





MINISTRY OF HEALTH MONROVIA, LIBERIA

National Knowledge, Attitudes and Practices (KAP) Study on Ebola Virus Disease in Liberia

March 2015



The National Knowledge, Attitudes and Practices Study on Ebola Virus Disease was implemented by the Liberia Institute of Statistics and Geo-Information Services (LISGIS) and the University of Liberia Pacific Institute of Research and Evaluation (UL-Pire). The funding and technical assistance was provided by the United Nations Children's Fund (UNICEF), Liberia. Additional technical support was provided by the World Health Organization (WHO), Johns Hopkins Center for Communication Programs (CCP) and Centers for Disease Control and Prevention (CDC).

Additional information about the National Knowledge, Attitudes and Practices Study on Ebola Virus Disease in Liberia may be obtained from the Ministry of Health, P. O. Box 10-9009, 1000 Monrovia 10, Liberia, West Africa. E-mail: info@mohsw.gov.lr

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Foreword

I am pleased to share this study report on the Knowledge, Attitudes and Practices on Ebola Virus Disease in Liberia. The fight against Ebola in Liberia is a national priority with direct regional and global implications and this research report provides valuable insights into current practices and will serve as the key guiding tool in fine-tuning our strategies, identifying areas in need of further attention, and designing approaches to capitalize on the gains in affected behaviours in the post-Ebola Liberia across all sectors. Importantly, it will allow us to benchmark and measure the effects of our collective work and inform the global community about lessons learned and best approaches.

The report clearly shows that awareness of Ebola is high, as is the ability to identify correct and effective practices to reduce the risk of contracting the virus. Hand-washing and personal hygiene practices are possibly at all times high. The benefits of these practices go well beyond containment of Ebola; and we must make a concerted effort to capitalize on the momentum to make such healthy behaviours permanent.

Despite our tremendous gains, much work remains to be done. Survivors and orphans are still stigmatized, health systems suffered significant setbacks, need for more sophisticated and actionable information still exists. The community mobilization structures and networks we have created can play a pivotal role in addressing these and other issues across all social sectors. This research report will serve as an important baseline to track our progress towards a better, brighter, Ebola-free Liberia.

Sincerely,

Bernice T. Dahn, MD, MPH Deputy Minister/Chief Medical Officer-RL Ministry of Health, **Republic of Liberia**

Acknowledgments

I would like to express my deepest appreciation of the collaborative nature of work that has made this study a success. I gratefully acknowledge UNICEF Liberia for providing financial and technical support. I Recognize valuable technical contributions of the World Health Organization (WHO), Johns Hopkins Center for Communication Programs (CCP), Center for Disease Prevention and Control (CDC), and the Liberian research organizations: Liberia Institute of Statistics and Geo-Information Services (LISGIS) and University of Liberia Pacific Institute of Research and Evaluation (UL-Pire).

I am extremely gratified for all household respondents who participated in the research study for their willingness, time commitment and sincere responses. I want to especially thank the Ministry of Internal Affairs and County Superintendents who assisted in getting the messages concerning the study to the village chiefs and other community dwellers via the community radio stations.

Finally, a special appreciation to the team members who worked tirelessly to produce this report. I thank you for your dedication and professionalism.

Sincerely,

Tolbert Nyenswah, LLB, MPH Assistant Minister/Preventive Services, Head of IMS, Ministry of Health, Republic of Liberia

List of Acronyms and Abbreviations

| BCC | Behavior Change Communication |
|---------|---|
| СВО | Community Based Organization |
| ССС | Community Care Centers |
| ССР | Johns Hopkins Center for Communication Programs |
| CDC | Center for Disease Control and Prevention |
| CHT | County Health Team |
| CSO | Civil Society Organization |
| EOC | Emergency Call Center |
| ETU | Ebola Treatment Units |
| EVD | Ebola Virus Disease |
| FGD | Focus Group Discussion |
| GoL | Government of Liberia |
| HF | Health Facility |
| IDPs | International Development Partners |
| IMS | Incendent Management System |
| KAP | Knowledge, Attitudes, and Practices |
| LISGIS | Liberia Institute of Statistics and Geo-Information Services |
| МоН | Ministry of Health |
| NGO | Non-Governmental Organization |
| NTFE | National Task Force on Ebola |
| PSU | Primary Sampling Units |
| PPS | Probability Proportional to Size |
| UL-Pire | University of Liberia Pacific Institute for Research and Evaluation |
| UNICEF | United Nations Children's Fund |
| WHO | World Health Organization |
| | |

Executive Summary

Introduction

Liberia is one of three West African countries most heavily affected by the recent epidemic of Ebola virus disease. By February 11, 2015, a total of 8881 cases and 3,826 deaths from Ebola virus disease (EVD) had been recorded in Liberia¹. With social mobilization of local communities and technical and financial support from development partners across the globe, the Government of Liberia has made major strides in fighting the epidemic. From the peak of the epidemic in October and November 2014, new infections have declined sharply.

The Knowledge, Attitudes and Practice (KAP) study was conducted between December 7th and 22nd, 2014, to gauge the success of social mobilization efforts to educate the general public on key Ebola prevention messages in the country. The study design included quantitative and qualitative components. A questionnaire survey from a representative sample of 1,140 households was conducted in 6 purposively selected counties (Montserrado, Grand Gedeh, Lofa, Nimba, River Cess and Grand Cape Mount). Counties were selected to cover a range in the timing and impact of the Ebola epidemic in different parts of Liberia. The qualitative component was included to provide social context, collective understanding, and evolving debates behind static survey responses. It consisted of a series of 28 focus group discussions among 224 men and women conducted around the same time period in the same six counties. Groups were divided by gender and urban-rural residence, with additional groups for those in professional occupations. The topic guide generally followed a similar structure to the survey questionnaire in order to facilitate comparison across both data sources.

Study objectives

Both components shared a common set of research objectives related the broader goals of describing the current state of knowledge and attitudes towards Ebola and the corresponding uptake of behaviors needed to prevent further spread of Ebola in communities:

To determine the awareness levels on EVD specifically on causes, symptoms, prevention, treatment, curability; to determine credible sources of messages and information on EVD;

To explore the perceptions of the community on EVD particularly in relation to causes, signs and symptoms, prevention, treatment and curability;

To assess the attitudes towards EVD and

underlying drivers of transmission; to determine current practices for prevention and control of EVD;

To determine current practices for care seeking;

To determine perceptions and practices in relation

To early reporting of the suspected cases and deaths and contact tracing/ case finding;

To assess attitudes to and changes in burial practices and/or maintenance of traditional practices despite the incidence of EVD;

To explore/investigate cultural, socio economic factors influencing adoption of recommended preventive behaviors;

1 World Health Organization, Ebola Situation Reports, February 11, 2015. http://apps.who.int/Ebola/en/Ebola-situation-report/ situation-reports/Ebola-situation-report-11-february-2015 To investigate perceptions and practices in relation to potential vaccine trials and uptake, as well as impact of Ebola on other health related issues.

Methods

The survey sample comprised 1170 households' heads or designated individuals in the absence of the households' heads for Montserrado (urban and rural), Lofa, Nimba, Rivercess, Grand Cape Mount, Grand Gedeh, selected proportional probability to size (PPS) sampling.

For the qualitative design, 28 Focus Group Discussions (FGDs) were conducted, 3-5 in each of the 6 counties. The break characteristics were youth/ adult, male/female/mixed, and professionals.

Key results

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Survey sample characteristics

By design, the number of households recorded for each county is proportional to the surrounding population size of that country. For example, households from urban Montserrado (Monrovia) accounted for 47% of the total survey sample, followed by Nimba county (19%) and Lofa county (13%). Males were more likely to be interviewed than females (60% vs. 40%), unsurprisingly since they were more likely than females to be listed as heads of household. The median age of the sample was between 25 and 34. By marital status, nearly two thirds (63%) were currently married or cohabiting, 31% single, and over 9% widowed, divorced or separated. By religion, most were Christian (83%) with a significant minority of Muslims (15%). Educational status covered a range from no education (20%) to post-secondary (14%) with the modal category of senior high school (35%). It is important to note that a sample of household heads is not designed to be representative of the general population. Consequently sample characteristics are likely to differ from those reported by population-based surveys such as the 2013 Liberian Demographic and Health Survey. More importantly, the estimates of attitudes and behaviors may also not be strictly representative of all adults in the 6 counties, but favor an older, wealthier, more male population captured by the sample design.

Awareness and knowledge of Ebola

General awareness of Ebola were virtually universal by December 2014. All respondents said they had ever heard of Ebola. Roughly a third (32%) said they knew an Ebola survivor. It is likely this measure would have been even higher if it included knowing people who had died of Ebola given the high mortality rate.

Recognition of Ebola symptoms and key behaviors to prevent transmission were consistently high although misconceptions about Ebola were surprisingly prevalent as well. Most associated symptoms of Ebola with vomiting (84%), diarrhea (80%), and sudden fever (44%). Overall 99% reported three or more correct forms of transmission. Most knew Ebola could be prevented by avoiding body fluids of a sick person (98%), by not touching a person with symptoms of Ebola (95%), and avoiding funeral or burial rites that involve touching or washing the body (96%). However 33% of respondents believed Ebola could be spread by mosquito bites while 26% believed it could be prevented by bathing in salt and hot water. Over half (57%) believed Ebola could be transmitted by people not having symptoms of illness. While this may reflect correct awareness of the possibility of sexual transmission for up to 90 days after surviving Ebola, only 9% of respondents mentioned sexual transmission among possible ways for Ebola to spread.

Qualitative interviews confirm the widespread belief by the time of the survey that Ebola is real, but also reveal the difficult path to acceptance for many communities. Many groups discussed denial and suspicions that greeted early Ebola messages, but starting to take the threat of Ebola seriously after witnessing death and experiencing fear that swept the country in 'Ebola time'.

Survey data also found limited evidence of early Ebola denial. By the time of the survey, close to 100 percent of survey respondents agreed that Ebola is 'real'. When asked how long ago they adopted this belief, well over 90 percent of respondents in most counties reported more than 6 months ago, corresponding to the time after initial cases were reported in Liberia but prior to the major resurgence of the epidemic in June and July 2014. Perhaps not coincidentally, the two counties with the highest percentage of respondents admitting delayed acceptance of the Ebola threat within the last 6 months were Montserrado (18%) and Grand Cape Mount (36%), the last two counties with confirmed Ebola cases in Liberia.

Risk perceptions

Data on risk perceptions point to the success of communication efforts to spread key prevention messages across all counties. Among core strategies for containing Ebola such as isolation of symptomatic patients, quarantine of affected communities, referral to ETU for treatment, support for contact tracing and safe burial - all found over 95% acceptance. Even if attitudes do not correspond perfectly to actual behavior, the nearly uniform acceptance of such measures suggests the emergence of community consensus around prevalent messaging campaigns, at least in principle.

Strong consensus on prevention may help to explain the results showing that the large majority (73%) perceived no personal risk of getting Ebola infection. When asked why they felt at low risk, most reported that they had no contact with the two recognized sources of infection: physical contact with Ebola patients and exposure to wild bush meat. Those reporting no personal risk were more likely than others to report behavior change to reduce Ebola risk. In other words, the perception of low risk may reflect the result of engagement with prevention messages rather than immunity to them.

Qualitative interviews included many citations of deliberate behavior change to reduce Ebola, even at the expense of deeply valued traditions like burial ceremonies.

Actual and intended behavior change

Almost all respondents (98%) reported changing at least one behavior to reduce their risk of getting Ebola. The most common form of response was regular hand washing (83%). At the height of the Ebola crisis hand washing was required to enter many public spaces, so this may reflect a structurally imposed change rather than a voluntary individual one. But in a number of qualitative texts suggested a public consensus around the value of regular hand washing, even in counties that were less affected by Ebola.

Over a third (36%) said they avoided large gatherings or known contact with people showing symptoms consistent with Ebola. It is not known how many people were invited to attend burials, but almost a quarter (24%) reported deciding not to attend a burial ceremony to reduce their exposure (see quotes above).

Information sources on Ebola

All data sources point to the key role played by radio stations as the first and most widespread source of continuing information on Ebola for the majority. Overall 93% of respondents reported they first learned about Ebola through the radio. The next most common sources of information about Ebola were interpersonal communication with family, friends and neighbors (39%) and house to house visits by health extension workers (36%). Focus group discussions suggested radio reports, health visits and person-to-person interaction sometimes worked to mutually reinforce each other.

Interestingly, when asked about actions they had taken to prevent Ebola in the community, nearly half (45%) reported the same type of action, with most reporting some form of interpersonal communication to discuss, demonstrate, or convince other community members on how to prevent Ebola. Engaging half of the community as behavior change agents would represent a remarkable achievement for any public health campaign, and points to an important contribution of community action in moving Liberia to zero new cases.

Survivor stigma

In contrast to near unanimous consensus around many of the key prevention messages for Ebola, survey and focus group results portray decidedly mixed attitudes towards Ebola survivors delicately balanced between acceptance and rejection. On one hand, the large majority of respondents (91%) reported that they would welcome back survivors to their own communities. On the other hand, up to a third or more of respondents reported fearing that one could get Ebola from touching or hugging a survivor, that those who had Ebola may be infected again in future, or students who survived Ebola put their classmates at risk.

Focus group discussions echo the same ambivalent sentiments towards survivors that swing between welcoming and distancing. Caution about survivors was typically linked with misconceptions about how Ebola is transmitted and whether or not Ebola survivors might be more rather than less susceptible to future infection. Quotes suggested a 'wait-and-see' attitude toward Ebola survivors for several months. Perhaps not coincidentally, this period seems to correspond to the length of time that Ebola may be transmitted sexually following infection.

Conclusions

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The KAP study has shown that at the time of the interviews, general awareness of Ebola was universal and knowledge of symptoms, transmission routes and prevention were reportedly very high. There was close to full support for core Ebola strategies (isolation of contacts, seeking early treatment at ETUs, contact tracing, and quarantine). Risk perception was low as 73% perceived that they

were at no personal risk of getting infected in the next four months mainly because they said they practice all the desired preventive measures. Most participants said had adopted hand washing with soap, chlorine or some other disinfectant. The study has confirmed that radio is main source of information on Ebola and that government messages have highest credibility. As regards to survivors, the study shows that attitudes towards acceptance were largely positive albeit cautious.

Way forward

There is need to address common misconceptions, especially about mosquitoes need to be addressed. EVD messages need more nuance to promote resumption of healthy interactions (immunization/ schools/health care) while still discouraging most dangerous (some burial practices, hunting bats, other reservoirs). There is also need to address concerns about post-infection transmission that feed stigma against survivors. Interventions should also seek to strengthen health facility infection, prevention and control; and community systems for rapid remobilization if case of Ebola resurgence. Lastly, there is need for a follow up study that will focus on restoration themes (stigma, vaccines, health care utilization) in selected counties.

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MAP OF LIBERIA



CHAPTER 1

INTRODUCTION

1.1 Background

Liberia is one of three West African countries most heavily affected by the recent epidemic of Ebola virus disease. By February 11, 2015, a total of 8881 cases and 3,826 deaths from Ebola virus disease (EVD) had been recorded in Liberia². Liberia experienced the first outbreak of the Ebola Virus Disease (EVD) in Foya District, Lofa County in March 2014. Lofa County has common borders with the Republics of Guinea and Sierra Leone. The second outbreak of EVD occurred in May 2014 in Monrovia and spread rapidly in July of that same year to other parts of the country.

Since March 2014, when the Government of Liberia formally declared an epidemic of Ebola virus disease, the Ministry of Health (MoH) in collaboration with various national and international partners has been working vigorously to combat the EVD. Ebola affected all parts of the country and transmission continued with high incidence in some counties especially Montserrado. This is the first EVD outbreak in the country and it caused a lot of fear, anxiety and panic. The health care system was overwhelmed with limited resources to respond swiftly and adequately. With only 50 physicians available at that time in Liberia and limited ambulances to respond swiftly to the EVD epidemic, there were numerous fears that the country was at the verge of collapse.

With social mobilization of local communities and technical and financial support from development partners across the globe, the Government of Liberia has made major strides in fighting the epidemic. From the peak of the epidemic in October and November 2014, new infections have declined sharply.

The Government of Liberia, international development partners (IDPs), and the civil society organizations (CSOs) continue to play a major role in educating the public on how to prevent the transmission of EVD as well as encouraging people to promptly seek medical care at Ebola Treatment Units (ETUs) or Community Care Center (CCC) in the event when they experience signs and symptoms associated with the disease. These mechanisms have proven to be effective in the rural communities especially by the restriction in urban-rural migration of people. The GoL has also encouraged community based organization to educate people in their community on the

² World Health Organization, Ebola Situation Reports, February 11, 2015. http://apps.who.int/Ebola/en/Ebola-situation-report/situation-reports/Ebola-situation-report-11-february-2015

danger of EVD, how to respond and prevent the disease. Traditional practices, misconceptions, and misinformation about the disease continue to put a strain on the fight against it. There have been widespread stories of people fearing to seek medical treatment and reporting suspected cases. In one study, 35 percent of survivors reported feeling rejected by society, including by family, friends, and neighbours. Survivors often face stigma, income loss, and grief, particularly if friends and family members have died; in addition, many of their possessions have been destroyed to prevent disease transmission. Some family members concerned about infection have been reluctant to accept orphaned children³.

According to the WHO, Ebola virus is transmitted to people through close contact with the blood, secretions, organs or other bodily fluids of infected wild animals such as chimpanzees, gorillas, fruit bats, and monkeys. Ebola then spreads through human-to-human transmission through direct contact with the blood, secretions, organs or other bodily fluids of infected people, and with surfaces and materials contaminated with these fluids. Burial ceremonies in which mourners have direct contact with the body of the deceased person can also play a role in the transmission of Ebola. People remain infectious as long as their blood and body fluids, including semen and breast milk, contain the virus . Men who have recovered from the disease can still transmit the virus through their semen for up to 7 weeks after recovery from illness⁴.

1.2 Broad Objective

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The "Knowledge, Attitude and Practices" (KAP) Survey on EVD is to provide a baseline data for further assessments and help in strengthening the behavioural and communication interventions on the EVD response. This study aimed at understanding the knowledge, attitudes and practices of the Liberian people and exploring their perceptions on EVD.

1.3 Specific Objectives

Specifically, the study set out to:

Determine the knowledge and awareness levels on EVD specifically on transmission, signs and symptoms, prevention, and care.

Assess the attitudes and beliefs towards EVD.

To measure risk perception towards EVD.

Determine current practices for prevention and control of EVD.

Determine current practices for care seeking.

Determine perceptions and practices in relation to early reporting of the suspected cases and deaths and contact tracing/ case finding.

Assess attitudes to and changes in burial practices and/or maintenance of traditional practices despite the incidence of EVD.

Explore/investigate cultural, socio economic factors influencing adoption of recommended preventive behaviours.

Determine credible sources of messages and information on EVD.

1.4 Methodology

The study involved quantitative and qualitative methodology to collect primary data of heads of households or their designees; and of men and women and youth from in six counties of Liberia. The quantitative component was implemented by LISGIS and the qualitative was implemented by UL-PIRE.

1.4.1 Quantitative Research Design

The study employed a cross-sectional research design to collect information from heads of households. The research period spanned from

³ CDC, Morbidity and Mortality Weekly Report Vol. 63/No. 50, Dec. 12, 2014, http://www.cdc.govlmmwr

⁴ http://www.who.int/mediacentre/factsheets/fs103/en/

November 4, 2014 - January 23, 2015. Data collection took place from December 7 – 22, 2014

1.4.2 Quantitative Sampling

The survey sample comprised 1170 households' heads or designated individuals in the absence of the households' heads. The sample size was calculated at 95% confidence level and confidence interval of +/- 3.0% given the estimated population of the about 3.5 million as per the population estimates from the National Population and Housing Census of Liberia (2008).

This study collected data from one county from each of the six regions of Liberia. The counties were chosen based on EVD incidence (High Versus low).

A multi-stage cluster sampling design with primary sampling units (PSUs), selected with probability relative to their size (PPS), was used in the study. The total enumeration areas in the six selected is 4,137. The required EAs for the study was derived by finding 1.9 percent of the total EAs in the selected counties constituting 78 enumeration areas spread across the counties based on their proportion to the total EAs. To select households for interview, household listings from each selected enumeration area were provided from the National Census database, and sampling interval was applied to determine the 15 households to be selected per cluster. The processes of selecting the households were as follows:

Identification of the centre of the sampled community using the EA maps;

Estimating the skip-interval defined as number of households divided by the sample for that community;

The sampling interval was estimated by the research team in advance of the field work using census projections and provided to the respective data collection teams. Table 1.4.2 below describes the sampling design of the study.

| No. | COUNTY NAME | No. of Households | Number of Enumeration Areas (EAs) | Percent of EAs Per County | Number of Selected EAs | Selected No. of Household (HHs) |
|-----|-------------------|----------------------|---|---------------------------------|---------------------------|------------------------------------|
| 1 | Lofa | 49,642 | 501 | 12 | 10 | 15x10= 150 |
| 2 | Grand Gedeh | 18,143 | 176 | 4 | 3 | 15x3 = 45 |
| 3 | Rural Montserrado | 31,651 | 283 | 7 | 5 | 15x5 = 75 |
| 4 | Monrovia | 200,934 | 1,967 | 48 | 37 | 15x37= 555 |
| 5 | Nimba | 80,734 | 781 | 19 | 15 | 15x15= 225 |
| 6 | River Cess | 13,981 | 152 | 4 | 3 | 15x3 = 45 |
| 7 | Grand Cape Mount | 23,950 | 277 | 7 | 5 | 15x5 = 75 |
| | TOTAL | 419,035 | 4,137 | 100 | 788 | 1170 |

Table 1.4.2. Sample design for KAP survey

1.4.3 Quantitative Data Collection

Data collection was conducted and coordinated by 18 trained and experienced enumerators, six field supervisors and three regional monitors. A three-day workshop on orientation of the study and data collection instruments was conducted. The questionnaire was pretested in an assigned community in Bomi and Margibi counties - which were not included in the sample. Feedback from the pre-test was used to improve the questionnaire. The trained data collectors and supervisors were subsequently divided into six respective teams consisting of there (3) enumerators and one (1) field supervisor. Each team was assigned to specified geographic clusters. Data collection for the study was completed in 15 days.

