HEWs, CVSFPs towards AFP case detection and reporting in pastoralist and semi pastoralist areas of Ethiopia. Muluken Asres (B.Sc, MPH) and etal,

Email address= muleraa@yahoo.com

Abstract

Background: Ethiopia initiated surveillance in 1997 and AFP forms part of the Integrated Disease Surveillance and Response (IDSR) which was adopted in 1998. However, the country remains at high risk because of a number of reasons.

Objective: to assess AFP surveillance status and enhance better AFP case detection in CGPP implementation semi-pastoralist and pastoralist *woredas* (districts).

Methods: The study used cross sectional qualitative methods involving key informant interviews with Health Extension Workers (HEWs and Community Volunteer Surveillance Focal Persons (CVSFPs) selected using criteria that included representativeness and feasibility.

Results: A total of 70 HEWs were interviewed in the nine study districts (*woredas*). Forty one (58.6%) was females and 29 (41.4%) were male. Asked about AFP case definition 12 (17.1%) answered points related to acute and flaccid paralysis, and 49(70%) mentioned flaccid paralysis only.

A total of 71 CVSFPs were interviewed from the nine study districts (*woredas*). Thirty five (49.3%) were female and while 36 (50.7%) were male. The case definition of AFP included paralysis from 20(28.2%) respondents and acute paralysis from 7 (9.9%).

Recommendations: strengthening of awareness of women, families and communities through targeted IEC interventions on causes, transmission, prevention of polio identification of AFP cases and care seeking; training and strengthening of supportive supervision HEWs community volunteers and health workers; establishing or strengthening of forums to involve stakeholders, religious and community elders and their institutions; involving kebele or other formal leaders to take responsibility on AFP identification, and subsequent actions.

Knowledge and practice of health workers, HEWs, CVSFPs towards AFP case detection and reporting in pastoralist and semi pastoralist areas of Ethiopia. Muluken Asres (B.Sc, MPH) and etal,

Background: Ethiopia initiated surveillance in 1997 and AFP forms part of the Integrated Disease Surveillance and Response (IDSR) which was adopted in 1998. The last laboratory confirmed wild poliovirus was identified in April 2008 in Gambella region. However, the country remains at high risk because of a number of silent areas and frontiers with high risk for re-infection countries.

Objective: This study was aimed to assess AFP surveillance status and enhance better AFP case detection in CGPP implementation semi-pastoralist and pastoralist *woredas* (districts).

Methods

Study design and population

The study used cross sectional qualitative methods involving key informant interviews with Health Extension Workers (HEWs), program coordinators, and Community Volunteer Surveillance Focal Persons (CVSFPs) selected using criteria that included representativeness and feasibility.

Sample size for facility based health worker KAP assessment-Considering accessibility and feasibility 5-10 kebeles were selected in each *woreda*. In the selected kebeles¹ one HEW (per health post) and 1 CVSFP were included. One health center was also randomly selected in each *woreda*.

Data Collection- facility based questionnaires were prepared to assess Knowledge and Practice of health workers towards AFP surveillance, AFP case detection and reporting. The questionnaires were translated to Amharic and Somali and back translated to ensure consistency. They were pretested and administered by trained interviewers.

Data entry and analysis- Quantitative data were entered and analyzed using SPSS version 17. Data analysis included data presentation using tables, graphs and appropriate summary figures.

¹ Kebele is the smallest administrative unit in Ethiopia

Ethical Considerations

This is a cross sectional study mainly done to inform a program planning process and as such did not need to go through a national IRB process. However, it was important to consult with the RHB and get permission to undertake the survey from regional, *woreda* and *kebele* administrative authorities. Official letters from the Regional Health Bureaus were written to the study sites as needed. Informed consent was obtained from the study participants after explaining the purpose of the study. The interviewer was made to sign on the consent form thereby verifying and taking responsibility of getting informed consent.

Results

Interviews with Health Extension Workers (HEWs)

