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Emergency Response against Ebola



End Line Survey Report

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Acronyms

CA	Christian Aid
CBOs	Community Based Organisations
CDC	Centre for Disease Control
CHW	Community Health Workers
CSOs	Civil Society Organisations
DERC	District Ebola Response Centre
DHMTs	District Health Management Teams
EVD	Ebola Virus Disease
ERAE	Emergency Response Against Ebola
FGD	Focus Group Discussion
GoSL	Government of Sierra Leone
KAP	Knowledge, Attitude and Practice
KII	Key Informant Interviews
MSWGCA	Ministry of Social Welfare, Gender and Children's Affairs
OFDA	Office of Foreign Disasters Emergency
PDA	Personal Digital Assistance
PHU	Peripheral under Investigation

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Executive Summary

This report provides findings from the endline survey of the Emergency Response Against Ebola (ERAE) project implemented in Bo, Bombali, Kambia and Tonkolili districts comprising 12 chiefdoms (planned). The endline survey was conducted by CA and partners and community volunteers as enumerators.

CA and partners implemented a six-month ERAE project which began in 1st February 2015. The ERAE project aimed to contribute to achieving zero new cases of the Ebola Virus Disease (EVD) in Sierra Leone through; increased surveillance, contact tracing and referral of EVD patients to holding facilities, community care centers and treatment centers, social mobilization in remote communities to promote the necessary behavioural changes for reducing transmission, early isolation, as well as safe and dignified burials. Key strategies included communication on behaviour change at household and community level to ensure safe practices for EVD prevention; case identification, contact tracing and timely patient referrals; psychosocial support for Ebola survivors and families affected; non-food item support for families in quarantine; and enhancing coordination and accountability at community and district level for an improved response.

Survey methodology, sampling and limitations of the survey: The endline survey was designed to compare achievements of various project indicators and results at the end of the project with those prevalent at the time of the baseline study. For both studies, quantitative and qualitative methods were used, including a KAP survey (385 respondents) and a stigma survey (200 respondents) in project locations: Bo district (Bumpeh Gbao, Kakua & Tikonko chiefdoms), Bombali district (Bombali Shebora, Paki Masabong & Sella Limba chiefdoms), Kambia district (Magbema, Mambolo & Masungbala chiefdoms) and Tonkolili district (Gbonkolenken, Kholifa Rowalla & Tane). A randomized control trial of 40 samples for KAP and stigma surveys each was also carried out in non-intervention areas: Bo district (Baoma chiefdom), Bombali district (Gbanti Kamaranka chiefdom), Kambia (Gbleh Dixon chiefdom) and Tonkolili (Kunike Sanda chiefdom) to compare differences in outputs in projects versus non-project areas. In total, there were 425 KAP and 240 stigma surveys administered in the endline survey. 36 focus group discussions (9 in each district) were organised and key informant interviews held with stakeholders and EVD actors at district and chiefdom levels using semi-structured questionnaires (7 in each of the 4 districts). A coordination survey was also carried out to specifically measure result 3 of the programme.

While the tools allowed gaining some understanding of the achievements of the programme, the following limitations significantly limited the reliability of the data and scope for drawing sound conclusions on the status quo prior to and after the intervention. These limitations were:

- a. Because Ebola had already been prevalent in Sierra Leone since May 2014, the level of knowledge around EVD transmission and prevention was already quite high at baseline, and increased further during the 3 month delay between project start up and baseline survey.
- b. It was impossible to use exactly the same sample for the endline survey as for the baseline, as a result of the random sampling approach employed to administer the survey instruments.
- c. Other state and non-state actors had started operating in the project areas by the time the present programme started. This made it difficult to measure whether increases in knowledge and adoption of good practice was attributable solely to this project or whether other interventions were contributing to the results.
- d. These actions were also carried out in some of the control areas for the survey, making any conclusions about differences between project and control locations difficult to draw.

For these reasons, the endline survey cannot be seen to give 100% reliable data on the true changes between the start of the crisis and the intervention in question.

Summary of baseline findings

A baseline survey was completed in May 2015 to determine key information required for monitoring performance towards the planned results of this project. Because Ebola has already been around in Sierra Leone since May 2014, the level of knowledge around EVD transmission and prevention was already quite high. Additionally the baseline was completed almost three months after the start of this project. These two factors therefore explain that this project was starting at a high baseline level. The methodology used to compile the baseline data included;

- KAP surveys using Kobo-collect with 385 respondents in project and 40 in control areas

- Stigma Survey with 200 Ebola survivors in project areas and 40 in control areas
- 40 FGDs, 10 in each district
- 28 key informant interviews with stakeholders, 7 in each district.

Findings showed that out of 385 KAP survey respondents, 37.5% of respondents in project areas had immediate family members who had been infected by EVD. More specifically, the following findings were highlighted:

Result 1) Levels of knowledge about EVD, the symptoms, prevention and treatment were high in project and control groups with <85% or respondents providing correct responses to most questions. Gaps in knowledge included myths that witchcraft is associated with EVD, and some negative attitudes and practices still prevailed such as keeping people with Ebola at home.

Result 2) Levels of stigma appear to be fairly low and there is willingness among most communities to accept survivors. However, 10% of survivors (total 200) were nervous to leave their homes; 37% in project locations continued to experience adverse health effects; and 37% were not aware Ebola could still be spread through unprotected sex 3 months after recovery. 34% male and 33% people in quarantined homes expressed dissatisfaction in relation to support they had received¹. Ebola survivors asked for further support in the form of basic necessities and livelihood support to meet their urgent, immediate and long term priority needs.

Result 3) All male respondents but only 58% female respondents had confidence in the ability of the government to respond to EVD. A recommendation was that sustainability mechanisms should be supported to ensure local community stakeholders, including traditional authorities and other groups own the EVD response process and play a lead role in the post Ebola response.

Key findings by objective/sector of endline survey

Objective 1: Mobilise communities to effectively prevent and treat EVD

1. Changes in incidence and prevalence in the target areas

- ***EVD Incidence 1 month before survey:*** This endline survey shows that there was a reduction in EVD incidence in the target areas compared to the baseline, evidenced by the low number of EVD Incidence during the 1 month period preceding the survey, of immediate family members infected with EVD, and household EVD deaths respectively. The stigma surveys specifically revealed that only 10 respondents out of 200 survivors had EVD in the one month period prior to the survey in the project areas. The majority of these cases were in Tonkolili district (8), while in Bombali and Kambia districts only 1 respondent had had the disease during this period and none in Bo. In the control locations, 3 respondents had EVD during the period, Bombali (1) and Kambia (2). The incidence among men was 2 in the project location and 2 in the control and among women 8 in the project location and 1 in the control.

The survey found that the incidence of EVD in project locations had reduced by 73% between the baseline and the endline survey, from 37 (14 M and 23 F) in the baseline to 10 (2 M and 8 F) in the endline, while in the control locations it had reduced from 7 (4M and 3 F) in the baseline to 3 (2 M and 1 F). The incidence rates had decreased comparatively more for women than they had for men in the project locations, from 23 to 8, which prove the importance of hygiene awareness among women and girls and the impact of increased knowledge by women and girls.

- ***Immediate family members infected with EVD:*** From the baseline survey; 29% respondents in project locations, 113 (64 M and 49 F) reported having an immediate family member being infected with EVD in the project locations and 38% (5 M and 10 F, out of 40) respondents have immediate family members being infected with EVD in the control locations. Cumulative number of immediate family members infected were; 438 in the project locations (154 adult men, 172

¹ Satisfaction with NGO support mainly relates to whether the immediate needs of affected survivors and quarantine households were met, in terms of; the distribution is need based, timeliness, quality and distribution process.

adult women, 56 male children and 56 female children and in the control locations 58 (24 adult men, 14 adult women, 12 male children and 8 female children). The endline survey findings indicate that 27% (49 M and 56 F, out of 385) respondents in the project location and 15% respondents in control locations, 6 (3 M and 3 F) have immediate family members that have been infected with EVD. A total of 269 were reported to have been infected in the project location; 50 adult men, 97 adult women, 70 male children, 52 female children and 31 in the control location; 17 Adult men, 9 adult women, 3 male children and 2 female children.

Comparing the two surveys, the project has been successful in reducing the rate of EVD incidence at in survey households from 438 to 113 in project locations.

- ***EVD Death in Households:*** At baseline stage, there had been 337 deaths in beneficiary households (121 adult men, 118 adult women, 56 male children and 48 female children) and by endline stage, 22% respondents in project locations (85 persons - 45 M and 40 F) and 25% respondents in control locations (5 persons - 2 M and 3 F) reported having immediate family members that have died of EVD. A total of 168 (30 Adult men, 51 Adult female, 48 male children, 39 female children) EVD deaths were reported in project locations and 9 (3 Adult men, 4 Adult female, 0 male children and 2 female children) in control locations respectively.

2. Utilising Targeted Health Education Messages

Community engagement is key to the successfully control of an EVD outbreak. Raising awareness of risk factors for Ebola infection and protective measures that individuals can take is an effective way to reduce human-to-human transmission. Endline survey findings show that 60.3% (131 male & 101 female) respondents in the project locations, reported that the source of knowledge about EVD was through sensitizations by CHWs, compared to 21.3% (43 M and 41 F) in the baseline.

The project has been successful in promoting Knowledge, Attitude and Practice (KAP) in target communities, demonstrated by the high levels of understanding about the essential messages which include knowledge about EVD, case definition, symptoms, mode of transmission, control and preventive among respondents and practice. The survey also showed that respondents are implementing the good hygiene practise measures shared with them by the Community Health Workers (CHWs) during their sensitisation sessions.

Essential Messages

- ***Knowledge about EVD:*** From the baseline findings, all but one respondent (project location) in Kambia had heard of the Ebola; indicating some gaps in knowledge prevailed at that time and required attention during project implementation. Endline findings show that Knowledge about EVD was 100% among respondents in both project and control locations. This is positive sign in the fight against EVD and an indication of the effectiveness of this project. Adequate knowledge about EVD contributes to reducing misconceptions and also improved behaviour change, which is a major factor in ending the outbreak.
- ***Case definition:*** Knowledge about EVD measured through correct definition or understanding of EVD by respondents, was reported to be 100% among respondents in the endline survey, as compared to < 85% at the baseline stage. More specifically, 98.7% in the project locations and 100% in the control locations respectively correctly define EVD as a disease now, rather than as a punishment from God or myth or witchcraft. As a result of the increased knowledge in EVD case definition, misconceptions which often deter positive behaviour and attitudes, creating space for the existence of cultural/traditional practices and norm, will be neglected for correct actions needed to end the outbreak including referring sick people to the hospital rather than keeping and caring them at home.
- ***Symptoms:*** Sudden onset of fever is a major symptom of EVD, which has been a focus for the project to ensure prompt referral of the sick to health facilities. Comparing the baseline and endline, there are evidences of deeper understanding about EVD symptoms at the end of the project demonstrated by correctly identifying EVD symptoms and 100% of the respondents in both project and control locations indicated this in the endline survey, while only 14% stated this

in the baseline. Findings from the endline survey also show that awareness raising messages about Ebola had also highlighted the following other key symptoms: 63.6% of respondents in the project location identified diarrhoea, vomiting and weakness; while 12.3% named diarrhoea and joint pain.

- **Mode of Transmission:** There is an increase in the correct identification of EVD modes of transmission which is mainly through contact with bodily fluids for human-human transmission, demonstrated by 100% respondents correctly stating contact with bodily fluids as a mode of human-to-human EVD transmission in the endline compared to 50% (97 M and 97 F) in the baseline. In addition, more women than men showed greater unawareness of the correct EVD mode of transmission in the baseline; however FGD findings in the endline survey indicate that knowledge level among women on EVD transmission has improved². Furthermore, the endline findings indicate that 100% of respondents in both project and control locations stated the correct mode of EVD human-human transmission which is bodily fluids. With the strong understanding about EVD mode of transmission, communities are in a better position to adopt the correct preventive and control practices thus breaking EVD chain of transmission.

- **Prevention of Ebola Virus Disease:**

Good outbreak prevention relies on the effective application of preventive actions (mainly hand washing and avoiding contact with people and dead bodies), which were strongly demonstrated by respondents. At baseline stage, 63.9% of all respondents in the project locations listed hand-washing as a key preventive action, whereas this figure had increased to 74.5% by the endline survey.

EVD prevention also requires careful handling of dead bodies, and at endline stage, 23.1 % of respondents in the project locations and 3.4 % in the control locations also mentioned avoidance of contact with people or dead bodies as a major preventive action, compared to 16.4% in project locations and 2.6% in control groups at the baseline stage.

The project recorded an increase in preventive practices by 13%, which is significant given knowledge of the importance of hand-washing was probably already quite high at baseline stage, as the baseline study was carried out in May 2015, 3 months after the start of the programme. Hand washing and no contact with people or dead bodies, are closely related mechanism of preventing the disease as in the event that one by error touches an infected person, washing one's hand would mitigate the incidence of contacting the virus.

- **Control of Ebola Virus Disease:** Breaking EVD chain of transmission relies on applying a package of interventions including earlier identification of cases through surveillance and contact tracing, isolation and treatment of infected persons and safe burial. Through awareness raising activities, the project had hoped to increase knowledge about these following key control actions in the event of a suspected new Ebola case. The findings show that respondents are strongly utilizing health messages, demonstrated by the increase in identifying correct control actions by respondents. While the baseline indicated that 95% (190 M and 175 F) mentioned calling 117 and visit hospital, there was an increase in the endline 97% (209 M and 163 F). In addition, two female respondents in the baseline project locations (one each from Kambia and Bombali districts), mentioned people should stay at home when infected, and 2 respondents - one male and one female from Bo and Bombali districts respectively, mentioned the option of seeking witch doctor. From the endline, none of the respondents reported that they will stay at home if infected and only 1 reported visiting the witch doctor (Tonkolili).