1.4.4 Quantitative Data Management and Data Entry

Completed and validated questionnaires from the field were safely and securely transported to

LISGIS headquarters in Monrovia. Data entry was performed by five trained and experienced clerks under the supervision two senior personnel from LISGIS. Double entry verification was performed on all questionnaires to alleviate any possible errors. Data entry was done using CSPro.

1.4.5 Quantitative Data Measurement and Analysis

For analysis, STATA (version 12.0) was used. The data is mostly categorical and some continuous variables (e.g. age in completed years) were categorised. "No responses" were very few and were not systematic and were recoded as missing values. Some variables were recoded so as to increase conceptual sense (e.g. don't know' were included in 'No" in dichotomous variables). Some new variables were generated (e.g. comprehensive knowledge) so as to increase conceptual sense of the results. Any changes to the dataset were saved and recorded in a do-file. Continuous data was reported using median/means and range; and categorical data as frequencies and proportions (as row percentages). Cross tabulations and bivariate analyses were performed on selected key variables - with chi square tests and fisher's exact tests performed on categorical outcomes to assess the strength of associations (reported with p-values at p=<0.05 significance level.

1.5 Qualitative Methodology

1.5.1 Qualitative data collection

Qualitative information gathered for this exercise was obtained through Focus Group Discussions (FGDs). Information was collected in communities with low, medium and high incidence of EVD based on relevant social, cultural and religious factors.

Purposive selection methodology was employed during the selection of clusters, stratified by the regions of the targeted counties (Grand Cape Mount, Grand Gedeh, Lofa, Montserrado, Nimba, and River Cess Counties). The UL-PIRE Africa Center worked with the Ministry of Health (MoH) and UNICEF-Liberia to confirm the sample size and cluster design, and applied the required procedures for adapting the standardized baseline questionnaire, and developed a timetable and work plan that minimized logistical challenges and maximized cost efficiency.

Purposive sampling method was used to select the low, medium and high regions or counties where EVD occurred per the demographic data from the MoHSW. A sample of a total of twenty-eight (28) FGDs was selected as the most convenient size which totaled two hundred and twenty-four (224) participants across the six (6) counties. The FGDs was based on group homogeneity such as gender, age and occupation. They included older women, older men, youths, teachers, community leaders and carpenters. Table 1 below illustrates the arrangement.

The discussions were done verbatim with the use of tape recorders. Notes were also taken as a backup for audio recordings.

A total of six (6) teams consisting of twelve (12) Note takers and six (6) Supervisors were deployed simultaneously to conduct the FGDs across the six (6) counties. A total of two hundred and twentyfour (224) participants were involved. Each team of Note takers consisted of a team leader and each Supervisor was responsible to ensure the quality of each survey on a daily basis. A total of twentyeight (28) FGDs were conducted in the counties over a ten (10) day period. Six (6) transcriptionists were involved in data processing, transcription and entry, respectively. The FGDs had age-related categories. Male and Female youths ranged from 16 to 35 years. Older Males and Females ranged from 36 years and above.

The Montserrado Team was joined by the Cape Mount Team to conduct the FGDs in both counties since they had the most number of FGDs, at seven and five, respectively. The combined teams conducted three FGDs in rural Montserrado and four FGDs in urban Montserrado before proceeding to Grand Cape Mount County where they conducted an additional five FGDs. The other four teams conducted four FGDs each in Lofa, Rivercess, Nimba and Grand Gedeh counties, respectively.

1.5.2 Qualitative Data Analysis

The analysis was performed using NVivo (version 9 for Windows) software. All focus group transcripts

were imported into NVivo with each interview question serving as a code or node. Focus group responses to each question were coded on screen by assigning the responses to the appropriate node. Node responses were then aggregated across all of the focus groups, and the aggregated responses analyzed and summarized to describe similarities and differences in answers to each question across all of the groups.

| County | District | Type of FGD | | Total FGD/County |
|--------------------------|-------------------|-----------------------------|---|-------------------------|
| Grand Gedeh County | Putu | - Male Youths | 1 | 4 |
| | | - Youth Females | 1 | |
| | | - Adult Males | 1 | |
| | | -Professionals (Educators) | 1 | |
| Grand Cape Mount County | Porkpa | - Adult Males | 1 | 5 |
| | | - Female Youths | 1 | |
| | Garwula | - Professional (Adult Fs) | 1 | |
| | | - Mix Youths | 1 | |
| | | - Adult Males | 1 | |
| Rural Montserrado County | Todee | - Adult (Mixed) | 1 | 3 |
| | St. Paul River | - Adult Males | 1 | |
| | Careysburg | -Professionals(Adult women) | 1 | |
| Urban Montserrado County | Greater Monrovia | - Female Youth | 1 | 4 |
| | Greater Monrovia | - Female Youths | 1 | |
| | Greater Monrovia | - Youth Males | 1 | |
| | Greater Monrovia | - Youth Males | 1 | |
| Nimba County | Sanniquellie-Mahn | - Professionals (Teachers) | 1 | 4 |
| | | - Female Youths | 1 | |
| | Wee-Gbehyi-Mahn | - Adults Female | 1 | |
| | | - Adult Men | 1 | |
| Rivercess County | Fahn River | - Farmers | 1 | 4 |
| | | - Female Males | 1 | |
| | Jo River | - Female Youth | 1 | |
| | | - Adults (Mixed) | 1 | |
| Lofa County | Foyah | - Adult Males | 1 | 4 |
| | | - Male youths | 1 | |
| | Voinjama | -Professional (Carpenters) | 1 | |
| | | - Female Youths | 1 | |
| | | TOTAL | | 28 |

1.6 Limitations

Due to time constraints, it was not possible to include all 15 counties in the sample and it limits the extent which the results of this study can be generalized to the other counties which were not include in the study.

Another limitation is that self-reported behaviours may not always be aligned with the individual's actual practices. It is possible that respondents may have provided socially desirable responses; especially due to the high awareness of EVD and heavy dose of sensitization and education being undertaken.

Furthermore, self-reported data may suffer from desirability bias and recall bias and the accuracy of these self-reports may be compromised because some health-risk behaviours are difficult to recall and some are so sensitive that respondents may not want to report them⁵.

⁵ BRENER, N. D., BILLY, J. O. G. & GRADY, W. R. 2003. Assessment Of Factors Affecting The Validity Of Self-Reported Health-Risk Behavior Among Adolescents: Evidence From The Scientific Literature. Journal Of Adolescent Health, 33, 436 – 457

PART 1: QUANTITATIVE FINDINGS

CHAPTER 2

SOCIO-DEMOGRAPHIC INFORMATION

2.1 Socio-demographic Characteristics

Most respondents (56%) in the study were over 35 years old, 53% were married, 20% reported to have no formal education and the majority (84%) had lived in the area for over a year. See table 2.1:

| Characteristics | Frequency | Percentage |
|------------------------------|---------------|------------|
| Age (years)(n=1170) | | |
| 18 - 24 | 146 | 12.5 |
| 25 - 34 | 375 | 32.1 |
| 35 + | 649 | 55.5 |
| Mean (Std. Dev.) | 38.73 (13.57) | |
| | | |
| Marital Status (n=1162) | | |
| Single/ never married | 357 | 30.72 |
| Married | 617 | 53.10 |
| Cohabiting | 114 | 9.81 |
| Separated/ Divorced/ Widowed | 74 | 6.37 |
| | | |
| Religion (n=1164) | | |
| Christianity | 971 | 83.0 |
| Islam | 172 | 14.7 |
| Traditional | 5 | 0.4 |
| No religion | 15 | 1.3 |
| Other | 1 | 0.1 |

Table 2.1: Socio-demographic characteristics of respondents

| Educational Attainment (n=116 | 58) | |
|-------------------------------|-----|------|
| No formal education | 235 | 20.1 |
| Elementary (1 - 6) | 148 | 12.6 |
| Junior High (7 - 9) | 189 | 16.2 |
| Senior High (10 - 12) | 414 | 35.4 |
| University | 163 | 13.9 |
| Others | 19 | 1.6 |
| | | |
| Main Occupation (n=1170) | | |
| Unemployed | 143 | 12.2 |
| Private business | 208 | 17.8 |
| Construction/ builder | 66 | 5.6 |
| Petty Trader | 96 | 8.2 |
| Farmer | 304 | 26.0 |
| Teacher / instructor | 69 | 5.9 |
| Pub. transportation driver | 26 | 2.2 |
| Commercial motorcyclist | 5 | 0.4 |
| Medical or health personnel | 16 | 1.4 |
| Other Govt employees | 65 | 5.6 |
| Student | 116 | 9.9 |
| Other | 56 | 4.8 |
| | | |
| Length of Residence (n=1170) | | |
| Less than one month | 9 | 0.8 |
| One month - 6 months | 24 | 2.1 |
| 7 - 12 months | 128 | 10.9 |
| Over a year | 979 | 83.7 |
| Less than one month | 9 | 0.8 |
| One month - 6 months | 24 | 2.1 |
| | | |

CHAPTER 3

AWARENESS AND KNOWLEDGE OF CAUSES, SIGNS, SYMPTOMS, AND OF WAYS OF EBOLA VIRUS TRANSMISSION

3.1 Awareness of EVD

As shown in tables 3.1 and 3.1b below awareness of EVD was essentially universal with all the respondents reporting that they had ever heard of Ebola and 98% said acknowledged that Ebola exists in Liberia at the time of the survey. In total, 86% of the respondents said that they have known of its existence six months prior but this proportion was comparatively lower in Grand Cape Mount County (64%).

Table 3.1: Awareness of Causes, Signs, Symptoms, and ways of transmission of EVD

| Characteristic | Yes (n (%) | No n (%) | Total <i>n</i> (%) |
|---|-------------------|-----------|---------------------------|
| | · | | |
| Ever heard of Ebola (n=1168) | 1168 | 0(0) | 1168 (100) |
| | | | |
| Believe Ebola exists (n=1169) by county | | | |
| Grand Cape Mount | 74 (98.67) | 1 (1.33) | 75 (100) |
| Grand Gedeh | 44 (97.78) | 1 (2.22) | 45 (100) |
| Lofa | 149 (99.33) | 1 (0.67) | 150 (100) |
| Montserrado | 622 (98.89) | 7 (1.11) | 628 (100) |
| Nimba | 218 (96.89) | 7 (3.11) | 225 (100) |
| River Cess | 41 (98.20) | 4 (8.89) | 45 (100) |
| Total | 1148 (98.20) | 21 (1.80) | 100 (100) |

| Time Ebola starte | ed to exists (n=11 | 40) by County | | | |
|-------------------|---------------------------------|-----------------------------------|----------------------------|--------------------------------------|----------------|
| | Less than one month n (%) | 1-3 months ago <i>n</i> (%) | 3-6 months ago n (%) | Over 6 months ago <i>n (%)</i> | Total n (%) |
| Grand Cape Mount | 1 (1.33) | 3 (4.00) | 23 (30.67) | 48 (64.00) | 75 (100) |
| Grand Gedeh | 1 (2.22) | 2 (4.44) | 1 (2.22) | 41 (91.11) | 45 (100) |
| Lofa | 0 (0.00) | 1 (0.68) | 4 (2.72) | 142 (96.60) | 147 (100) |
| Montserrado | 6 (0.98) | 13 (2.13) | 88 (14.40) | 504 (82.49) | 611 (100) |
| Nimba | 1 (0.46) | 4(1.83) | 10 (4.57) | 204 (93.15) | 219(100) |
| River Cess | 0 (0.00) | 1 (2.33) | 2 (4.65) | 40 (93.02) | 43 (100) |
| Total | 9 (0.79) | 24 (2.11) | 128 (11.23) | 979 (85.88) | 1140 (100) |

Table 3.1b: Time Ebola started to exists

3.2 Knowledge of Causes of EVD

As shown in figure 3.2 below, the majority of the respondents (70%) identified the cause of EVD to be wild animals (bats, monkeys and chimpanzees) and less than half as much – 31% in total – reported "virus" as a cause. Grand Cape Mount County was both the highest in reporting wild animals (89%) and lowest in reporting 'virus' (4%).



3.3 Knowledge of mode of transmission of Ebola Virus

Contact with any body fluids (saliva, (saliva/sperms/vaginal fluids/urine/breast milk/sweat /faeces) of an infected person was universally reported as the mode through which Ebola is transmitted; 87% mentioned 'participating in burial ceremonies' and 69% identified eating or preparing bush food (bush meat or fruits eaten by bats). See table 3.3 below.

Table 3.3: Knowledge of mode of transmission

| COUNTY | Sex (with an infected person or survivor) n (%) | Bush food (preparing/ eating bush meat, bat-eaten fruits) n (%) | Participating in burial ceremonies that involve handling of dead body n (%) | Body fluids (saliva/sperms / vaginal fluids/ urine/breast milk/sweat / faeces) n (%) | Handshaking and other Physical contact <i>n</i> (%) |
|------------------|---|---|--|---|---|
| Knowledge of Mod | le of Transmission (I | n=1170) | | | |
| Grand Cape Mount | (10) 13.33 | 57 (76.00) | 68 (90.67) | 75 (100.00) | (25) 33.33 |
| Grand Gedeh | 1 (2.22) | 37 (82.22) | 43 (95.56) | 45 (100.00) | 29 (64.44) |
| Lofa | 1 (0.67) | 116 (77.13) | 141 (94.00) | 150 (100.00) | 66 (44.00) |
| Montserrado | 40 (6.35) | 436 (69.21) | 554 (87.94) | 630 (100.00) | 330 (52.38) |
| Nimba | 169 (24.89) | 126 (56.00) | 167 (74.22) | 225 (100.00) | 145 (64.44) |
| River Cess | 1 (2.22) | 37 (82.22) | 43 (95.56) | 45 (100.00) | 10 (22.22) |
| Total | 109 (9.32) | (809) 69.15 | (1016) 86.84 | 1170 (100.00) | 605 (52.71) |

Table 3.4 below describes the results of knowledge of various signs and symptoms of EVD. Mostly reported were vomiting (84%) and diarrhoea (80%).

Table 3.4: Knowledge of signs and symptoms of EVD

| Characteristic | Frequency | Percentage (%) |
|---|-----------|----------------|
| Signs and symptoms of Ebola (n=1170) | | |
| Delirium/ confusion | 5 | 0.43 |
| Hiccups | 42 | 3.59 |
| Bleeding (internal or external) | 261 | 22.31 |
| Difficulty breathing | 34 | 2.91 |
| Rash | 298 | 25.47 |
| Sore throat | 382 | 32.65 |
| Lack of appetite | 119 | 10.17 |
| Abdominal (stomach) pain | 229 | 19.57 |
| Vomiting (with or without blood) | 984 | 84.1 |
| Diarrhoea (with or without blood) | 936 | 80.0 |
| Weakness | 661 | 56.5 |
| Muscle pain | 403 | 34.44 |
| Severe headache | 581 | 49.66 |
| Sudden onset of high fever | 555 | 47.44 |
| Any Fever | 159 | 13.59 |
| Others (Red eyes, blood oozing from eyes, ears etc) | 256 | 21.88 |

Table 3.5: Knowledge of means of prevention of EVD

| Knowledge of Means of Prevention | Avoid contact with blood and body fluid n (%) | Avoid touching anyone sick <i>n</i> (%) | Avoid funeral and burial rites <i>n (%)</i> |
|-------------------------------------|---|--|---|
| By county | n = 1165 | n = 1168 | n = 1164 |
| Grand Cape Mount | 72 (96.0) | 71 (94.67) | 70 (93.33) |
| Grand Gedeh | 44 (98.78) | 41 (91.11) | 42 (95.45) |
| Lofa | 145 (11.33) | 139 (92.67) | 145 (96.67) |
| Montserrado | 621 (99.2) | 599 (95.38) | 609 (97.13) |
| Nimba | 219 (97.33) | 220 (97.78) | 217 (97.31) |
| River Cess | 40 (88.89) | 39 (86.67) | 39 (86.67) |
| Total | 1141 (97.94) | 1109 (94.95) | 1122 (96.39) |
| | | | |
| By place of residence | | | |
| Rural | 682 (98.27) | 665 (95.55) | 671 (96.83) |
| Urban | 459 (97.45) | 444 (94.07) | 451 (95.75) |
| | | | |
| By age | | | |
| 24 years and below | 143 (98.26) | 138 (95.17) | 140 (95.89) |
| 25 - 34 years | 369 (98.4) | 375 (95.2) | 359 (96.25) |
| 35 years and over | 629 (97.52) | 614 (94.75) | 623 (96.59) |
| | | | |
| By educational attainment | | | |
| No formal education | 222 (94.87) | 220 (94.02) | 215 (92.67) |
| Elementary (1 - 6) | 144 (97.3) | 141 (95.27) | 144 (97.3) |
| Junior High (7 - 9) | 184 (97.87) | 176 (93.12) | 181 (96.28) |
| Senior High (10 - 12) | 410 (99.27) | 397 (96.13) | 398 (96.6) |
| University Degree | 161 (100) | 154 (94.48) | 163 (100) |
| Others | 18 (94.74) | 19 (100) | 19 (100) |
| By sex | | | |
| Male | 691 (98.15) | | |
| Female | 450 (97.61) | | |

3.6 Misconceptions of EVD transmission, prevention and cure

As shown in the Table 3.6 below, 33% of the respondents reported a misconception that avoiding mosquito bites can prevent Ebola transmission; this was highest in Grand Gedeh (53%) and lowest in River Cess (2%). Another misconception assessed was bathing with salt and hot water as an Ebola prevention means, 27% of all respondents accepted this, the highest proportion was from Grand Cape Mount (45%) and again the lowest was in River cess (4%). The results also show that 12% of the respondents reported that spiritual healers can cure Ebola, and 3% said traditional healers can also heal Ebola.

| COUNTY | n | One can prevent themselves from getting Ebola by bathing with salt and hot water <i>n</i> (%) | n | One can prevent themselves from getting Ebola by avoiding mosquito bites n (%) | n | Spiritual healers can cure Ebola n (%) | n | Traditional healers can cure Ebola n (%) |
|---------------------|------|--|-----|---|------|---|------|---|
| | | | | | | | | |
| Grand Cape Mount | 75 | 34 (45.33) | 75 | 33(44.00) | 72 | 7 (9.72) | 75 | 7 (9.33) |
| Grand Gedeh | 45 | 19 (42.22) | 45 | 24 (53.33) | 41 | 3 (7.32) | 45 | 3 (6.67) |
| Lofa | 149 | 40 (26.85) | 150 | 53 (35.33) | 150 | 12 (8.00) | 150 | 4 (2.67) |
| Montserrado | 628 | 124 (19.75) | 650 | 158 (25.08) | 623 | 99(15.89) | 626 | 7 (1.12) |
| Nimba | 224 | 90 (40.18) | 630 | 118 (52.44) | 222 | 18 (8.11) | 225 | 10 (4.44) |
| River cess | 45 | 2 (4.44) | 225 | 1 (2.22) | 45 | 3 (6.67) | 45 | 1 (2.22) |
| Total | 1166 | 309 (26.50) | 45 | 783 (33.08) | 1153 | 142(12.32) | 1166 | 32 (2.74) |
| | | | | | | | | |
| By place of reside | ence | | | | | | | |
| Rural | 472 | 166 (35.17) | 473 | 203 (43.92) | 464 | 41 (14.66) | 473 | 19 (4.02) |
| Urban | 694 | 143 (20.61) | 697 | 184 (26.40) | 689 | 101 (8.84) | 693 | 13 (1.88) |

Table 3.6: Misconceptions of EVD transmission, prevention and cure

The results also show that 57% of the respondents stated that an infected person who is not showing any signs and symptoms of Ebola can transmit the virus.

Table 3.6b: Asymptomatic person can be infectious

| Asymptomatic person can be infectious | Frequency | Percentage |
|---------------------------------------|-----------|------------|
| Yes | 654 | 57.27 |
| No | 488 | 42.73 |
| Total | 1,142 | 100.00 |

3.7 Comprehensive knowledge of EVD

Table 3.7 describes results for comprehensive knowledge of EVD. In total, about half of the respondents (50%) reported comprehensive knowledge. River Cess County had the most respondents having comprehensive knowledge (80%) while Grand Cape Mount had the lowest (29%); urban residing respondents had more comprehensive knowledge than rural respondents (56% vs 40%).

