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Health, Disability, and Sexual and Gender-Based Violence in Post-Conflict Liberia: Focus group interviews of 120 and surveys of 396 men and women

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Global Epidemiology

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**Abstract Cover Page**

# Health, Disability, and Sexual and Gender-Based Violence in Post-Conflict Liberia: Focus group interviews of 120 and surveys of 396 men and women

By

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BAs, Anthropology and Psychology
University of Louisville
2009

Faculty Thesis Advisor: Roger Rochat, MD

An abstract of

A thesis submitted to the Faculty of the
Rollins School of Public Health of Emory University

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## Abstract

Health, Disability, and Sexual and Gender-Based Violence in Post-Conflict Liberia: Focus group interviews of 120 and surveys of 396 men and women

By Rosalyn Schroeder

**Background:** Liberia, a nation of approximately 3.7 million people, continues to recover from the brutality of 14 years of civil conflict (1989-2003). Chief aims of the research are to provide community-level estimates of mental health conditions and prevalence of post-traumatic stress disorder symptoms; to determine whether there are associations between sexual and gender-based violence and potential risk factors; and to identify statistically significant differences in the perceptions of reporting sexual violence when the victim has a disability (physical, mental, or epilepsy).

**Methods:** Using data obtained from 396 survey respondents and 120 focus group participants in two urban communities in Monrovia, Liberia, the following mixed-methods study seeks to explore the intersection between sexual violence, mental and reproductive health, and the impact of disabilities on vulnerability to and reportability of SGBV crimes, including rape and physical assault. We asked survey respondents about their experiences during the war, about violence in their homes and their communities, and questions to understand the magnitude of mental and reproductive health issues occurring to the respondent in the 12 months preceding the survey.

**Findings:** Survey respondents reported several negative mental health outcomes, including high rates of anxiety (32.3%), sadness or depression (30.1%), recurrent nightmares (52.5%), and insomnia (30.3%). Most consequential problems reported by respondents included post-traumatic stress disorder (25.0%), rape (6.5%), and domestic violence or beating (27.3%). Additionally, we identified several barriers to health services and facilities and made recommendations to reduce gaps in access.

**Conclusions:** Rape and domestic violence continue to be extensive problems throughout post-conflict Liberia despite government and non-government organizational attempts to target and prevent SGBV crimes. Recommendations are made herein to improve utility and outreach of services as well as to strengthen community buy-in of services.

**Cover Page**

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## Table of Contents

# Background/Lit Review

## *Scope of the Problem: Sexual Violence in War and Post-War Environments*

A 2011 World Health Organization multi-country study found that 15-71% of the world's women and 5-10% of men have reported experiencing some sort of physical or sexual violence at some point in their lives (1). Sexual violence is a pervasive global problem that has significant consequences on the physical and psychological health of victims. War, displacement, and post-war environments can exacerbate existing violence, often leading to new forms of violence against women in particular (1).

## *A History of Violence: Civil Conflict and Sexual Violence[1] in Liberia*

Over the course of fourteen years Liberia (1989-2003) experienced a violent civil war that killed hundreds of thousands of people and displaced millions across the region. Along with major destruction of property and the breakdown of infrastructure and social norms, the country experienced a dramatic increase in sexual violence as it was mechanized as a form of violence during the war (2). In turn, rape and other forms of sexual and gender-based violence (SGBV) increased dramatically (3, 2). During the war, an estimated 90% of women suffered from at least one event involving physical or sexual abuse (4). Other estimates suggest that more than 61.4% of women and girls in rural Bomi, Grand Cape Mount, Margibi, and Sinoe counties were victims of rape (5, 6) while

[1] *Definition of Sexual Violence:* Throughout this document, the term "sexual violence" is defined in conjunction with the definition set by the World Health Organization. Sexual violence is defined as "any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic, or otherwise directed, against a person's sexuality using coercion, by any person regardless of their relationship to the victim, in any setting, including but not limited to home and work" (Krug et al. 2002). The WHO definition was chosen due to its nature as the global standard for sexual violence and the guiding definition international donors use when allocating funds to sexual violence interventions.

in urban Bong and Montserrado counties, 77.4% of women and girls are thought to have been affected by rape during the war (7). Additionally, many women and girls were abducted into rebel fighting factions and were subsequently gang-raped, coerced into survival sex (i.e., sex for money or favors), or were forced into sex slavery (8). A 2008 survey conducted by the International Committee of the Red Cross (ICRC) indicated that more than half of all respondents reported that a close friend or family member had been a victim of sexual violence during the war (9).