3. Source of Knowledge about EVD

One of the key aims of this programme was to increase knowledge about EVD (case definition, symptoms and mode of transmission), benefits of isolation and earlier referral, EVD prevention and control; which requires active engagement of community members, who are very knowledgeable about their communities and masters of their own solutions. Owing to this fact, CHWs were included in this project as key actors and agents of change. Other actors, too, were engaged in this kind of awareness raising and so this survey sought to explore the sources of

² FGD, adult woman - Tikonko chiefdom, Bo District

information to which respondents had access and that may have influenced change. The majority (60.3%) of the respondents in the endline survey reported that the source of knowledge about EVD was through sensitizations by CHWs, while 25% and 36% of male and female respectively reported the same in the baseline. The project achieved a significant increase in the involvement of CHWs resulting in an improvement in positive behaviors and practices as reported by respondents in the essential message section of this report. In addition, 22.1% in project locations and 65% in control locations respectively had learnt about EVD from the media, an important source of information in Sierra Leone which may have part of other intervention.

Objective 2: Mobilise communities to support Ebola survivors and their families

Perceived Levels of Stigma towards and Discrimination against Ebola Survivors

Lack of psychosocial support and trauma counselling for Ebola survivors and families affected by EVD has been a challenge in the EVD crisis. Through this project, communities were supported for reintegration of survivors and reduction of EVD related stigma through awareness rising by CHWs and psychosocial support by religious leaders. From the endline survey, there are low or no evidence of social, cultural and traditional norms and practices of the citizens and community influencers that promotes EVD related stigma (FGD and stigma survey).

Experience of stigma and discriminative actions against survivors

- Experience of stigma and discriminative actions against survivors was found to be low among respondents, demonstrated by 11% increase in the number of survivors (stigma survey) that reported no experience of people not wanting to touch them and 7% increase for those with no experience of people not wanting to talk to them.
- The correct case definition and cause of EVD also contributes to determining how survivors are treated at household and community levels. The survey findings show that 98.7% and 100% in the project and control locations respectively stated the correct definition of EVD, while only one respondent mentioned witchcraft (Tonkolili 1). By this, no survivor can be described as evil or witchcraft which is indicative that there are almost no existence of stigma and discriminative actions against survivors in the target areas.
- The reintegration of survivors into their homes, communities and job/school has been an issue across the country. Government officials from MoHS and MSWGCA and local authorities as well as NGOs have been playing a leading role in the reintegration of survivors. Findings indicate high levels of agreement on the reintegration of survivor; 95% respondents in the baseline and 98% in the endline agreed that survivors should be allowed to return to their homes, while 96% respondents from endline agreed that survivors should be allowed to return to their jobs and school.
- Apart from survey respondents' positive attitude towards survivors (KAP survey), almost all community members are also positively relating to survivors. From the endline survey, respondents' feedback on whether people talk badly about people who have had, or are thought to have had Ebola indicates that over half of the respondents did not agree; 70% (148 M and 122 F) and 80% (16 M and 16 F) in project and control locations respectively. The baseline findings indicate that 42% male and 47% female respondents in project areas agreed that people talk badly about Ebola infected persons. This demonstrates that the project has been successful in supporting EVD survivors and families affected as evidenced by the significant level of positive actions towards project target. Additionally, in all 36 FGDs conducted, respondents strongly stated that community members are no longer doing stigma and discriminative actions against survivors.
- There is a strong evidence of reduced stigma demonstrated by the free movement of survivors, which can allow them find livelihood and seek health needs. Project baseline indicates that only 41% (82 of the 200 survivors) were very confident to leave their homes, while the endline survey findings show that feedback from respondents on their confidence to leave their homes was 63.5% (127 of the 200 survivors) and 42.5% (17) in the project and control locations respectively reported being very confidence to leave their homes. As a result of this success, survivors strengthening the livelihood activities thus enabling them address their needs.

Fear of contacting EVD from survivors: Fear of contacting EVD from survivors reduced by over 10%, indicating that there is high level of correct understanding about EVD transmission; baseline 68% - 47% male and 60-64% female respondents in project and control and endline 77.2% (165 M and 132 F) in project locations and control location 73% (16 m and 13 F). This also significantly contributes to maintaining a positive relationship with survivors and providing support at household and community levels.

Perception on Survival of Infected Persons: The average EVD case fatality rate is around 50%. Case fatality rates refer to number of deaths over number of confirmed cases and have varied from 25% to 90% in past outbreaks³. The perception of an infected person surviving the disease contributes to the degree of acceptance, earlier realization and health care. These are the factors for reducing fatality and ending the outbreak. Almost all respondents think that infected person can survive EVD; 97% (204 M and 168 F) and 98% (19 M and 20 F) in the project and control locations respectively. The reasons for surviving the EVD as stated by the respondents include; health care (project 78.7% and control 82.5%) and earlier realization or acceptance (project 11.4% and control 10%).

Practical/personal actions towards survivors: Where there are misconceptions and fear, freely talking to survivors and above all hugging them is difficult. The endline survey shows that target areas are almost stigma free, evidenced by a high percentage of respondents demonstrating positive personal actions towards EVD survivors; 98% and 63% of respondents demonstrated freely talking to survivors and hugging survivors respectively. Comparing to the baseline, there is an increase of 5% to 7% in respondents freely talking survivors in both project and control locations and 13% (project location) and 20% (control locations) respondents confirming the will hug survivors.

Number of individuals who have actually received support from religious leaders

Emotional Support from Religious Leaders: Noting that the baseline was completed three months into the project, it can be stated that the project has made success in supporting religious leaders to provide psychosocial support to survivors as well as mobilizing communities to practice positive actions towards survivors and provision of essential messages to communities. Comparing the endline data to the baseline, survivors that stated receiving support from religious leaders; baseline shows 88% (78 M and 97 F) and 85% (10 M and 24 F) in project and control locations reported having received emotional support from religious leaders, while 89% (73 M and 105 F) in the project location and 90% (14 M and 22 F) reported the same from the endline.

Although only 1% change can be seen but comparing to the entire population of target communities, this may have a positive effect on target communities, as messages relating to support to survivors often target the entire community.

Participation in religious activities: Survey findings show that there is a positive sign of reintegration of survivors including participation into religious activities. Exclusion of survivors from religious activities reduced by 8% indicating that nearly 20 more survivors in survey locations had their participation in religious activities restored. The end survey also shows that, no respondent was always being excluded as compared to the baseline in which 7 (5 M and 2 F) reported always being excluded.

Source of survivors' knowledge about EVD spread: 22.5% change was made in the delivery of essential EVD messages including spread of the virus by survivors through the sensitizations made by religious leaders. While the main source of knowledge about EVD spread changed in the control locations (from CHW sensitization in the baseline to media), there was a constant report on the main source of knowledge being through sensitizations by religious leaders in the project locations, which is a strong evidence of sustained effort by all project actors.

Objective 3: Provide quarantine and survivor households with non-food/essential relief commodities

³ [WHO EVD fact sheet N°103-updated August 2015](#)

Evidence that essential non-food needs of quarantined and survivor households have been met.

- **Immediate needs of survivors:** There is evidence that the immediate needs of survivors in both surveys remain unchanged in both project and control locations. There are medical evidences surviving EVD often leave people with health side-effects including hear, eye sight, body pains. This is demonstrated by 28% of the respondents who consider medical attention as an immediate need in both surveys.
- **Biggest concerns of survivors:** The concerns of survivors appear to be common and mainly focus on livelihood/employment, health needs and housing. Findings from both baseline and endline surveys indicate that the biggest concern for most survivors in project and control locations are; food, clothing and health (9.5% baseline and 9% endline), followed by housing, food, clothing and health (8.5% baseline and 7% endline). In addition, 6.5% (7 M and 6 F) survivors indicated that employment and housing is their biggest concern.
- **Respondents' satisfaction with support to quarantined households:** There has been a significant improvement (22%) in the level of satisfaction of support to quarantine households, indicating that the project's objective of meeting the immediate needs of quarantine households was achieved. Although all respondent may not have directly received food and essential relief items from this project, the coordination and community engagement processes may have given them deeper understanding relating to support to quarantine households.
- **Respondent's satisfaction with support to survivors**
The level of satisfaction among respondents relating to support for survivors, increased by 7.8% in project locations. Although the gaps in the support to survivors remained the same for both baseline and endline surveys, there is however a significant decrease in the percentage of respondents that reported these gaps. These demonstrate that the project achieved its aim of meeting the needs for survivors.

Comparison of Baseline and Endline Surveys
Table 1: Comparison of Baseline and Endline Surveys

Sector / Objective	Indicator	Target	Baseline findings Month 3	Endline findings Month 6
Targeted planned beneficiaries for the intervention included; 219,473 people directly; >50% women. Beneficiaries per sector were as follows: Health: 109,521; Protection: 109,066; Logistics & relief commodities: 700; Coordination/information: 136.				
Objective 1: Mobilise communities to effectively prevent and treat EVD	Incidence and prevalence of EVD in the target areas	0	<p><u>No. of EVD cases recorded in less than one month</u> Project location: 37 (6 Bo, 18 Bombali, 6 Kambia & 7 Tonkolili). 14 male and 23 female. Control location: 7 (3 Bo, 2 Bombali, 1 Kambia & 1 Tonkolili)</p> <p><u>Immediate family infected with EVD</u> Project location: Total 438 154 Adult men, 172 Adult female, 56 male children and 56 female children</p> <p>Control location: Total 60 24 Adult men, 14 Adult female, 12 male children and 10 female children</p> <p><u>EVD death in households</u> Project location: Total 337 121 Adult men, 118 Adult female, 56 male children and 42 female children</p> <p>Control location: Total 51 20 Adult men, 14 Adult female, 8 male children and 9 female children</p>	<p><u>No. of EVD cases recorded in less than one month</u> Project location: 10 (1 Bombali, 1 Kambia & 8 Tonkolili). 2 male and 8 female. Control location: 3 (1 Bombali & 2 Kambia)</p> <p><u>Immediate family infected with EVD</u> Project location: Total 269 50 Adult men, 97 Adult female, 70 male children and 52 female children</p> <p>Control location: Total 31 17 Adult men, 9 Adult female, 3 male children and 2 female children</p> <p><u>EVD death in households</u> Project location: Total 168 30 Adult men, 51 Adult female, 48 male children and 39 female children</p> <p>Control location: Total 9 3 Adult men, 4 Adult female, 0 male children and 2 female children</p>
	Number and percentage of household members visited (or households with estimated numbers)	109,521 Household members	<u>% & # of respondents reached with EVD message by CHW</u> Project location: 21.8% (43 male & 41 female) Control location: 12.5% (2 male & 3 female)	<u>% & # of respondents reached with EVD message by CHW</u> Project location: 60.3% (131 male & 101 female) Control location: 20% (5 male & 3 female)
		(80%)	<u>% of respondents utilizing health messages</u>	<u>% of respondents utilizing health messages</u>

Sector / Objective	Indicator	Target	Baseline findings Month 3	Endline findings Month 6
	<i>of members?) who are actually putting into practise what they have learned</i>	87,617 utilizing essential messages	<p>Project location: Main preventive actions – hand washing 63.9% and 23.1% no contact with people.</p> <p>Main control action – call 117/visit hospital 94.8% and no contact with people 3.4%</p> <p>Control location: Main preventive actions – hand washing 72.5% and no contact with people 22.5%</p> <p>Main control action – call 117/ visit hospital 90% and no contact with people 5%.</p>	<p>Project location: Main preventive actions – hand washing 74.5% and 16.4% no contact with people.</p> <p>Main control action – call 117/visit hospital 96.6% and no contact with people 2.6%</p> <p>Control location: Main preventive actions – hand washing 82.5% and not contact with corpses 2.5%</p> <p>Main control action: call 117/visit hospital 97.5% and no contact with people 2.5%</p>
Objective 2: mobilise communities to support Ebola survivors and their families	<i>Evidence of reduction in perceived levels of stigma towards and discrimination against Ebola survivors; target 20% reduction from baseline level (as per our own M and E plan)</i>	20% from baseline (69%)	<p><u>Survivors experience of stigma and discriminative actions</u></p> <p>Project location: Respondents with no experience - talking to survivors 69% and contact with survivors 69.5%.</p> <p>Control location: Respondents with no experience - taking to survivors 62.5% and contact with survivors 70%.</p>	<p><u>Survivors experience of stigma and discriminative actions</u></p> <p>Project location: Respondents with no experience - taking to survivors 82.5% and contact with survivors 84.5%.</p> <p>Control location: Respondents with no experience - taking to survivors 70% and contact with survivors 72.5%.</p>
	<i>Number of individuals who have actually received support from religious leaders</i>	There was no target	<p><u>% & # of respondents reached with EVD message by religious leaders</u></p> <p>Project location: 40.5% (32 M and 49 F)</p> <p>Control location: 27.5% (5 M& 6 F)</p> <p><u>% of respondents that have received support from religious leaders</u></p> <p>Project location: 88% (78 M and 97 F)</p> <p>Control location: 85% (10 M and 24 F)</p> <p><u>% of respondent never excluded from religious activities</u></p>	<p><u>% & # of respondents reached with EVD message by religious leaders</u></p> <p>Project location: 63% (58 M and 68 F)</p> <p>Control location: 25% (6 M& 4 F)</p> <p><u>% of respondents that have received support from religious leaders</u></p> <p>Project location: 89% (73 M and 105 F)</p> <p>Control location: 90% (14 F and 22 F)</p> <p><u>% of respondent never excluded from religious activities</u></p>