Table 3.7: Comprehensive knowledge of EVD

| COUNTY | n | Accepts three main means of prevention n (%) ⁶ | n | Reject three misconceptions n (%) ⁷ | n | Has comprehensive knowledge (Accepts three main means of prevention and Reject three mis- conceptions) n (%) |
|-----------------------|------|--|------|--|------|--|
| Grand Cape Mount | 75 | 73 (97.33) | 72 | 73 (97.33) | 72 | 73 (97.33) |
| Grand Gedeh | 44 | 43 (97.73) | 41 | 43 (97.73) | 40 | 43 (97.73) |
| Lofa | 149 | 148 (99.33) | 149 | 148 (99.33) | 148 | 148 (99.33) |
| Montserrado | 623 | 621(99.68) | 621 | 621(99.68) | 615 | 621(99.68) |
| Nimba | 223 | 221 (99.10) | 221 | 221 (99.10) | 219 | 221 (99.10) |
| River cess | 42 | 42 (93.33) | 45 | 42 (93.33) | 45 | 42 (93.33) |
| Total | 1159 | 1148 (99.05) | 1149 | 1148 (99.05) | 1139 | 1148 (99.05) |
| | | 1148 (99.05) | | 579 (50.38) | | 568 (49.87) |
| By place of residence | e | | | | | |
| Rural | 689 | 463 (98.51) | 686 | 191 (41.25) | 460 | 185 (40.22) |
| Urban | 470 | 685(99.42) | 463 | 383 (56.56) | 679 | 383 (56.41) |

⁶ Accepts: 1- One can prevent oneself from getting Ebola by avoiding contact with blood and body fluids (stool, urine, blood, saliva, sweat, tears, semen, vaginal fluids, runny nose); 2- One can prevent themselves from getting by not touching anyone who is sick?; 3- One can prevent themselves from getting Ebola by avoiding funeral or burial rituals that require handling the body of someone who has died from Ebola

⁷ Rejects: 1- spiritual healers can cure Ebola; 2- One can prevent themselves from getting Ebola by bathing with salt and hot water; 3-One can prevent themselves from getting Ebola by avoiding mosquito bites

CHAPTER 4

PERCEPTIONS AND BELIEFS

4.1: Risk perception of getting Ebola

4.1.1 Perceived level of risk

At the time of the interviews, majority of the respondents (73%) perceived that there were not at risk of getting infected with Ebola Virus in the following four months – this was highest in Grand Gedeh and lowest in Lofa. On the other end, only 5% of the respondents perceived to be at high risk, and conversely, Lofa was the highest and Grand Gede the highest. See table 4.1.1 below.

| Characteristic | No risk n (%) | Low risk n (%) | Medium risk n (%) | High risk n (%) | Don't know/ not sure n (%) | Total n (%) |
|-------------------------|-------------------|-------------------|-------------------------|--------------------|----------------------------------|----------------|
| Perceived level of risl | k by county (n= | 1167) | | | | |
| Grand Cape Mount | 62 (84.93) | 2 (2.74) | 1 (1.37) | 1 (1.37) | 7 (9.59) | 73 (100.00) |
| Grand Gedeh | 37 (82.22) | 3 (6.67) | 0 (0.00) | 0 (0.00) | 5 (11.11) | 45 (100.00) |
| Lofa | 81 (54.00) | 33 (22.00) | 9 (6.00) | 24 (16.00) | 3 (2.00) | 150 (100.00) |
| Montserrado | 449 (71.27) | 93 (14.76) | 25 (3.97) | 33 (5.24) | 3 (2.00) | 630 (100.00) |
| Nimba | 179 (79.91) | 6 (2.68) | 18 (8.04) | 4 (1.79) | 17 (7.59) | 224 (100.00) |
| River Cess | 42 (93.33) | 0 (0.00) | 0 (0.00) | 1 (2.22) | 17 (7.59) | 45 (100.00) |
| Total | 850 (72.84) | 137 (11.74) | 53 (4.54) | 63 (5.40) | 64 (5.48) | 1167 (1000) |
| | | | | | | |
| Perceived level of risl | k by place of res | sidence (n=116 | 7) | | | |
| Urban | 494 (70.98) | 92 (13.22) | 36 (5.17) | 41 (5.89) | 33 (4.74) | 696 (100.00) |
| Rural | 356 (75.58) | 45 (9.55) | 17 (3.61) | 22 (4.67) | 31 (6.58) | 471 (100.00) |

Table 4.1.1: Perceived level of risk (of contracting Ebola in the next four months)

4.1.2 Reasons for high risk perception

As shown on table 4.1.2 below, for the respondents that felt at high risk, the most cited reason was that Ebola is everywhere (59%). 38% of the respondents also said that it is because they use public transport regularly.

| Reasons for perceiving at high risk (n=253) | Frequency | Percentage |
|--|-----------|------------|
| I have been experiencing signs and symptoms of Ebola since day (s) ago | 14 | 5.51 |
| Someone in my family/household/dwelling has/had Ebola in the past day (s) | 4 | 1.58 |
| I am a health care professional | 8 | 3.16 |
| I live in the same household with a health care professional | 7 | 2.77 |
| I have taken care of a family member /relative/ friend who experienced signs and symbols of Ebola in the past days | 5 | 1.98 |
| I hunt bush meat as my means of livelihood | 2 | 0.79 |
| l use public transport regularly | 97 | 38.34 |
| Ebola is everywhere | 149 | 58.89 |
| I washed/touched the body of someone who died in my family or community in the past days | 1 | 0.40 |
| I have attended a burial/ funeral ceremony in the past days | 6 | 2.37 |
| I work as a contact tracer or part of a burial team | 4 | 1.58 |
| Others | 51 | 20.16 |
| | | |

Table 4.1.2: Reasons for high risk perception

4.1.3 Reasons for perceiving NOT at risk

The results show that 61% of the respondents that perceived themselves to be at NO risk because they do not eat bush meat or bats, and 50% said because they wash their hands often with soap.

Reasons for perceiving NOT at risk (n=851) Frequency Percentage I do not eat bush meat or bats(n=850) 520 61.18 I am not a health care or medical professional 196 23.03 I am a clean person - I wash my hands often with soap and water 425 49.94 I don't live in an area where there is Ebola 326 38.31 I don't come in contact with someone with Ebola 411 48.30 263 God is protecting me 30.90

Table 4.1.3: Reasons for no risk perception

4.2 Beliefs and attitudes towards isolation suspected Ebola persons and their direct contacts

4.2.1 Isolation of suspected Ebola persons and their direct contacts

The majority of the respondents in the study supported isolation of persons that are suspected of having Ebola (96%) and of those that had direct contact with the suspected persons (97%). See table 4.2.1 below:

Table 4.2.1: Suspected persons/direct contacts should be isolated

| Characteristic | n (%) |
|---|--------------|
| Suspected Ebola persons should be isolated (n=1164) | 1123 (96.48) |
| Person having direct contact with Ebola should be isolated (n=1162) | 1131 (97.33) |

4.2.2 Length of days for isolation

As can be seen in table 4.2.2 below the majority of the respondents (87%) in the study reported that Ebola suspected persons or persons who had direct contact with them should be isolated for 15 to 21 days.

| Characteristic (Length of time) | Length of days suspected Ebola Persons should be isolated (n=1130) | Length of isolation for direct contact (n=1130) |
|---------------------------------|--|--|
| 1-7 days | 33 (2.9) | 33 (2.9) |
| 8-14 days | 33 (2.9) | 33(2.9) |
| 15-21 days | 983 (86.9) | 983 (86.9) |
| 22 days and over | 81 (7.2) | 81 (7.2) |
| Total | 1130 | 1130 |

Table: 4.2.2 Length of days for isolation



BEHAVIOURS AND PRACTICES

5.1 Adopted and anticipated Ebola protective behaviors

5.1.1: Adoption of protective behaviors to avoid Ebola infection

According to the results as shown in figure 5.1, nearly all of the respondents (98%) said they had taken some action to avoid being infected by Ebola – this was high across all counties.



5.2: How long they had been practicing Ebola protective behaviours

As shown in table 5.2 below and figure 5.2 further below, 42% of the respondents had started practicing Ebola protective behaviors between five to six months prior to the interview, a slightly closer proportion (39%) had been practicing them three to four months prior.

Table 5.2: Time they have been practicing Ebola protective behaviours

| | >1 month n (%) | 1-2 months n (%) | 3-4 months n (%) | 5-6 months n (%) | 7-8 months n (%) | >9 months n (%) | Total n (%) |
|--|----------------------|------------------------|-------------------------------|------------------------|-------------------------------|-----------------------|----------------|
| Time they began protective behaviour by county (n=1170) | | | | | | | |
| Grand Cape Mount | 3 (4) | 7 (9.3) | 39 (52.0) | 16 (21.33) | 9 (12) | 1 (1.3) | 75 (6.41) |
| Grand Gedeh | 5 (11.1) | 0 (0) | 27 (60.0) | 13 (28.89) | 0 (0) | 0 (0) | 45 (3.85) |
| Lofa | 3 (2) | 0 (0) | 77 (51.33) | 63 (42.0) | 6 (4) | 1 (0.7) | 150(12.82) |
| Montserrado | 6 (1) | 25 (4) | 177 (28.10) | 289 (45.87) | 102 (16.2) | 28 (4.4) | 630 (53.85) |
| Nimba | 4 (1.8) | 5 (2.2) | 105 (46.67) | 103 (45.78) | 5 (2.2) | 1 (0.4) | 225 (19.23) |
| River Cess | 1 (2.2) | 15 (33.3) | 18 (40.0) | 9 (20.0) | 1 (2.2) | 1 (2.2) | 45 (3.85) |
| Total | 22 (1.88) | 52 (4.4) | 443 (37.86) | 493 (42.14) | 123 (10.5) | 32 (2.7) | 1170 (100) |
| Time they began protective behaviour by residence (n=1170) | | | | | | | |
| Rural | 15 (3.2) | 28 (5.92) | 217 (45.88) | 179 (37.84) | 28 (5.92) | 4 (0.85) | 473 (100) |
| Urban | 7 (1) | 24 (3.44) | 226 (32.42) | 314 (45.05) | 95 (13.63) | 28 (4.02) | 697 (100) |
| Total | 22 (1.9) | 52 (4.4) | 443 (37.86) | 493 (42.14) | 123 (10.51) | 32 (2.74) | 1170 (100) |



5.3: Protective behaviors adopted

As shown in the figure 5.3 below, the respondents reported some measures they had adopted to protect themselves from Ebola. These were:

- Disinfectant hand washing: with soap and water (83%); with chlorine (73%%); with other disinfectants (73%)
- No physical contact: Avoiding crowded places (61%); no physical touch With everyone (36%); no physical touch with suspects (36%).
- Avoiding burials: (24%) Some behaviours based on misconceptions were also reported: washing hands with water only (21); drinking lots of water (4%), and drinking bitter cola (3%).



Some behaviours based on misconceptions were also reported: washing hands with water only (21%); drinking lots of water (4%), and drinking bitter cola (3%). See figure 5.3b below:



5.4 Anticipated behaviour: First action they would take if they come into physical contact with as suspected Ebola person

The results show that the first thing the majority of the respondents would do if they came in contact with a person suspected of Ebola were: washing hands (74%) while 18% said they would go to a health facility (health centre or Ebola care centre or ETU), and 5% said they would call the hotline number (4455).

| rigure 5.4: First action they would take if | they come into phy | Sical contact with as sus |
|---|--------------------|---------------------------|
| Characteristics | Frequency | Percentage |
| Don't tell anyone | 20 | 1.7 |
| Wash your hands | 849 | 73.1 |
| Tell family or friends | 20 | 1.7 |
| Call the hotline number/4455 | 55 | 4.7 |
| Tell your community leader/ chief | 11 | 0.9 |
| Take own medicines | 4 | 0.3 |
| Go to the health centre or Ebola care centre or ETU | 203 | 17.5 |
| Total | 1162 | 100 |

Figure 5.4: First action they would take if they come into physical contact with as suspected Ebola person

5.5 Behaviours and practices around health facilities/Ebola treatment units (ETUs)

5.5.1: Anticipated behavior: Would go to HF or ETU if symptomatic of fever

The majority of the respondents (90%) reported that they would go to a health facility or an ETU if they had fever, and a higher proportion (98%) said they would visit ETU when they were to be suspected of Ebola.

| Characteristic | n | They would seek treatment at HF/ ETU if they had fever n (%) | n | Would visit ETU when suspected of Ebola n (%) |
|------------------|------|--|------|--|
| By county | | | | |
| Grand Cape Mount | 75 | 72 (96) | 75 | 73 (97.3) |
| Grand Gedeh | 45 | 44 (97.8) | 45 | 44 (97.8) |
| Lofa | 150 | 145 (96.7) | 150 | 149(99.3) |
| Montserrado | 628 | 533 (84.9) | 626 | 612 (97.80 |
| Nimba | 225 | 217 (96.4) | 222 | 221 (99.5) |
| River Cess | 45 | 38 (84.4) | 45 | 44 (97.8) |
| Total | 1168 | 1049 (89.8) | 1163 | 1143 (98.3) |
| | | | | |
| by residence | | | | |
| Rural | 695 | 603 (86.8) | 472 | 466 (98.7) |
| Urban | 473 | 446 (94.3) | | |

Table 5.5.1 : Would go to HF or ETU if symptomatic of fever

5.5.2 Length of time before Going to Health Facility if they had fever/were suspected of Ebola

If they were to have fever, most of the respondents (55%) said they would wait for less than one day and only 2% said they would wait for more than a week. While if they were to be suspected of having Ebola, most of the of the respondents (67%) said they would wait for less than a day, while 28% said would wait one to two days. See table 5.5.2 below:

| | oing to Health Facility/ ere suspected | Facility/ Time before going to Health Facility/ ETU if they had fever | | |
|-------------------|---|--|-----------|------------|
| Characteristics | Frequency | Percentage | Frequency | Percentage |
| Less than one day | 761 | 66.6 | 640 | 55.1 |
| One – two days | 315 | 27.6 | 372 | 32.0 |
| Three – four days | 59 | 5.2 | 34 | 2.9 |
| Five – six days | 8 | 0.3 | 2 | 0.2 |
| Total | 1,143 | 100.0 | 1,049 | 100.0 |

Table 5.5.2: Time before Going to Health Facility if they had fever/were suspected of Ebola

5.5.3 Reasons for not preferring the health facility or ETU if they had fever

Figure 5.5.3 shows that the three major reasons the respondents did not prefer to go to the health facility/ ETU if they were to have fever; 39 % said they would prefer to go to a nearby pharmacy instead', 33% stated that 'people will think I have Ebola' while 16% believed the health facilities are contaminated with Ebola.



5.5.4: Reasons for NOT going to health facility/ ETU if suspected of contracting Ebola

As presented in Figure 5.5.4 below, those that would not go to ETU if suspected of Ebola infection expressed two major reasons: belief that the hospital is contaminated with Ebola (56%), and preference to go to a nearby pharmacy instead (22%).


5.5.5 Perceived outcomes of Ebola suspected person who goes to the hospital/health facility

The respondents felt that the following will happen to someone suspected of having Ebola goes to the hospital/health facility: 81% percent stated that he or she would be well taken care off (rehydrated, given medicines/food, monitored), 24% said he or she would be definitely cured, and 10% felt that the person would die there. See table 5.5.5 below:

| Characteristics | Frequency | Percentage |
|---|-----------|------------|
| Perceived outcomes of a suspected case at an ETU (n=1401) | | |
| They won't be able to do anything for him/her and may die there | 119 | 10.2 |
| They will take care of him/her (rehydrate, give medicines/food, monitor status) | 945 | 80.8 |
| They will definitely cure the person from Ebola | 282 | 24.1 |
| They will find a way to kill the patient so that he/she doesn't spread 5.7Ebola to others | 22 | 1.9 |
| They will be turn away | 5 | 0.4 |
| Others | 31 | 2.6 |

Table 5.5.5: Perceived outcomes of a suspected case at an ETU(n=1170)

5.6 Behaviours and practices in protecting family members

5.6.1 Reported behavior: action taken any action to protect family members from Ebola

Respondents stated that they had taken some actions in protecting their family members form Ebola; 88% said that they had told them about hand washing and hygiene, while 65% said they had told them not touch a sick person or a dead body.

Table 5.6.1: Behaviours taken to protect family

| Characteristics | Frequency | Percentage | | | | | |
|---|-----------|------------|--|--|--|--|--|
| Action taken any action to protect family members from Ebola n=1170 | | | | | | | |
| Telling them about hand washing and hygiene | 1026 | 87.69 | | | | | |
| Telling them what to do when someone in the community is sick | 684 | 58.46 | | | | | |
| Telling them not to touch sick person or dead body | 761 | 65.04 | | | | | |
| Preparing chlorine water every day for hand washing and bathing | 577 | 49.32 | | | | | |
| Buying items for protection like medicines, plastic bags, gloves | 152 | 12.99 | | | | | |
| Informing local leader or hotline(4455) if someone is sick in the community or has died | 18 | 1.54 | | | | | |
| Others | 54 | 4.6 | | | | | |

5.6.2 Anticipated action: If family member contracted Ebola

In the event of a family member contracting Ebola, most of the respondents (61%) said they would call the hospital/Ebola phone line (4455); 43% said they would avoid all physical contact and bodily fluids of that person, and 33% said they would take the person to the health facility/ETU.

Table 5.6.2: Anticipated action: If family member contracted Ebola

| Characteristics | Frequency | Percentage |
|---|-----------|------------|
| Nothing | 26 | 2.3 |
| Help care for the person at home (e.g., clean up their excretions / vomit; help bathe them) | 16 | 1.4 |
| Check their temperature by touching their body | 11 | 0.9 |
| Avoid all physical contact and bodily fluids of that person | 501 | 42.8 |
| Call the hospital / Ebola phone line (4455) | 717 | 61.3 |
| Take the person to the health facility/ETU | 387 | 33.1 |
| Tell the community leader | 198 | 16.9 |
| Tell friends and family | 64 | 5.5 |
| Give home treatment | 7 | 0.6 |
| Stay away from them for1-7 days | 37 | 3.2 |
| Stay away from them for 8-14 days | 13 | 1.1 |
| Stay away from them for 15-21 days | 172 | 14.7 |
| Keep them at home | 6 | 0.5 |
| Others | 20 | 1.7 |

5.6.3: Anticipated behaviors: Caring for suspected family member while awaiting help

The majority of the participants (75%) reported that they would keep away from other people a family member who is suspected of having Ebola while awaiting for help while 19% said they would provide him/her with food, water and other fluids.

| Characteristic | Frequency | Percentage | | | | |
|---|-----------|------------|--|--|--|--|
| Caring for Ebola suspected family member while awaiting for help (n=1170) | | | | | | |
| Keep the person away from others | 875 | 74.8 | | | | |
| Use a single caregiver | 160 | 13.7 | | | | |
| Would not touch the person or their body fluids | 482 | 41.2 | | | | |
| Would use protective barriers such as gloves | 451 | 38.5 | | | | |
| Frequently wash hands | 226 | 19.3 | | | | |
| Provide sick person with food, water, and other fluids | 227 | 19.4 | | | | |
| Others | 50 | 4.3 | | | | |

5.6.4: Anticipated behavior: would allow contact tracers to discuss Ebola with family

The results show that 97% of the respondents said that they would allow contact tracers to talk to their family and find out more if there was a case of a family member with possible symptoms of Ebola compared to one percent who said.

| Characteristic | Yes n (%) | No n (%) | Total <i>n</i> (%) | | | |
|---|---|-----------------|---------------------------|--|--|--|
| Would allow contact tracer by county (n=1154) | | | | | | |
| Grand Cape Mount | 72 (97.3) | 2 (2.7) | 74 (100) | | | |
| Grand Gedeh | 44 (100) | 0 (0) | 44 (100) | | | |
| Lofa | 146 (98.6) | 2 (1.4) | 148 (100) | | | |
| Montserrado | 618 (98.6) | 9 (1.4) | 627 (100) | | | |
| Nimba | 216 (98.6) | 3 (1.4) | 219 (100) | | | |
| River Cess | 43 (95.6) | 2 (4.4) | 45 (100) | | | |
| Total | 1139 (98.4) | 18 (1.6) | 1154 (100) | | | |
| | | | | | | |
| Would allow contact tracer) by resid | Would allow contact tracer) by residence (n=1154) | | | | | |
| Rural | 472 (100) | 0 (0) | 466 (100) | | | |
| Urban | 679 (98.26) | 12 (1.74) | 691 (100) | | | |

Table 5.6.4: Would allow contact traces to discuss Ebola with family

5.7 Behaviours and practices around burials and handling of dead body

5.7.1 Anticipated action: When a sick family member dies from unconfirmed cause of death

The results as shown in figure 5.7.1 below and table 5.7.1 further below, 85% of the respondents said they would contact the burial team in the event that would a family member became sick and died without prior knowledge for cause of death - Montserrado was highest (92%); and 47% of all respondents said that they would not touch the body – Nimba was highest (64%).



Table 5.7.1: Anticipated action: When a sick family member dies from unconfirmed cause of death

| COUNTY | n | Not touch body n (%) | Wash the body n (%) | lmmed. bury body n (%) | Take to funeral parlour n (%) | Wait for burial team n (%) | Others n (%) |
|---------------------|-----------|----------------------------|---------------------------|------------------------------|--|-------------------------------------|-----------------|
| When a sick fam | nily meml | per dies from ur | nconfirmed cau | use of death n= | 1170 | | |
| Grand Cape Mount | 75 | 24 (32.00) | 8 (12.00) | 4 (5.33) | 2 (2.67) | 61 (81.3) | 1 (1.33) |
| Grand Gedeh | 45 | 5 (11.11) | 0 (0) | 1 (0.67) | 0 (0) | 33 (73.3) | 4 (8.89) |
| Lofa | 150 | 62 (41.33) | 1 (0.67) | 12 (8.0) | 0 (0) | 122 (81.33) | 8 (5.22) |
| Montserrado | 630 | 291 (46.19) | 6 (0.95) | 10 (1.59) | 2 (0.32) | 581 (92.22) | 5 (0.79) |
| Nimba | 225 | 146 (64.89) | 0 (0) | 12 (5.3) | 0 (0) | 157 (69.78) | 50 (22.2) |
| River Cess | 45 | 20 (44.40) | 0 (0) | 1 (2.22) | 0 (0) | 36 (80.00) | 1 (2.22) |
| Total | 1170 | 548 (46.84) | 16 (1.37) | 31 (2.65) | 4 (0.34) | 990 (84.6) | 69 (5.9) |

5.7.2 Mode to Contact the Burial Team

As seen in figure 5.7.2 below, 71% of the respondents stated they would call 4455 as a mode to contact the burial team to bury the body, while 19% said they would inform community leaders and 6% said they would call local numbers.



5.7.3: Length of time would wait for the burial team

The results show that the 17% of the respondents would wait less than one day for the burial team to arrive before they or their community take action while 13% said they would wait for more than one week. However, most of the respondents (45%) said they would wait for one to two days. See table 5.7.3 below.