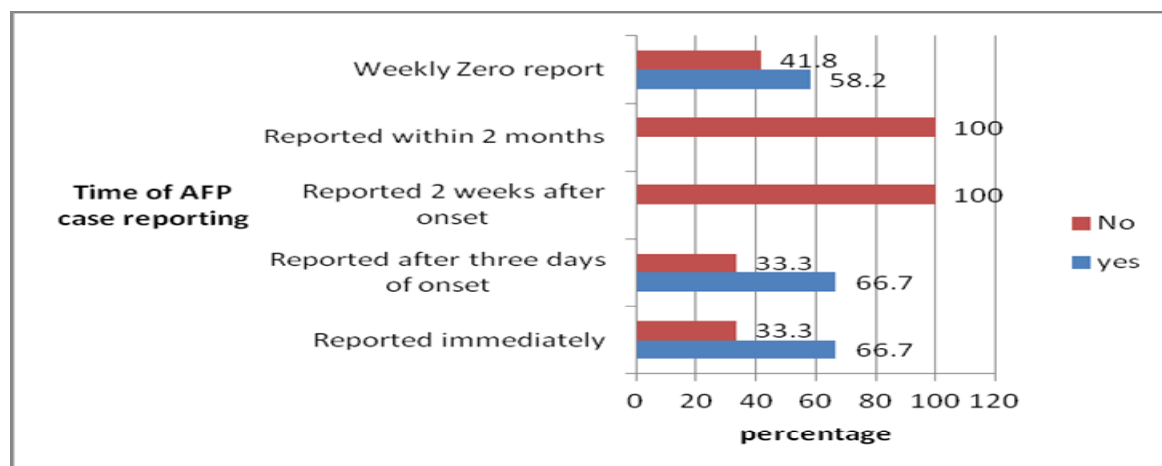
A total of 70 HEWs were interviewed in the nine study *woredas*. The median age of the respondents was 24.0 years. It ranged from 18-45 years. Forty one (58.6%) were female and 29 (41.4%) were male. The mean (and median) duration of work of the respondents was 3.0 years and ranged from 3 months to 6 years. In the majority of the cases 59(84.3%), the health posts were located in rural areas

Asked about AFP case definition 12 (17.1%) answered points related to acute and flaccid paralysis, and 49(70%) mentioned flaccid paralysis only.

Concerning activities they carry out in relation to AFP surveillance, 34 (48.6%) said they search AFP case by going house to house, 4 (5.7%) gave health education, 5 (7.1%) gather information from volunteers, while 27(38.6%) said they did not do anything specific to AFP surveillance.

Three HEWs said that they detected AFP, while the rest 67 answered that they have never detected AFP. The reasons given for not detecting AFP were 61 (91.0%) there were no cases, and the community is mobile 3 (0.5%). All the three who responded to have identified AFP, answered that they had reported immediately. Two said they detected the case during house to house visit while the other one said it was detected during a community gathering. Two were reported to *woreda* health office and one to health center. Twenty nine said that reporting format was available while 41 responded that they would apply 0 reporting.

Figure 1 Practice of HEWs on AFP case reporting in pastoralist and semi-pastoralist areas of CORE Group Ethiopia Polio Project Implementation Districts, Ethiopia. 2012 (n=70)



Interviews with Community Volunteer Surveillance Focal Persons (CVSFPs)

A total of 71 CVSFPs were interviewed from the nine study districts (*woredas*). The mean age of the respondents was 33.9 ± 9 and median 30 years. Thirty five (49.3%) were female and while 36 (50.7%) were male. Thirty nine (54.9%) respondents reported that they can easily read and write, others 11(15.5%) could read and write with difficulty and 21(29.6%) could not read or write at all. The mean duration of work was $3.4 \text{ years} \pm 2.4$, and median was 3.0 years.

Thirty eight (53.5%), 21 (29.6%) and 16(22.5%) were trained in community based surveillance, newborn tracking and social mobilization respectively. Seventeen (23.9%) did not have any of the above training. Thirty nine (54.9%) of the CVSFPs reported to have received supervision during the last six months, of whom 22(59.5%) got feedback. Forty one (57.7%) attended health post monthly meeting and 34 (47.9%) attended the quarterly meeting.

Most of the kebeles 60(84.5%) where the CVSFPs worked were located in rural areas while 11(15.5%) are located in urban areas.

The case definition of AFP included paralysis from 20(28.2%) respondents and acute paralysis from 7 (9.9%). Nine (12.7%) respondents gave other answers that did not include paralysis; such as diarrhea, vomiting, a problem of under five children, a problem under fifteen old children, children don't eat, and 22 CVSFPs (31.0%) answered they don't know the case definition of AFP.

Regarding the activities they perform, 44(62.0%) of the CVSFPs said they perform house to house search and 9(12.7%) said they conduct health education on AFP and Polio, 6(8.5%)

house to house search and health education , while 7 (9.8 %) said they do not conduct AFP case detection activities.