*Prevalence of Sexual and Gender-Based Violence (SGBV)*

According to reports from the World Health Organization, widespread systematic violence that was introduced during the war continues to occur at alarming rates (8, 10). Ten years into post-war recovery efforts, sexual violence is still prevalent (11). Additionally, since the end of the war, intimate partner violence has grown more socially acceptable and has continued to be a major concern amongst communities (8, 12). Opportunistic sexual violence--where perpetrators commit further crimes due to the relative anonymity of crime and lawlessness that occurs during and after conflict and disaster--continues to affect the lives of many Liberians, and rates of domestic violence have also been on the rise since the close of the war (8, 13).

According to estimates provided in the 2007 Liberian Demographic Health Survey, 45% of Liberian women aged 15-49 reported experiencing at least one instance of physical violence since the age of 15. An additional 29% of female respondents reported experiencing one or more acts of physical violence in the year previous to being surveyed (14). Rape continues to be the most commonly reported serious crime

throughout Liberia (6). A 2011 study conducted by the Small Arms Survey in Liberia found that 68% of all reported SGBV crimes[2] were instances of rape (10), and 62% of survivors of SGBV report knowing their perpetrators (10).

Rates of sexual violence tend to vary greatly between communities, though this may be suggestive of numerous factors. These statistics may be skewed by varying levels of stigma associated with SGBV and whether or not individuals and community members are willing to report crimes of SGBV to police and other government officials. While the true extent of SGBV in Liberia may never be known, even the most conservative of estimates provide clear evidence that sexual violence has profoundly impacted women, men, and communities within Liberia.

*SGBV Targeting Men and Boys:*

While most research and statistics focus on violence perpetrated against women and girls, it is critical to note that men and boys also experience sexual and interpersonal violence, though it has long been assumed that rates of male victimization are lower than female victimization (15, 16). Still, the magnitude of physical and sexual violence against males has been strongly contested as details surrounding the systematic use of rape and sexual humiliation during war continue to emerge (17). Historically, few efforts have attempted to collect data on sexual violence that includes males, in part because rates of victimization were thought to be low and also because males are less likely to divulge such crimes due to increased stigma surrounding male victims of violence (15, 18, 19). One of only a few of its kind, a 2006 study at a Monrovia hospital found that 15 out of 658 rape survivors were boys and men (15). Another recent survey of 1666

[2] Other SGBV crimes include sexual coercion, sexual exploitation, female genital cutting, etc.

Liberian men revealed that 32.6% of male combatants (118 of 367 combatant respondents) experienced sexual violence, while 16.5% (57 of 360 combatant respondents) were forced to become sexual servants at some point during the war (20).

*Public Health Impacts of Sexual Violence:*

Sexual and gender-based violence leads to serious short- and long-term physical, mental, sexual, and reproductive health problems for victims and their families. Physical health effects can include headaches, back and abdominal pains, fibromyalgia, gastrointestinal disorders, and/or limited mobility (1).

Mental health consequences of sexual violence include moderate to severe depression, post-traumatic stress disorders, sleep difficulties, eating disorders, emotional distress, feelings of inadequacy and fearfulness, increased violence and anger, as well as suicidal thoughts and attempts. Estimates indicate that over 40% of Liberians meet the symptomatic criteria for post-traumatic stress disorder, which is commonly referred to as the folk diagnosis of *open mole* by Liberians (15, 21).

Sexual and reproductive health consequences of SGBV in women include unintended pregnancies, gynecological conditions, induced abortions, and sexually transmitted infections. Sexual violence during pregnancy can also lead to low birth weights, miscarriage, stillbirth, and/or pre-term delivery. Sexual violence has also been associated with increased rates of infant, child, and maternal morbidity and mortality. Men who have experienced sexual violence are prone to suffer from abdominal pain and gastrointestinal disorders, including irritable bowel syndrome, dyspepsia, and heartburn. Sexually-abused men are also more susceptible to post-traumatic stress

disorder and anxiety than men who have not experienced any lifetime events of sexual violence (1, 22). Sexual violence also remains a vastly underrepresented risk for HIV, as sexual violence and coercion may increase susceptibility to and transmission of HIV as violent sexual acts increase genital trauma and facilitates spread of disease (23).

Sexual violence also increases risk-taking behaviors among survivors. Sexual violence, particularly when it occurs during childhood, increases risk of smoking, drug and alcohol addiction, and risky sexual behaviors in later life. A first act of violence is also associated with an increased risk of future sexual violence perpetration when it occurs to male victims and an increased lifetime risk of additional victimization when it occurs to female victims (1).