Table 5.7.3: Length of time would wait for the burial team

| Characteristics | Frequency | Percentage | | | | |
|--|-----------|------------|--|--|--|--|
| Length of time would wait for the burial team (n=1072) | | | | | | |
| Less than one day | 183 | 17.07 | | | | |
| One – two days | 482 | 44.96 | | | | |
| Three – four days | 163 | 15.2 | | | | |
| Five – six days | 107 | 9.98 | | | | |
| More than one week | 137 | 12.78 | | | | |
| Total | 1072 | 100.0 | | | | |

5.7.4: Decision maker on burial rites and rituals

Figure 5.74 below shows that most of respondents (48%) recognized community elders as the decision makers on what burial rites and rituals should be followed in respondent community.



5.7.5: Ever been around a dead body/participated in a burial ceremony

The majority of the respondents (94%) said they had not been around a dead body in the previous month compared to 6% who said they had. Similar proportions were observed as regards to participation in a burial ceremony.

Table 5.7.5: Being around dead body/participated in funeral or burial ceremony

| COUNTY | n | Being around dead body n (%) | | n | Participated burial cerem n (%) | in funeral or ony |
|---------------------|------|---------------------------------|-------------|------|---------------------------------------|----------------------|
| | | Yes (%) | No (%) | | Yes (%) | No (%) |
| Grand Cape Mount | 75 | 19 (25.3) | 56) 74.7) | 75 | 11 (14.7) | 64 (85.3) |
| Grand Gedeh | 45 | 2 (4.4) | 43 (95.6) | 45 | 2 (4.4) | 43 (95.6) |
| Lofa | 150 | 6 (4) | 144 (96) | 150 | 1 (0.7) | 149 (99.3) |
| Montserrado | 623 | 28 (4.5) | 595 (95.5) | 628 | 42 (6.7) | 586 (93.3) |
| Nimba | 225 | 10 (4.4) | 215 (95.6) | 224 | 8 (3.6) | 216 (96.4) |
| River Cess | 45 | 7 (15.6) | 38 (84.4) | 44 | 7 (15.9) | 37 (83.1) |
| Total | 1163 | 72 (6.2) | 1091 (93.8) | 1166 | 71 (6.1) | 1095 (93.9) |

5.7.6: Actions done at funeral/burial ceremony

The respondents who participated in a funeral or burial ceremony in the previous month were asked what they did at the event. No respondent reported washing the body, six % touched other people, 30% cried over body, 58% did not wash the bid most did not touch the body, did not touch other people at the burial ceremony, other cried over the body but did not touch it, and did not wash the body.

| COUNTY | n | Not touch body n (%) | Not wash the body n (%) | Touched other people n (%) | Cried over body n (%) |
|------------------|----|----------------------------|-------------------------------|----------------------------------|-----------------------------|
| Grand Cape Mount | 11 | 11 (100) | 11 (100) | 0 (0) | 1 (9.09) |
| Grand Gedeh | 2 | 2 (100) | 2 (100) | 0 (0) | 1 (50) |
| Lofa | 1 | 1 (100) | 1 (100) | 0 (0) | 0 (0) |
| Montserrado | 42 | 18 (42.86) | 42 (100) | 2 (4.67) | 14 (33.33) |
| Nimba | 8 | 5 (62.5) | 8 (100) | 2 (25) | 1 (12.5) |
| River Cess | 7 | 7 (100) | 7 (100) | 0 (0) | 4 (57.14) |
| Total | 71 | 41 (57.75) | 71 (100) | 4 (5.63) | 21 (29.58) |

Table 5.7.6: Actions done at funeral/burial ceremony

5.7.7 Acceptance of safer ways of funeral/burials

The results in table 5.7.7 reveals that 83% of the respondents accepted other ways of funeral/burial that would NOT involve the touching or washing of the dead body compared to 17% who reported 'no'. Montserrado county had the highest proportion of respondents who said they would accept other burials methods (93%) followed by Grand Gedeh (84%).

Table 5.7.7: Acceptance of safer ways of funerals and burials

| Characteristic | Yes n (%) | No n (%) | Total n (%) |
|---|------------------|-----------------|----------------|
| Accept other burial methods by county (n=11 | 55) | | |
| Grand Cape Mount | 50 (66.7) | 25 (33.3) | 75 (100) |
| Grand Gedeh | 38 (84.4) | 7 (15.6) | 45 (100) |
| Lofa | 118 (78.7) | 32 (21.3) | 150 (100) |
| Montserrado | 572 (92.9) | 44 (7.1) | 616 (100) |
| Nimba | 145 64.7 () | 79 (35.3) | 224 (100) |
| River Cess | 38 (84.4) | 7 (15.6) | 45 (100) |
| Total | 961 (83.2) | 194 (16.8) | 1155 (100) |

5.8: Participation in Ebola community activities

5.8.1: Participated in community action to Stop Ebola

As can be seen in Table 5.8.1 below, 47% of the participants said that they had participated in some community activity to stop Ebola. Of these, the majority said that they had spread awareness message and 44% said they had attended meetings about Ebola.

Table 5.8.1: Participated in community action to stop Ebola

| Characteristic | Frequency | Percentage |
|--|-----------|------------|
| Ever participated in community action to stop Ebola | | |
| Yes | 556 | 47.6 |
| No | 609 | 52.1 |
| Total | 1169 | 100 |
| | | |
| Community action undertaken | | |
| Spreading awareness | 465 | 82.1 |
| Demonstrating prevention actions | 200 | 36 |
| Attending meetings about Ebola | 246 | 44.2 |
| Giving instructions to/supervising others | 32 | 5.8 |
| Distributing materials (Kits/ posters/ etc) for protection | 50 | 9 |
| Contact tracing and case finding | 6 | 1.1 |
| Conducting safe burials as part of burial teams | 1 | 0.2 |
| Others (specify): | 4 | 0.7 |
| Total | 556 | 100 |
| | | |



INFORMATION CHANNELS, NETWORKS AND SOURCES

6.1: Sources of Ebola related information

Table 6.1 indicates that 93% of the respondents' initial source of Ebola messages was radio, 39% cited relatives / friends / neighbours/ community members and 35% mentioned health workers through house to house visits. For source of information on contact tracers, again most participants mentioned radio (85%), seconded by house to house visits (34%). On the person who visited them to give Ebola related information, teachers were mostly reported (69%) and nearly as many respondents mentioned "other" (See figure 6.1 below).

| Information Channel | Initial source of Ebola message (n=1170) | | Source of info on contact tracers (n=1170) | |
|---|---|-------------------|--|-------------------|
| | Frequency | Percentage (%) | Frequency | Percentage (%) |
| Radio | 1092 | 93.3 | 990 | 84.6 |
| Television | 251 | 21.5 | 196 | 16.8 |
| Megaphone/public announcements/Town criers | 30 | 11.1 | 162 | 13.8 |
| House-to-house visits by health workers | 408 | 34.9 | 394 | 33.7 |
| Church / Mosque / other religious venues | 132 | 11.3 | 315 | 31.5 |
| Other community meetings | 131 | 11.2 | 81 | 6.9 |
| Relatives / Friends / Neighbours/ Community members | 460 | 39.3 | 116 | 9.9 |
| Newspaper / Flyers / Brochures / Posters/ Other print materials | 173 | 14.8 | 22.2 | 22.2 |
| Internet / Blog / Website / Social Media / Facebook | 93 | 7.9 | 81 | 6.9 |
| Traditional/Community leaders | 39 | 3.3 | 14 | 1.2 |
| Government/ County Health Team | 257 | 22.0 | 24 | 2.1 |
| Billboards/ wall paintings | 93 | 7.9 | 94 | 8 |
| Mobile phone / text messages | 5 | 0.4 | 19 | 1.6 |
| Call center/hotline/4455 | 13 | 1.1 | 2 | 0.2 |
| Burial team | 5 | 0.4 | 0 | 0 |
| | | | | |

Table 6.1: Sources of Ebola related information



6.2: Radio listenership and Ebola Messages

As shown in table 6.2 below, about 80% of the respondents indicated that during the last three months prior to the interview, they had listened to the radio almost every day, 18% said they had listened to radio sometimes, and 3% said they never. Radio listenership was highest in Grand Cape Mount (92%) and lowest in Grand Gedeh (56%).

Overall, 77% of the respondents had heard a message on Ebola almost every day in the previous three months prior to the interview. Again, this was reported highest in Grand Cape Mount (90%) and lowest in Grand Gedeh (57%); and slightly higher in urban than rural areas (79% vs 73%).

| | Listened to Radio (n=1168) | | | Heard Message on Ebola last 3 mon (n=1133) | | |
|---------------------|----------------------------|------------|----------|---|-------------|----------|
| County | Almost everyday | Sometimes | Never | Almost everyday | Sometimes | Never |
| Grand Cape Mount | 69 (92.00) | 4(4.00) | 3(4.00) | 66(90.41) | 6(8.22) | 1(1.37) |
| Grand Gedeh | 25 (55.56) | 17(37.78) | 3(6.67) | 24(57.14) | 18(42.86) | 0(0) |
| Lofa | 107(71.33) | 33(22.00) | 10(6.67) | 104(74.82) | 33(23.74) | 2(1.44) |
| Montserrado | 529(84.10) | 93(14.79) | 7(1.11) | 501(80.81) | 118(19.03) | 1(0.16) |
| Nimba | 168(75.00) | 47(20.98) | 9(4.02) | 145(67.44) | 68(31.63) | 2(0.93) |
| River Cess | 32(72.11) | 12(26.67) | 1(2.22) | 31(70.45) | 13(29.55) | 0(0) |
| Total | 930(79.62) | 205(17.55) | 33(2.83) | 871(76.88) | 256 (22.59) | 6 (0.53) |
| | | | | | | |
| By place of resid | dence | | | | | |
| Urban | 571(82.16) | 112(16.12) | 12(1.73) | 541(79.21) | 141(20.64) | 1(0.15) |
| Rural | 359 (75.00) | 93(19.66) | 21(4.44) | 330(73.33) | 115(25.56) | 6(0.53) |

Table 6.2: Radio Listenership and Ebola messages

6.3: Trusted / preferred source for health related information on EVD

The results show that 86% of the respondents trusted the Government/Ministry of Health and Social Welfare to provide reliable health information and and 79% to trusted the same to provide information on safe funeral/burial practices respectively.

| Characteristic | Trust to Provide reliable health information (n=1170) | | Preferred sourd safe funeral/bu (n=1170) | |
|---|--|----------------|--|---------------|
| | Frequency | Percentage (%) | Frequency | Percentage(%) |
| Government / Ministry of Health and Social Welfare | 1000 | 85.5 | 925 | 79.1 |
| The Media | 304 | 26.0 | 270 | 23.1 |
| Health and medical professionals | 647 | 55.3 | 589 | 50.3 |
| Relatives and friends | 77 | 6.6 | 34 | 2.9 |
| Religious leaders (e.g. pastor, Imam) | 72 | 6.2 | 61 | 5.2 |
| Spiritual healers | б | 0.5 | - | - |
| Traditional healers | 1 | 0.1 | 5 | 0.4 |
| Call center/hotline/4455 | 13 | 1.1 | 21 | 1.8 |
| Health workers that go from house to house | 291 | 24.9 | 349 | 29.8 |
| Burial team | 12 | 1.0 | 140 | 12 |

Table 6.3: Trusted / preferred source for Health Related Information on EVD

6.4: Information needs on Ebola

As shown in the table 6.4 below, 49% of the respondents said that they needed additional information on how to protect others in the house if a household member is suspected of Ebola; 35% said they needed additional information on the cause/origin of the disease; while about 8% said they needed additional information on the new Ebola vaccine.

Table 6.4: Require additional information on Ebola

| Frequency | Percentage (%) |
|-----------|---|
| 27 | 35.1 |
| 22 | 28.6 |
| 24 | 31.2 |
| 17 | 22.1 |
| 23 | 29.9 |
| 38 | 49.4 |
| 11 | 14.3 |
| 14 | 18.2 |
| 8 | 10.4 |
| 6 | 7.8 |
| 26 | 33.8 |
| 0 | 0 |
| 0 | 0 |
| 10 | 13 |
| | 27 22 24 17 23 38 11 14 8 6 26 0 0 0 |

6.5: Information channels

6.5.1: Knowledge and usage of Hotline number 4455

The results show that 65% of the participants knew the hotline number (4455) and 97% of these mentioned the number correctly. Most of the respondents said they had never called the number, 9% of all respondents said they did. Among those who called 81% said that they had been satisfactorily responded through getting the information they required or having an immediate action implemented because of the call.

Table 6.5.1: Knowledge and usage of Hotline number 4455

| Characteristic | Frequency | Percentage |
|--|-----------|------------|
| Know number to call to report a suspected Ebola case or ask questions (n=1167) | 756 | 64.78 |
| Knowing the correct number – 4455 (n=749) | 727 | 97.06 |
| Ever called hotline 4452 (n=1167) | 109 | 9.34 |
| Received the info needed/immediate action taken (n=110) | 89 | 80.91 |

6.5.2: Reasons for calling hotline

The results show that most respondents called the hotline number to report a death (40%), and closely as much (39%) had called to report a death.

Table 6.5.2: Reasons for calling hotline

| Reason for calling hotline (n=109) | Frequency | Percentage |
|---------------------------------------|-----------|------------|
| Get information on Ebola | 14 | 12.84 |
| Report a death | 43 | 39.45 |
| Report suspected case | 42 | 38.53 |
| Want to know if number is working | 5 | 4.59 |
| Others | 5 | 4.59 |
| Total | 109 | 100 |



ATTITUDES AND PERCEPTION TOWARDS SURVIVORS

7.1: Knowing an Ebola survivor

About a third of the respondents (32%) stated that they know a person who had survived from Ebola, this was highest in Lofa (45%) and lowest in River cess (7%). See figure 7.1 below.



7.2: Positive attitudes toward survivors

The results show that there were some positive attitudes towards survivors. As shown in table 7.1 below, 91% said the respondents said they would welcome back survivors in their community, 58% said they would be willing to buy from survivors, and 84% said they would accept a surviving orphan to live in their household.

| | n | Can Buy from survivors n (%) | | Would welcome survivors in community n (%) | n | Would accept a surviving orphan to live in household n (%) |
|---------------------------|------|------------------------------------|------|---|------|--|
| County | | n = 1126 | | n = 1169 | | n = 1164 |
| Grand Cape Mount | 72 | 33 (45.83) | 75 | 60 (80.0) | 74 | 57 (77.03) |
| Grand Gedeh | 44 | 22 (50.0) | 45 | 29 (64.44) | 45 | 30 (66.67) |
| Lofa | 138 | 81 (58.70) | 150 | 137 (91.33) | 150 | 135 (90.0) |
| Montserrado | 611 | 380 (62.19) | 630 | 603 (95.71) | 628 | 550 (87.58) |
| Nimba | 216 | 109)50.46) | 224 | 194 (86.61) | 222 | 164 (73.87) |
| River Cess | 45 | 30 (66.67) | 45 | 39 (86.67) | 45 | 41 (91.11) |
| Total | 1126 | 655 (58.17) | 1169 | 1062 (90.85) | 1164 | 977(83.93) |
| | | | | | | |
| By residence | | n = 1126 | | n = 1169 | | n = 1164 |
| Rural | 675 | 420 (62.22) | 696 | 659 (94.68) | 693 | 599 (86.44) |
| Urban | 451 | 235 (52.11) | 473 | 403 (85.20) | 471 | 378 (80.25) |
| | | | | | | |
| By age group | | n = 1126 | | n = 1169 | | n = 1164 |
| 17 - 24 years | 140 | 71 (50.71) | 145 | 126 (86.9) | 145 | 120 (82.76) |
| 25 - 34 years | 360 | 202 (56.11) | 375 | 339 (90.4) | 372 | 289 (80.11) |
| 35 years and over | 626 | 382 (61.02) | 649 | 597 (91.99) | 647 | 559 (86.40) |
| | | | | | | |
| By educational attainment | | n = 1124 | | n = 1167 | | n = 1162 |
| No formal education | 223 | 115 (51.57) | 235 | 119 (84.68) | 235 | 189 (80.43) |
| Elementary (1 - 6) | 142 | 72 (50.70) | 148 | 131 (88.51) | 147 | 117 (79.59) |
| Junior High (7 - 9) | 179 | 89 (49.72) | 188 | 166 (88.3) | 186 | 148 (79.57) |
| Senior High (10 - 12) | 404 | 252 (62.38) | 414 | 390 (94.2) | 413 | 144 (88.89) |
| University Degree | 159 | 114 (71.70) | 163 | 156 (95.71) | 162 | 18 (94.74) |
| Others | 17 | 12 (70.59) | 19 | 18 (94.74) | 19 | |

Table 7.2: Positive Attitudes toward Survivors

7.3: Negative Attitudes towards Survivors

Table 7.3 below shows some reported negative beliefs towards survivors. Over a third of the respondents (37%) stated that child survivors put their classmates at risk – this was higher in the rural areas than urban areas (40% vs 33%). Close to a third of the respondents (29%) said that Ebola survivors are likely to have the disease again. This was highest in Nimba (47%) and lowest in Monstrerrado (21%).

| Characteristic | n | Survivors likely to contract Ebola again n (%) | n | Child survivors put classmates at risk n (%) |
|---------------------------|-------------|---|-------------|--|
| County | | | | |
| Grand Cape Mount | 75 | 25 (33.33) | 75 | 38 (50.67) |
| Grand Gedeh | 45 | 16 (35.56) | 45 | 12 (26.67) |
| Lofa | 150 | 46 (30.67) | 149 | 44 (29.53) |
| Montserrado | 630 | 133 (21.11) | 629 | 295 (46.90) |
| Nimba | 225 | 105 (46.67) | 222 | 29 (13.06) |
| River Cess | 45 | 10 (22.22) | 45 | 17 (37.78) |
| Total | 1170 | 335 (28.63) | 1165 | 435 (37.34) |
| | | | | |
| By place of residence | | | | |
| Rural | 697 | 164 (23.53) | 695 | 279 (40.14) |
| Urban | | | | |
| | 473 | 171 (36.15) | 470 | 156 (33.19) |
| By age | | | | |
| 17 - 24 years | 146 | 42 (28.77) | 146 | 47 (32.19) |
| 25 - 34 years | | 375 | | 371 |
| 35 years and over | | | | |
| | 649 | 175 (26.96) | 648 | 253 (39.04) |
| By educational attainment | n = 1168 | | n = 1163 | |
| No formal education | 235 | 54 (26.96) | 234 | 80 (34.19) |
| Elementary (1 - 6) | 148 | 50 (33.78) | 146 | 54 (36.99) |
| Junior High (7 - 9) | 189 | 62 (32.80) | 188 | 57 (35.64) |
| Senior High (10 - 12) | 414 | 126 (30.43) | 413 | 159 (38.50) |
| University Degree | 163 | 35 (21.47) | 163 | 64 (39.26) |
| Others | 19 | 8 9(42.11) | 19 | 11 (57.89) |

Table 7.3: Negative attitudes towards survivors

CHAPTER 8

ASSOCIATIONS between socio-demographic characteristics, comprehensive knowledge, risk perception, exposure to radio and community activities - and behavioural outcomes

8.1 Associations with "Avoiding physical contact"

The results show that several independent variables had statistically significant association with the dependent variable "avoiding physical contact⁹" (meaning that the associations in the sample likely reflect those in the population). These were i) 'educational attainment' – proportionally more higher educated respondents reported 'avoiding physical contact' than lower educated respondents; ii) 'place of residence'-proportionally more urban respondents reported 'avoiding physical contact' than lower educated respondents; ii) 'place of residence'-proportionally more urban respondents reported 'avoiding physical contact' than rural respondents; iii) 'marital status'- proportionally more married respondents reported 'avoiding physical contact' than single respondents; iv) 'community participation': proportionally more respondents who participated in community activities reported avoiding physical contact as compared to those who said they did not participate in them; v) radio listening frequency – proportionally respondents who said they listen to the radio everyday reported 'avoiding physical contact' than those that reported less frequent listenership; vi) risk perception – there was a negative association; that is, proportionally the more respondents who had lower risk perception reported 'avoiding physical contact' than respondents with higher risk perceptions. See Table 8.1 below:

^{9 &}quot;Avoiding physical contact" is a composite variable that was generated by adding "avoiding crowded places", "no physical touch with everyone" and "no physical touch with suspected persons"

Table 8.1: Associations with "Avoiding physical contact"

| NO PHYSICAL CONTACT | | | | |
|--|------------------|--------------|------------|-----------|
| | No | yes | Total | P - value |
| Educational attainment | | | | |
| No formal education | 81 (35.84) | 145 (64.16) | 226 (100) | <.0001 |
| Elementary (1-6) | 57 (38.26) | 92 (61.74) | 149 (100) | |
| Junior High (7 - 9) | 52 (28.26) | 132 (71.74) | 184 (100) | |
| Senior High (10 - 12) | 88 (21.73) | 317 (78.27) | 405 (100) | |
| University | 27 (16.56) | 136 (83.44) | 163 (100) | |
| Total | 305 (27.06) | 822 (72.94) | 1127(100) | |
| Place of residence | | | | |
| Urban | 138 (20.26) | 543 (79.74) | 681 (100) | <.0001 |
| Rural | 171 (36.77) | 294 (63.23) | 465 (100) | |
| Total | 309 (26.96) | 83 (73.04) | 1146(100) | |
| Marital Status | | | | |
| Single | 115 (33.05) | 233 (66.95) | 348 (100) | <.0001 |
| Married | 171 (23.78) | 548 (76.22) | 719 (100) | |
| Widowed/divorced/separated | 22 (30.99) | 49 (69.01) | 71 (100) | |
| Total | 308 (27.07) | 830 (72.936) | 1138 (100) | |
| Community participation | | | | |
| No | 188 (32.03) | 399 (67.97) | 587(100) | <.0001 |
| Yes | 120 (21.62) | 435 (78.38) | 555 (100) | |
| Total | 308 (26.97) | 834 (73.03) | 1142 (100) | |
| Radio listening frequency in t | he previous thre | e months | | |
| Everyday | 203 (22.28) | 708 (77.72) | 911 (100) | <.0001 |
| At least once a week | 72 (41.86) | 100 (58.14) | 172 (100) | |
| <once a="" td="" week<=""><td>17 (60.71)</td><td>11 (39.29)</td><td>28(100)</td><td></td></once> | 17 (60.71) | 11 (39.29) | 28(100) | |
| Never | 17 (51.52) | 16 (48.48) | 33 (100) | |
| Total | 309 (27.01) | 835(72.99) | 1144(100) | |
| Risk perception | | | | |
| No risk | 219 (26.32) | 613 (73.68) | 832(100) | 0.01 |
| Low risk | 32 23.36) | 105 (76.64) | 137 (100) | |
| Medium risk | 9 (16.98) | 44 (83.02) | 53 (100) | |
| High risk | 22 (35.48) | 40 (64.52) | 62 (100) | |
| Not sure/Don't know | 26(43.33) | 34 (56.67) | 60 (100) | |
| Total | 308 (26.92) | 836 (73.08) | 1144 (100) | |