Sector / Objective	Indicator	Target	Baseline findings Month 3	Endline findings Month 6
			Project location: 88% (78 M and 98 F) Control location: 82.5% (9 M and 24 F)	Project location: 93% (79 M and 107 F) Control location: 90% (13 M and 23 F)
Objective 3: <i>provide quarantine and survivor households with non food/essential relief commodities</i>	<i>Evidence that essential non-food needs of quarantined and survivor households have been met.</i>	700	<u>% of survivors immediate needs</u> Project location: food & NFIs 93% Control location: food & NFIs 67.5% <u>% of respondents satisfied with NGO actions against Ebola</u> Project location: 98% (194 M and 186 F) Control location: 100% (15 M and 25 F) <u>% of respondents perception of enough support to quarantine households⁴</u> Project location: 82.3% (155 M and 162 F) Control location: 75% (11 M and 19 F) <u>% of respondents perception of enough support to survivors</u> Project location: 87.3% (170 M and 166 F) Control location: 82.5% (14 M and 19 F)	<u>% of survivors immediate needs</u> Project location: food & NFIs 51% Control location: food & NFIs 55% <u>% of respondents satisfied with NGO actions against Ebola</u> Project location: 100% (217 M and 168 F) Control location: 100% (20 M and 20 F) <u>% of respondents perception of enough support to quarantine households</u> Project location: 94.5% (204 M and 160 F) Control location: 95% (19 M and 19 F) <u>% of respondents perception of enough support to survivors</u> Project location: 90.6% (155 M and 162 F) Control location: 100% (20 M and 20 F)
Objective 4: <i>Strengthen coordination between government agencies and CSOs to improve allocation and utilisation of EVD resources</i>	<i>Evidence of improved coordination and governance in EVD response at community and district level</i>		# of respondents with important role for more effective response: 24 (17 M and 7 F) # of respondents currently having obstacles in playing their role: 22 # of respondents that have carried out activities in relation to their role: 20 # of agencies involved in the Ebola response at local/community level: 37 (10 Bo,13 Bombali,6 Kambia and 8 Tonkolili)	# of respondents with important role for more effective response: 28 (20 M and 8 F) # of respondents currently having obstacles in playing their role: 5 # that have carried out activities in relation to their role: 28 # of agencies involved in the Ebola response at local/community level: 50 (14 Bo,15 Bombali,10 Kambia and 11 Tonkolili)
	Number of visits to Ebola response		Visit to Ebola response structures: 16 respondents	Visit to Ebola response structures: 28 respondents

⁴ Enough support means that the support including food, NFIs and psychosocial support are needs based and timely.

Sector / Objective	Indicator	Target	Baseline findings Month 3	Endline findings Month 6
	<i>structures by community representatives, local authorities and CSOs</i>		Average visit: 20	Average visit: 50
	<i>Number of dialogue forums held at chiefdom and district levels</i>		# respondents engaged in dialogue sessions: 20 % of respondents for Chiefdom level sessions: 20% % of respondents for Chiefdom level sessions: 100% Frequency of sessions: 100% Once a week	# respondents engaged in dialogue sessions: 28 % of respondents for Chiefdom level sessions: 80% % of respondents for Chiefdom level sessions: 100% Frequency: 100% Once a week
	<i>Percentage of trained CSO representatives who are actually involved in monitoring EVD resource allocation and utilisation</i>		CSO respondents: 39% (11) # of respondents with important role for more effective response: 24 # of respondents currently having obstacles in playing their role: 22 # of respondents that have carried out activities in relation to their role: 20 # of agencies involved in the Ebola response at local/community level: 37 (10 Bo,13 Bombali,6 Kambia and 8 Tonkolili)	CSO respondents: 54% (15) # of respondents with important role for more effective response: 28 # of respondents currently having obstacles in playing their role: 5 # that have carried out activities in relation to their role: 28 # of agencies involved in the Ebola response at local/community level: 50 (14 Bo,15 Bombali,10 Kambia and 11 Tonkolili)

Key Recommendations and Best Practices

Recommendations:

To compare the change in knowledge, attitude and practice as well as social, cultural and traditional practices between communities in which the project have been implemented and those without the project, the baseline and endline surveys included communities that were not targeted by this project as control. Comparing the two surveys, there are few differences in terms of positive change in the project and control locations. This indicates that communities targeted by this project were in greater need of project interventions while as the control locations had similar interventions that may have started before this project.

By the end of this project there are high levels of knowledge, attitude and practice and a reduction in social, cultural and traditional practices in favour of positive health behaviours in project locations. Although this is the requirement to end the outbreak, it is recommended that follow-up actions be taken to sustain these positive behaviours and practices to enhance improved broader community health.

Religious leaders have played a significant role in achieving the project's objective of mobilising communities to support Ebola survivors and their families. Involving religious leaders in development intervention is therefore highly recommended evidenced from their role in the EVD response.

Best practices:

The involvement community actors in this intervention played a major role in addressing traditional and cultural believes and practices. Through the activities of CHWs and religious leaders, there was greater acceptance of the project and ownership by local and traditional authorities and their community members. This is demonstrated by the increased level of practice of essential messages by the end of the project, mainly delivered by CHWs and religious leaders that largely being enforced by local and traditional authorities.

CASL utilized mobile technology for data collection during the implementation of this project and the following benefits were documented: cost benefit - comparatively, generating and inputting of the data is far cheaper than using paper questionnaires, time - no data entry required, once data is collected, it is easily transferred to the centralized data based system managed at CA; quality and accuracy - close to 100% clean data. Minimal blank spaces, which usually are not the case when paper instrument are used which require separate data entry; capacity building for CASL community member. "Using KoBoCollect is a great opportunity for us and can now use the skills elsewhere."

1. Background

1.1 Overview of the project

Sierra Leone has recorded the highest total number (13,785) of positive EVD cases in West Africa out of a total of 28,251⁵. Geographically, hotspots are changing frequently and there are still flare ups which continue to require sustained interventions until the country gets to a resilient zero.

The gaps that have affected the ending of the EVD outbreak in Sierra Leone include the following: lack of correct information on EVD prevention and care, denial and misinformation; unsafe burials, including the washing of dead bodies, late reporting and lack of isolation, especially in rural areas; lack of systematic contact tracing and timely patient referrals for treatment; fear of and stigma towards Ebola survivors, with many being ostracized from communities; lack of essential food and NFIs for households under quarantine, rendering them more likely to break out of quarantine in the search for food; lack of psychosocial support and trauma counselling for Ebola survivors and families affected by EVD; absence of mechanisms to engage communities, especially women, in EVD response planning, monitoring and holding providers to account at ward and district level; and poor coordination in the EVD response at community and district level.

Christian Aid – Sierra Leone started implementing its first phase emergency response project from 01 November 2014. With funding from the USAID Office of Foreign Disasters Assistance (OFDA), Christian Aid (CA) and five partners implemented a six months Ebola response project to contribute to achieving zero new cases of Ebola Virus Disease (EVD) in Sierra Leone.

The project was implemented in four districts – Bombali (Northern Sierra Leone), Tonkolili (Northern Sierra Leone), Kambia (North-West of Sierra Leone) and Bo (Southern Sierra Leone) targeting 12 chiefdoms (3 per district). Key activities included behavior change communication at household and community level to ensure safe practices for EVD prevention; case identification, contact tracing and timely patient referrals; psychosocial support for Ebola survivors and affected families; non-food item support for families in quarantine; and enhancing coordination and accountability at community and district level for an improved response. Stigma, fear and denial are being addressed through reintegrating Ebola survivors into their communities and supporting them to become Ebola ‘champions’ for behavior change. Targeted planned beneficiaries for the intervention included; 219,473 people directly; >50% women. Beneficiaries per sector were as follows: Health: 109,521; Protection: 109,066; Logistics & relief commodities: 750; Coordination/information: 136.

The objectives of the project are as follows:

1. Communities are mobilised to break the chain of EVD transmission through information, surveillance, contact tracing and referrals
2. Support to Ebola survivors and families affected/in quarantine
3. Communities engaged in improving local governance and coordination of the EVD response

1.2 Aim and purpose of the survey

The overall aim of this endline survey was to assess the strengths and weaknesses in the implementation of the USAID Office of Foreign Disasters Assistance (OFDA)-supported project **“Emergency Response Against Ebola”** (ERA) as regards planned and unintended achievements and results, and sustainable transformations that may have occurred in the targeted communities, to inform future project planning and design.

The purpose of the survey was to collect quantitative and qualitative endline data aligned with approved programme indicators and results. The endline survey results will be compared with the baseline results of the project, which will enhance documentation of project performance.

⁵ [WHO](#) data, 16th September 2015.

The outputs of the survey will provide an opportunity to stakeholders to review the strategies that have been adopted towards the achievement of the objectives, identify best practices and challenges and provide recommendations and conclusion based on solid lessons learned and good practice developed

1.3 Specific scope of the survey

The KAP and stigma surveys, focus group discussions and surveys on prevalent coordination mechanisms held specifically assessed the following components of the programme:

1. Knowledge about Ebola including definitions, symptoms, mode of transmission, preventive measures and necessary actions to control disease and to mobilise influencers such as traditional leaders, religious leaders, and women/men/youth leaders.
2. Prevalent attitudes towards EVD infected persons and survivors, as well as perceptions on available health services, confidence in health service delivery and on government ability to respond to the EVD crisis, as well as views on existing NGO actions forming part of the EVD response.
3. Behaviour, social, cultural and traditional norms and practices of citizens and community influencers alike, including traditional leaders, religious leaders, women/men/youth leaders in regards to Ebola and stigma management
4. Perception of citizens about practical measures undertaken to support quarantined families and EVD survivors at community and household level.
5. Level of stigma associated with EVD at community and household level particularly occupation and housing challenges.
6. Adverse health effects of EVD on survivors and knowledge of control measures required from survivors.
7. Assess existing local governance and coordination mechanisms characterising the Ebola response, in line with result 3 of the programme

2. Methodology

Integral to the ERAE project design is a strong M&E plan, based on performance indicators agreed upon with USAID.

2.1. Tools and their application

2.1.1 Knowledge, Attitude and Practice Survey (KAPS)

The KAP survey was carried out utilizing structured questionnaires targeting community members, and gathered a range of information on knowledge of case definition, symptoms, mode of transmission, preventive measures, and necessary actions to control the disease by the citizens, confidence in the health service delivery in the provision of the needed service, perception of Government of Sierra Leone's (GoSL's) ability to respond to the EVD crisis, and NGO actions towards the EVD response, quarantine measures and EVD survivors at community and household levels.

Sample size calculation was done based on the projected 2014 census population data for the targeted districts provided by the Ministry of Health and Sanitation (MOHs)⁶. The population for the survey was the total population (1,924,908) of the target districts⁷. Using a 5% confidence interval at 95% confidence level (+/- 5 margin of error), the sample size of this survey was 385. A population proportional-to-size method was used to distribute the total sample to the 4 districts. In other words, the size of each district sample was proportional to the total population. A randomized control trial sample of 40 samples (10 per district) was collected in non-intervention areas to compare outcomes.

⁶ Source: www.health.gov.sl

⁷ District population was used since chiefdom population are not readily available.

Since the KAP survey focused on project actions that reached total targeted chiefdom populations, selection of respondents was randomly carried out without any preference.

Table 2: KAP survey sample distribution by partner and district.

Type of survey	Partner	CARL	CAHSe	HPA	SLSAV	REWAP	Total
	District	Bo	Bombali		Kambia	Tonkolili	
Project location	Sampling	111	81		75	118	385
Control location (Randomized control trial)		10	10		10	10	40

2.1.2 Stigma Survey

The survey was carried out utilizing structured questionnaires targeting only Ebola survivors and gathered a range of information on; perceived levels of stigma towards and discrimination against Ebola survivors, support from religious leaders and also household and neighbours, immediate needs of survivors, adverse health effects of EVD on survivors and knowledge of control measures required from survivors.

The population for the survey was the total number of EVD survivors (400) directly targeted by the project. Using a 5% confidence interval at 95% confidence level (+/- 5 margin of error), the sample size of this survey was 197, which was rounded-up to 200. A population proportional-to-size method was used to distribute the total sample to the 4 districts. In other words, the size of each district sample was proportional to the total population. A randomized control trial sample of 40 samples (10 per district) was collected in non-intervention areas to compare outcomes.

Respondents for the stigma survey were randomly selected from survivors' list obtained from the Ministry of Social Welfare, Gender and Children's Affaires (MSWGCA) and survivors association at district or chiefdom level. As the EVD outbreak continues, the number of survivors increases based on the district case load. By this, there were more survivors in each district than planned by the project. However, based on the design of the project, each survivor might have been reached by a project intervention.