*Government Efforts to Address SGBV:*

Under the presidency of Africa's first female president, Ellen Johnson Sirleaf, post-war Liberia has prioritized efforts to address sexual violence, and sexual and gender-based violence has emerged as a governmental and developmental priority in Liberia (24, 11, 12). The government continues to place strategic emphasis on improving protection, prevention, and rehabilitation mechanisms for survivors of SGBV (11). Liberia has also established the world's first special court for prosecuting crimes of sexual violence (11, 12). Improvements have also been made in enforcing the new rape law, which expands the category of sexual offenses to allow for the prosecution of gang rape and the rape of minors (12). Furthermore, the government has also developed one of the first National Action Plans to End Gender-Based Violence under the terms of United Nations Security Council Resolution 1325 (25).

As part of the government's efforts to prevent and treat future instances of SGBV, the Liberian Ministries of Gender and Justice launched the National Gender-Based Violence Plan of Action in 2009 (11, 26). It is constructed on four pillars: protection of women and children from sexual and gender-based violence; prevention of sexual and gender-based violence; promotion of women's human rights; and participation of women in peace processes (26). Additionally, in response to the post-war health challenges, the Ministry of Health and Social Welfare has paired with donors and international nongovernmental organizations (NGOs) to begin to rebuild a national health system and to deliver a basic package of health services. However, the participation of a very large number of donors in health sector reconstruction has presented notable challenges in coordination, reporting of health indicators, and the management of competing priorities for the ministry in prioritizing sexual violence as a health concern (27). These issues paired with the serious dearth of health care providers and health facilities throughout Liberia, the health care needs of a majority of Liberia's citizens remain largely unmet.

*Goals of Research:*

A key component of this thesis is to provide relevant, useful, and actionable statistics and recommendations to the Liberian government and local and international non-government organizations (NGOs) working to improve the health and well-being of Liberian communities. The following research attempts to target five objectives:

1. To provide baseline demographic data on two communities, Peace Island, which has been historically absent from Census and government collected data, and West Point, which has garnered substantive NGO attention

2. To provide baseline estimates on the burden on mental health and reproductive health maladies in two communities in Monrovia, Peace Island and West Point in order to make recommendations for actions to improve access and acceptance of health care services
3. To estimate reported incidence of sexual and gender-based violence in these two communities and gauge community responses to these events, including referral pathways and barriers to care;
4. To characterize and estimate the incidence of folk diagnoses of *open mole* (akin to post-traumatic stress disorder) and *spell* (epilepsy) and how these illnesses, among others, affects community perspectives of susceptibility of sexual violence.
5. To characterize community perceptions of disability and whether disability type has an effect on willingness to report an act of SGBV (defined herein as an instance of rape or physical assault)

*A Tale of Two Communities: Analyzing Experiences of Health and Violence in West Point and Peace Island Communities*

In order to better understand the impact of SGBV on health in Liberia, two communities in the capital of Monrovia were selected for inclusion in the study. The first community, West Point, was selected for inclusion in the study as it had a long history and presence of international NGO outreach. It also houses a number of government-sponsored resources within the community, including two health clinics, a township commissioner office, and a Women and Children's Protection Unit—a branch of the

Liberian National Police that focuses on crimes committed specifically against women and children and has jurisdiction for all SGBV crimes.

The community of Peace Island was selected as a comparison site, as it has historically received no government or NGO attention or benefits due to the fact that it was established in the aftermath of the war by ex-combatants and exists on land whose ownership is contested by the government. As a result of future threats of eviction, the government refuses to offer social services to the community and has barred international organizations from entering the community and establishing in-community resources, including the setting up of schools and health clinics, despite the fact that the community of Peace Island has set aside plots of land for these facilities.

The community of Peace Island was chosen to act as a quasi-control community as it was similarly geographically isolated and was assumed to have comparable demographics and income potential as that of West Point community, yet Peace Island has not yet received any government resources or NGO interventions and remains without a health clinic or policing resources. The decision to work in Peace Island was supported by the Carter Center, as the organization was interested in expanding their Justice and Peace Commission community advocates into the Peace Island community. Some of the research herein attempted to elucidate more information about community needs and perceptions and sought to identify whether or not the social climate in the Peace Island community would be amenable for the Carter Center to expand its efforts into the community.

*Rationale for Site Comparison:*

Quantitative methodology seeks to determine whether there are substantive differences in the reporting of community or personal health issues in between the two communities, Peace Island and West Point, given that there is access to health and social resources in West Point yet not in Peace Island. Qualitative methodology seeks to determine whether communities perceive the efforts of government or NGO interventions as having a significant effect on improving health outcomes. Additional goals were to identify whether differences in urban geographical location and previous interventions by the Liberian government or other non-government organizations affected rates of SGBV and use of existing national policing, health, and legal systems.