8.2 Associations with "disinfectant hand washing"

The results show that several independent variables that had a statistically significant association with the dependent variable "disinfectant hand washing¹⁰". These were i) 'radio listening frequency' - proportionally respondents who said they listen to the radio everyday reported more 'disinfectant hand washing' than those with that reported less frequent listenership; ii) 'risk perception' - there was a negative association; that is, those that perceived no or low risk reported more disinfectant handwashing than those that had higher risk perceptions; and iii) 'place of residence' - proportionally urban respondents reported more disinfectant hand washing than rural respondents". See Table 8.2 below:

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¹⁰ Disinfectant hand washing " is a composite variable that was generated by adding "washing hands with soap", "washing hands with chlorine" and "washing hands with other disinfectants"

Table 8.2: Associations with "disinfectant hand washing"

| | | - | | | | | |
|--|--------------------|----------------|-----------|-----------|--|--|--|
| DISINFECTANT HANDWASHING | | | | | | | |
| | No | Yes | Total | P - value | | | |
| Radio listening freque | ncy in the previou | s three months | | | | | |
| Everyday | 12 (1.32) | 899 (98.68) | 911 (100) | 0.03 | | | |
| At least once a week | 8 (4.65) | 164 (95.35) | 172 (100) | | | | |
| <once a="" td="" week<=""><td>1 (3.57)</td><td>27 (96.43)</td><td>28(100)</td><td></td></once> | 1 (3.57) | 27 (96.43) | 28(100) | | | | |
| Never | 1 (3.03) | 32 (96.97) | 33 (100) | | | | |
| Total | 22 (1.92) | 1122 (72.99) | 1144(100) | | | | |
| | | | | | | | |
| Risk perception | | | | | | | |
| No risk | 11 (1.32) | 821 (98.68) | 832(100) | <.0001 | | | |
| Low risk | 8 (5.84) | 129 (94.16) | 137 (100) | | | | |
| Medium risk | 2 (3.77) | 51 (96.23) | 53(100) | | | | |
| High risk | 1 (1.61) | 61 (98.39) | 62 (100) | | | | |
| Not sure/Don't know | 0 (0) | 60 (100.00) | 60 (100) | | | | |
| Total | 22 (1.92) | 1122 (98.08) | 1144(100) | | | | |
| | | | | | | | |
| Place of residence | | | | | | | |
| Urban | 8 (1.17) | 673 (98.83) | 681 (100) | 0.03 | | | |
| Rural | 14 (3.01) | 451 (96.99) | 465 (100) | | | | |
| Total | 22 (1.92) | 1124 (98.08) | 1146(100) | | | | |

8.3 Associations with "avoiding unsafe burials"

The results show that several independent variables had a statistically significant association with the dependent variable "avoiding unsafe burials¹¹". These were i) 'risk perception'- respondents that reported medium risk had reportedly avoided unsafe burials more than those with low/no and high risk; and ii) 'place of residence'- proportionally more urban respondents reported to have avoided unsafe burials than rural respondents. See Table 8.3 below:

Table 8.3: Associations with "avoiding unsafe burials"

| | - | | | |
|-----------------------------|-------------|-------------|------------|-----------|
| AVOIDING UNSAFE BURI | ALS | | | |
| | No | Yes | Total | P - value |
| Risk perception | | | | |
| No risk | 633 (76.08) | 199 (23.92) | 832(100) | <.0001 |
| Low risk | 94 (68.61) | 43 (31.39) | 137 (100) | |
| Medium risk | 28 (52.83) | 25 (47.17) | 53 (100) | |
| High risk | 58 (93.55) | 4 (6.45) | 62 (100) | |
| Not sure/Don't know | 52 (86.67) | 8 (13.33) | 60 (100) | |
| Total | 865 (75.61) | 279 (24.39) | 1144 (100) | |
| | | | | |
| Comprehensive knowledge | | | | |
| Urban | 405 (72.06) | 157 (27.94) | 562 (100) | 0.01 |
| Rural | 440 (78.85) | 118 (21.15) | 558 (100) | |
| Total | 845(75.45) | 275 (24.55) | 1120(100) | |

¹¹ Measured by the item: In what ways have you changed your behavior or taken actions to avoid being infected? (I do not participate in burial ceremonies that involve the handling (touching/ washing) of the dead body)

8.4 Associations with "comprehensive knowledge"

The results show that several independent variables had a statistically significant association with the dependent variable "comprehensive knowledge". These were i) "radio listening frequency": proportionally respondents who said they listen to the radio everyday had more 'comprehensive knowledge" than respondents with less frequent listenership; and ii) "sex": proportionally more male respondents had "comprehensive knowledge" than female respondents. See Table 8.4 below:

| COMPREHENSIVE KNOWLEDGE | | | | | | | |
|--|-------------|--------------|------------|-----------|--|--|--|
| | No | Yes | Total | P - value | | | |
| Radio listening freque | ency | | | | | | |
| Everyday | 429 (47.35) | 477 (52.65) | 906 (100) | .003 | | | |
| At least once a week | 107 (62.57) | 64 (37.43) | 171 (100) | | | | |
| <once a="" td="" week<=""><td>14 (51.85)</td><td>13 (48.15)</td><td>27(100)</td><td></td></once> | 14 (51.85) | 13 (48.15) | 27(100) | | | | |
| Never | 19 (57.58) | 14 (42.42) | 33 (100) | | | | |
| Total | 509(50.04) | 568 (49.96) | 1137 (100) | | | | |
| | | | | | | | |
| Sex | | | | | | | |
| Male | 329 (47.75) | 360 (52.25) | 689 (100) | 0.05 | | | |
| Female | 242 (53.78) | 208 (46.22) | 450 (100) | | | | |
| Total | 571 (50.13) | 1143 (49.87) | 1139(100) | | | | |

Table 8.4: Associations with "comprehensive knowledge"

PART 2: QUALITATIVE FINDINGS

CHAPTER 9

Qualitative findings

9.1 Awareness and Knowledge

9.1.1 Knowledge about Ebola varied across groups

The views in each of the focus groups varied in their knowledge of Ebola from simplistic to scientific descriptions of the disease. Across the various groups of age and gender, respondents understood Ebola to be deadly, highly contagious, and fast acting. Some respondents recounted learning that Ebola has a lot of symptoms similar to malaria and other common illnesses, including fever, headache, and red eyes. Many views described the disease as incurable but preventable. Views from the youth male groups gave a very detailed scientific description of how EVD works:

"It attacks the central nervous system so as the result it damages the brain. Ebola what it does is that damages the thrombocytes. Thrombocytes are those cardinal cells like the white blood cell. It damage it...damages it. Sometime the person, rashes grow on their body. And those rashes when they are not taken care of from the initial stage it damages, it damages the system that's allow to fight and you know disease and thing in the body. Yes and what I know about Ebola also is that Ebola is, is not an air borne disease. People catch Ebola maybe through touching an infected person-someone who has been infected with the disease. Yeah and people also come in contact with Ebola as a result of people who have been transporting the disease like through migration moving from one place another. So this make the disease uncontrollable. So as a result people catch the disease through that same mean". (Urban male youth respondent)

A much simplistic description was articulated in a male youth group in Lofa, as well as another from a male adult group in Cape Mount.

"We know that Ebola is a disease that can kill easily. We know Ebola is a disease. Ebola is dangerous. Don't plays with Ebola, Ebola can kill quick". (Rural male youth respondent)

"What I know about Ebola business, come long time we can hear about them, many big... Ebola killing people. After they list all, the information reached to us, all the things they gave to us, we can clean ourselves. They gave us buckets, they gave us malaria pills. Every morning I can put my bucket out, somebody be passing, they come and wash their hands. That's the one I know about Ebola, I keep myself for that. I thank God, I now (still have) all my family them, every day I can compare them to wash their hands, before they go out. They come, before they go inside, I can compare them to wash their hands before. We keeping ourselves, (we are safe) I thank God for that". (Rural male adult respondent)

Views in one of the rural adult male groups (Pennokon) traced Ebola to the Congo in 1976.

"First of all Ebola we know that it originated first from Congo in 1976 where it killed a lot of people but it was contained. But recently Ebola in think in March of this year or so I don't want to be exact because I can't remember know the date it enter in Liberian or enter Liberia particular through Lofa County. And there it started spreading to almost all the counties in Liberia. Ebola is a virus that came from DRC Congo in the year 1976. From 1976 up to now this is how Ebola came to Africa. And this Ebola the name Ebola came from a river in Congo that was named after this Ebola. Um we have so many health workers that came here and told us about Ebola". (Rural male adult respondent)

Respondents' awareness of EVD included methods of prevention, such as constant hand washing, cooking food very well, avoiding contact with symptomatic persons and bodily fluids of symptomatic people if possible, and using protective gloves and clothing if handling sick people. At least, a group's view described EVD as a man-made virus that either kills or abates in 21 days.

"What I know about Ebola and what I been hearing about Ebola from people. Ebola is a man-made virus or let's say disease. Ebola does not have cure. That's what I can hear from people. Ebola does not have cure and Ebola is a sickness when it catch (catches) you it only last in you for twenty one (21) days. Either you die or you get cure from it". (Rural female youth respondent)

Views across the various groups mentioned people's initial disbelief in the disease that rapidly turned to belief as more and more people became sick. They also described the setting up of villages' vigilante forces responsible for checking and preventing possibly sick person slipping in at night.

"The Ebola issues in this area now presently we believe it, but from the starting we don't believe it because we get serious information against this Ebola business....Ebola is real we believe it but we are still, there is people still in the community that do not still believe it so that I say we know about it... We mobilize our children in the town to not sleep because whenever you sleep somebody come in your town you will not know when the night comes from 9:00pm to 6:00am in the morning they are up these are the vigilante group, the force that we have behind this Ebola we our self we volunteer yourself we put our children to check all houses who going to come who came..." (Rural male adult respondent)

There had been initial denial across the various groups at the onset of the Ebola outbreak, but with the peak in incidence and death, respondents became aware of the firsthand knowledge of the dangers of disbelief:

"First I deny about Ebola I say Ebola not on him...we must not shake hand...hard head but if I am not making mistake it was in I think July or August my father died of Ebola. He was sick but still I was denying it. But I thank God my town chief put stop to me...that I must not go there. Through his advice he saved me today I'm still on earth now I know that Ebola is real. I joined the no-shaking-hand advice. He give it to us—if your daughter or wife sick don't touch her or him, take them to nearby [clinic/hospital]. Thank God that Government is telling us that it is ceasing down..." (Rural mixed adult female respondent)

Views emanating across all of the FGDs clearly indicated that most of the discussants had not seen an Ebola victim, but a view in one of the groups, having never seen an Ebola victim, described adhering to some precautionary advice but not everything.

"You talked about people being in the community, knowledge they have about Ebola; my family and I have little idea, we don't have any idea at all about Ebola because we have not seen any sick Ebola patient. We only listen to radio or hear from people; so these prevention that going about we go there to wash our hands don't eat so-so and so; these things that we were eating so, at time we eat them. The only thing prevention we do now, to go wash our hands after we talked with somebody or shaking hand with somebody I go to wash my hands that is the only thing I and my family do in the community..." (Rural mixed adult male respondent)

9.1.2 Causes and Methods of Contracting Ebola

Participants across all of the focus groups shared various methods of contracting the Ebola virus, most of these stemming from contact with infected people, dead bodies and undercooked contaminated bush or bat or monkey meat. Respondents strongly indicated that EVD is spread through skin-to-skin contact including kissing, hugging shaking hands and sexual intercourse. Other mentioned methods of spreading the disease included contact with bodily fluids of affected individuals, and most mentioned the importance of avoiding contact with people who displayed symptoms such as vomiting, red eyes, and diarrhoea. Migration of infected individuals and denial of Ebola's existence were also cited as methods of spreading EVD.

Views across the FGDs in the counties pointed that EVD is caused by wild animals. Bats, monkeys and chimpanzees were mentioned prominently and strongly across all groups to be the host of the Ebola virus and cause of Ebola.

"As far as I know, they say that Ebola came from bat...." (Rural male adult respondent) "Ebola is a virus as we learnt in the past, previously as it came through an animal called monkey. Ebola came from monkey. But sometimes ago when we checked on the net, we learnt again that Ebola came from Congo through once, a river. But for Liberia, we learnt that it came from monkey." (Urban female youth respondent)

Fewer views indicated that eating unwashed or contaminated fruit such as certain plums, or eating bush meat or baboon, or playing in dirt could also cause infection of EVD, while few others were not too sure of the mode of transmission.

"We can't actually tell what really the cause of Ebola, but we can just talk about how the how the sickness came about or where Ebola came from. Because we learnt that Ebola came from a river from Congo and from that river they had some animals there like Monkeys, Baboon, so that baboon and monkey always going to that river side and coming in the town in the bushes, people killing the meat. So through that killing of the monkeys and baboon, human being start eating the monkeys and baboons, Ebola develop in humans. It leave (left) the animal and develop in human. So for now, we can't actually tell what the cause of Ebola. (Urban female youth respondent)

"Denial can cause Ebola and also the community, if y'all are not cooperating denial each another can cause the Ebola can come in area, traveller can cause Ebola, travellers, those who can leave from town to town business, marketers any kind off traveller that doing business interacting coming from town to do business these are the people who can cause Ebola to come". (Rural male adult respondent)

"Some of the main things that put people at risk is, doubt. Once you doubt that Ebola is not real, you will always make yourself vulnerable. In other words if you see someone is sick, like people always say; 'all the signs and symptoms of Ebola was existing before Ebola came about.' If you doubt the sickness, you see someone vomiting or toileting (going to the toilet) without taking any precaution, going around the person, it is a high possibility you come in contact with the virus". (Urban female youth respondent)

Urban groups seemingly more knowledgeable of modes of transmission

Generally, urban groups (particularly the female urban youths) described (and in detail) more modes than rural groups. Across all groups though, contact with a sick person or a dead body and eating of bush meat were prominent.

"You can get Ebola when you get in contact with somebody who has been affected by the disease. You can get it through skin contact or when someone is dead, and the person has died from the disease. Like what people usually do, they say is tradition; they will bathe the person before taking the person to the funeral home..." (Female urban youth respondent)

"People can get the virus from someone that affected with Ebola virus by body fluid, sweat, pupu (poo) pepe (urine) clothes the person used, ehn where the person lie down, the bath room y'all used," (Male urban adult respondent).

Knowledge of ways of prevention of Ebola virus infection

All groups exhibited correct knowledge of more than three ways of preventing infection, however the urban groups explained them more clearly and specifically – linking them to the causes. Prominently cited ways were: washing hands often, avoiding contact with sick persons, not touching dead body and not eating bush meat.

"We also learnt that whenever the person is down with the virus, most especially when they are vomiting, we should try to avoid them. If we wish to help, we should also put on gloves or wrap plastic on our hands to help take care of that person whenever they are down with the symptom and we have clothes that was given to us that we should use to take care of that person by taking them to the hospital. And we should avoid dead bodies. Whenever we find dead body around us we should contact..." (Urban female youth respondent).

"What they speak to us. Ebola you can keep yourself, somebody die, we must not touch it, even we must not close (get close to the dead) by the dead. You must contact the people who can do the work (health workers) if you do all that thing, some time you can be safe." (Rural male adult respondent).

9.1.3 Other names for Ebola

Respondents across almost all of the focus groups reported a number of different and similar names for the Ebola virus. All of these name point to the transmissible virulence of the Ebola virus.

"DV" (Urban female youth respondent)

"The household DV; Humanactive fever; Momo, Keheaplea; Closing House" (Rural male adult respondent)

"Jukpeh" (Rural mixed adult respondent)

"Barkuzeo; Bayourzoe; Kupayonvle; kupawhere; kupayon; Imoeyonvoi; Chenwa' (Rural male youth respondent)

Gak keh plehn (Rural female respondent)

9.1.4 Can someone who has Ebola survive from it?

The majority of views across the focus groups believed Ebola to be survivable is often based on having witnessed the experience of relatives or neighbors. Others who believed Ebola to be survivable cited hospital treatment as the cause for recovery, several expressed that having a strong immune system and seeking early treatment was the key.

"Yes people have been surviving from this deadly Ebola virus. Um when the health Ministry began to come in, first people were dying. But when they start experience it when Ministry of Health come in now people was survive. And people can only survive from this virus whenever you have experience the symptom run to the hospital for proper check. That the only way you can get save from this Ebola". (Rural male adult respondent)

A minority expressed that Ebola was not survivable believed that the virus, if untreated, would eventually consume its victims.

"People can't survive from Ebola because if you allow the sickness to get worst and it eats you up, it can kill you". (Urban female youth respondent)

9.1.5 Signs and Symptoms of Ebola

Across all the focus groups, symptoms and signs of Ebola infection were readily listed. These included fever, hot skin, red eyes, vomiting, vomiting blood, diarrhoea, headache, skin rash, weakness, and unresponsiveness to medication, people who have been lying down for days, body aches, sore throats, heavy bleeding, and bleeding from any opening on the body.

Headache, fever, running stomach and red eye are the main signs

All groups (strongly among males) readily described more than three signs and symptoms of EVD. Headache, fever, running stomach and red eye came out prominently.

"We have many signs and symptoms of Ebola. Firstly, when the Ebola, when you contract the virus, fever will start on you, fever that cannot finish. Even though there are time you go and take table other thing, it may cool it down but it can't stop. These what, these are some importantly signs and [talking in background] these signs are signs that at time you start to vomit, start to toilet, you get rash, sore throat and your eye begin red." (Urban male youths respondent).

"....If you see somebody with severe headache, red eyes, rash on the body, vomiting, running stomach, all these things are signs and symptoms or something like that..." (Rural male adult respondent).

9.2 Risk Perceptions and Beliefs

9.2.1 Individual risk of contracting Ebola now

Preventive practices lower respondents' risk perception

Again views on risk perception across all groups prominently indicated that participants are not at risk of getting Ebola any time soon – because of the preventive measures they are practising by strongly adhering to the instructions provided by health authorities such as the regular washing of hands with chlorinated water, avoiding physical and bodily fluid contacts, such as shaking hands, hugging, and handling materials of the sick, as well as desisting from carrying on traditional burial rites, such as washing and grooming of body, and promptly calling the relevant authorities when there is a suspicion of Ebola sickness or death. This was more strongly expressed in the urban youth groups. Most of them who said they may not be at risk were from urban Montserrado County and minority were from Rivercess County.

"Okay if it happens, meaning that those people are taking the preventive measures. That is, you always keep by yourself, wash your hands, you don't get among people and you don't touch anyone that have sign and symptom of Ebola." (Urban youth male respondents)

"Because I always use the preventive method. Avoid shaking hands, hugging people and hosting strangers as a whole, stranger who I don't know, even if I know you if you from a strange area where they say Ebola is outbreak there I won't host you." (Urban female youth respondents).

On the other hand some views, mainly from rural groups, expressed relatively higher risk perception. Some views from rural adults felt their risk is in hands of God.

"...because where I am going today, I feel some has the virus and they sit here and don't spray the area with chlorine and I come and sit there. I am at risk. I don't know if someone sit there with Ebola virus. They get the virus already, and then I come and sit there. So I am at risk at any time." (Rural adult male respondents).

"Because God make some people not to get Ebola. We have different, different power in our body (Everybody has different degree of resistance). Some people can't get Ebola because God bless, when God bless, you can't get Ebola." (Rural adult male respondents).

9.2.2 Possibility of someone having Ebola and not knowing that they have it

Focus group view, for the most part, believed that people could be infected with EVD and not know it. Many of these respondents believed that tests were the definitive marker of the virus and several cited the fact that EVD mimics many other diseases.

"Yes, you can have Ebola in your body and you can't know it is Ebola because before Ebola could come we had other sicknesses that were in Liberia before. And all those sicknesses have all, almost all the same symptoms. We had running stomach before, we had fever before, we had diarrhea before. Now Ebola come, Ebola embedded all those symptoms. So I can be having diarrhea and I don't know whether it is Ebola diarrhea. I can be vomiting; I don't know whether it is Ebola vomit..." (Rural male adult respondent)

Denial of Ebola was cited several times as a contributing factor to people not knowing that they were infected.

"If you not believing, if you within yourself you still denying that there is no Ebola when you have it, you will not even know wither that's Ebola, because you still denying, you not believing that the virus is real, you not taking any preventive measure so if you get it you will not know wither that Ebola..." (Rural mixed adult respondent)

9.2.3 Perception of health-workers who go house-to-house to raise awareness of Ebola

The majority of groups expressed appreciation for the health workers' door-to-door efforts to raise awareness about Ebola, with many citing the fact that isolated communities do not have access to radio or internet service and would be otherwise cut off from such information. Similarly, many respondents shared the benefits of the health workers' efforts to increasing preventive measures in communities.