Table 3: Stigma survey sample distribution by partner and district

Type of survey	Partner	CARL	CAHSe	HPA	SLSAV	REWAP	Total
	District	Bo	Bombali		Kambia	Tonkolili	
Project location	Sampling	57	43		39	61	200
Control location (Randomized control trial)		10	10		10	10	40

2.1.3 Focus Group Discussions (FGDs)

The FGD tool, targeted community influencers and members to assess the knowledge, skills, attitude, norm, and perceptions related to EVD including; transmission, spread, prevention and control measures. The following groups were targeted for the FGD:

- Level 1: Community Influencers – Local authorities, Religious Leaders, Youth/Women Leaders
- Level 2: Community Group/Peers - youth, Men & Women groups: Adolescence male (11 – 18 years); Adolescence female (11 – 18 years); Male youths (19 – 35 years); Female youths (19 – 34 years); Adult Men group (35 years +) and Adult Women groups (35 years +)

Gender and age dynamics were taken into account by ensuring that the sample chosen includes representatives from different gender groups and individuals within relevant age brackets. Three (3) FGDs were conducted per chiefdom making 9 per district, using semi-structured questionnaires.

FGDs were only conducted in project locations and participants were selected randomly. The total number of FGD participants was 200, which is on an average of 5 participants in each FGD.

DISTRICT	CATEGORY OF FGD PARTICIPANTS											Male Total	Female Total	Grand Total	
	Community Influencers – Local authorities, Religious Leaders, Youth/Women Leaders		Adolescence (11 – 18 years)		Youths (19 – 34 years)		Adult (35 years +)		M	F	M				F
	M	F	M	F	M	F	M	F							
BO	5	3	8	6	8	6	8	5	29	20	49				
Bombali	4	3	7	8	6	7	6	8	23	26	49				
Kambia	6	4	6	7	7	8	9	6	28	25	53				
Tonkolili	4	3	8	8	8	6	5	7	25	24	49				
Grand Total	19	13	29	29	29	27	28	26	105	95	200				

2.1.4 Key Informant Interviews (KIIs)

Key informant interviews (KII) were conducted to gather information on existing coordination and local EVD governance. Structured questionnaires were used to elicit information on the role of stakeholders to ensure a more effective response to the Ebola crisis, obstacles and activities carried out in relation to their role, main support/tools needed and level of involvement of stakeholders in the response.

The KII targeted CSOs, community leaders and local authorities (DHMTs, DERC and MSWGCA). Seven questionnaires were administered per district through a total of 28 KIIs and respondents; 9 Government stakeholders (DERC, MOHS, MSWGCA, and Local Council), 6 community stakeholders and 13 CSO representatives. KIIs were only conducted in project locations and participants were selected randomly.

2.2 Administration of the surveys

The Survey Team: CA M&E Coordinators were responsible for developing the TOR and the training agenda, conducting training and taking on the lead responsibility for the entire survey including technical support. To address field level issues, 5 staff (3 M and 2 F, 1 staff from each partner) were involved in the survey as field focal persons, with the responsibility of coordinating data collection, linkage with stakeholders and providing support to enumerators. Data collection was carried out by 25 community volunteers as enumerators (including 15 females and 10 males). The main responsibility of the enumerators was to collect the most accurate and complete data for the survey. The selection of enumerators was done by partners using agreed TORs that focused on knowledge about the communities and cultural sensitivity, experience in data collection and basic IT knowledge including use of PDA.

Training of enumerators for the survey covered 2 days (Tues. 14th – Wed 15th July) and was facilitated by CA M&E Coordinators. The training provided a deeper understanding of the survey including purpose, methodology and sampling, target respondents, survey tools and translation into local languages, and data collection with KoBoCollect (device).

Piloting: Apart from the practical sessions conducted during the training, a half -day was dedicated to pilot the tools after the completion of the training. This provided the enumerators with a first-hand experience and as a result field challenges were identified, which were resolved during the feedback session.

Data collection: CA Sierra Leone has been using kobo-collect since December in EVD response data collection activities. KoBoCollect is an app that runs on Android mobile phones (device) and allows multiple survey forms to be stored, and completed with or without a network connection. This approach was employed to gather quantitative data (KAP and stigma). Structured questionnaires for the KAP and stigma were developed and uploaded into Kobo-collect website and downloaded on the devices for survey administration. Qualitative data (FGDs) were recorded on the device.

2.4 Survey Enumeration Area

The survey was conducted in four (4) districts comprising 3 project chiefdoms and 1 control chiefdom for each district. In the control chiefdoms, 10 KAP and stigma surveys were administered.

Selection of control locations (chiefdoms) was on a random basis by the partners in the respective districts, which were the same as in the baseline.

Table 5: Survey Enumeration Area

Location	Bo	Bombali	Kambia	Tonkolili
Project	Bumpeh Gao	Bombali Shebora	Magbema	Gbonkolenken
	Kakua	Paki Masabong⁸	Mambolo	Kholifa Rowalla
	Tikonko	Sella Limba	Masungbala	Tane
Control	Baoma	Gbanti Kamaraka	Gbleh Dixon	Kunike Sanda

2.5 Data Management

Quantitative data- data processing actually started in the field as completed surveys are automatically uploaded into a central Kobo-collect database. Data analysis was carried out using excel and descriptive statistics were generated for the report.

Qualitative data- FGDs were recorded by the enumerator using the device during each session. A transcription team of three was contracted to transcribe FGDs, which were analysed along the relevant themes and used for report writing.

2.6 Ethical considerations

Respondents were selected randomly by enumerators, and participation was completely voluntary.

- In each location, the random selection process for identifying respondents was clearly explained to local authorities and beneficiaries.
- Before interviewing respondents in the survey, the interviewers explained in detail the objectives and expectations, followed by the completion of an informal consent done orally in local languages.
- Interviewees were advised that they could stop the interview at any time or skip a question if they were not comfortable answering it.
- All the interviews were conducted in a private place without the presence of any local authorities for confidentiality.
- Personal details only included gender, age, religion, occupation and household demography. These were immediately uploaded in the website which is only accessible to the CA M&E Coordinator, who will ensure compliance with personal data.
- All the interviewers followed the rules of keeping study information confidential.
- Team members were trained to be a respectful and friendly when interacting with local inhabitants and authorities.

2.7 Limitations

Time lag between baseline and endline survey: The baseline survey for this project was conducted at the end of April 2015 (data collection) which was almost 3 months into project implementation, while data collection for the endline survey was carried out in July. This short duration period between the baseline and endline surveys has significantly contributed to the closeness of the findings in both surveys and therefore minimal changes in several indicators. Additionally, the level of knowledge, attitudes and practice relating to EVD as a result of many NGOs, was already quite high when the project started because Ebola had broken out the previous year and interventions were already underway at district and national level by the time the project started and quite advanced by the time the baseline study was carried out.

⁸ This is a new chiefdom for the project and was replaced by Tambaka chiefdom in the endline survey.

Volume of assistance in project locations and control areas: The EVD outbreak had severe impacts including loss of human lives and suffering as well as wider security, economic and livelihood consequences. As a result, there was huge support (at least before the start of the project) to end the outbreak. Consequently many agencies were already delivering similar interventions (social mobilization, provision of food and NFIs and stigma reduction). In particular, Christian Aid (CA) provided similar support in Bo with support from the START FUND and CA humanitarian fund. In addition, our DFID funded project, ENCISS also carried out Ebola work from around Nov 2014 – Jan 2015 on contact tracing, awareness raising and psycho-social support.

USAID/OFDA also provided funding to various agencies including United States Centre for Disease Control (CDC), International medical Coupes (IMC) and Partners in Health (HIP). CA and partners have been actively involved coordination mechanisms at district and national levels, to minimize duplication of interventions and share relevant information from the field. Despite this coordination, it is hard to find major differences in the project and control locations and difficult to attribute positive change to this project alone.

Difficulties with ensuring continuing in survey samples: The methodology for the baseline and endline surveys, the sample size and type and project locations and control areas were intended to be the same. However, respondents for both surveys might have not been the same as a result of the random sampling approach employed to administer the survey instruments. This may have an influence on the responses provided and therefore does not make the comparisons 100% reliable.

Reliability of responses: There are medical evidences of health side effects among EVD survivors, which may include memory problems. This may be a challenge in terms of the accuracy of responses from survivors to some questions particularly relating to time/period⁹.

Difficulties to reach survivors: Despite the fact that the enumerators visited all locations to identify respondents, based on the survivor lists obtained from partners and provided by MSWGCA, it was difficult to reach survivors. This was mainly due to migration of survivors due to a fear of stigmatisation and economic reasons. Enumerators had to effectively search for other survivors on the list, including making further visits and reaching them in their farms or work place.

Resistance to surveys: As in the baseline survey, respondents expressed their frustration over the many surveys administered by various organisations which they had participated in, with little follow up action or feedback once the data had been collected. This challenge was tactfully managed by the enumerators through precise explanation of the purpose of the exercise. Making provision for feedback sessions to communities would be useful to mitigate the respondents' frustration in the future.

Change of intervention and survey districts: Due to a request from DHMTs and DERCS in Bombali and Kambia, project locations were changed by either adding new chiefdoms or relocating the project to a new chiefdom. The baseline survey was not conducted in the additional chiefdoms and for the endline survey, only Kapi Masabung Chiefdom in Bombali district was included in the endline survey. There are therefore no baseline data for these new chiefdoms.

⁹ For example stigma survey: Q31. How long ago did you have Ebola?

3. Survey Findings

3.1 Socio-Demographic Profile of Survey Respondents and Households

KAP Survey: Socio-Demographic Profile of Survey Respondents

A total of 425 KAP survey interviews (385 in project locations and 40 in the control), were completed in the four operational districts of the project. 55.8% (237) of the respondents were male and 44.2% (188) female. There are variations between districts and chiefdoms, in terms of age, religion and occupation. The demography and distribution of the respondents are described in table 6 below.

Table 6: KAP Survey respondent profile by gender, age, religion, and occupation

Profile		Bo (n=121)	Bombali (n=91)	Kambia (n=85)	Tonkolili (n=128)	Total	%
gender	man	63	52	51	71	237	55.8
	woman	58	39	34	57	188	44.2
age	6-17	9	10	1	6	26	6.1
	18-50	79	67	67	100	313	73.6
	51-65	30	12	16	19	77	18.1
	65+	3	2	1	3	9	2.1
religion	Christian	69	44	9	45	167	39.3
	Muslim	52	47	76	79	254	59.8
	traditional				4	4	0.9
occupation	Big Business	4	4	1	1	10	2.4
	Community Health Volunteer	1	3	1	3	8	1.9
	Farmer	56	40	46	65	207	48.7
	Fishing	2	2	5	4	13	3.1
	Health Worker	1	3		5	9	2.1
	other	20	10	7	7	44	10.4
	Petty Trader	19	15	11	34	79	18.6
	Religious Leader	2	7	3	4	16	3.8
	Teacher	16	7	11	5	39	9.2

KAP Survey: Demographic Profile of Households

Total household population for the KAP survey was 5,520 people (2,799 M and 2,271 F). 33% (1,819) of household members are found to be within age 18 and 50, 895 male and 924 female. Table 7 below describes household demography for the KAP survey.

Table 7: KAP survey household demography

District	0to5		6to17		18to50		51to64		65+		Total
	M	F	M	F	M	F	M	F	M	F	
Bo	107	118	205	145	180	181	67	79	17	24	1,123
Bombali	84	92	118	119	140	195	57	48	14	14	881
Kambia	109	108	161	142	162	157	62	49	13	11	974
Tonkolili	277	334	430	340	413	391	133	128	50	46	2,542
Total	577	652	914	746	895						

Stigma Survey: Socia-Demographic Profile of Survey Respondents

A total of 240 (200 in project locations and 40 in the control) stigma survey interviews were completed in the four operational district of the project. 40.8% (98) of the respondents were male and 59.2% (142) were female. There are variations between districts and chiefdoms, in terms of age, religion and occupation. The demography and distribution of the respondents are described in the table 8 below.

Table 8: Stigma Survey respondent profile by gender, age, religion, and occupation

Profile		Bo (n=67)	Bombali (n=53)	Kambia (n=49)	Tonkolili (n=71)	Total	%
gender	man	23	24	24	27	98	40.8
	woman	44	29	25	44	142	59.2
age	6-17	12	11	12	16	51	21.25
	18-50	47	35	37	51	170	70.8
	51-65	8	7		3	18	7.5

	65+					1	1	0.4
religion	Christian	25	16	8	18	67	27.9	
	Muslim	42	37	41	53	173	72.1	
occupation	Big Business		1			1	0.4	
	Community Health Volunteer		2	1		3	1.3	
	Farmer	33	22	12	29	96	40.0	
	Fishing			5	1	6	2.5	
	health Worker	2	1	4	1	8	3.3	
	Other	9	9	15	16	49	20.4	
	Petty Trader	21	13	10	23	67	27.9	
	Religious Leader		2		1	3	1.3	
Teacher	2	3	2		7	2.9		

Stigma Survey: Demographic Profile of Households

In the stigma survey, total household population was 2,365 with 576 males and 547 females. There are variations in the household demography between district, gender and age. Table 9 below describes household demography for the stigma survey.