*Describing Folk Diagnoses of Mental Illness in Liberia:*

***Spell*:**

In Liberia, neurological conditions such as epilepsy and mental illness are highly stigmatized, despite the fact that they are common throughout the nation (28, 29). *Spell*, which refers to the colloquial term for epilepsy in Liberia, remains one of the most stigmatized illnesses in the country as folk tradition has placed causation of epilepsy on the presence of evil spirits or witchcraft (30). Diop et al. (31) provided one of the first estimates for the rate of *spell* in Liberia. Using a sample size of 4,406 epileptics in the country, Gerrits (32) estimated that the rate of *spell* existing in Grand Bassa County, Liberia lay between 28.9-49.0 cases per 1,000 people, making it one of the highest incidences of epilepsy in the world (28, 32).

Since these initial studies in the 1980s, much research has indicated that the disease burden of epilepsy in developing countries has been attributable to largely preventable parasitic, bacterial, or viral infections, including malaria, or brain damage due to perinatal trauma or head injury in youth or adulthood (28, 31). However, despite extensive scientific evidence supporting biological causes of epilepsy, West African folk tradition continues to attribute causation of *spell* to matters of witchcraft and spiritual unrest. As such, individuals suffering from *spell* are often stigmatized and are seen as dangerous, unruly, and often outcast from society, leaving epileptics increasingly vulnerable to victimization and social discrimination (28, 31).

**Post-Traumatic Stress Disorder and *Open Mole:***

Years of war and violence have had a myriad of negative effects on the population of Liberia. Recent estimates have indicated that upwards of 44% of surveyed adults in Liberia have symptoms associated with post-traumatic stress disorder (PTSD) (29). 57% of former combatants were found to have PTSD symptoms, while 37% of the general population who had not participated in the war met these same symptomatic criteria (15).

However, it is important to note that understanding trauma is an exercise in cultural relativity, and communicating about trauma and mental health must take into account colloquial terminology and traditional ideas about disease causation. *Open mole* refers to a mental health condition specific only to Liberia. Sufferers of *open mole* believe the skull begins to separate, leaving a hole behind from which the soul can escape the body (33). *Open mole* is considered to be the Liberian equivalent of PTSD and is recognized by a large majority of the population. Liberians believe that *open mole* occurs

after an individual experiences a traumatic event or after a person has endured years of chronic stress and challenges (21, 34). Visiting psychologists have noted that the symptomology of *open mole* bears remarkable similarity to Western medicine's diagnosis of post-traumatic stress disorder (35). Notable symptoms associated with *open mole* include (34):

- Severe headache
- Neck pain
- Back pain
- Tiredness
- Weakness
- Sleeping problems
- Lack of appetite
- Bad dreams, nightmares
- Worriedness or anxiety
- Forgetfulness
- Loss of interest in usual activities
- Fast heartbeat
- Headache
- General body pain
- Heat throughout the body
- Trembling
- Hearing voices and sounds
- Crying
- Self-isolation
- Confusion
- Wanting life to end
- Fear of death

Though symptoms reported by sufferers of *open mole* are diverse and tend to vary by the individual, a single unified characteristic of a soft spot on top of the skull is considered the defining symptom of *open mole*. Despite wide general acceptance of *open mole* as an actual disorder, the cause of *open mole* is often contested. Many fear *open mole* to be a contagious disorder while others believe that the disorder is caused by tampering with spiritual forces or partaking in witchcraft (21, 34). Despite disagreements about the causation of *open mole,* the disorder is often met with stigma and with few

trained providers available to treat the disorder most cases remain undiagnosed and untreated (21).

**Prevalence and Burden of Open Mole:**

Existing studies on *open mole* in Liberia indicate a high prevalence of post-traumatic stress disorder-related symptomology throughout the country. However, while the folk illnesses of *spell* and *open mole* are commonly self-diagnosed, the prevalence of these disorders within the capital of Monrovia has to this point received little attention. This document provides baseline data for the Liberian Ministry of Health and Social Welfare (MOHSW) that provides community-level estimates of *open mole* and *spell* in Peace Island and West Point as self-reported by survey respondents. Researchers expect that collected data will provide a better understanding of the scope and magnitude of both conditions as it pertains to improving the health care sector's response to targeting disease burden and treatment.