> "I appreciate the health workers; I just try to encourage them to continue their good work, because Liberia is not free from Ebola yet. We need more sensitization to go on. So let them continue their good work until Liberia can be pronounced Ebola free..." (Rural male adult respondent)

A minority of group view, however, cited local distrust of health workers and described rumors of sabotage by them by purposefully poisoning locals and contaminating locals' food with the virus, and contaminating people with the chemicals distributed to wash hands.

"Because they have not experience such thing so [they believe] that the medicine can kill them. This is why they think that kind of way. Like an example I listen over the radio here Nimba some people went and attack the health workers and say well, the people [spraying] medicine, they are doing it just to kill the people. So that why they hate some of the health workers. Some people have that belief because we use to hear rumors that whenever Ebola effect some community and the supply that can be carry there and the supply it can be poison like the oil or the food...whenever they carry food there, then they can go they contaminate that food they poison it and giving it to them causing more death..." (Mixed adult teacher FGD in Nimba)

9.3 Behaviours and Practices

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9.3.1 Individual behaviors to prevent contracting Ebola

All groups across the six counties reported engaging in preventive measures of constantly washing hands in chlorinated water, calling the relevant health authority when there is a suspected EVD illness or death, and abstaining from physically touching sick people and dead bodies, since having become aware of Ebola and behaviors that they and their families could engage in to diminish their likelihood of contracting the virus.

"According to the health workers that went around and when they gave us that advice we listen (adhere) to it. And with the help of God no one was able to come down with the virus they call Ebola..." (Female adult FGD in Rural Montserrado)

Preventive behaviors described by views across all focus groups included washing hands often, avoiding crowds, not visiting sick or dead family members, washing hands after, if visited sick relatives, not allowing children to play in the dirt or playing with their friends, avoidance of street food, wearing gloves and long sleeves, and placing buckets of chlorine or chloride water at the entrance of their house for hand washing before entry. Additional preventive measures engaged in included avoidance of skin-to-skin contact such as shaking hands, using rubbing alcohol after bathing, avoiding other people's bodily fluids, and no longer bathing or burying their dead. Most reported beginning to engage in these activities since July or August, with some admitting that their communities were aware of the disease and preventive, and all respondents reported engaging in these actions on a daily basis.

9.3.2 What people do if they are sick and have symptoms like Ebola?

Groups' views varied across the counties on how they would deal with sick community members or family members. Primarily, participants across all focus groups in rural areas held that symptomatic individuals would report themselves to the Town Chief. Those in urban areas said that someone in the community or family would call the emergency number-4455-to report the individual, who would then leave the community by ambulance. Most of the respondents in the rural counties, especially Lofa and Cape Mount, would report to the town chiefs, while most of the respondents in the urban setting, especially in Montserrado and perhaps, Nimba would call the 4455 hotline. This would be followed by contact and quarantine of any individuals with whom the sick person had come into contact.

"The person will be reported to the Town Chief first because he control the Town. It will be reported to him so as the health practitioner, to have them informed so he can be taken immediately." (Rural adult male respondent)

"We would call the health Authority and the ambulance will go for them, they take you out of the community. And after taking out of the community, all the people that you get in contact with they will now list all of them and quarantine them to separate them from the other group of people in the Town or they observe you for twenty one days..." (Rural male adult respondent)

Different area hospitals and clinics mentioned included G. W. Harley Hospital, Clara Town, Trinity Maternity clinic, Simple Development, Mittal Steel, Rennie, the Ebola Center, and St. Mary's Clinic. While most groups reported that they would call an ambulance to have sick people transported to the hospital; only a few reported that they would drive them themselves or take them to the hospital via motorbike.

"If they are energized in the position to move they get a quick vehicle a taxi to take them there quick. If they are not moveable they call the hotline 4455 to send for an ambulance to take them faster..." (Urban male youth respondent)

Few groups described people running away to hide in the bush if they thought they were sick.

"Yes some people, yes some people they use to go sit down in the bush like that sometime his one he go sit down in the bush. But one time we were to Karnplay over there self they brought somebody out. They find the person in the bush. He was just laying down in the bush like that. They ask him he said I just vomiting here so I scare to go in the town. I don't want to be among my family so that they can get this sickness. But why you can't go to the health facility. He say no I scare to go. So that how that day the people tried by force to bring him out... (Rural male youth respondent) Wearing protective gear while caring for family or community members and waiting for the Ebola team to come was the most cited method of providing care across all groups.

"Wear your gloves, your clothes, make sure that you cover every part of your body. If possible, you use your rain boats. Because what happen, the person is vomiting, so that it won't be able to touch you and then what number two was saying, giving the ORS, make sure that your gloves is on, first aid treatment like the ORS given..."(Urban female youth respondent)

9.3.3 What happens when a person dies?

In all of the six counties, all focus groups reported that in the case of a sick person dying, the proper procedure was to notify the proper authorities to have the body removed as opposed to period prior to the Ebola outbreak where family and community members would handle the dead body themselves in the performance of the burial rites, such as bathing, grooming and transporting the body themselves. Across all the focus groups in the six counties, discussants expressed reluctance/lack of enthusiasm in forgoing their traditional practices for the immediate disposal of the dead by the burial teams.

"When someone dies in our community since the outbreak of the Ebola, we usually go to the community chairman house (calls name) to come and pick up the body. And then he calls people in the community who are staying away. Since the Ebola outbreak I am afraid, I don't want to get the disease because they people told us that once somebody dies the disease will be very active. So for that reason when someone dies in our community we always look for the chairman, when he comes, later they call the Ebola Team..." (Urban female youth respondent)

"There is a big difference, way back when someone dies, there's a culture; you bathe the body, sit down near the body (keep wake) sometime the body sleep with us, the father, the mother, the relatives, you sit with the person, do your ceremony but now, whenever anybody dies, they come and spray the body, all those ones, it not ...we not in favor of it, but that what happening now..." (Urban male adult respondent)

"We was used to wash the body, we go dig the hole and we pray on the person we go we bury then the time Ebola was not out outbreak now no washing body, no praying business, you can't bury person, you have to contact health worker the health worker come they can go bury the body but Ebola come you can't touch the body, when you touch the body when the person get the Ebola you will get some even if you not get Ebola self we can't touch body this time." (Rural male adult respondent)

"Because we are scare for (of) Ebola, that's why we can't play with body now. Sometime when somebody died here we can take about 3 days, we playing with the dead body but this time now it can take one hour but to take 2 hours, no, y'all bury (you bury right away)" (Rural male adult respondent)

"...now we have been told nationwide that when someone dies in your community, the community people shouldn't bury again. All burials should be done by the burial team. So when somebody dies in the community, err...like for Cape Mount, let's take it for ourselves. Cape Mount is divided into districts and all district has district heads office they called called the DHO (District Health Officer). The DHO for Garwula for example is err..err...if a body happens in Garwula, the Town people will the call the health authority to inform the DHO and he will have the body on hand, the DHO will come and do the case investigation about that death. After the case investigation, they will come out with, whether it is a suspected,

whether it is confirmed or whether ... in fact it can only be confirmed with laboratory testing equipment or whether it is a no case. If it is a no case, nationwide, it has been agreed that nobody should bury. So they will call upon the burial team to come and bury the body. The only thing the family members will do, maybe they will just go and dig the grave." (Rural male adult respondent)

"Before when Ebola never exist when somebody dies when that woman that three nights it will spend there. If that man that four nights it will spend there. But since we been advice that nobody must go closer together when somebody dies they must send for task force to come and test the body whether that Ebola before they will go around it. Whether that Ebola before your must not go around it. If somebody die your sit by yourself. Let the task force came and give us the test before your go around that person. In fact it very, very hard if somebody die this time now for you to you say that my mother that my father just for you to rush there. For me I can't do it because I want to live long whether hundred years or not. Yes I want to live long. I can't just rush there. So we have been notice that somebody die let the task force came and test the person and go carry and do the burial." (Rural male adult respondent)

"Now if somebody dies you lock the person up, you call the government to come and see the body. You call the doctors and the government thy will come to your call. You don't allow the family members or children to enter to where the boy is. Because, before when somebody die... because of the sorrow you can see them rolling them self over the body, touching the body, but now, now we don't do it. If somebody die we lock the body up; you can only be on the piazza or you take the family from the house we send them elsewhere to be until they (burial team) can do the burial." (Rural male youth respondent)

A focus group in Grand Cape Mount bluntly expressed its disagreement of abandoning all of its traditional burial practices; even though "not in favor" of the anti-Ebola measures as they relate to the burial practices they have to adapt to the situation.

"Just to add some there, it has been known to us now that whenever someone dies, no one should touch the body. Because they have a burial team, so the people put appeal to the burial team that, since we are Muslim, they must have a little prayer before they bury. Thank God they have accepted that one, whenever they anybody dies, you go do your ceremony, don't touch the body; after they carry the body...There is a big difference, way back when someone dies, there's a culture; you bathe the body, sit down near the body; sometime the body sleep with us, the father, the mother, the relatives, you sit with the person, do your ceremony but now, whenever anybody dies, they come and spray the body, all those ones, it not ...we not in favor of it, but that what happening now. Spray the body, carry the body, put it in bag, they carry it, all that one we are feeling bad about what is happening but we just have to adjust to the situation. So that's a big difference from way back to the present" (Rural male adult respondent)

9.4 Information Channels, Networks and Sources

9.4.1 Means and ways of hearing about Ebola

Focus Groups reported hearing about Ebola through a variety of means. Primary among these were radio, health workers, and community members. This method, of hearing first from a relative or community member, then hearing about EVD on the radio, was repeated in many focus groups.

"I can remember sometime in April my Fiancé came from work; he and we I were lecturing and he said, 'there's a sickness like when it gets on you, blood can start coming from your ears and your nose, ' and I was like 'eh..., which one be that other sickness.' But then that same day in the evening, over UMIL Radio, in their special English they were talking about it. So I had to tell him sorry because I was...kind of doubting him. So that was how I heard about this Ebola virus..." (Urban female youth respondent).

Most focus groups suggested documentaries (although not necessarily in large group settings) and video clips, using pictures and visual aids for people who cannot read or write, the use of drama, workshops and how-to demonstrations, and door-to-door presentations by members of the community as a preferred means of disseminating Ebola messages, as well as the importance of having the messages come from community leaders and other local entities. These could be either documentaries from past EVD outbreaks in other countries or locally produced ones.

"We have been getting lot of awareness. Information on radio, from people, from health workers, people are coming telling us and we ourselves are seeing it. One of the ways who have been better for us is to educate the community leaders so that they can better educate their people. The community leaders, the teachers must be involved, the traditional elders must be involved and everybody must be involved in the awareness. The awareness should be carried on in all dialects because most of the time the awareness that can be carry on by radio can only be in English and most people can't speak the English they don't even understand it. So one of the ways that who have been easier for us is to involve everybody within the community so they can give more awareness in all the dialects we speak in Liberia..." (Urban female youth respondent)

"We the average Liberian People, we think seeing is believe. So all these posters, we the average Liberian people, if we are not seeing anything, it will be very hard to believe it. So posters, all these things, or video, anything that you will put in place for people to see, then they will say 'oh that how this thing look like' there after all of them talk...but all these sensitizations people carrying on, this and that, bucket I am talking you about is insufficient. It will be well if people are going to the show or TV show, all these things, anything you put in place people see, they will believe..."(Rural male adult respondent)

9.5 Attitudes towards Survivors

9.5.1 How certified Ebola survivors should be treated in the community

Focus group views, across all of the groups, to Ebola survivors returning to the community ranged from fear and skepticism to acceptance and welcoming. The focus groups shared that while they would welcome the survivor into the community or family, they would remain cautious about bodily contact until they could be assured that the person was completely virus free, and they would not force other members of the family or community to accept the person's presence right away. Though survivors are certificated by the government through the Ministry of Health, respondents' scepticism and fear stemmed from the virulence of the EVD, and would prefer exhibiting a "wait and see attitude before fully accepting survivors back into the community. Participants in Urban areas were aware of certification for survivals unlike those in rural areas.

> "I will make sure I give you food. I will prepare a place for you which is your simple room. I will not still make other people to be brave on you. To be coming around you like the way it supposed to be. To be shaking your hand. To be doing other things because I know that virus already in you they now treat it. With all that I need to observe you too for my own of life too

to be protected and my children. So I will give you room. I will take care of you. When day break I say oh brother or sister come sit down here every necessary thing because of this I will do this one for you please don't find yourself in this place in that place. Let us be here as sister. I will talk to you and continue to talk to you, counsel you so that you can't feel that I want to look at you different. But just for us to observe that time until after three or four months I be observing you I be there be taking care of you. Don't touch me. I will not touch you. Everything about you will be different..." (Rural female adult respondent)

"You will never be treated fairly. If you survive from Ebola even if they gave you certificate from the Health Ministry the people will still be afraid of you. Reason is this is a deadly disease that what people continue to run away. We will not believe it except after sometime before we come around you. You will not be treated fairly as I said; because your friends will not come around you". (Rural male adult respondent)

9.5.2 Roles Ebola survivor should play in the community upon their return

The majority of suggestions across the various groups on the role that survivors could play in the community upon their return from a treatment center revolved around integrating survivors into an Ebola task force and/or enlisting and supporting them as spokespeople to humanize the disease and give others hope.

"I believe when they come home, they should help the team too to carry the message around. Because I know that once that person comes up to say, 'I was infected by the virus but at least today I am well.' It will encourage those that even get the virus to even go to the hospital because I will say 'if my friend could go there and get well, then why myself can't go there and get well. At least people will not running around. So once the person comes home they should be able to go on the field too to save other lives because some people don't believe in it so once I go around as testimony, I show my paper 'this is my paper from ministry of health that am Ebola free' I think that other people too infected by the virus when they see it, they will like to go to the hospital. They will not be escaping... (Rural female youth respondent)

9.6 Impact on other areas

9.6.1 Impact of Ebola outbreaks on family and community

A number of impacts of the Ebola outbreak on family and community life in Liberia were described across the group discussions. Prominent among these were divisiveness within communities and families, as well as economic devastation and revenue loss from the closure of businesses and gathering spots, and the closure of education and medical institutions restrictions on travel and migration, and loss of cultural traditions, especially around burials.

"When it comes to the family level, it affected the family a whole lot because it happen....it has brought, let say enemy ship as I will say between some families. It has brought enemy ship (Enmity/Hatred) in some communities. It has brought enemyship (enmity)... (Urban female youth respondent)

CHAPTER 10

CONCLUSION AND WAY FORWARD

10.1 Conclusion

The quantitative analysis yielded a clear snapshot of the status of Ebola knowledge, attitudes, and practice in mid-December 2014. In almost all respects, the results demonstrate a high degree of community mobilization against Ebola in all of the sampled counties. Virtually all Liberians had heard about Ebola, accepted that Ebola was real, could identify the most common symptoms and name at least 3 ways of avoid becoming infected. Overwhelming agreement with intended behaviours such as isolation of those with symptoms, early treatment and safe burial show a newly emerged consensus supporting public health recommendations. Comparable levels of reported behaviour change in areas such as increased hand washing and reduced physical contact suggest new behaviour norms were being put into action across sampled communities by this stage in the Ebola epidemic. Perhaps the most striking finding is the high degree of community engagement in the response, where people were not only changing their own behaviour but interacting with family, friends, and neighbours to encourage them to do the same. Survey results found nearly half of respondents had engaged in some form of community action since the start of the epidemic.

The study also revealed some weaknesses in the Ebola response. Misconceptions about how Ebola was spread were surprisingly common, particularly the belief that it could be transmitted by mosquitos or prevented by bathing with salt and water. Stigmatizing beliefs about risk of getting Ebola from survivors by hugging or touching, or fear of Ebola spreading in schools by allowing children who survived Ebola point to gaps in the social mobilization efforts. Stigma appeared to be rooted in misconceptions concerning infectiousness of Ebola survivors or susceptibility to reinfection. Communities reacted by agreeing they would welcome back survivors cautiously, but wait for three to four months before treating them the same as other members of the community. Clearly messages about how Ebola is and is not transmitted need further clarification. Failure to address such issues may feed community stigma against individuals, families, and entire communities touched by infection and thus identified as 'survivors'.

10.2 Way forward

While study results pertain to a narrow period in December when Ebola transmission was still occurring in Liberia, the results still hold important lessons for current and future practice. First, remaining misconceptions about the source of Ebola and how it is spread found by the National KAP study should be explicitly addressed as part of continuing social mobilization efforts. These efforts may need to be intensified in districts of Liberia bordering affected neighboring countries, but also apply to other communities where survivors of Ebola or those who come from families that experienced an Ebola death continue to suffer from stigma rooted in the same misconceptions. It is apparent that community education focused more effort on how Ebola was spread rather than how it was not spread. Radio was by far the most important source of information for most Liberians through the epidemic, and provides a medium to reach a wide audience in a short period.

The study found significant demand for more information, particularly on how to protect family members from others who are suffering symptoms of Ebola. As the real risk of Ebola declines within Liberia, but the risk of cross-border transmission remains real, the importance of a basic level of community-based infection prevention is likely to make this issue even more pressing than before. Failure to address these concerns may result in delay or denial of health care access starting at the community level, which is another critical feature of the post-Ebola restoration period.

In addition to correcting remaining misconceptions and knowledge gaps, social mobilization should address other sources of stigmatizing attitudes toward survivors and others affected by Ebola. As qualitative accounts suggest, stigma touches not just survivors themselves but entire families and communities where Ebola occurred by association. Ambivalence about reintegrating such individuals will be important for rapid restoration of communities after the epidemic ends.

A post-Ebola KAP survey with an equal focus on Ebola vigilance and return to use of normal health, education, and social dimensions of community life will be important to document progress and direct new social mobilization efforts most effectively.

As for area of further research, the discrepancies between knowledge and behaviour as shown in this study need to be investigated.

PUBLIC KNOWLEDGE, ATTITUDE AND PRACTICES SURVEY ON EBOLA VIRUS DISEASE (EVD) PREVENTION AND CARE IN LIBERIA SURVEY QUESTIONNAIRE

| IDENTIFICATION | |
|--------------------------------|-------------|
| NAME OF COUNTY | code/ / / |
| NAME OF DISTRICT | code/ / / |
| NAME OF CLAN/TOWNSHIP | code/ / / / |
| ENUMERATION AREA (EA) | code/ / / / |
| STRUCTURE NUMBER | code/ / / |
| HOUSEHOLD NUMBER | code/ / / |
| | |
| SERIAL NUMBER OF QUESTIONNAIRE | / / / / |

| INTERVIEWER | | | | | | | | |
|---|--|------------|---------------------------|-----------|--------------------------|--|--|--|
| DATE OF INTERVIEW (dd/mm/yy) /_/_/ /_// | | | | | | | | |
| INTERVIEWER'S NAME | | | | | | | | |
| | | | | | | | | |
| FIELD SUPERVISOR NAME: DATA | | DATA CODIN | DATA CODING OFFICER NAME: | | DATA ENTRY OFFICER NAME: | | | |
| Signature | | Signature | | Signature | | | | |
| Date | | Date | | Date | | | | |

Consent Statement

Hello. My name is _________. I am working with Ministry of Health and Social Welfare in partnership with LISGIS in Liberia that works to improve the health of children, women, and their communities. We are conducting a study on the public's knowledge, attitudes, behaviours, and practices relating to the prevention of Ebola virus disease. The information we collect will help us and other civil society organizations better educate the public about how to effectively prevent the transmission of the disease. The interview will take about 45 – 60 minutes. All of the information you share with us will be kept confidential. Your participation in this study is voluntary, and you will not be paid. You may choose to stop the interview at any point or refuse to answer questions you do not feel comfortable responding to. There are no right or wrong responses. Therefore we encourage you to be honest and truthful in your responses so that we can accurately understand the on-the-ground situation.

ASK TO RESPONDENT:

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Do you have any questions? 1. Yes 2. No

Do I have your permission to continue with the interview?

1. YES I AGREE_____continue with interview 2. NO I DECLINE ____END

By signing below, I attest that I have read the above statement to the participant and he/she has agreed to continue with the interview. I have also addressed all of his/her questions and/or concerns.

