

## More eyes on the lookout for Acute Flaccid Paralysis in Yobe State

In 2016, Nigeria reported four wild poliovirus cases, almost two years after the last reported polio case(s) and just on the verge of being certified polio-free. With this development, attention was drawn to the need to strengthen Acute Flaccid Paralysis (AFP) surveillance, a typical indicator of Polio. The current practice for detection of AFP cases is active surveillance at health facilities for which the Local Government Area Disease Surveillance and Notification Officers (DSNOs) are solely responsible. The process was quite cumbersome because it required regular visits to health care facilities within settlement catchment areas, review of patient records, interviews with health care workers/community informants and follow up visits to communities to review cases in-person.



*When I was recruited to join the AVADAR network, I had never used an android phone. In my work as a CHEW, I captured data using paper-based forms or by talking with community members. My phone didn't even have a camera.*

*- Yagana Shettima*

In 2016, the Bill and Melinda Gates Foundation, in conjunction with the World Health Organization (WHO), Novel-T and eHealth Africa (eHA) designed and developed a mobile-based SMS surveillance application called AVADAR (Auto-Visual AFP Detection And Reporting) to improve the detection, timeliness of case reporting and case investigation rates of AFP.



*Yagana Shettima with community informants in Yobe state*

The AVADAR application included an embedded 30-second video showing a child having difficulty crawling/walking which is typical of AFP, as well as an electronic data collection form for submission of detailed information on suspected AFP case-patients and/or zero reports. The surveillance application was piloted in 2016 in two locations in Nigeria and then, scaled up to four additional Nigerian states including Yobe state between November 2016 and August 2017.

eHealth Africa trained health care workers and community informants in selected areas with low AFP surveillance, including Yagana, on how to use the AVADAR application to detect and report suspected AFP cases in their immediate community to local disease surveillance officers. To date, over 3,000 informants and health workers have been trained and are part of the AVADAR surveillance network in Nigeria.

Yagana has reported at least 3 true AFP cases since the inception of the intervention in September 2017 within her state. Thanks to the educational video, her ability to report and identify true AFP cases in her community has improved significantly, ensuring that she was never confused about what a child who had AFP looked like.

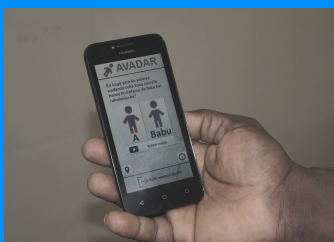
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*I was very worried about using an Android device and the fact that reporting would be done electronically; however, after the capacity building sessions, I can now navigate an android phone and use the AVADAR mobile application with ease. If I see a child with difficulty walking or crawling, I don't need to rely on just my memory to know if it is really AFP or not. All I need to do is open the video and compare. I am happy that I can play a bigger role in eradicating polio from my community and my state as a whole. I am fulfilled.*

*- Yagana Shettima*

The AVADAR project has reduced the burden of work on the Disease Surveillance and Notification Officers by ensuring that they have more eyes looking out for cases of AFP in Yobe State. By including Community Health Extension Workers and other community members like Yagana, the elements of community ownership and participation have been infused into AFP surveillance and reporting.

By so doing, the AFP surveillance system which was previously centered at the health centers and LGAs has been decentralized and others like Yagana, have a chance to be a part of the eradication of polio in Yobe State.



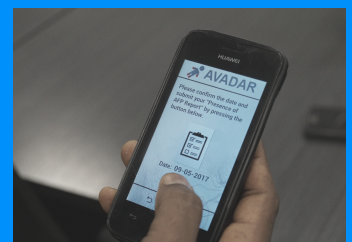
Once a week, the app plays a video that shows the symptoms of AFP, then asks the first question, if they have seen any child with the symptoms. The app is translated into several languages, this is in Hausa.



The DSNOs need accurate information about location. This question helps to eliminate any confusion about the child's location.



Timeliness is important. This questions pinpoints data that helps the DSNOs prioritize the cases to investigate.



Each report is date stamped, for better record keeping.