*Disabilities and Violence:*

An additional sub-analysis of data explores community perceptions of disability and whether disability type has an effect on willingness to report an act of SGBV (defined herein as an instance of rape or physical assault). Persons living with disabilities (PWD) are thought to be at higher risk of becoming victims of violence when compared to individuals that do not have disabilities. This increased risk has been attributed to the increased levels of stigma, discrimination, and ignorance that is targeted toward those with disabilities (36). Individuals living with disabilities are also less likely to have social supports that are emotionally and financially able to care for them, which increases their

risk of becoming targeted victims of crimes (37). A systematic review of global studies on violence conducted by the WHO found that adults with disabilities were 1.5 times more likely to be victims of violence than adults without a disability. Moreover, individuals diagnosed with a mental health condition were found to be at greatest risk of violence at a rate of four times the risk of an adult without a disability (36).

The 2007 Liberian Demographic and Health Survey indicates that upwards of 16% of Liberia's population suffers from one or more disabilities (14). According to Government of Liberia SGBV database figures, only 1% of SGBV survivors were reported to have a "known" disability (38). However, 67% of all data on disability status is missing in the database, and these numbers do not account for crimes against persons with disabilities that are not formally reported to the government legal system (39).

To date, no published research has been found that explores the intersection of disability and its relation to sexual or physical violence in Liberia or other sub-Saharan countries. By understanding cultural perceptions of disability type and its perceived reportability, educational campaigns may be better targeted by disability advocates to prevent crimes against those living with disabilities in addition to encouraging the formal reporting of SGBV crimes that are committed against those living with disabilities.

## Methods

*Quantitative Data Collection:*

A cross-sectional random cluster survey of 649 adults aged 18 years or older was conducted in both West Point (n=345 adults) and Peace Island (n=304 adults) using structured interviews conducted by Liberian enumerators university-trained in demographic studies. The survey covered a wide range of topics related to justice, security, and health in Liberia.

Specific areas of interest to researchers included:

- Basic sociodemographic information
- Health care services and utilization
- Perceptions of the Liberian judicial system
- Recent history of interpersonal disputes over property, debt, loving, child support, rape, beating, abuse of authority, killing, or labor issues
- History of participation in the war
- Mental health, substance abuse, and disabilities
- Domestic violence and sexual abuse

**Survey Design and Implementation:**

The survey was informed and designed over a two-month period of qualitative research, and question field-testing was undertaken in May and June of 2012. The survey was executed over the course of two weeks during early July 2012. Surveys were

administered by trained Liberian enumerators via touchscreen iPods, allowing data to be uploaded and stored securely using iSurvey application software.

Survey zones in both Peace Island and West Point communities were selected by creating a GPS coordinate grid of each community and using a random number generator in the R statistical sampling package to choose target survey sites. GPS coordinates for Peace Island were replicated from a future New York University (NYU) study on sex work involvement and UNMIL. The NYU project's map was generated by dividing the city of Monrovia by individual households, identifying GPS coordinates for each household, and randomly sampling households based on these coordinates. Using Google Earth this technique was applied to the community of West Point, which enabled the community to be broken down into household zones based on GPS coordinates. In West Point, GPS coordinates were selected to section off zones of 25,091 square feet. The team then randomly sampled from 25 zones in West Point. In Peace Island, GPS coordinates were selected to section off zones of 136,604 square feet. The team then randomly sampled 42 zones in Peace Island.

To choose households to be selected for surveying, enumerators first counted the number of households in each zone and randomly selected households to survey using a random number generator. After inquiring as to the number of household residents over the age of 18, enumerators randomly selected an interview participant. GPS coordinates for each household were recorded for survey replication purposes.

The survey consisted of two components: (1) A short screening questionnaire that collected residential and geographic information to inform demographic analysis of both communities, and (2) a longer main survey questionnaire that collected information on

history of interpersonal disputes, trust in Liberian policing and legal systems, and specific information on health and disabilities. Selected survey participants were first screened to determine their involvement in some form of a dispute (property, debt, loving, child support, rape, beating, abuse of authority, killing, labor). Respondents who were involved in a dispute in the past 12 months subsequently completed a main survey that involved questions about dispute resolution, security, civic education, and health. In total, 396 respondents in both communities completed both the screening and main surveys and were included in final analysis (see Figure 1).

A demographic analysis of survey results indicated that survey respondents in West Point and Peace Island shared remarkable similarities in both composition and characteristics, and thus the two communities were matched on demographic grounds. Results of a demographic analysis of Peace Island and West Point can be found in Table 1 and Table 2.