SIGNATURE OF INTERVIEWER:

DATE (dd/mm/yy): /_//

Team Identification

Team Number: / / /

Enumerator ID: / / /

Supervisor Initials (QA/QC): _____

Status of interview (circle): Completed / 1 / Not completed / 2 /

| A. SO | CIO-DEMOGRAPHIC ECTION | | | |
|-------|--|--|-------|--|
| A.1 | Age (In completed years) | | / / / | |
| A.2 | Sex | Male | 1 | |
| | | Female | 2 | |
| A.3 | Place of residence | Urban | 1 | |
| | | Rural | 2 | |
| f | How long have you and your family been living at this residence | Less than one month | 1 | |
| | | One month – 6 months | 2 | |
| | | 7 – 12 months | 3 | |
| | | Over a year | 4 | |
| A.5 | Marital status (circle one answer) | Single/ never married | 1 | |
| | | Legally married and living with spouse/ husband | 2 | |
| | | Married but separated by work | 3 | |
| | | Cohabiting | 4 | |
| | | Separated | 5 | |
| | | Divorced | 6 | |
| | | Widowed | 7 | |
| | | No response | 8 | |
| A.6 | Religion (circle one answer). If respondent answers more than one religion, please specify under 'Other'. | Christianity | 1 | |
| | | Islam | 2 | |
| | | Traditional | 3 | |
| | | No religion | 4 | |
| | | Other (specify): | 5 | |
| | | No response | 6 | |
| A.7 | What is the highest educational level completed? (circle one answer) | No formal education | 1 | |
| | | Elementary (1 - 6) | 2 | |
| | | Junior High (7 - 9) | 3 | |
| | | Senior High (10 - 12) | 4 | |
| | | University (Bachelor, Masters, Doctorate) | 5 | |
| | | Others, specify: | 6 | |
| | | No response | 7 | |
| A.8 | What kind of work (main occupation) do you currently do? | Unemployed | 1 | |
| | | Private business (excluding petty trader | 2 | |
| | | Plumber / Carpenter / Electrician/ builder | 3 | |
| | | Petty Trader | 4 | |
| | | Farmer | 5 | |
| | | Teacher / lecturer / instructor | 6 | |
| | | Public transportation driver (taxi, buses, bajaj | 7 | |
| | | Commercial motorcyclist | 8 | |
|--------|--|--|----|--|
| | | Medical or health professional | 9 | |
| | | Other Government employees(not stated above) | 10 | |
| | | Student | 11 | |
| | | Other (please specify) | 12 | |
| | | No response | 13 | |
| B. AWA | ARENESS AND KNOWLEDGE OF CAUS | SES, SIGNS, SYMPTOMS & TRANSMISSION | 1 | |
| B.1 | Have you ever heard or learnt of | Yes | 1 | |
| | Ebola before (prior to this interview)? | No (if selected, end survey here). PLEASE INFORM YOUR SUPERVISOR of THIS LOCATION. | 2 | |
| | | No response | 3 | |
| B.2 | Do you believe that Ebola exists in | Yes | 1 | |
| | Liberia? | No | 2 | |
| | | I don't know/ not sure | 3 | |
| | | No response | 4 | |
| B.3 | Does Ebola have another name in your local language? Yes (Specify) | | | |
| | | | 1 | |
| | | No | 2 | |
| | | I don't know/ not sure | 3 | |
| | | No response | 4 | |
| B.4 | What causes Ebola? (select all | Virus | 1 | |
| | applicable choices) | Bats / Monkeys / Chimpanzees / Other wild animals | 2 | |
| | | God or higher power | 3 | |
| | | Witchcraft | 4 | |
| | | Evildoing / Sin | 5 | |
| | | Curse | 6 | |
| | | Other(specify) | 7 | |
| | | I don't know/ not sure | 8 | |
| | | No response | 9 | |
| B.5 | How does a person get Ebola? | By air | 1 | |
| | (select all applicable choices) | Bad odor or smell | 2 | |
| | | Preparing bush meat as a meal (such as chimpanzees, monkeys, and other wild animals) | 3 | |
| | | Eating bush meat | 4 | |
| | | Eating fruits likely to have been bitten by bats | 5 | |
| | | Saliva of an infected person | 6 | |
| | | | | |

| | | Sweat of an infected person | 8 | |
|-----|---|--|----|--|
| | | Urine of an infected person | 9 | |
| | | Feces of an infected person | 10 | |
| | | Breast milk of an infected person | 11 | |
| | | Sperm or vaginal fluid of an infected | 12 | |
| | | person | | |
| | | Shaking the hands of an infected person | 13 | |
| | | Other physical contact with an infected | 14 | |
| | | person | | |
| | | God's will | 15 | |
| | | Witchcraft | 16 | |
| | | Participating in burial ceremonies that involve the handling (touching/washing/ wrapping) of dead body | 17 | |
| | | Coming in contact with anything someone sick with Ebola has touched | 18 | |
| | | Having sex with infected person | 19 | |
| | | Having sex with someone who has recovered | 20 | |
| | | Going to the hospital / health facility | 21 | |
| | | Others | 22 | |
| | | l don't know / not sure | 23 | |
| | | No response | 24 | |
| B.6 | What are the main signs and | Any Fever | 1 | |
| | symptoms of someone infected | Sudden onset of high fever | 2 | |
| | with Ebola? (select all mentioned/ that apply) | Severe headache | 3 | |
| | | Muscle pain | 4 | |
| | | Weakness | 5 | |
| | | Diarrhea (with or without blood) | 6 | |
| | | Vomiting (with or without blood) | 7 | |
| | | Abdominal (stomach) pain | 8 | |
| | | Lack of appetite | 9 | |
| | | Sore throat | 10 | |
| | | Rash | 11 | |
| | | Difficulty breathing | 12 | |
| | | Bleeding (internal or external) | 13 | |
| | | Hiccups | 14 | |
| | | Delirium/ confusion | 15 | |
| | | Others | 16 | |
| | | l don't know / not sure | 17 | |
| | | No response | 18 | |



| B.7 | One can prevent oneself from | Yes | 1 | |
|--------|---|---|-----------------------|-------------|
| | getting Ebola by avoiding contact | No | 2 | |
| | with blood and body fluids (stool, | I don't know/ not sure | 3 | |
| | urine, blood, saliva, sweat, tears, | No response | 4 | |
| | semen, vaginal fluids, runny nose)? | | | |
| B.8 | One can prevent themselves from | Yes | 1 | |
| | getting Ebola by bathing with salt | No | 2 | |
| | and hot water? | I don't know/ not sure | 3 | |
| | | No response | 4 | |
| B.9 | One can prevent themselves from | Yes | 1 | |
| | getting Ebola by avoiding | No | 2 | |
| | mosquito bites? | I don't know/ not sure | 3 | |
| | | No response | 4 | |
| B.10 | One can prevent themselves from getting Ebola by not touching | Yes | 1 | |
| | anyone who is sick? | | | |
| | | No | 2 | |
| | | Don't know/ Not sure | 3 | |
| | | No response | 4 | |
| B.11 | One can prevent themselves from | Yes | 1 | |
| | getting Ebola by avoiding funeral | No | 2 | |
| | or | Don't know/ Not Sure | 3 | |
| | burial rituals that require handling the | No response | 4 | |
| | body of someone who has died | | | |
| | from Ebola? | | | |
| C. RIS | VPERCEPTIONS AND BELIEFS | | | |
| C.1 | When did you begin to believe | Less than one month? | 1 | |
| | that Ebola is real in Liberia? * | 1-3 months ago | 2 | |
| | | 3-6 months ago | 3 | |
| | | Over 6 months ago | 4 | |
| | | | | |
| | | I don't believe it is real | 5 | |
| | | I don't believe it is real I don't know | 5 6 | |
| | | | | |
| C.2 | What level of risk do you think | I don't know | 6 | Go to |
| C.2 | you have in getting Ebola in the | I don't know No response No risk | 6 7 1 | Go to C4 |
| C.2 | | I don't know No response No risk Low risk | 6 7 1 2 | |
| C.2 | you have in getting Ebola in the | I don't know No response No risk Low risk Medium risk | 6 7 1 | |
| C.2 | you have in getting Ebola in the | I don't know No response No risk Low risk | 6 7 1 2 | |
| C.2 | you have in getting Ebola in the | I don't know No response No risk Low risk Medium risk | 6 7 1 2 3 | |

| C.3 | Why do you believe that you are at risk? (select all applicable choice | I have been experiencing signs and symptoms of Ebola since day (s) ago. (Convert an answer given in weeks or months to number of days. If number of days is less than 30, stop the interview, recommend that the person call 4455 immediately AND INFORM YOUR COMMUNITY LEADER IMMEDIATELY and record the address to follow-up. ALSO INFORM YOUR SUPERVISOR IMMEDIATELY) | 1 | GGo to C5 |
|-----|--|---|---|--------------|
| | | Someone in my family/household/ dwelling has/had Ebola in the past day (s). (Convert an answer given in weeks or months to number of days. If number of days is less than 30, stop the interview, finding out if the person is still in the dwelling, recommend that the person call 4455 AND INFORM THE COMMUNITY LEADER immediately and record the address to follow-up. INFORM YOUR SUPERVISOR IMMEDIATELY) | 2 | Go to C5 |
| | | I am a health care professional | 3 | Go to C5 |
| | | I live in the same household with a health care professional | 4 | Go to C5 |
| | | I have taken care of a family member / relative/ friend who experienced signs and symbols of Ebola in the past days (Convert an answer given in weeks or months to number of days. If number of days is less than 30, stop the interview, finding out if the person is still in the dwelling, recommend that the person call 4455 AND INFORM THEIR COMMUNITY LEADER immediately, record the address to follow up. INFORM YOUR SUPERVISOR IMMEDIATELY) | 5 | Go to C5 |
| | | I hunt bush meat as my means of livelihood | 6 | |
| | | I use public transport regularly | 7 | |
| | | Ebola is everywhere | 8 | |

| | | I washed/touched the body of someone who died in my family or community in the past days (Convert an answer given in weeks or months to number of days. Recommend that the person call 4455 AND INFORM THEIR COMMUNITY LEADER immediately, record the address to follow up) I have attended a burial/ funeral | 9 | |
|-----|--|---|----|-------------|
| | | ceremony in the past days . (Convert an answer given in weeks to number of days. Recommend that the person call 4455 AND INFORM THEIR COMMUNITY LEADER immediately, record the address to follow up). ALSO INFORM YOUR SUPERVISOR IMMEDIATELY. | | |
| | | l work as a contact tracer or part of a burial team | 11 | |
| | | Others | 12 | |
| | | l don't know / not sure | 13 | |
| | | No response | 14 | Go to C5 |
| C.4 | Why do you believe that you are | I do not eat bush meat or bats | 1 | |
| | NOT at risk? (select all applicable choices) | l am not a health care or medical professional | 2 | |
| | | l am a clean person - I wash my hands often with soap and water | 3 | |
| | | I don't live in an area where there is Ebola | 4 | |
| | | l don't come in contact with someone with Ebola | 5 | |
| | | God is protecting me | 6 | |
| | | I have spiritual protection or powers | 7 | |
| | | I have traditional protection or powers | 8 | |
| | | Others | 9 | |
| | | I don't know / not sure | 10 | |
| | | No response | 11 | |
| C.5 | Do you think it is possible for | Yes | 1 | |
| | someone to have Ebola and not | No | 2 | |
| | show its signs or symptoms? | I don't know/ not sure | 3 | |
| | | No response | 4 | |

| C.6 | .6 Should a person suspected of Ebola or having Ebola like symptoms be isolated (kept in house or confined place) from others? | Yes | 1 | If Yes, Go to C7. Else skip to C8 |
|------|--|------------------------|---|--|
| | | No | 2 | |
| | | I don't know/ not sure | 3 | |
| | | No response | 4 | |
| C.7 | If yes, how long should they be | 1-7 days | 1 | |
| | isolated? | 8-14 days | 2 | |
| | | 15-21 days | 3 | |
| | | 22 days and over | 4 | |
| C.8 | C.8 Say a person comes into direct contact with someone who has Ebola. Should that person be isolated? | Yes | 1 | If Yes, go to C9. Else skip to C10 |
| | | No | 2 | |
| | | I don't know/ not sure | 3 | |
| | | No response | 4 | |
| C.9 | If yes, how long should that | 1-7 days | 1 | |
| | person be isolated for? | 8-14 days | 2 | |
| | | 15-21 days | 3 | |
| | | 22 days and over | 4 | |
| C.10 | Do you believe that you can | Yes | 1 | |
| | get Ebola from a person who is | No | 2 | |
| | infected but doesn't have any signs or symptoms? | I don't know/ not sure | 3 | |
| | | No response | 4 | |
| C.11 | Should a person diagnosed with | Yes | 1 | |
| | Ebola be taken to health facility/ | No | 2 | |
| | Ebola Treatment Unit? | I don't know/ not sure | 3 | |
| | | No response | 4 | |
| C.12 | What chances of survival does a person who has Ebola like | Better/ higher | 1 | Go to C12a |
| | symptoms have if he/she goes | The same chances | 2 | |
| | immediately (within one day) to a Health Facility? | Worse | 3 | Go to C12b |
| | | l don't know | 4 | |
| | | No response | 5 | |

| · · · · | What do you believe will happen to someone with Ebola like | They will receive better care than at home | 1 | Go to C13 |
|---------|---|--|---|--------------|
| | symptoms who goes to a Ebola Treatment Unit? * | They will receive nutritious food and water | 2 | |
| | | It is a safe place to be for sickness | 3 | |
| | | They will get medicines including for other diseases | 4 | |
| | | Others, specify: | 5 | |
| | | l don't know | 6 | |
| | | No response | 7 | |
| C.12b | What do you believe will happen | They will not receive good care | 1 | |
| | to someone with Ebola like | They will not be fed | 2 | |
| | symptoms who goes to a Ebola | They will not get medication | 3 | |
| | Treatment Unit? * | They will be discriminated | 4 | |
| | | Their family will not be able to visit them | 5 | |
| | | They will be cremated if they die | 6 | |
| | | Other | 7 | |
| | | I don't know/ not sure | 8 | |
| | | No response | 9 | |
| C.13 | If a person with Ebola like symptoms goes immediately (within one day) to a Health Facility do you think he/she will reduce the chance of spreading it to family/people they are living with? | Yes | 1 | |
| | | No | 2 | |
| | | I don't know/ not sure | 3 | |
| | | No response | 4 | |
| C.14 | Do you believe communities | Yes | 1 | |
| | with high risk of Ebola should be | No | 2 | |
| | isolated? | I don't know/ not sure | 3 | |
| | | No response | 4 | |
| C.15 | Do you believe that health | Yes | 1 | |
| | workers who come to your | No | 2 | |
| | community to ask about Ebola | I don't know/ not sure | 3 | |
| | affected people and people they have been in touch with, are trying to protect you from Ebola? | No response | 4 | |

| C.16 | Who do you believe is the most | The community | 1 | |
|--------|---|---|-----|-------------|
| | influential in stopping the spread | The government/ Health Ministry/ | 2 | |
| | of Ebola? (allow for more than one option) | County health team | _ | |
| | | local organizations | 3 | |
| | | Religious leaders | 4 | |
| | | foreign aid workers | 5 | |
| | | Spiritual healers | 6 | |
| | | Traditional healers | 7 | |
| | | Survivors of Ebola | 8 | |
| | | Chiefs & Elders/Traditional Leaders | 9 | |
| | | Only God | 10 | |
| | | Others | 11 | |
| | | No response | 12 | |
| C.17 | Do you believe that traditional | Yes | 1 | |
| | healers can cure or treat you from | No | 2 | |
| | Ebola? | I don't know/ not sure | 3 | |
| | | No response | 4 | |
| C.18 | .18 Do you believe that spiritual healers can cure or treat you from Ebola? | Yes | 1 | |
| | | No | 2 | |
| | | I don't know/ not sure | 3 | |
| | | No response | 4 | |
| D. BEH | HAVIOURS AND PRACTICES | | | |
| D.1 | Have you taken any action to avoid being infected by Ebola? | Yes | 1 | Go to D2 |
| | | No | 2 | Go to D3 |
| | | l don't know/ not sure | 3 | Go to D3 |
| | | No response | 4 | Go to D3 |
| D.2 | In what ways have you changed your behavior or taken actions to | I wash my hands with soap and water more often | 1 | |
| | avoid being infected? (select all applicable choices) – do not read | I wash my hands with just water more often | 2 | |
| | aloud | I wash my hands with chlorine water | 3 | |
| | | often | | |
| | | often I clean my hands with other disinfectants more often, if so, which disinfectants | 4 | |
| | | I clean my hands with other disinfectants more often, if so, which | 4 5 | |
| | | I clean my hands with other disinfectants more often, if so, which disinfectants | | |

| | | I drink traditional herbs | 8 | |
|-----|--|--|----|-------------|
| | | l take antibiotics (e.g. penicillin, amoxicillin) | 9 | |
| | | I wear gloves (if so ask, how many times you change the gloves daily:) | 10 | |
| | | I try to avoid physical contact with people I suspect may have Ebola | 11 | |
| | | I avoid physical contact with everyone | 12 | |
| | | I do not participate in burial ceremonies that involve the handling (touching/ washing) of the dead body | 13 | |
| | | I wash with salt and hot water | 14 | |
| | | Others | 15 | |
| | | I don't know/ not sure | 16 | |
| | | No response | 17 | |
| D.3 | If you had a fever would you go to a health facility/ Ebola Treatment | Yes | 1 | Go to D4 |
| | Unit? | No | 2 | Go to D5 |
| | | l don't know/ not sure | 3 | Go to D7 |
| | | No response | 4 | Go to D7 |
| D.4 | How would you get there? (tick all | Walking | 1 | Go to |
| | that apply) | Bicycle | 2 | D6 |
| | | Motorbike | 3 | |
| | | A friend or family member will take me | 4 | |
| | | Private car | 5 | |
| | | Public taxi | 6 | |
| | | Public bus | 7 | |
| | | I would call for an ambulance | 8 | |
| | | Others: | 9 | |
| | | l don't know | 10 | |
| | | No response | 11 | |
| D.5 | If NO – Why Not? (select all | I have no money / can't afford to pay | 1 | Go to |
| | applicable choices) | I believe the hospital is contaminated with Ebola | 2 | D7 |
| | | People will think I have Ebola | 3 | |
| | | I prefer to go to a nearby pharmacy instead | 4 | |
| | | I prefer to go to a black bagger | 5 | |
| | | I prefer to go to a traditional healer | 6 | |

| | | I prefer to go to a spiritual healer | 7 | |
|------|--|---|----|--------------|
| | | Others | 8 | |
| | | I don't know/ not sure | 9 | |
| | | No response | 10 | |
| D.6 | If you had a fever, how long would you wait before going to a health facility? | Less than one day | 1 | |
| | | One – two days | 2 | |
| | | Three – four days | 3 | |
| | | Five – six days | 4 | |
| | | One week or more | 5 | |
| | | I don't know/ not sure | 6 | |
| | | No response | 7 | |
| D.7 | What would be the first thing | Don't tell anyone | 1 | |
| | you do if you touch a person | Wash your hands | 2 | |
| | suspected of Ebola? | Tell family or friends | 3 | |
| | | Call the hotline number/4455 | 4 | |
| | | Tell your community leader/ chief | 5 | |
| | | Take own medicines | 6 | |
| | | Go to the health centre or Ebola care centre or ETU | 7 | |
| | | I don't know/ not sure | 8 | |
| | | No response | 9 | |
| D.8 | Would you go to the health facility/ Ebola Treatment Unit if | Yes | 1 | Go to D9 |
| | you suspect that you may have contracted Ebola? | No | 2 | Go to D8a |
| | | I don't know/ not sure | 3 | Go to |
| | | No response | 4 | D10 |
| D.8a | If no, why not? | I have no money / can't afford to pay | 1 | Go to |
| | | I believe the hospital is contaminated with Ebola | 2 | D10 |
| | | People will think I have confirmed Ebola | 3 | |
| | | l prefer to go to a nearby pharmacy instead | 4 | |
| | | I prefer to go to a black bagger | 5 | |
| | | I prefer to go to a traditional healer | 6 | |
| | | I prefer to go to a spiritual healer | 7 | |
| | | Others | 8 | |
| | | I don't know/ not sure | 9 | |
| | | No response | 10 | |
| D.9 | If yes, how long would you wait before going to a health facility/ Ebola Treatment Unit? | Less than one day | 1 | |

| | | One – two days | 2 | |
|------|--|---|----|--|
| | | Three – four days | 3 | |
| | | Five – six days | 4 | |
| | | One week or more | 5 | |
| | | I don't know/ not sure | 6 | |
| | | No response | 7 | |
| D.10 | What actions have you taken to | | - | |
| | protect your family members from Ebola? (Please mark all that | Telling them about hand washing and hygiene | 1 | |
| | apply) | Telling them what to do when someone in the community is sick | 2 | |
| | | Telling them not to touch sick person or dead body | 3 | |
| | | Preparing chlorine water every day for hand washing and bathing | 4 | |
| | | Buying items for protection like medicines, plastic bags, gloves | 5 | |
| | | Informing local leader or hotline(4455) if someone is sick in the community or has died | 6 | |
| | | Others | 7 | |
| | | I don't know/ not sure | 8 | |
| | | No response | 9 | |
| D.11 | For how long have you been | Less than 1 month | 1 | |
| | practicing these behaviors? | 1-2 Months | 2 | |
| | | 3-4 months | 3 | |
| | | 5-6 months | 4 | |
| | | 7-8 months | 5 | |
| | | 9 month and more | 6 | |
| D.12 | What would you do if you suspect | Nothing | 1 | |
| | someone in your family has Ebola? (select all mentioned/ applicable choices) | Help care for the person at home (e.g., clean up their excretions / vomit; help bathe them) | 2 | |
| | | Check their temperature by touching their body | 3 | |
| | | Avoid all physical contact and bodily fluids of that person | 4 | |
| | | Call the hospital / Ebola phone line (4455) | 5 | |
| | | Take the person to the health facility/ETU | 6 | |
| | | Tell the community leader | 7 | |
| | | Tell friends and family | 8 | |
| | | Give home treatment | 9 | |
| | | Stay away from them for1-7 days | 10 | |

| | | Stay away from them for 8-14 days | 11 | |
|------|---|--|----|--|
| | | Stay away from them for 15-21 days | 12 | |
| | | Keep them at home | 13 | |
| | | Others | 14 | |
| | | I don't know/ not sure | 15 | |
| | | No response | 16 | |
| D.13 | How can you safely help care for | Keep the person away from others | 1 | |
| | a family member suspected of | Use a single caregiver | 2 | |
| | having Ebola while waiting for help to arrive? What can you do? (select all mentioned; DO NOT | Do not touch the person or their body fluids | 3 | |
| | read choices) | Do not touch things the person has touched (e.g soiled clothes) | 4 | |
| | | Use protective barriers such as gloves | 5 | |
| | | Frequently wash hands | 6 | |
| | | Provide sick person with food, water, and other fluids | 7 | |
| | | Others | 8 | |
| | | I don't know/ not sure | 9 | |
| | | No response | 10 | |
| D.14 | What happens if someone suspected of having Ebola goes | They won't be able to do anything for him/her and may die there | 1 | |
| | to the hospital / health facility? (select all applicable choices) | They will take care of him/her (rehydrate, give medicines/food, monitor status) | 2 | |
| | | They will definitely cure the person from Ebola | 3 | |
| | | They will find a way to kill the patient so that he/she doesn't spread Ebola to others | 4 | |
| | | They will be turn away | 5 | |
| | | Others | 6 | |
| | | I don't know/ not sure | 7 | |
| | | No response | 8 | |
| D.15 | If there was a case of a family | Yes | 1 | |
| | member with possible symptoms | No | 2 | |
| | of Ebola would you allow the health workers to talk to your | I don't know/ not sure | 3 | |
| | family and find out more? | No response | 4 | |
| D.16 | If a family member became sick | Not touch the body | 1 | |
| | and died, (and you didn't know | Wash the body | 2 | |
| | the reason) what would you do with the body? (Tick all that | Immediately bury the body yourselves | 3 | |
| | apply) | Take the body to a funeral home | 4 | |