Table 9: Stigma survey household demography

District	0to5		6to17		18to50		51to64		65+		Total
	M	F	M	F	M	F	M	F	M	F	
Bo	99	65	111	91	81	107	29	52	15	16	666
Bombali	71	62	116	118	110	127	50	51	10	8	723
Kambia	44	36	74	51	67	90	26	21	5	3	417
Tonkolili	73	64	81	101	79	90	23	30	9	9	559
Grand Total	287	227	382	361	337	414	128	154	39	36	2,365

3.2 Analysis of findings per objective and indicator

3.2.1. Objective 1: Mobilise communities to effectively prevent and treat EVD

3.2.1.1. Changes in incidence and prevalence in the target areas

The rate of occurrence of EVD depends on many factors including capacity to respond to the outbreak and behaviour change through social mobilization. Although the capacity to respond to the outbreak improved through local and international support prior to this project, the incidence and prevalence of the virus was still high in Sierra Leone, justifying an intervention. Social mobilization for improved community actions and behavioural change was the main objective of this project aimed at achieving a resilient zero.

EVD Incidence 1 month before survey

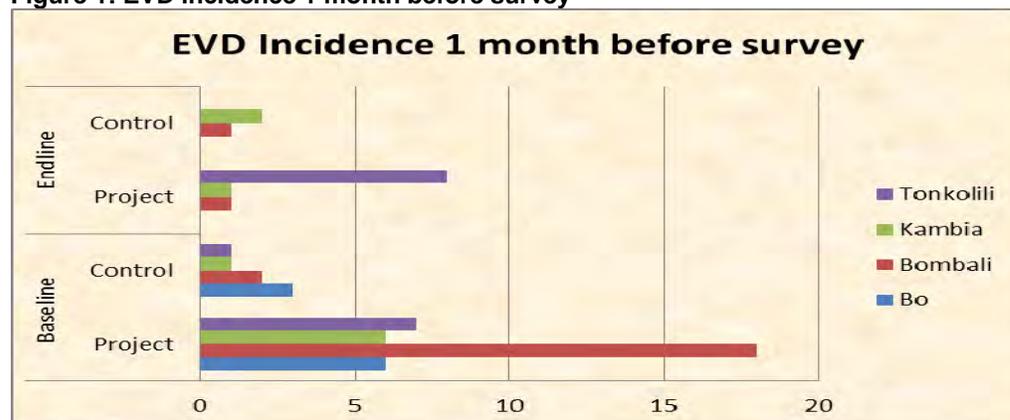
By the time the endline survey was carried out, EVD incidence in the target areas was relatively low. 37 out of 200 respondents (stigma survey) in the project locations reported having EVD one month before baseline survey. Distribution of EVD incidence from the baseline are; 6 Bo, 18 Bombali, 6 Kambia and 7 Tonkolili. In the baseline control locations 7 incidence were reported; 3 Bo, 2 Bombali, 1 Kambia and 1 Tonkolili. The incidence among men was 14 (38%) and women 23 (62%), indicating a higher incidence among women than men.

This endline survey shows that there was a low incidence of EVD in the target areas. This survey also found that only a total of 10 respondents had EVD one month before the survey in the project areas. The majority of this was in Tonkolili district (8), while in Bombali and Kambia districts only 1 respondent had the disease during this period and there were no cases in Bo. The high incidence of EVD in Tonkolili district from the endline survey is connected to the activities of traditional healers, who in many cases recommend home treatment instead of earlier early referral. To complement this project, CASL has working with traditional healers in Bombali, Kambia and Tonkolili; aimed at actively engaging traditional healers in EVD response actions. (The information here refers to one month before the survey) In the control locations, 3 respondents had EVD during the period, Bombali (1) and Kambia (2). The incidence among men was 2 in the project location and 2 in the control and among

women 8 in the project location and 1 in the control. Women and girls normally play a caring role in households and this is likely the main reason for the high EVD incidence among female household members.

The survey found that the incidence of EVD in project locations had reduced by 73% between the baseline and the endline survey, from 37 (14 M and 23 F) in the baseline to 10 (2 M and 8 F) in the endline, while in the control locations it had reduced from 7 (4M and 3 F) in the baseline to 3 (2 M and 1 F). Figure 1 describes the incidence of EVD 1 month before the baseline and the endline surveys as reported by respondents.

Figure 1: EVD incidence 1 month before survey



Immediate family members infected with EVD

From the baseline survey; 29% respondents in project locations, 113 (64 M and 49 F) have an immediate family member being infected with EVD in the project locations and 38% (5 M and 10 F, out of 40) respondents have immediate family members being infected with EVD in the control locations. Cumulative number of immediate family members infected were; 438 in the project locations (154 adult men, 172 adult women, 56 male children and 56 female children and in the control locations 60 (24 adult men, 14 adult women, 12 male children and 10 female children). The endline survey findings indicate that 27% (49 M and 56 F, out of 385) respondents in project locations and 15% respondents in control locations, 6 (3 M and 3 F) reported family immediate family members infected with EVD. A total of 269 were reported to have been infected in the project location; 50 adult men, 97 adult women, 70 male children, 52 female children and 31 in the control location; 17 Adult men, 9 adult women, 3 male children and 2 female children. Table 10 provides details about respondents' immediate family members infected with EVD.

Table 10: Immediate family members infected with EVD by age and district

Infected Immediate Family	Location	BASELINE					ENDLINE				
		Bo	Bombali	Kambia	Tonkolili	Total	Bo	Bombali	Kambia	Tonkolili	Total
Adult Male	Control	0	10	0	14	24	1	8	7	1	17
	Project	31	42	6	75	154	5	23	10	12	50
	Adult Male Total	31	52	6	89	178	6	31	17	13	67
Adult Female	Control	0	5	1	8	14	1	3	4	1	9
	Project	23	58	6	85	172	10	30	7	50	97
	Adult Female Total	23	63	7	93	186	11	33	11	51	106
Male Children	Control	2	3	0	7	12	0	3	0	0	3
	Project	8	28	2	18	56	8	14	1	47	70
	Male Children Total	10	31	2	25	68	8	17	1	47	73
Female Children	Control	2	5	0	3	10	0	2	0	0	2
	Project	8	28	2	18	56	9	5	2	36	52
	Female Children Total	10	33	2	21	66	9	7	2	36	54
Grand Total	74	179	17	228	498	34	88	31	147	300	

EVD Death in Households

The baseline findings show that 22% (45 M and 40 F) respondents in the project location and 13% (2 M and 3 F) in the control locations reported they had lost family members to EVD. Cumulative number

of 337 household EVD deaths in the project locations; 121 adult men, 118 adult women, 56 male children and 42 female children. Findings from the endline survey indicate that 25% (45 M and 40 F) respondents in project locations, and 25% (2 M and 3 F) respondents in control locations, have immediate family members that have died of EVD. A total of 168 deaths were reported in project locations; 30 Adult men, 51 Adult female, 48 male children, 39 female children and 46 deaths in control locations; 3 Adult men, 4 Adult female, 0 male children and 2 female children. Table 11 describes EVD deaths in households.

Table 11: EVD death in households

EVD death in households	Location	BASELINE					ENDLINE				
		Bo	Bombali	Kambia	Tonkolili	Total	Bo	Bombali	Kambia	Tonkolili	Total
Adult Male	Control	0	6	0	14	20	1	1		1	3
	Project	28	30	3	60	121	2	15	8	5	30
	Adult Male Total	28	36	3	74	141	3	16	8	6	33
Adult Female	Control	0	3	0	11	14	0	3	1	1	5
	Project	21	39	1	57	118	6	11	3	31	51
	Adult Female Total	21	42	1	68	132	6	14	4	32	56
Male Children	Control	0	1	0	7	8					0
	Project	10	27	1	18	56	9	8	0	31	48
	Male Children Total	10	28	1	25	64	9	8	0	31	48
Female Children	Control	1	2	0	6	9		2			2
	Project	7	7	4	24	42	12	7	1	19	39
	Female Children Total	8	9	4	30	51	12	9	1	19	41
Grand Total	67	115	9	197	388	30	47	13	88	178	

3.2.1.2. Utilising Targeted Health Education Messages

The household population for the endline KAP survey was 5,520 people (2,799 M and 2,271 F) for 425 respondents, and stigma survey total household population was 2,365 with 576 males and 547 females, for 240 respondents. In total 7,885 household members were recorded from the endline survey. Essential messages shared with communities during awareness raising included knowledge about EVD, case definition, symptoms and mode of EVD transmission, EVD prevention and control. Utilization of essential messages which were mainly received by respondents through sensitizations by CHWs was found to be effective among respondents and can be the same for the 7,885 survey household population.

Essential Messages

Knowledge about EVD

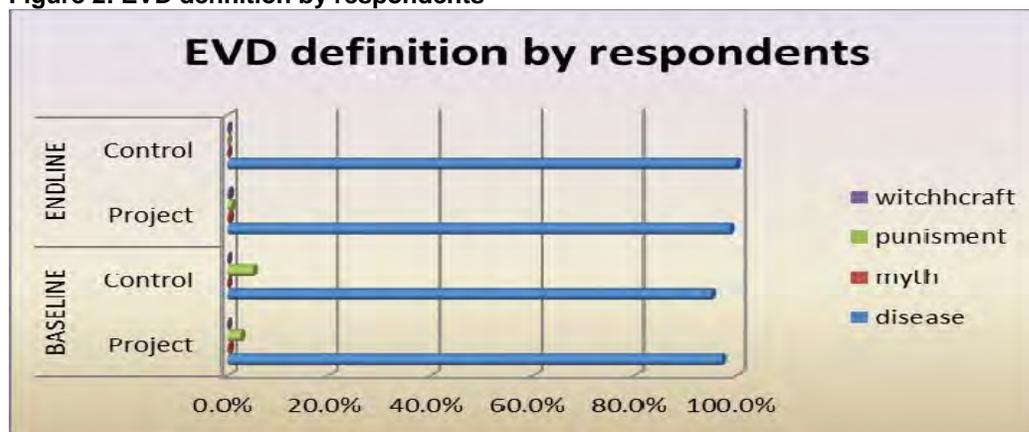
From the baseline findings, all but one respondent (project location) in Kambia had heard of the Ebola; indicating some gaps in knowledge prevailed at that time and required attention during project implementation. Endline findings show that Knowledge about EVD was 100% among respondents in both project and control locations. This is positive sign in the fight against EVD and an indication of the effectiveness of this project. Adequate knowledge about EVD contributes to reducing misconceptions and also improved behaviour change, which is a major factor in ending the outbreak.

Case definition

The understanding of EVD as a disease was high in the baseline, with only 3 female respondents considering EVD as myth (2 in project locations) and punishment from God (1 from control locations). This misconception could contribute to increase level of disbelief in communities, and consequently result into non adherence in the control of the disease. From the endline survey, the understanding of EVD as a disease is highly demonstrated by respondents; 98.7% and 100% in the project and control locations respectively. Additionally all respondents in Bo (111) and Kambia (85) in both project and control locations correctly defined EVD as a disease. Notwithstanding the correct understanding of EVD, there are some respondents who reported that EVD is myth/does not exist (Bombali 1), punishment from God (Bombali 2 & Tonkolili 1) and witchcraft (Tonkolili 1).

The project has contributed to maintaining correct definition of EVD as a disease in target communities. This achievement can translate into positive behaviour and actions required to end the outbreak and also reducing stigma and discriminative actions against affected person especially survivors.

Figure 2: EVD definition by respondents



Symptoms

Symptoms of EVD include; sudden onset of fever, fatigue, muscle pain, headache and sore throat. This is followed by vomiting, diarrhoea, rash, symptoms of impaired kidney and liver function, and in some cases, both internal and external bleeding (e.g. oozing from the gums, blood in the stools)¹⁰. All respondents in both project location and control communities were able to identify at least one main symptom. Among the 385 respondents scoped in the project communities, 14% of them named three symptoms of the EVD correctly – fever, diarrhoea and vomiting; and approximately 5% named five symptoms including fever, diarrhoea, vomiting, and joint pain and bleeding. In the control communities, only 8% named fever, diarrhoea and vomiting which is far less than the percentage from the project location. None of the respondents in the control community named nine symptoms; and 10% identified five symptoms.

From endline findings, EVD symptoms identified by respondents in the project location include: fever, diarrhoea, vomiting and weakness 63.6% (Bo 101, Bombali 43, Kambia 48 and Tonkolili 51) and fever, diarrhoea, joint pain 12.3% (Bo 5, Bombali 8, Kambia 12, and Tonkolili 22). In the control locations symptoms identified by respondents include: fever, bleeding, joint Pain 33% (Bo 3, Bombali 2, Kambia 3, and Tonkolili 5); fever, diarrhoea vomiting collapse 23% (Bo 3, Bombali 2, Kambia 3 and Tonkolili 1) and fever, diarrhoea, vomiting, rash 15%(Bo 1, Bombali 3 and Kambia 2). Sudden onset of fever is a major symptom of EVD and 100% of the respondents in both project and control locations indicated this.

In project target communities, there is a significant increase in the correct identification of EVD symptoms (from 14% baseline to 63.6% endline) demonstrating effective understating and utilization of essential messages delivered by CHWs. By the end of the project, target communities are therefore better position to promptly referral EVD cases to health facilities compared to the period prior to implementation.

Mode of Transmission

Ebola spreads through human-to-human transmission via direct contact (through broken skin or mucous membranes) with the blood, secretions, organs or other bodily fluids of infected people, and with surfaces and materials (e.g. bedding, clothing) contaminated with these fluids.

Baseline findings show that in the project communities, more women than men showed greater unawareness of the correct mode of EVD human-to-human transmission which is contact with bodily fluids; 2 out of 196 male respondents and 5 out of 189 women respondents. Touching the fluid of an infected person was identified as the most popular by equal number of male and female respondents of 97 each. *This mode of transmission was echoed in almost all FGDs held in almost every community in the project four districts.* Together with fluids, unprotected sex with an infected person was the next most popular mode of transmission identified by both male and female respondents – male 59 and female 49. Again, this was confirmed by the many FGDs in project locations.