*Quantitative Data Analysis:*

All data analysis was performed in SAS 9.3 and included descriptive analytics and comparative analyses between communities. Given that the data collected was part of a cross-sectional study, to measure whether statistically significant differences in health outcomes were reported between the two communities, log-binomial regression models were used to produce unbiased prevalence ratio estimates. SAS's PROC GENMOD log-binomial regression capabilities were utilized in order to produce estimates of prevalence ratios (PRs), confidence intervals, and p-values in order to make inferences about variables of interest. Additionally, outcome variables with three groups were analyzed

using ANOVA statistics in order to determine whether statistically significant differences existed among willingness to report an act of SGBV against an individual with a disability and risk of SGBV in individuals with a disability.

Continuous variables of interest included age and education level; for ease of use, these variables were broken down into categorical variables based on cut-off levels common to Demographic and Health Surveys. Other categorical variables of interest included job category and relationship category. Dichotomous variables of interest included literacy status, employment status, health access indicators, SGBV reporting indicators, participation in war indicators, and health condition indicators.

Outcome variables of interest include reported negative health outcomes and perceptions of risk and reportability of SGBV crimes occurring amongst individuals with different categories of disability.

Please note that data was stratified by sex and by location, but chi-square values and odds ratios indicated that there were no significant statistical differences between the responses of both sexes in either community. Therefore, for the purpose of this study, responses are reported as an aggregate of both sexes' responses throughout the results and discussion. In the rare instance that sex-specific differences in responses were found to be statistically significant, these results will be discussed in the text of the results and discussion sections.

*Qualitative Data Collection:*

In addition to the survey, twelve structured focus group discussions were conducted with a total of 120 participants [60 men and 60 women] in West Point and

Peace Island—two of Monrovia's poorest communities—with the intent to identify perceptions of social service availability and referral pathways following sexual and gender-based violence (SGBV). Each focus group consisted of ten participants and groups were segregated by gender as to ensure confidentiality and safety of all participants. Both mental and reproductive health issues were discussed during the course of focus group discussions, as was how sexism, tribalism, and disability can affect an individual's risk of sexual violence for individuals in the community. Participants were also asked to answer questions about how the issues of gender and disability affected an individual's willingness to seek out medical or psychosocial care. All focus group participants were selected through gatekeepers in both communities, including township commissioners and women's group leaders.

Additionally, fifteen semi-structured in-depth interviews were conducted with community officials, women's rights advocates, NGO staff, health organizations, and government officials to identify mental and reproductive health issues that were perceived to be of greatest concern. Health service providers and their clientele were included in structured interviews in order to assess the effectiveness of services being provided to the community. Additional discussions with health and cultural experts helped to shortlist priorities for research, including a focus on the effect of disabilities in mediating or exacerbating the risk of sexual or physical violence.

*Qualitative Data Analysis:*

All twelve focus group sessions were audio recorded and transcribed by Liberian research assistants for future analysis. Transcripts were then uploaded to MAXQDA 10

software and were flagged according to theme and content in order to provide context for quantitative research. A content analysis of these transcripts provided further information on thematic responses related to health and SGBV issues in Peace Island and West Point. While qualitative data analysis was not the main point of this research, it is used herein to triangulate quantitative data gathered and to provide greater context and legitimacy of collected survey data.

## Results

*Community Demographics:*

General characteristics of individuals who completed both the screening and main surveys, by community of residence, can be found in Table 1 and Table 2. Overall, women constituted a majority of respondents (62.9%). The age distribution of respondents included individuals from 18 through 75 years of age, with nearly equivalent average age of respondents in both communities (33.9 years vs. 34.2 years). Population pyramids of each community by age category and sex can be found in Figure 3.

Unemployment rates are very high in both communities: 62.5% of Peace Islanders reported being unemployed at the time of the survey and 57.6% of West Point residents reported the same. Average monthly household earning potential in both communities was found to be nearly equal, with an average of $61 per household per month in Peace Island and an average of $64 per household per month in West Point being reported.

Individuals in Peace Island self-reported higher levels of education than individuals in West Point; 27.8% of all Peace Island respondents reported having completed college or a graduate degree whereas 17.5% of West Point respondents reported the same. While respondents in both communities tended to over report their literacy abilities, respondents in Peace Island were more likely to be able to read a newspaper headline when asked to do so. 61.4% of Peace Islanders were able to read the excerpt whereas 53.3% of respondents in West Point were able to read the excerpt provided by survey enumerators.

The majority of respondents in both communities reported being in stable relationships, which includes couples that are married, dating seriously, or unmarried but

currently living with a partner. However, Peace Island residents were more likely to report being single (34.2%) than West Point respondents (25.5%). Other sociodemographic variables of interest can be found in Table 1.

*Understanding Community Issues:*

One of the main objectives of the survey was to assess current health and security issues present in each community. Despite the presence of in-community health and policing resources in West Point, individuals living in this community were generally much more likely to report ill health and security risks than respondents living in Peace Island (see Tables 3-6).