| | | Contact and wait for the burial team to bury the body | 5 | GO TO D18 |
|------|---|---|----|------------------|
| | | Other: | 6 | |
| | | I don't know/ not sure | 7 | |
| | | No response | 8 | |
| D.17 | If a family member suspected of Ebola dies, what would you do with the body? (Tick all that | Wash the body | 1 | Got to D20 |
| | apply) | Immediately bury the body yourselves | 2 | |
| | | Take the body to a funeral home | 3 | |
| | | Contact and wait for the burial team to bury the body | 4 | Go to D18 |
| | | | 5 | Go to |
| | | Other: | | D20 |
| | | I don't know/ not sure | 6 | |
| | | No response | 7 | |
| D.18 | How would you contact the burial | Call 4455 | 1 | Go to |
| | team to bury the body? | Call local number | 2 | D19 |
| | | Tell community leader | 3 | |
| | | Call the radio station | 4 | |
| | | Call family member | 5 | |
| | | Other | 6 | |
| | | I don't know/ not sure | 7 | Go to D20 |
| | | No response | 8 | Go to D20 |
| D.19 | How long would you wait for the | Less than one day | 1 | |
| | burial team to arrive before you | One – two days | 2 | |
| | or your community took action | Three – four days | 3 | |
| | yourself? | Five – six days | 4 | |
| | | More than one week | 5 | |
| D.20 | Who decides on what burial rites | The traditional chief or leader | 1 | |
| | and rituals should be followed | Community elders | 2 | |
| | in your community? (select all | The whole community | 3 | |
| | mentioned/ that apply) | Only the family | 4 | |
| | | The women in the community/family | 5 | |
| | | The men in the community/family | 6 | |
| | | It's a tradition | 7 | |
| | | Others | 8 | |
| | | I don't know/ not sure | 9 | |
| | | No response | 10 | |

| D.21 | In the past month, have you been | Yes | 1 | |
|------|---|---|---|--------------|
| | around a dead body? | No | 2 | |
| | | No response | 3 | |
| D.22 | Did YOU participate in a funeral/ | Yes | 1 | |
| | burial ceremony in the past month (30 days)? | No | 2 | Go to D24 |
| | | No response | 3 | Go to D24 |
| D.23 | During the funeral / burial | Touched the dead body | 1 | |
| | ceremony which of the following | Washed the dead body | 2 | |
| | did YOU do? (select all applicable choices – read ALL Choices) (If the respondent touched or | Touched other people at the burial ceremony (hug, handshake, etc.) | 3 | |
| | washed the body recommend | Cried over the body but did not touch it | 4 | |
| | that the person call 4455 AND | I did not touch the body | 5 | |
| | INFORM THEIR COMMUNITY | I did not wash the body | 6 | |
| | LEADER immediately, record the address to follow up). ALSO STOP | I did not touch other people at the burial ceremony | 7 | |
| | THE INTERVIEW and INFORM | Others | 8 | |
| | YOUR SUPERVISOR IMMEDIATELY) | No response | 9 | |
| D.24 | If a family member died, would | Yes | 1 | |
| | you accept other ways of funeral/ | No | 2 | |
| | burial that would NOT involve the | I don't know/ not sure | 3 | |
| | touching or washing of the dead body? | No response | 4 | |
| D.25 | Do you know the number to call to report a suspected Ebola case or ask questions about Ebola? | Yes (If so, what is the Number?) Enumerator: Correct Incorrect | 1 | |
| | | No | 2 | |
| | | I don't know/ not sure | 3 | |
| | | No response | 4 | |
| D.26 | Have you ever called the 4455 Hotline Number? | Yes | 1 | Go to D27 |
| | | No | 2 | Go to D29 |
| | | I don't remember/ not sure | 3 | Go to D29 |
| | | No response | 4 | Go to D29 |
| D.27 | What was the reason for calling | Get health information on Ebola | 1 | |
| | the hotline number? | Report a death | 2 | |
| | | Report a suspected case | 3 | |
| | | Want to know if the number is working | 4 | |
| | | Others | 5 | |

| | | I don't remember/ not sure | 6 | Go to D29 |
|---------|--|--|----|--------------|
| | | No response | 7 | Go to D29 |
| D.28 | Did you get the information you | Yes | 1 | |
| | wanted or immediate action | No | 2 | |
| | when you called the 4455 hotline number? | I don't remember/ not sure | 3 | |
| | number? | No response | 4 | |
| D.29 | In the past 3 months have you | Yes | 1 | Go to |
| | participated in any community | No | 2 | D31 |
| | activity to stop Ebola from | I don't remember/ not sure | 3 | 1 |
| | coming into your community? | No response | 4 | |
| D.30 | What did you do? (mark all that | Spreading awareness | 1 | |
| | apply) * | Demonstrating prevention actions | 2 | |
| | | Attending meetings about Ebola | 3 | |
| | | Giving instructions to/supervising others | 4 | |
| | | Distributing materials (Kits/ posters/ etc) for protection | 5 | |
| | | Contact tracing and case finding | 6 | |
| | | Conducting safe burials as part of burial teams | 7 | |
| | | Others (specify): | 8 | |
| D.31 | If there was an approved vaccine | Yes | 1 | |
| | that could prevent Ebola, would | No | 2 | |
| | you accept it for yourself and your | Not sure/ don't know | 3 | |
| | family? | No response | 4 | |
| E. INFC | DRMATION CHANNELS, NETWORKS A | | | • |
| E.1 | How did you hear or learn about | Radio | 1 | |
| | Ebola? (select all mentioned/that | Television | 2 | |
| | apply) | Megaphone public announcements/ Town criers | 3 | |
| | | House-to-house visits by health workers | 4 | |
| | | Church / Mosque / other religious venues | 5 | |
| | | Other community meetings | 6 | |
| | | Relatives / Friends / Neighbors/ | 7 | |
| | | Community members | | |
| | | Newspaper / Flyers / Brochures / Posters/ Other print materials | 8 | |
| | | Internet / Blog / Website / Social Media / Facebook | 9 | |
| | | Traditional/Community leaders | 10 | |
| | | Government/ County Health Team | 11 | |

| | | Billboards/ wall paintings | | |
|-----|--|--|----|--|
| | | Mobile phone / text messages | 12 | |
| | | Call center/hotline/4455 | 13 | |
| | | Burial team that was in your community | 14 | |
| | | Others | 15 | |
| | | | | |
| | | I don't remember/ not sure | 16 | |
| | | No response | 17 | |
| E.2 | How did you hear or learn about | Radio | 1 | |
| | health workers who go from | Television | 2 | |
| | house to house to ask questions about whether you have been | Megaphone public announcements/ Town criers | 3 | |
| | around Ebola patients (reference to contact tracers)? *(Select all | Health workers came to my house | 4 | |
| | that apply) | Health workers came to other houses in my community | 5 | |
| | | Church / Mosque / other religious venues | 6 | |
| | | Other community meetings | 7 | |
| | | Relatives / Friends / Neighbors/ | 8 | |
| | | Community members | | |
| | | Newspaper / Flyers / Brochures / Posters/ Other print materials | 9 | |
| | | Internet / Blog / Website / Social Media / Facebook | 10 | |
| | | Traditional/Community leaders | 11 | |
| | | Government/ County Health Team | 12 | |
| | | Mobile phone / text messages | 13 | |
| | | Call center/hotline/4455 | 14 | |
| | | Burial team that was in your community | 15 | |
| | | Others | 16 | |
| | | I don't remember/ not sure | 17 | |
| | | No response | 18 | |
| E.3 | Through what ways would you | Radio | 1 | |
| | prefer to get information on | Television | 2 | |
| | Ebola? (select all mentioned/ applicable choices) | Megaphone public announcements/ Town criers | 3 | |
| | | House-to-house visits by health workers | 4 | |
| | | Church / Mosque / other religious venues | 5 | |
| | | Other community meetings | 6 | |
| | | Relatives / Friends / Neighbors/ Community members | 7 | |
| | | Newspaper / Flyers / Brochures / Posters/ Other print materials | 8 | |

| | | Internet / Blog / Website / Social Media / Facebook | 9 | |
|-----|---|--|----|--|
| | | Traditional/Community leaders | 10 | |
| | | Government/ County Health Team | 11 | |
| | | Mobile phone / text messages | 12 | |
| | | Call center/hotline/4455 | 13 | |
| | | Burial team that was in your community | 14 | |
| | | Others | 15 | |
| | | I don't remember/ not sure | 16 | |
| | | No response | 17 | |
| E.4 | Who do you trust to give you reliable health information? | No one | 1 | |
| | (select all applicable choices) | Government / Ministry of Health and Social Welfare | 2 | |
| | | The Media | 3 | |
| | | Health and medical professionals | 4 | |
| | | Relatives and friends | 5 | |
| | | Religious leaders (e.g. pastor, Imam) | 6 | |
| | | Spiritual healers | 7 | |
| | | Traditional healers | 8 | |
| | | Call center/hotline/4455 | 9 | |
| | | Health workers that go from house to house | 10 | |
| | | Burial team that was in your community | 11 | |
| | | Others | 12 | |
| | | I don't remember/ not sure | 13 | |
| | | No response | 14 | |
| E.5 | Who would you want to provide | No one | 1 | |
| | you with information about other funeral/burial practices that do | Government / Ministry of Health and Social Welfare | 2 | |
| | not involve touching or washing | The Media | 3 | |
| | the body? (select all applicable | Health and medical professional | 4 | |
| | choices) | Relatives and friends | 5 | |
| | | Religious leaders (e.g. pastor, Imam) | 6 | |
| | | Traditional healers | 7 | |
| | | Call center/hotline/4455 | 8 | |
| | | Health workers that came to your | 9 | |
| | | community | | |
| | | Burial team that was in your community | 10 | |
| | | Others | 11 | |
| | 1 | I de u/t lue es u/ u et es ure | 12 | |
| | | I don't know/ not sure | | |

| E.6 | During the last 3 months how | Every day | 1 | |
|------|--|---|---|--|
| | often have you listened to the radio? | At least once a week | 2 | |
| | | Less than once a week | 3 | |
| | | Did not listen to radio in last 3 months | 4 | Go to E8 |
| | | I don't know/ not sure | 5 | |
| | | No response | 6 | |
| E.7 | In the past 3 months, have you | | | |
| | heard any messages on Ebola on | | 1 | |
| | the radio? | Sometimes | 2 | |
| | Almost everyday | No | 3 | |
| | | I don't know/ not sure | 4 | |
| | | No response | 5 | |
| E.8 | In the past 3 months have you been visited by someone who gave you information and discussed Ebola? | Yes | 1 | If Yes, Go to E9. Else skip to E10 |
| | | No | 2 | |
| | | I don't remember/ not sure | 3 | |
| | | No response | 4 | |
| E.9 | Who was this person? | Community health volunteer | 1 | |
| | (Select all that apply) | Teacher | 2 | |
| | | Traditional leader | 3 | |
| | | Religious Leader | 4 | |
| | | Government/Ministry Officials/Ebola Task Force | 5 | |
| | | Other (please specify): | 6 | |
| | | l don't know | 7 | |
| | | No response | 8 | |
| E.10 | Do you need more information on | Yes | 1 | If Yes, |
| | Ebola? | | | Go to |
| | | No | 2 | E11. |
| | | I don't remember/ not sure | 3 | Else skip |
| | | No response | 4 | to F1 |
| E.11 | What area(s) do you need | Cause / origin of the disease | 1 | |
| | additional information on? Select | Signs and symptoms of the disease | 2 | |
| | all that apply | Ways to prevent the disease | 3 | |
| | | Medical care and treatment options for those with the disease | 4 | |

| | | Home-based care for someone who is sick and suspected to have Ebola | 5 | |
|--------|---|--|----|--|
| | | How to protect others in the house if a household member is suspected of Ebola | 6 | |
| | | Safe burials of those suspected/ confirmed to have died from Ebola | 7 | |
| | | Survivors of Ebola | 8 | |
| | | Support and care for those quarantined because they have been exposed to Ebola | 9 | |
| | | New Ebola vaccine | 10 | |
| | | New Ebola treatments | 11 | |
| | | Information about new national cemetery | 12 | |
| | | Plans for national monument | 13 | |
| | | Others | 14 | |
| | | I don't know/ not sure | 15 | |
| | | No response | 16 | |
| F. ATT | ITUDES TOWARD SURVIVORS | | | |
| F.1 | When a person confirmed with Ebola, survives and has a | Yes | 1 | |
| | | No | 2 | |
| | certificate from the government, do you believe that you can still | Not sure | 3 | |
| | get Ebola from them through touching or hugging? | No response | 4 | |
| F.2 | When a person confirmed | Yes | 1 | |
| | with Ebola survives and has a | No | 2 | |
| | certificate from the government, | Not sure | 3 | |
| | do you believe that you can still get Ebola from them through sex with them within the first 3 months? | No response | 4 | |
| F.3 | Once people are cured of Ebola, | | | |
| | are they likely to get Ebola again? | Yes | 1 | |
| | | No | 2 | |
| | | I don't know/ not sure | 3 | |
| | | No response | 4 | |
| F.4 | Do you know anyone who has | Yes | 1 | |
| | recovered from Ebola? | No | 2 | |
| | | I don't remember/ not sure | 3 | |
| | | No response | 4 | |

| F.5 | If you knew a shopkeeper | Yes | 1 | |
|-----|---|------------------------|---|--|
| | who survived Ebola and has a | | | |
| | certificate from a Government Health Facility stating he/she is Ebola free, would you buy fresh bread from him or her? | | | |
| | | | | |
| | | No | 2 | |
| | | I don't know/ not sure | 3 | |
| | | No response | 4 | |
| F.6 | going child that has survived | Yes | 1 | |
| | | No | 2 | |
| | Ebola and has a certificate from | I don't know/ not sure | 3 | |
| | a Government Health Facility stating he/she is Ebola-free puts | No response | 4 | |
| | other students in their class at risk | | | |
| | of infection? | | | |
| F.7 | Would you welcome someone | Yes | 1 | |
| | back into your community/ | No | 2 | |
| | neighborhood after that neighbor has recovered from Ebola? | I don't know/ not sure | 3 | |
| | has recovered from Ebola? | No response | 4 | |
| F.8 | If a child that you know has lost | Yes | 1 | |
| | both parents to Ebola but is not | No | 2 | |
| | infected or has recovered, would | I don't know/ not sure | 3 | |
| | you be willing to bring him/her to live with your family? | No response | 4 | |
| | | | | |
| | <u> </u> | | | |



The safety of enumerators is paramount

Likewise, the safety of participants is equally important

Every enumerator must follow the established safety guidelines and protocols.

Supervisors must observe enumerators to ensure that security protocols are properly implemented

Supervisors must contact the appropriate LISGIS staff if there are issues or safety concerns that arise in the field

Do not get in any physical contact with respondents No hand shake with participants Do not get in any other physical contact (hugging, touching, etc.)

Maintain reasonable distance with interviewees (one full arm length).

Do not conduct interviews inside the house/dwelling Find a suitable open space (e.g., front entrance, veranda)

Do not let participants touch the survey questionnaire

Wash your hands with soap and water several times during the day. Use the hand sanitizer provided to you frequently, especially before and after interviews.

Do not drink from a cup in any visited household

Do not accept (or offer) food or snacks from participants

Do not accept any other material or financial gifts

At anytime during or after the survey, if you experience sudden onset of high fever coupled with diarrhea, vomiting, joint aches, stomach aches, or weakness you must IMMEDIATELY contact LISGIS to report these signs and symptoms; contact the nearest health facility; or call 4455

Scenario A

If an interviewee informs you that he/she has been experiencing signs and symptoms of Ebola Immediately stop the interview Ask him/her to call the Ebola phone line (4455) Inform your supervisor of the situation Record the address of the interviewee

Supervisor must then contact LISGIS immediately

Scenario B

If a participant informs you that someone else in the household has been showing signs and symptoms of Ebola

Immediately stop the interview Ask him/her to call the Ebola phone line (4455) Inform your supervisor of the situation Record the address of the interviewee Supervisor must then contact LISGIS immediately

Scenario C

If a participant asks you to provide any medical care Inform them that you are NOT a medical professional and NOT permitted to do so DO NOT attempt to provide any medical care or suggest medication(s) to be taken Ask the participant to IMMEDIATELY contact the nearest health facility or call 4455

PUBLIC KNOWLEDGE, ATTITUDE AND PRACTICES SURVEY ON EBOLA VIRUS DISEASE (EVD) PREVENTION AND CARE IN LIBERIA

| IDENTIFICATION | | | | |
|-----------------------|--------|---|---|---|
| NAME OF COUNTY | code / | / | / | |
| NAME OF DISTRICT | code / | / | / | |
| NAME OF CLAN/TOWNSHIP | code/ | / | / | / |
| ENUMERATION AREA (EA) | code/ | / | / | / |

| FACILITATOR | | | | | | | |
|-------------|--|------------|------------------|-----------|-----------------|--|--|
| DATE OF IN | DATE OF INTERVIEW (dd/mm/yy) /_/_/ / / / / / / | | | | | | |
| FIELD SUPE | ERVISOR NAME: | DATA CODIN | IG OFFICER NAME: | DATA ENTR | Y OFFICER NAME: | | |
| | | | | | | | |
| Signature | | Signature | | Signature | | | |
| Date | | Date | | Date | | | |

Respondent Socio-Demographic Data

| Category | |
|------------------|--|
| How many males | |
| How many females | |

Ages:

 1.______

 2.______

 3.______

 4.______

 5.______

 6.______

 7.______

 8.

What is your highest level of education?

- 1._____
- 2._____
- 3._____4.____
- 5._____
- 6._____
- 7._____
- 8._____

What kind of work do you currently do?

| 1 | | |
|---|------|------|
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | | |

Average monthly income:

- 1._____ 2._____ 3._____ 4._____ 5._____ 6.____
- 7._____
- 8.

What is your religion?

 1.______

 2._______

 3._______

 4._______

 5._______

 6._______

 7._______

8.

AWARENESS AND KNOWLEDGE SECTION

1. What do people in your community (friends, family, self) know about Ebola? Probe:

How does someone get Ebola? What are the causes of Ebola? What are the main signs and symptoms?

Are there any other things that make you believe someone has Ebola?

Are there any other names for Ebola?

Can someone who has Ebola survive from it?

Risk Perceptions and Beliefs

2. What puts people at risk of getting Ebola?

Probe: Why do you think so? Why do you think some people are not at risk of getting it? Do you think you could be at risk?

3. Is it possible for someone to have Ebola and not know that they have it?

Probe Why do you say so?

4. What do people think about health-workers who go house-to-house to tell people about Ebola and to stop the disease from spreading?

Probe

Social mobilisers/ community educators? Contact tracers? Psycho-social workers? Etc What do you think?

Behaviours and Practices

5. Since Ebola outbreaks started, what are things that people have been doing to stop themselves or their families from getting Ebola?

Probe

What are the specific changes that people have made in your community? Behaviors or practices that have stopped? New behaviors or practices that have started? Since when? How often are they being done? What about you?

6a. What do people do if they are sick and have Ebola like symptoms?

Probe If answer is go to traditional, spiritual or religious healer, why do you say so? How soon do they go after they fall sick? If answer is hospital.....where in Liberia do they go?

How do they get there? What do people believe happens there?

6b. What do people do if someone is suspected of Ebola in their household? Probe

If answer is go to traditional, spiritual or religious healer, why do you say so? If answer is hospital.....where in Liberia do they go?

How do they get there? What do they believe happens there?

6c. What do people do if someone is suspected of Ebola in their community? Probe

If answer is traditional, spiritual or religious healer, why do you say so? If answer is hospital.....where in Liberia would they go? How will they get there? What do they believe happens there? What would you do in your community?

7. What are some of the ways to care for someone who is suspected of having Ebola in a family, while waiting for help to come?

Probe:

What are specific actions? What happens at family level? At community level?

8. When someone dies in your community, what does the community do?

Probe:

What are specific actions and practices? How have these practices been affected in this time of Ebola?

Information Channels, Networks and Sources

9. Through what means or what ways have people heard or learnt about Ebola? Probe

What other means do you think would have been better? Why? What messages would work well in your community?

Attitudes towards Survivors

10. How are people with confirmed Ebola who survive and get certificate from Ministry of Health stating they are Ebola-free, being treated in the family?

Probe Why do you say this? How are they being treated in the community? Why?

11. What roles should an Ebola-survivor play in the community upon his/her return from a treatment center?

Probe Why? How will it be done?

Impact on Other Areas

12. Since the Ebola outbreaks started in Liberia, how have families and communities been affected?

Probe Work/job/ business? Diet? Health? Travel? Family interaction?

APPENDIX C: EVD KAP STUDY IMPLEMENTATION TEAM

| NAME | INSTITUTION |
|-----------------------|-------------|
| Dr. T. Edward Liberty | LISGIS |
| Robert S. Toweh | LISGIS |
| Rudi S. Vinton | LISGIS |
| Francis F. Wreh | LISGIS |
| Daniel F. Kingsley | LISGIS |
| Reginald Fannoh | LISGIS |
| Clarence G. Lamie | LISGIS |
| Tom Glassco | LISGIS |
| Joseph Nyan | LISGIS |
| Jemee Tegli | UL - Pire |
| Curtis H. Taylor | UL - Pire |