Findings from the endline survey show that 100% of respondents in both project and control locations stated the correct mode of EVD human-to-human transmission which is bodily fluids. In the project

¹⁰ [WHO EVD fact sheet N°103-updated August 2015](#)

locations, 47.3% mentioned fluid only, 40.3% fluid & unprotected sex, 6.8% fluid & injectable, and 4.2% fluids/witchcraft/injected/unprotected sex. *Ebola spread in this community as a result of care people were giving to their infected loved ones almost all those who fall sick died of EVD. (FGD, adult woman - Tikonko chiefdom, Bo District).*

Through this intervention, there has been an increase in communities' understanding about the correct mode of EVD transmission. Effectively practicing this knowledge will limit new EVD chains of transmission as community members will deviate from contacting a bodily fluid which is mostly as a result of caring for the sick and ensure early referral that does not only break the chain of transmission but also increase the chance of surviving EVD.

Prevention of Ebola Virus Disease

Good outbreak prevention relies on the effective application of preventive actions. Respondents for the baseline in both project and control communities, reported hand washing as the most appropriate means of preventing someone from contracting EVD; 64% (121 M and 125 F) and 73% (13 M and 16 F) respectively in the project and control locations. In concurrency with this prevention method, not touching others or touching corpses of infected persons was identified as the second best means of preventing EVD; 23% (46 M and 43 F) and 23% (2 M and 3 F).

Findings from the endline show that respondents are correctly utilizing key messages, evidenced by applying correct preventive actions. The main preventive actions indicated by respondents in the project location include, hand washing 75% (162 M and 125 F) as their best means of prevention, followed by no contact with people 16% (34 M and 29 F). In the control locations, respondents indicated; hand washing 83% (17 M and 16 F) and no contact with people 13% (2 m and 3 F) as their main preventive actions. EVD prevention also requires careful handling of dead bodies, and respondents in this survey also indicated that not touching dead bodies is a main preventative action; 7.8% and 2.5% in project and control locations respectively.

The benefit of practicing the preventative measures we have learnt from CHWs is that there is a break in the transmission rate of the virus. The community has not experienced a suspected Ebola case for a very long time and we hope we will not have a case again. (FGD, adult woman - Tane chiefdom, Tonkolili District)

Table 12: Main EVD preventive actions

Main preventive actions	Location	BASELINE						ENDLINE					
		Bo	Bombali	Kambia	Tonkolili	Total	%	Bo	Bombali	Kambia	Tonkolili	Total	%
grace	Project	1				1	0.3				2	2	0.5
Hand Washing		69	48	52	77	246	63.9	79	47	65	96	287	74.5
Not Touching Corpses		21	12	8	4	45	11.7	10	15	2	3	30	7.8
Not Touching People		20	20	14	35	89	23.1	22	18	6	17	63	16.4
other				1	1	2	0.5		1	2		3	0.8
Protective Clothing			1			1	0.5					0	0.0
Grand Total		111	81	75	118	385	100.0	111	81	75	118	385	100
grace	Control					0	0	1				1	2.5
Hand Washing		7	6	10	6	29	72.5	9	6	10	8	33	82.5
Not Touching Corpses			1			1	2.5		1			1	2.5
Not Touching People		3	3		3	9	22.5		3		2	5	12.5
other					1	1	2.5					0	0
Protective Clothing						0	0					0	0
Grand total		10	10	10	10	40	100	10	10	10	10	40	100

Control of Ebola Virus Disease

Breaking the EVD chain of transmission relies on applying a package of interventions including; earlier identification of cases through surveillance and contact tracing, isolation and treatment of infected persons and safe burial. Baseline findings indicate that 95% (190 M and 175 F) and 90% (14 M and 22 F) of the respondents in the project and control locations respective, agreed that the person should go to a hospital, followed by no contact with people 3% (3 M and 10 F) and 5% (1 M and 1 F).

Taking the person to a hospital would understandably involve calling 117 or health personnel. Despite this high response, some respondents in the project locations mentioned two worrying options: two female respondents said the person should stay at home, one each from Kambia and Bombali districts, and one male respondent from Bo and one female from Bombali districts said the person should see a witch doctor.

The main control actions reported by respondents in project locations include; call 117 or visit hospital 97% (209 M and 163 F) and 3% (6 M and 4 F) and in the control locations; call 117 or visit hospital 97.5% (19 M and 20 F). Misconceptions of EVD at the start of the outbreak largely contributed to the spread as a result of self-treatment or staying at home and visiting witch doctors. The findings also show that none of the respondents reported that they will stay at home if infected and only 1 reported visiting the witch doctor (Tonkolili).

To control the spread of Ebola in this community, we are engaged in regular hand washing and sick cases are immediately reported to the health centre. (FGD, Local Authority - Mambolo chiefdom, Kambia District).

Table 13: Main EVD Control actions

Main Control actions	Location	BASELINE						ENDLINE					
		Bo	Bombali	Kambia	Tonkolili	Total	%	Bo	Bombali	Kambia	Tonkolili	Total	%
No contact with person	Project	2	4	1	6	13	3.4	1	5	1	3	10	2.6
Call 117/ visit hospital		108	74	73	110	365	94.8	110	75	73	114	372	96.6
Stay At Home		1	1	1	1	4	1.0					0	0.0
witchdoctor			2			2	0.5				1	1	0.3
other						1	0.3		1	1		2	0.5
Grand Total		111	81	75	118	385	100.0	111	81	75	118	385	100
No contact with person	Control	1		1		2	5		1			1	2.5
Call 117/ visit hospital		9	10	9	8	36	90	10	9	10	10	39	97.5
other						0	0					0	0
Grand total		10	10	10	8	38	95	10	10	10	10	40	100

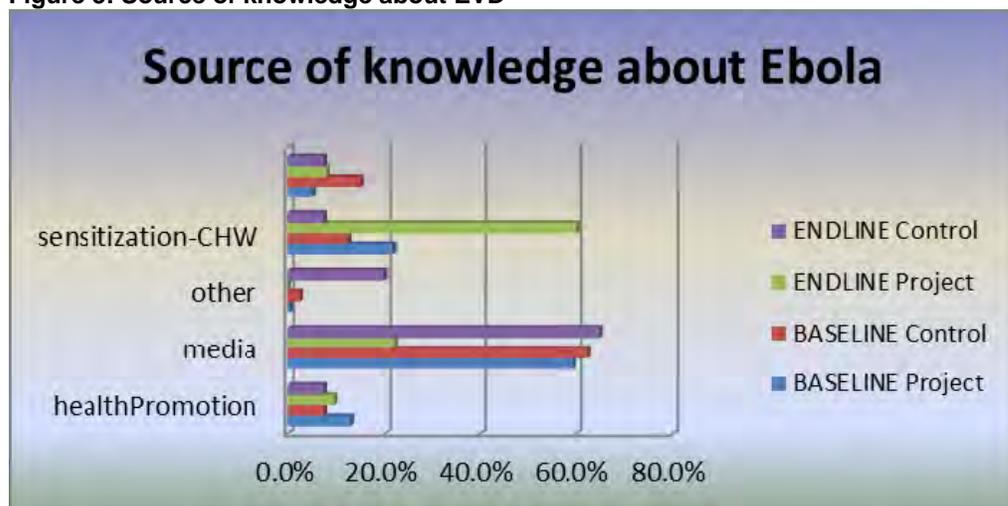
3.2.1.3. Source of Knowledge about EVD

From the baseline survey 25% and 36% of male and female respectively in the project communities selected the media as the main source of information. A similar pattern, 33% of male and 27% women in control communities identified the media as the key source of information. The role of Community Health Workers (CHW) and health promotion messages by Peripheral Health Unit (PHUs) personnel were also recognized as the second and third popular source of information by male and female respondents in communities in project locations and control locations. The information is useful in identifying the choice of transfer of information in project communities for awareness raising interventions.

The high rate of knowledge and understanding about EVD indicated by respondents in the endline survey can be as a result of awareness raising activities. The findings show that 60.3% (131 male & 101 female) and 20% (5 male & 3 female) respondents in the project and control locations respectively, reported that the source of knowledge about EVD was through sensitizations by CHWs. In Sierra Leone media plays a great role in raising awareness about relevant issues. 22.1% and 65% in project and control locations respectively learnt about EVD from the media.

Although media plays a key role in disseminating information in Sierra Leone, there is greater effectiveness in engaging community members to serve as agents of change. This is due to the fact community members are fully knowledgeable about their problems and are better positioned to bring about change. The involvement of CHWs in this intervention contributed to positive change in knowledge, attitude and practice in target communities.

Figure 3: Source of knowledge about EVD



3.2.2. Objective 2: Mobilise communities to support Ebola survivors and their families

Families directly affected by Ebola are not only stigmatized when survivors return to their communities but they also face significant psychological trauma, which is further compounded by the loss of essential household items, including mattresses, bedding, cooking equipment etc. To address this, the project provided psychosocial support and counselling in order to build their coping mechanisms and assist their reintegration into society.

3.2.2.1. Perceived Levels of Stigma towards and Discrimination against Ebola Survivors

Lack of psychosocial support and trauma counselling for Ebola survivors and families affected by EVD have been a challenge in the EVD crisis. Through this project communities were supported for reintegration of survivors and reduction of EVD related stigma through awareness raising by CHWs and psychosocial support by religious leaders.

Experience of stigma and discriminative actions against survivors

Survivors experience of stigma and discriminative actions from the baseline were as follows; 69% (62 M and 76 F) reported no experience of people not wanting to talk to them and 69.5% (66 M and 73 F) in the project locations and 62.5% (7 M and 18 F) reported no experience of people not wanting to talk to them and 70% (7 M and 21 F) in the control locations. From the endline survey, 82.5% (73 M and 92 F) of respondents reported no experience of people not wanting to talk to them in the project location and 70% (M and F) in the control, while 84.5% (75 M and F 92) and 70% (13 M and 15 F) in the project and control locations respectively reported no experience people not wanting to touch them were. Comparing the two surveys, experience of stigma and discriminative actions against survivors were found to be low among respondents.

Misconceptions about what is EVD largely contributes to stigma and discriminative actions against survivors. Relating to survivors by family and community members also depends on their understanding of what is EVD; if people believe it is caused by witchcraft; survivors will be treated as witches and wizards, which may expand stigma levels. The survey found that only 1 respondent (Tonkolili) wrongly defined EVD as witchcraft. This is indicative that there is almost no existence of stigma and discriminative actions against survivors in the target areas.

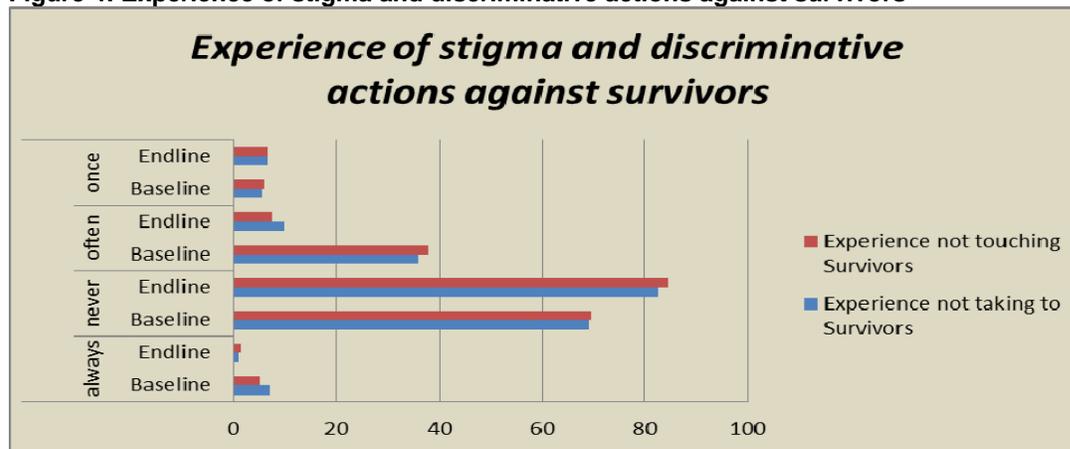
The reintegration of survivors into their homes, communities and workplaces/schools has been an issue across the country. Government officials from MoHS and MSWGCA and local authorities as well as NGOs have been playing a leading role in the reintegration of survivors. Findings indicate high levels of agreement on the reintegration of survivors, 98% (210 M and 166 F) and 95% (19 M and 19 F) in the project and control locations respectively agreed that survivors should be allowed to return to their homes, 96% (206 M and 165 F) and 98% (20 M and 19 F) in the project and control locations respectively agreed that survivors should be allowed to return to their jobs or school. From the baseline, 95% of respondents in project community affirmed survivors should be allowed to return to their homes. Comparing the baseline and endline, there is some level of improvement in communities' agreement on the reintegration of survivors.

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Respondents' feedback on whether people talk badly about people who have had, or are thought to have had Ebola indicates that over half of the respondents did not agree; 70% (148 M and 122 F) and 80% (16 M and 16 F) in project and control locations respectively. The baseline findings indicates that 42% male and 47% female respondents in project areas agreed that people talk badly about Ebola infected persons. In the control communities more male respondents, 60% compared to 36% female respondents, said people talked badly about Ebola infected persons. This clearly shows that apart from survey respondents' positive attitude towards survivors, almost all community members are also positively relating to survivors. In all 36 FGDs conducted, respondents strongly stated that community members are no longer doing stigma and discriminative actions against survivors.

