

EVD outbreak: impact on the treatment of malnutrition?

Case studies from Freetown-Western Area and Moyamba Districts

Sierra Leone

The provisions of basic health services in Sierra Leone have been severely challenged since the EVD outbreak started in May 2014. The preparedness of the health staff and health facilities to respond to the outbreak was limited and contributed to the disruption of provision of essential health services. This has led to the reduced uptake of health services and more likely the detriment of the health status of the population, particularly women and children under 5. The disruption was mainly as a consequence of the health staff and communities fear of contracting the virus while in the health facilities due to infected EVD patients or health staff. Indeed, in some cases, the EVD presents as malaria and diarrhoea leading to a poor understanding and diagnosis by health staff in identifying and managing, probable and definite cases. Misdiagnosis of EVD for common illnesses has resulted in the closure of several health facilities interrupting the service delivery and contributing to the growing mistrust among staff and communities that have resulted in lower attendance rates.

Since the beginning of the epidemic Action contre la Faim (ACF) has been monitoring the admissions of children under 5 years with severe acute malnutrition (SAM) in the Districts of Freetown-Western Area and Moyamba. ACF supports 14 Peripheral Health Units (PHUs) and 2 In-patient Facilities (IPF) in Western Area, and 40 PHUs and 1 IPF in Moyamba.

The period July-September 2014 has shown the highest decline in the admissions in PHUs and IPFs in Freetown-Western Area. Indeed, compare to the July's admissions, in September the facilities have observed a 66% (PHUs) and 90% (IPFs) decline. In the same period, in Moyamba, the level of admissions declined by 25% in the PHUs and by 100% in the IPF. It is relevant however to note that in Moyamba, contrary to Freetown-Western Area, the number of admissions drastically decreased by 45% immediately after the first EVD confirmed case was identified in the district (July). It is also worth noting that in the same district another drastic decreased was registered in November, when the district has experienced another peak in the number of EVD confirmed cases.

In both districts, in the period October-December 2014 the number of admissions increased at PHU level almost realigning with the data of the same period in 2013. This trend could be explained by the implementation of the "infection, prevention and control" (IPC) measures training in all PHUs in Western Area and Moyamba districts that aimed at reducing the risk of infection of the staff and beneficiaries by providing training on precise safety protocols, protective gears and consumable to medical staff. In addition, social mobilization and health promotion activities might have also contributed to the increase in the number of admissions.

Although the data is not representative of the situation in the whole Western Area and Moyamba districts, it provides an illustration of the impact of the Ebola outbreak on the access to severe acute malnutrition treatment.

ACF is concerned that:

- There is a limit of basic health services available;
- The overall loss of confidence the communities have on the health system;
- The lack of training of CHWs in detecting malnutrition through visual screening as requested by the "no-touch" policy defined following the declaration of the "state of emergency" to protect CHWs while working at community level;
- The absence of programmes for Moderate Acute Malnourished (MAM) children, as food for Supplementary Feeding Programmes (SFP) has been diverted for quarantining od homes and communities so SFP has mostly not been functional since the beginning of the outbreak
- The delay in training mothers of children under 5 on the use of the MUAC tape and the provision of one MUAC tape/child, as per the newly identified strategy of the MoHS to monitor the nutritional status of the child

will contribute towards a mid to long term increase in the rates of Global Acute Malnutrition, morbidity and mortality amongst under 5, which would be detrimental to the nutritional improvements achieved from 2010 to 2014; and would impact also on the progress made towards the achievement of the MDGs.

In October, in the 14 OTPs in Freetown a steep increase by 121% was registered in the number of admissions from admissions made in September. This increase has represented a change in the trend seen in the same OTPs in the hunger period (July-September 2014) when a decline by 66% was recorded. Since the October's increase the trend in the 14 OTPs in Freetown-Western Area has gradually decreased but still at 44% above the admissions made in September.



Figure 1 : Admissions in the 14 OTPs supported by ACF in the Western Area district, December 2014

Figure 2 below shows that following the first confirmed EVD cases identified in Moyamba District on 25th July 2014, there has been a significant decrease in the number of admissions of SAM cases as a 46% decline in admissions was recorded in August compared to July 2014. However the decline was not extremely significant when compared to admissions made at the same time in 2013. In fact, the number of admissions in August 2014 (151) is almost close (171) with admissions recorded in the same month in 2013. In Moyamba the lowest admissions were registered in November 2014 (78). In the same month, 1 OTP was closed due to unsafe exposure of health staff to an Ebola suspected case, who turned out confirmed positive. In addition there was a surge of outbreaks in few chiefdoms (in particular Lower Banta and Ribbi). Similarly as in Freetown-Western Area, in November heath staff of 100 PHUs were trained on IPC measures and this, along with an intense social mobilization and health promotion activities, could explain the increase in admissions registered in December.



Figure 2: Admissions in the 40 OTPs supported by ACF in Moyamba district, December 2014

Admissions in In-patients facilities

Following the hunger gap period (July-September) when in Freetown-Western Area the IPFs have recorded a decline in admissions by 90%, the situation has marginally improved but remained, until December 2014, 64% less than the same period in 2013. The increase in admissions compared to August and September could be explained with the reopening of the Ola-During Children's Hospital IPF on 24th September. Likewise, the low number of admissions in the period October-December could be explained with the opening, in the only government referral Paediatric Hospital, of an Ebola isolation room that impacted on mothers' willingness to bring their children to the IPF, as well as to the hospital for other health delivery services. The same situation occurred in 34 Military Hospital where 0 admissions were registered in October. The low number of admissions could be explained, for both hospitals with the establishment within the facilities of an Ebola Isolation room. In order to improve on the safety of health staff and patients, starting from the Ola During IPF in Freetown, all children are tested for EVD prior admission to avoid episodes of unsafe exposure to happen again.



Figure 3: Admissions in the 2 In-patient facilities supported by ACF, Western Area district, December 2014

Following the identification of the first EVD case in Moyamba District the number of SAM admissions has drastically decreased also at IPF level. In the period August-November the IPF in the district hospital has not recorded any admission. This was also due to the closure of the IPF in October due to unsafe exposure of the health staff to suspected Ebola cases. Compared to 2013, the admissions in IFPs have seen an 80% decline in the period August-December.



Figure 4: Admissions in the 2 In-patient facilities supported by ACF, Western Area district, December 2014

ACF recommendations

In light of the initial findings, ACF Sierra Leone recommends:

- MoHS and Implementing Partners to strengthen awareness raising on health seeking behaviour at community level
- MoHS, UNICEF and Implementing Partners to start as soon as possible the distribution of MUAC tapes and training to mothers of children under 5 countrywide how to use MUAC for their children avoiding usage of same MUAC tape
- MoHS, UN Agencies and Donors to strengthen the supply chain for free health care drugs and RUTF ensuring no stocks out occurs at health facility level, particularly during Ebola outbreak when the need to regain community trust in health system is high
- MoHS, UN Agencies and Donors to ensure that the quantity and quality of personal protective equipment provided at PHUs/hospital remain constant even following the emergency
- MoHS, UN Agencies and Implementing Partners to strengthen the nutrition surveillance system



ACF works in Freetown-Western Area (urban and rural), Moyamba and Kambia Districts implementing health and nutrition, food security and WaSH programmes. In strong collaboration with the local and national authorities, ACF has been focusing on prevention and treatment of acute malnutrition by addressing the direct and underlying causes of malnutrition (food insecurity, limited livelihood opportunities and poor access to water and sanitation).