Figure 2: Reported Activities Performed by CVSFPs in pastoralist and semi-pastoralist areas of CORE Group Polio Project Implementation Districts, Ethiopia. 2012 (n=71)

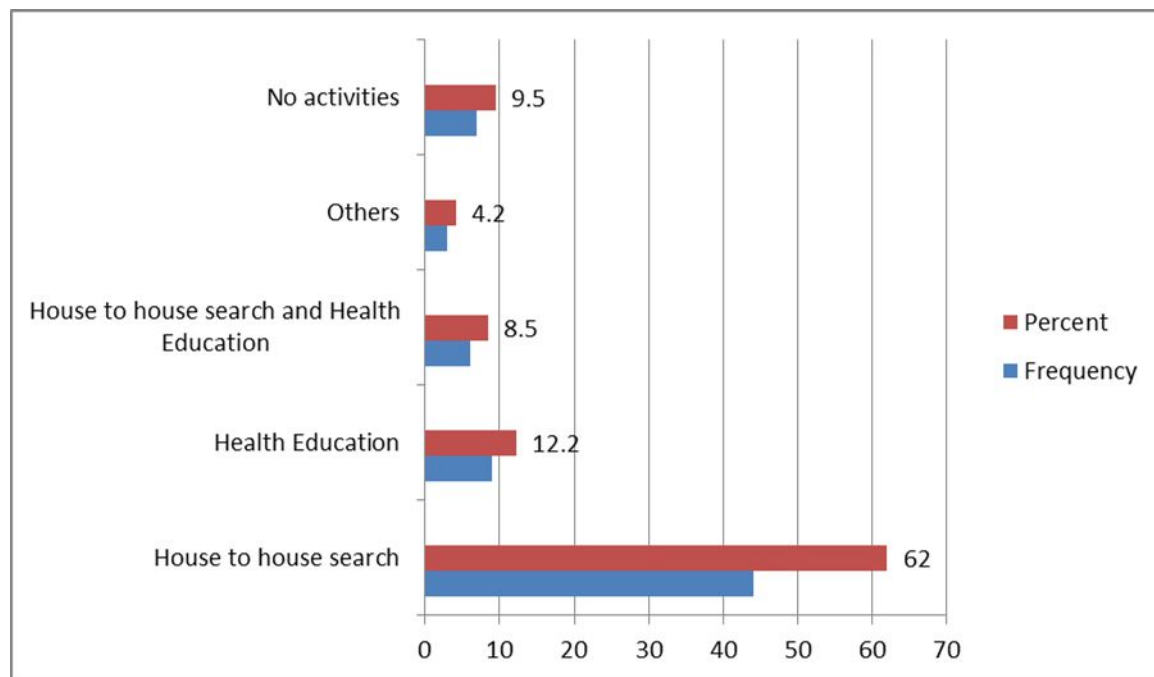


Table 1 CVSFPs Practice on AFP case detection and reasons for not detected AFP case in pastoralist and semi-pastoralist areas of CORE Group Ethiopia Polio Project Implementation Districts, Ethiopia. 2012 (n=71)

CVSFPs ever detected AFP case		
Yes	9	15.5
No	49	84.5
CVSFPs did not detected AFP case since there was no any case		
Yes	39	84.8
No	7	15.2
CVSFPs did not detected AFP case because of mobile Community		
Yes	2	4.7
No	41	95.3
No AFP case detection made due to other reasons		
Yes	4	10.0
No	36	90.0

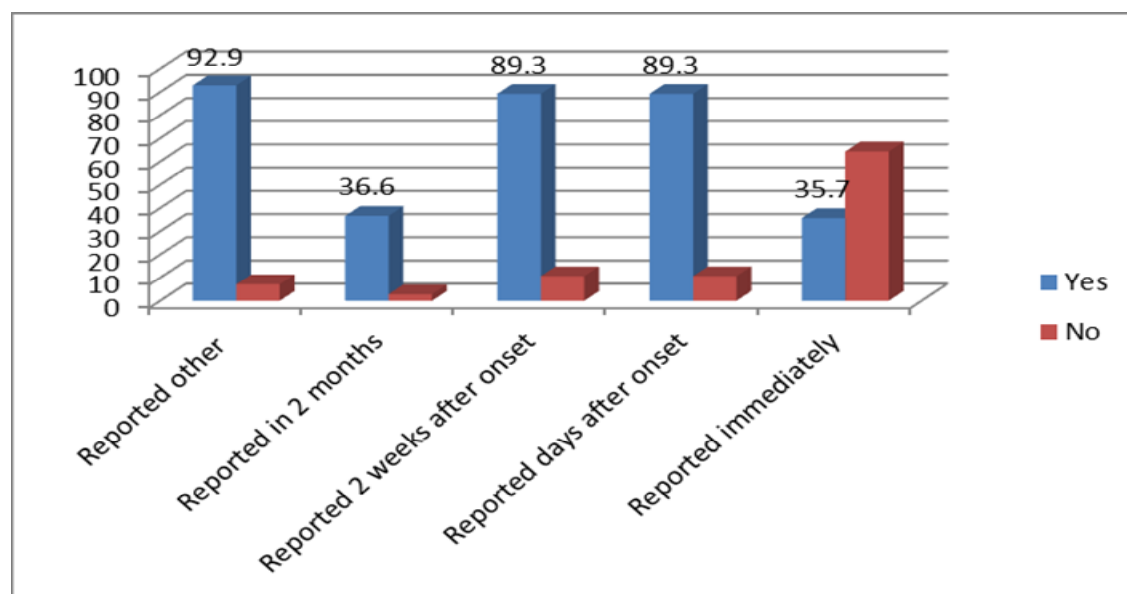
No AFP case detection made because of reason specified