High stigma at household and community level affects the free movement of survivors. Project baseline indicates that only 41% (82 of the 200 survivors) were very confident to leave their homes, 72 were confident, 20 were very nervous and another 24 quite nervous in project location, reiterating the fact that stigmatization against survivors existed in target communities. The endline survey, feedback from respondents on their confidence to leave their homes indicates that 63.5% (127 of the 200 survivors) and 42.5% (17) in the project and control locations respectively reported being very confidence to leave their homes. Additionally, very few respondents reported being quite nervous (10%) and very nervous (6%) to leave their homes. There is a strong evidence of reduced stigma demonstrated by the free movement of survivors, which can allow them find livelihood and seek health needs.

Figure 4: Experience of stigma and discriminative actions against survivors



Before this time, most community people were discriminating against us in this community but we are now saying thanks to God as we are now treated as one and we are invited to community issues. (FGD, Survivor - Bombali Shebora chiefdom, Bombali district)

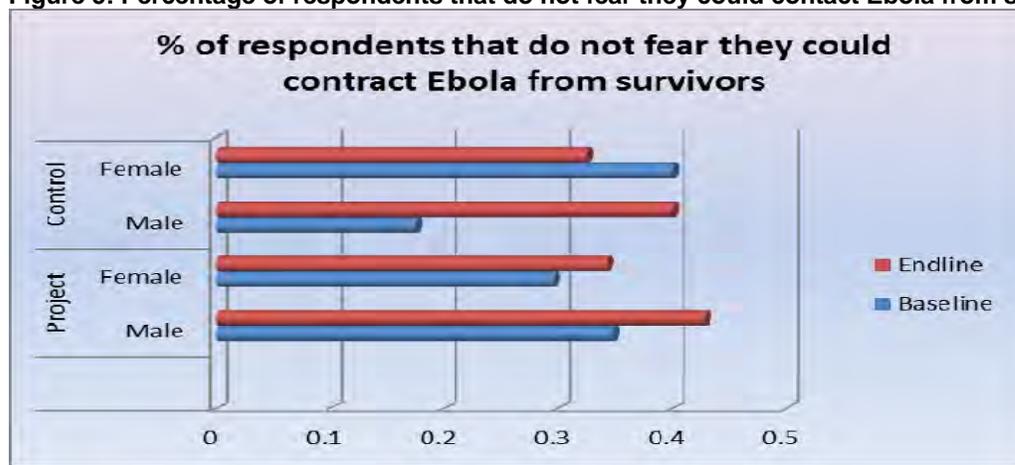
Fear of contacting EVD from survivors

The fear of contracting EVD from survivors often leads to stigma and discriminatory actions against EVD survivor. From the baseline, 68% - 47% male and 60-64% female respondents in project and control districts respectively thought they could not contract Ebola from survivors. Endline findings indicate that majority of the respondents don't fear of contracting EVD from survivors; project location

77.2% (165 M and 132 F) and control location 73% (16 m and 13 F). Fear from contacting EVD from survivors reduced by over 10%, indicating that there is high level of correct understanding about EVD transmission. This also significantly contributes to maintaining a positive relationship with survivors and providing support at household and community levels.

The fear of contracting EVD from survivors often leads to stigma and discriminatory actions against EVD survivor. From the baseline, 68% and 60% respondents in project and control districts respectively thought they could not contract Ebola from survivors. Endline findings indicate that 77.2% of respondents in project locations (165 M and 132 F) and 73% in the control locations (16m and 13f) do not have fear of contracting EVD from survivors. Fear of contacting EVD from survivors has therefore reduced by almost 10%, indicating that there is high level of correct understanding about EVD transmission and that even despite the short time delay between the endline and the baseline surveys, the work of those involved in reducing stigma had a high impact. This also significantly contributes to maintaining a positive relationship with survivors and providing support at household and community levels.

Figure 5: Percentage of respondents that do not fear they could contact Ebola from survivors



Perception on Survival of Infected Persons

The average EVD case fatality rate (number of deaths over total number of EVD confirmed cases) is around 50%. Case fatality rates have varied from 25% to 90% in past outbreaks¹¹. These are the factors for reducing fatality and ending the outbreak.

From the baseline 93% male respondents and 89% female respondents in project locations responded that someone infected with EVD could survive. The endline indicates that 97% of respondents in the project locations (204 M and 168F) and 98% in the control locations (19M and 20 F) now believe that an infected person can survive EVD. The reasons for surviving the EVD as stated by the respondents are health care (project 78.7% and control 82.5%) and earlier realization or acceptance (project 11.4% and control 10%). The project has achieved an improvement in the perception of community members on the survivor of an infected person surviving the disease thus contributing to the degree of acceptance, earlier realization and health care.

Practical/personal actions towards survivors

Where there are misconceptions and fear, freely talking to survivors and above all hugging them is difficult to practice. The baseline findings indicated that; 90% (179 M and 170 F) and 93% (13 M and 24 F) respondents in the project and control locations respectively, reported that they will freely talk to survivors, while 50% (102 M and 90 F) and 38% (7 M and 8 F) respondents stated they will hug survivors. Findings show that respondents in the KAP survey are demonstrating positive actions towards survivors; 98% (209 M and 165 F) respondents in the project and 98% (20 M and 19 F) in the control locations stated that they will free talk to survivors in the street. Furthermore, 63% (136 M and 106 F) respondents in the project and 58% (11 M and 12 F) in the control locations stated that they

¹¹ [WHO EVD fact sheet N°103-updated August 2015](#)

will hug survivors, which is a strong evidence that stigma has significantly reduced in target communities.

3.2.2.2. Support from Religious Leaders

Religion plays an important role in the lives of Sierra Leoneans where the majority are practicing believers and religious leaders enjoy significant trust and respect. Although the involvement of religious leaders in the EVD response started late, they have played a transformational role aimed at ending the outbreak. They have used religious texts to interpret essential health messages on knowledge, prevention and control. On this background, this project included religious leaders to serve as agents of change in their respective locations. Christian Aid has been working with religious leaders since December 2014 in all 14 districts of Sierra Leone, through its partner Council of Churches in Sierra Leone (CCSL).

Number of individuals who have actually received support from religious leaders

Emotional Support from Religious Leaders

The baseline of this project found that 88% (78 M and 97 F) and 85% (10 M and 24 F) in project and control locations reported having received emotional support from religious leaders. In the endline survey 89% (73 M and 105 F) in the project location and 90% (14 M and 22 F) reported receiving emotional support from religious leaders. More women received support from religious leaders and this might be as a result of their beliefs and actual religious practices.

The project therefore only achieved a slight change (difference of 1%, out of 200 survivors), in the numbers of survivors receiving emotional support from religious leaders.

Comparing the endline data to the entire population of target beneficiaries, this may have a positive effect on target communities, as messages relating to support to survivors provided by religious leaders targeted community members in general.

Figure 6: Percentage of survivors who received support from religious leaders



Participation in religious activities

To determine the participation of survivors in religious activities, respondents in the stigma survey (200 survivors in project and 40 in control locations), were asked whether they have experienced being excluded from religious activities. Feedback from baseline indicates that 88% (78 M and 98 F) and 62% (9 M and 24 F) in the project and control locations respectively had never been excluded from religious activities. Further responses in the project locations were: exclusion takes places often (5.5%), once (3%) and always (3.5%), (3 M and 4 F). The endline survey shows that 96% (82 M and 109 F) and 70% (13 M and 23 F) respondents in the project and control locations respectively have never experienced exclusion from religious activities. Whilst there was no respondents that reported always being excluded in the project locations, 6 respondents in the control locations reported always being excluded. Only 4 respondents were often excluded and 5 once in the project location while 3 were often excluded and 3 once.

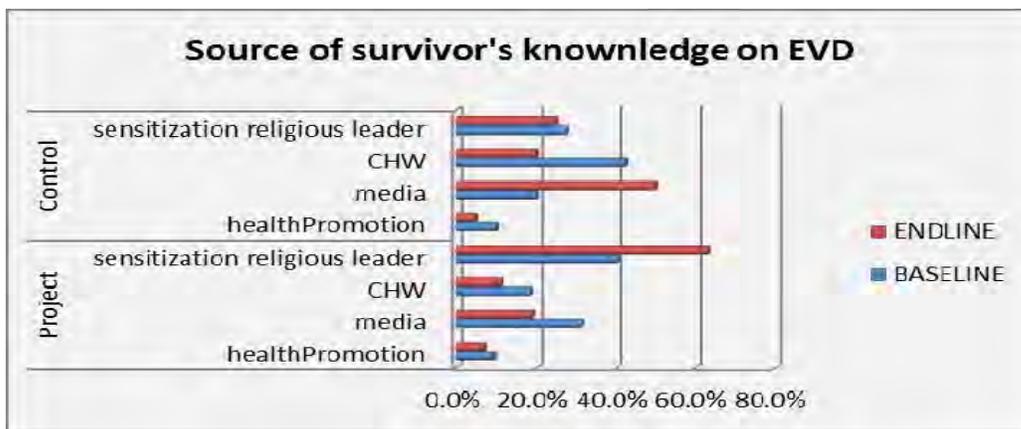
Survey findings show that there is a positive sign of reintegration of survivors including participation into religious activities. Exclusion of survivors from religious activities reduced by 8% indicating that nearly 20 more survivors in the survey had their participation in religious activities restored. The end survey also shows that, no respondent was always being excluded as compared to the baseline in which 7 (5 M and 2 F) reported always being excluded.

Source of survivors’ knowledge about EVD spread

Control of EVD focused on survivors in the country following increased reports of new infections as a result of unprotected sex with survivors. This is a sensitive but very crucial issue that requires a great deal of care. Owing to this background, religious leaders have been playing a major role in providing essential messages about EVD spread focusing on survivors. The baseline of this project shows that in the project 40.5% (32 M and 49 F) survivors received knowledge about EVD spread from religious leaders, while the second main source was the media 31.5% (25 M and 13 F). In the control location however, the main source of knowledge about EVD spread was sensitization by CHWs 42.5% (7 M and 10 F), followed by sensitization by religious leaders 27.5% (5 M and 6 F). The findings from the endline survey indicate that in the project location, 63% (58 M and 68 F) of survivors received EVD knowledge from religious leaders and the second main source was the media 19% (13 M and 25 F). Findings from the endline survey control locations show that 50% (5 M and 15 F) received knowledge through the media, while 25% (6 M and 4 F) received knowledge from religious leaders.

22.5% change was made in the delivery of essential EVD messages including spread of the virus by survivors through the sensitizations made by religious leaders. While the main source of knowledge about EVD spread changed in the control locations (from CHW sensitization in the baseline to media), there was a constant report on the main source of knowledge (religious leaders) in the project locations. This is a strong evidence of sustained effort by all project actors.

Figure 7: Source of survivors’ knowledge on EVD spread



3.2.3. Objective 3: Provide quarantine and survivor households with non-food/essential relief commodities

3.2.3.1. Evidence that essential non-food needs of quarantined and survivor households have been met.

Families directly affected by Ebola are not only stigmatized when survivors return to their communities but they also face significant psychological trauma, which is further compounded by the loss of essential household items, including mattresses, bedding, cooking equipment etc. Survivors and families affected with project locations have been provided with non-food Items (NFIs) in order to build their coping mechanisms and assist their reintegration into society and to quarantine households to prevent families from going outside for essential items.

Immediate needs of survivors

The baseline survey findings indicate that the main immediate needs of survivors were: money, food, clothing and medical attention 28% (25 M and 31 F) followed by money, food and clothing 24.5% (24

M and 25 F) in the project location and in the control location; money, food and clothing 42.5% (3 m and 17 F), followed by money, food, clothing and medical attention 22.5% (6 M and 3 F).

Findings from the endline survey show that the immediate needs of survivors were: in the project location; money, food, clothing and medical attention 28.5% (22 M and 35 F), followed by money, food and clothing and in the control location; money, food, clothing and medical attention 32.5% (6 M and 7 F), followed by money, food and clothing 22.5% (5 M and 4 F).

It is evidenced that the immediate needs of survivors remain unchanged in both project and control locations which was mainly non-food items. This indicates that the project support to survivors was in line with the needs of beneficiaries. Important to note is that 28% of the respondents consider medical attention as an immediate need.

Biggest concerns of survivors

The concerns of survivors appear to be common and mainly focus on livelihood/employment, health needs and housing. Findings from both baseline and endline surveys indicate that the biggest concern for most survivors in project and control locations are; food, clothing and health (9.5% baseline and 9% endline), followed by housing, food, clothing and health (8.5% baseline and 7% endline). In addition, 6.5% (7 M and 6 F) survivors indicated that employment and housing is their biggest concern. Comparing baseline and endline surveys, the project met some of the concerns of survivors which include non-food items.