Table 3 illustrates commonly reported community issues among respondents in Peace Island and West Point. Respondents in West Point were much more likely than Peace Island respondents to report that their community was unsanitary (Prevalence ratio (PR): 1.41 (95% CI (CI): 1.29 - 1.55); p-value <0.0001), their community suffered from high unemployment (PR: 1.60 (CI: 1.46 -1.75); p-value <0.0001), homes were in disrepair (PR: 1.57 (CI: 1.46 - 1.69); p-value <0.0001), and that no schools were available to youth in the community (PR: 1.26 (1.16 - 1.37); p-value <0.0001).

Respondents in West Point were also much more likely than respondents in Peace Island to report that substance abuse was a major issue in their community. West Point respondents were significantly more likely to report illegal marijuana usage as a major community issue than Peace Islanders (PR: 1.31 (CI: 1.21 - 1.56); p-value <0.0001). West Pointers were also significantly more likely to report excessive alcohol intake as a major community issue than respondents in Peace Island (PR: 1.07 (CI: 1.03 - 1.19); p-

value: 0.039).

*Understanding Community Health Events and Health Access Issues:*

Respondents in both communities were also asked to answer questions pertaining to health issues that they were aware of happening in the three months prior to the date of being surveyed. Respondents in West Point were more likely than Peace Islanders to report negative community health issues; results of these questions can be found in Table 4.

Respondents in West Point were significantly more likely to report having knowledge of a woman dying during childbirth (PR: 1.30 (CI: 1.03 - 1.64); p-value: 0.025) or knowing a woman who died during her pregnancy (PR: 1.29 (CI: 1.05 - 157); p-value: 0.016). West Pointers were also more likely to report severe injuries to children occurring in their neighborhood (PR: 1.15 (CI: 1.02 - 1.29); p-value: 0.025) than respondents living in Peace Island.

Respondents in West Point were also much more likely to report knowing an individual who had been raped or beaten in the three months prior to being surveyed. Respondents in West Point were nearly 2.5 times more likely to report having heard of an instance of rape in their community than respondents in Peace Island (PR: 2.41 (CI: 2.10 - 2.76); p-value <0.0001). Respondents in West Point were also significantly more likely to report having heard of an instance of domestic violence occurring to an individual in their community than respondents in Peace Island (PR: 1.23 (CI: 1.14 - 1.33); p-value <0.0001).

No significant differences were found between the two communities when a

number of health access variables were considered, with more than half of all respondents in each community reporting knowing a woman who gave birth in her home (PR: 1.04 (CI: 0.79 - 1.39); p-value: 0.735) and individuals who had difficulty finding transport to a hospital or clinic during a medical emergency (PR: 1.01 (CI: 0.88 - 1.16); p-value: 0.889). Respondents in both communities were also asked to discuss other potential barriers to health care and hospital access; results of these questions can be found Table 5.

In accordance with previous responses, respondents in West Point were also generally more likely to perceive greater barriers to health care and health facilities than Peace Island respondents. West Pointers were more likely than Peace Islanders to report that facilities were too far away to be accessible (PR: 1.23 (CI: 0.97 - 1.58); p-value: 0.091), transportation was a major issue (PR: 1.39 (CI: 1.11 - 1.74); p-value: 0.005), and that there were no accessible health clinics (PR: 1.56 (CI: 1.36 - 1.79); p-value <0.0001).

Respondents in both communities reported the same priority health care access issues: prohibitive cost (PR: 1.06 (CI: 0.92 - 1.21); p-value: 0.435), distance from home to health care facility (PR: 1.24 (CI: 0.97 - 1.59); p-value: 0.091), and extensive wait time at the health care facility (PR: 0.91 (CI: 0.82 - 1.02); p-value: 0.103) as the three primary deterring factors from seeking out formal health care services, though no statistically significant differences were seen between the two communities in the reporting of these access issues. However, as a result of health access issues, respondents in West Point were more than 1.5 times as likely to seek out the health services of a traditional healer than respondents in Peace Island (PR: 1.52 (CI: 1.24 - 1.86); p-value <0.0001).

*Self-Assessed Physical and Mental Health Issues:*

Individuals in both communities reported extensive physical and mental health issues (see Table 6), though the proportion of individuals reporting health issues was consistently higher in West Point respondents as compared to Peace Island respondents. Individuals in West Point were nearly twice as likely to report experiencing heart palpitations (PR: 1.95 (CI: 1.80 - 2.12); p-value <0.0001) or symptoms of spell/epilepsy (PR: 1.91 (CI: 1.54 - 2.37); p-value <0.0001) than respondents living in Peace Island.