Yes	52	73.2
No	15	21.1
Due to prevention	1	1.4
No case	2	2.8
No case found	1	1.4

Answering the question to whom they report, 43 (60.6%) said they report to the HEW/Health post and 16 (22.5%) to the health center of the catchment area.

Twenty four (33.8%) CVSFPs said report forms are available while 22(31.0%) said they apply zero reporting.

Figure 3, Reported practices of CVSFPs on detected AFP case in pastoralist areas of CORE Group implementation districts, Ethiopia, 2012 (n=71)



Interviews with Health Center AFP Surveillance Focal Persons

Eleven health centers AFP Surveillance focal persons were also interviewed on the activities they undertake with respect to AFP surveillance and their training related to AFP surveillance. The health center AFP surveillance focal persons reported that their activities include providing IEC to the community, and reporting weekly and monthly AFP cases. Two health center AFP surveillance focal persons mentioned coordinating community based surveillance. Two

answered that they orient and support identification of AFP among children that come for outpatient service and another one mentioned he participated in SIAs. All health center AFP surveillance focal persons have other responsibilities and mentioned working in the outpatient department, rendering EPI services, working in under-five clinics, working as EPI coordinators, working at the PMTCT clinics and heading the outpatient department. Four pointed out having attended a quarterly meeting whereas the other seven had not. Eight AFP focal persons had received supervision during the last 6 months, whereas 5 got feedback.

Three health center AFP surveillance focal persons answered that they had reported AFP whereas the rest 8 had not. Four said they did not report because no case was detected and 7 answered they use zero reporting. One of the cases reported was identified by HEW and brought to the health center. Another was brought to the outpatient department (OPD) by the family and another identified by community members.

Discussion

Of note is the fact that only 12(17.1%) HEWs could give a comprehensive definition of AFP , and 49(70%) could mention flaccid paralysis. This may be a major hindrance in detecting AFP cases. Only three HEWs said that they detected AFP, while the rest 67 answered that they had never detected AFP, which may be related to the point mentioned above regarding high workload.

Thirty two 32(45.1%) CVSFPs said that they could read and write with difficulty or could not read or write at all. This indicates limitations in updating their knowledge through reading and writing and the need for continuous support and follow up. On the other hand it was only about 30% of the CVSFPs who received supervision and feedback. The problem is also aggravated by the fact that about one fourth of CVSFPs said they had not received any training while 38(53.5%) said that they were trained in community based surveillance.

Knowledge of the case definition of AFP was found not to be impressive as only 20 (28.2%) mentioned paralysis 9(12.7%) and respondents gave other answers such as diarrhea, vomiting, a problem of under five children, children don't eat, that did not include paralysis in their response and 22 CVSFPs (31.0%) answered they don't know the case definition of AFP. Thus although use of CVSFPs to reach the community with IEC messages and for detecting AFP seems indispensable, the capacity of several of the CVSFPs to identify AFP cases and/or deliver proper information about AFP appears not to be strong. It is also worth noting that 28(39.6%) of the CVSFPs were not engaged in AFP search activities and only 15 (21.2%) said that they conduct health education. While these could be attributed to lack of knowledge, training and supportive supervision, there is a need to explore the reasons for such sub-optimal performance of the CVSFPs.

Conclusion: Considering the findings from the different components of the study the following recommendations were made: strengthening of awareness of women, families and communities through targeted IEC interventions on causes, transmission, prevention of polio identification of AFP cases and care seeking; training and strengthening of supportive supervision HEWs community volunteers and health workers; establishing or strengthening of forums to involve stakeholders, religious and community elders and their institutions; involving kebele or other formal leaders to take responsibility on AFP identification, and subsequent actions.

Acknowledgments

This project was funded by USAID to which CGPP is very grateful. We highly appreciate the support and collaboration of the regional health bureaus, zonal health departments and woreda health offices where the study was conducted.

Our gratitude is also extended to the study coordinators, supervisors, enumerators, field guides without their dedicated contributions the study would not have been successful.

Last but not least our deepest appreciation goes to the respondents for their time and cooperation.