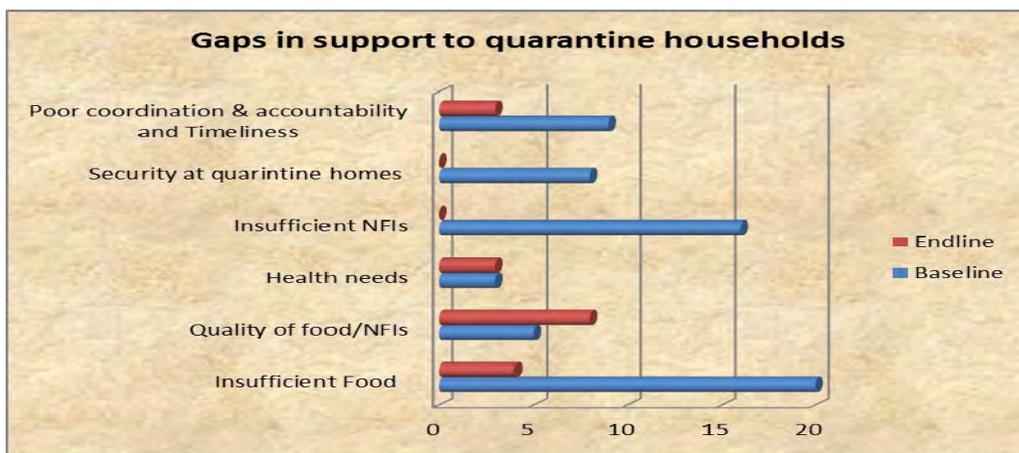
Respondents' satisfaction with support to quarantined households

At baseline stage, 31% of respondents from project locations (30 M and 26 F) and 25% (6 M and 4 F) in control locations reported not being satisfied with support to quarantine households and the endline survey findings show that only 9% (11 M and 7 F) and 5% (1 M and 1 F) reported that quarantine households have not been satisfactorily supported.

From the baseline, identified gaps as reported by respondents include; insufficient food (10%), insufficient NFIs (8%), poor coordination & accountability and timeliness (5%) and insecurity during quarantine (4%). The endline findings show that the lacking support for quarantine households include; quality of food/NFIs (4%), insufficient Food, health needs and poor coordination & accountability. Figure 8 below, describes identified gaps in the support to quarantine households.

There has been a significant improvement (22%) in the level of satisfaction of support to quarantine households, indicating that the project's objective of meeting the immediate needs of quarantine households was achieved. Although all respondents may not have directly received food and essential relief items from this project, the coordination and community engagement processes may have given them a deeper understanding relating to support to quarantine households.

Figure 8: Gaps in support to quarantine households



Respondent's satisfaction with support to survivors

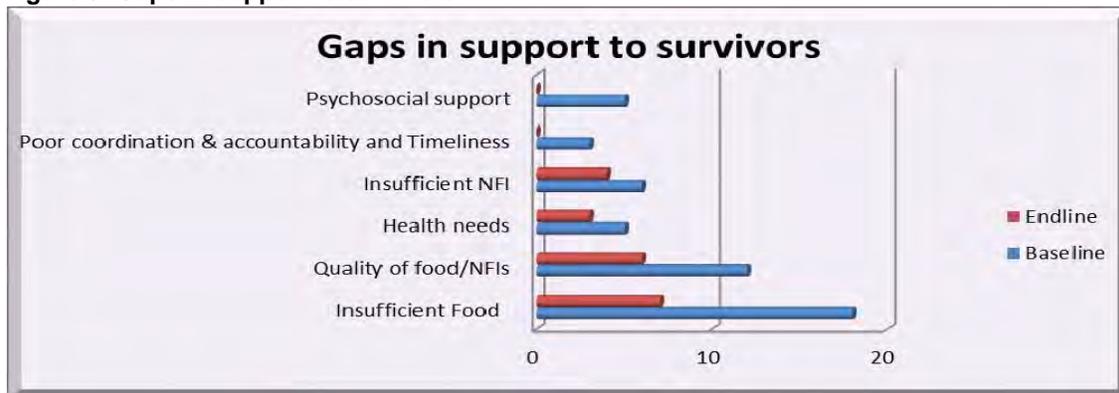
The baseline survey indicates that in the project locations only 13% (49) survivors were not satisfied with support to survivors, while 5.2% (20) survivors reported the same in the endline survey project location. 7 (18%) out of the 40 respondents in the baseline control locations reported that they were

not satisfied with support to survivors and a 100% satisfaction was reported in the endline control locations.

The gap reported by survivors were; insufficient food (4.7% baseline and 1.8% endline), quality of food/NFIs (3.1% baseline and 1.6% endline) and insufficient NFIs (1.6% baseline and 1% endline).

The level of satisfaction among respondents relating to support for survivors, increased by 7.8% in project target locations. Although the gaps in the support to survivors remained the same for both baseline and endline surveys, there is a significant decrease in the percentage of respondents that reported these gaps. This demonstrates that the project achieved its aim of meeting the needs for survivors.

Figure 9: Gaps in support to survivors



3.2.4. Objective 4: Strengthen coordination between government agencies and CSOs to improve allocation and utilisation of EVD resources

Coordination and accountability at community, chiefdom and district levels has been a major challenge in the EVD response. To address this, the ERAE project incorporated actions aimed at enhancing coordination and accountability at community and district levels for an improved response. This will strengthen EVD response planning, monitoring and holding providers to account at ward and district level; and poor coordination in the EVD response at community and district level.

3.2.4.1. Evidence of improved coordination and governance in EVD response at community and district level

An improvement in coordination and governance in the EVD response is dependent on the number of actors that recognize that they have an important role to play in ensuring an effective response. Out of the 28 participants in the KII, 24 (17 M and 7 F) in the baseline and all 28 (20 M and 8 F) in the endline reported having an important role in the EVD response. Gender variation in the number of actors is largely due to the normal role of respondents at district, chiefdom and community levels. Findings show that obstacles in playing an active role in the response were reported by 22 respondents in the baseline and 5 in the endline, demonstrating an improvement in the challenges relating to EVD response. The number of respondents that have carried out activities in relation to their role was 20 in the baseline and 28 in the endline survey. The effectiveness of response may also depend on the number of agencies involved in the Ebola response at local/community level; baseline 37 (10 Bo, 13 Bombali, 6 Kambia and 8 Tonkolili) and 50 (14 Bo, 15 Bombali, 10 Kambia and 11 Tonkolili).

By the end of the project, there was evidence that coordination and governance has improved within target locations, demonstrated by an increase in the numbers of EVD actors that recognize having an important role participating in the response and agencies that are actively engaged in the response. Improvement in governance can be attributed to the reduction in the existence of obstacles that EVD actors face in carrying out their role, which was reduced by 75% (baseline 20 and endline 5).

3.2.4.2. Number of visits to Ebola response structures by community representatives, local authorities and CSOs

Visits to Ebola response structures, including Community Care Centres (CCC), Holding Centres and Ebola Treatment Centres (ETC), by community representatives, local authorities and CSOs can provide a hands-on identification of challenges faced by response actors or gaps in the response at various levels, and an opportunity for timely actions to address them. From the baseline 16 respondents out of 28, reported visiting EVD response structures. Baseline findings also indicate an average of 20 visits were reported by the 16 respondents. The endline survey indicates that all 28 respondents have conducted visits to EVD structures on an average of 50 visits per respondents.

3.2.4.3. Number of dialogue forums held at chiefdom and district levels

Dialogue forums create an opportunity for stakeholders and community members to engage in identifying critical issues that affect the majority of people. In particular, the dialogue forums conducted in this project, were aimed at bringing the concerns of stakeholders including government representatives, local/traditional leaders, NGOs and community members for an effective response. Important to note also, is that communities can learn from best practices observed in other locations which can strengthen resilience to health emergencies. At baseline stage, 20% of the respondents participated at the chiefdom level, while all respondents participated at the district level. The frequency of dialogue forums as reported by respondents in the baseline was one per week. Findings from the endline survey show that all 28 respondents have been participating in dialogue forums; 80% participated in chiefdom level sessions and there was 100% participation at district level. The frequency of dialogue forums was once a week in Bo and more than once a week in Bombali, Kambia and Tonkolili.

There has been an increase in the number of dialogue forums at chiefdom levels and this creates a sense of ownership in the response by local/traditional leaders and community members. As a result, stakeholders at the chiefdom and community levels will actively perform their roles, thus contributing to enhanced coordination and governance of the response.

3.2.4.4. Percentage of trained CSO representatives who are actually involved in monitoring EVD resource allocation and utilisation

The baseline indicates that 11 (39%) out of the 28 respondents in the coordination survey were CSO representatives trained by this project, while the endline shows that 15 (54%) of the respondents were CSO representatives. This might be partly a coincidence but also partly attributed to the impact of the OFDA-funded project.

These trained CSO representatives have been participating in EVD response activities at district and chiefdom level including, visits to EVD structures and active engagement in dialogue forums. Identifying gaps relating to resource allocation and utilization have formed part of the role in the response. To address these relevant issues, the trained CSO representatives have been actively engaging stakeholders (including dialogue forums) for timely response.

3.3.5. Other findings and observations

3.3.5.1. Observation on secret burials

Secret burials continue to pose a challenge in the eradication of the EVD, due to unsafe contacts that occur with the dead thus exposing those involved to EVD. From the baseline, respondents in both project and control communities agreed that 117 should be called in the event of the death an infected or EVD suspect died in the home, which is the most appropriate thing to do. While 91% and 98% respondents in project and control communities respectively had never observed the occurrence of any secret burial in their communities, the baseline findings also revealed that secret burials were often (12 in project communities) and sometimes (18 in project communities & 1 in control communities) occurring as reported by respondents.

The endline survey findings show that 96% and 100% of the respondents in project and control location respectively reported never observing the occurrence of secret burial in their communities.

However, 2% reported that this often done and 4% reported secret burial sometimes done from the project communities.

The project has been successful in reducing the occurrence of unsafe burial in target communities which is a major factor in achieving a reduced EVD incidence and prevalence by the end of the project. Important to note also, in that the involvement of key community actor including CHWs and religious have played a significant role in positively changing traditional and cultural practices which include burials.

Through the sensitization activities done by this project in our community, we all understand that EVD spread by contact with sick persons and corpses. Because we don't want a single EVD case again in this community, we can assure you that there is no occurrences secret burial here. (FGD, Local Authority - Tikonko chiefdom, Bo District).

3.3.5.2. Perception of target population about government ability to response to the EVD crisis, and NGO actions towards the EVD response

From the baseline, all male respondents and 58% female respondents in the control communities reported having confidence in the ability of the government to response to the EVD crisis. The insufficient availability of experts, slow response of actors to calls, the neglect of government towards its workers, attitude of some health workers towards the public, contradictory messages on Ebola, the persistence of the virus in the country, unfulfilled promises and weak health systems were given by the 15 respondents (13 in project; 2 in control areas) who did not have confidence in the ability of the government.

The baseline also found that; with exception of only two respondents in both project location and control communities in all four districts, all the respondents shared their satisfaction with NGOs in their response during the survey. To the two respondents, the unfulfilled promised of supplying food and the non-availability of an action plan was cited as reasons for their position.

The endline survey findings indicate that 99% of the respondents in the project locations reported satisfaction with government and NGO actions, while all respondents in the control were satisfied. The 5 respondents that reported dissatisfaction stated limited efforts in addressing the health needs of survivors as a major gap in the actions of government and NGOs.

Comparing the baseline and endline, there is a significant improvement in the satisfaction level of communities relating to the response of government and NGOs. This will contribute to building trust and thus acceptance of essential messages and practice.

3.3.5.3. Adverse health effects of EVD on survivors

Medical evidence shows that there are health effects of EVD on survivors. From the baseline, less than half of the survivors (70, comprising 24 male and 46 female) in project location and about half (21 consisting of 8 male and 13 female survivors) in control communities respectively reported experiencing adverse health hazards after their recovery. Findings from the endline show that 34% (26 M & 42 F) out of 200 survivors in the stigma survey reported experiencing adverse health effect of EVD.

The adverse health effects varied from depression, sleeplessness, drowsiness, joint pain, panic attacks, and headaches, hearing defects, lethargy, malnutrition, menstrual pain and visual impairment.

4. Key Recommendations and Best Practices

To compare the change in knowledge, attitude and practice as well as social, cultural and traditional practices between communities in which the project have been implemented and those without the project, the baseline and endline surveys included communities that were not targeted by this project as control. Comparing the two surveys, there are few differences in terms of positive change in the project and control locations. This indicates that communities targeted by this project were in greater need of project interventions while as the control locations had similar interventions that may have started before this project.

By the end of this project there are high levels of knowledge, attitude and practice and a reduction in social, cultural and traditional practices in favour of positive health behaviours in project locations. Although this is the requirement to end the outbreak, it is recommended that follow-up actions be taken to sustain these positive behaviours and practices to enhance improved broader community health.

Religious leaders have played a significant role in achieving the project's objective of mobilising communities to support Ebola survivors and their families. Involving religious leaders in development intervention is therefore highly recommended evidenced from their role in the EVD response.

Best practices:

The involvement of community actors in this intervention played a major role in addressing traditional and cultural beliefs and practices. Through the activities of CHWs and religious leaders, there was greater acceptance of the project and ownership by local and traditional authorities and their community members. This is demonstrated by the increased level of practice of essential messages by the end of the project, mainly delivered by CHWs and religious leaders that are largely being enforced by local and traditional authorities.

CASL utilized mobile technology for data collection during the implementation of this project and the following benefits were documented: cost benefit - comparatively, generating and inputting of the data is far cheaper than using paper questionnaires, time - no data entry required, once data is collected, it is easily transferred to the centralized data based system managed at CA; quality and accuracy - close to 100% clean data. Minimal blank spaces, which usually are not the case when paper instrument are used which require separate data entry; capacity building for CASL community member. "Using KoBoCollect is a great opportunity for us and can now use the skills elsewhere."