Respondents in West Point were nearly twice as likely as Peace Island respondents to report feeling hopeless (PR: 1.73 (CI: 1.55 - 1.94); p-value <0.0001), feeling weak or fatigued (PR: 1.64 (CI: 1.50 - 1.79); p-value <0.0001), being less interested in life activities (PR: 1.82 (CI: 1.58 - 2.11); p-value <0.0001), and were also nearly twice as likely to report experiencing physical or emotional abuse in the home in the year prior to being surveyed (PR: 1.82 (CI: 1.60 - 2.08); p-value <0.0001).

Individuals in West Point were also more likely to report having trouble sleeping (PR: 1.40 (CI: 0.97 - 2.02); p-value: 0.076), and West Pointers were significantly more likely to report having recurrent bad dreams or nightmares (PR: 1.31 (CI: 1.07 - 1.59); p-value: 0.0075), experiencing bouts of anger for no discernable reason (PR: 1.42 (CI: 1.15 - 1.75); p-value: 0.0013), were more likely to report suffering from open mole (PR: 1.39 (CI: 1.16 -1.67); p-value: 0.0003), and were 1.5 times more likely to report thoughts of suicide or self-harm (PR: 1.58 (CI: 1.38 - 1.80); p-value: <.0001).

Overall, more than one-third of all respondents in both communities (31.5% in PI vs. 33.0% in WP) reported suffering from anxiety or excessive worrying, though there was not a significant difference in this reporting between communities (PR: 1.05 (CI:

0.95 - 1.16); p-value: 0.3653). More than two-thirds of respondents in both communities (66.3% in PI vs. 74.5% in WP) reported recurrent migraines and head pains, though West Point respondents reported this malady at a significantly higher frequency than Peace Island respondents (PR: 1.12 (CI: 1.05 - 1.19), p-value: 0.0006). Other health issues of interest can be found in Table 6.

*Disabilities and the Reporting of SGBV Crimes:*

Additional survey questions sought to understand community perceptions of the variable risks of sexual violence associated with different types of disability—including mental handicaps, physical handicaps, and *spell* (epilepsy). Survey respondents were asked to answer questions regarding disability type and how presence of different types of disability can affect an individuals susceptibility to SGBV or whether disability type affects witness willingness to report acts of sexual violence. Table 7 illustrates respondent willingness to report a crime of SGBV depending on type of disability victim portrayed.

Respondents in both communities overwhelmingly responded that they would report an act of SGBV (including sexual and physical abuse) to police, with 95.0% of all respondents in both communities reporting they would report an act of rape to police if the victim were blind, deaf, dumb or crippled; 92.9% responded that they would report a rape of a woman who suffered from epilepsy/*spell* to the police; and 82.8% of all respondents responded that they would report an act of rape if the victim had a mental illness, “crazy”, or had a mental handicap. An ANOVA analysis performed among the three categories of disability indicated that no statistical difference was found between

the reporting of a rape of a woman with epilepsy/*spell* and reporting the rape of a woman with a physical disability (blind, deaf, or crippled) (chi-square value: 0.681, p-value: 0.409). However, statistically significant differences between reporting the rape of a woman with a mental disability or mental illness and a woman with epilepsy/*spell* (chi-square value: 5.97, p-value: 0.0073) and a woman with mental disabilities or illness and a woman with a physical disability (chi-square value: 10.04, p-value: 0.0008) were also found.

*Disabilities and Perceived Vulnerability to SGBV:*

Additionally, survey questions sought to understand whether community members perceived disability type as a risk factor that affected susceptibility of women or children to experiencing sexual or gender-based violence. Table 8 illustrates respondent perceptions of increased vulnerability of women and children to rape based on type of disability or physical condition.

The majority of respondents in both communities reported that the presence of any of the three disability types would increase an individual's vulnerability to SGBV. More respondents reported that the presence of a physical disability (77.0%) would increase an individual's vulnerability to rape than would the presence of a mental disability (74.2%) or *spell* (62.6%).

An ANOVA analysis performed among the three categories of disability indicated that no statistical difference was found between perceived vulnerability of a rape of a woman with a mental disability and the vulnerability of a rape of a woman with a physical disability (chi-square value: 0.211, p-value: 0.646). Additionally, no statistical

difference was found between perceived vulnerability of a woman with epilepsy/*spell* and a woman with a physical disability (chi-square value: 3.33, p-value: 0.068) was found. However, a statistically significant difference between perceived susceptibility of a woman with a mental disability or mental illness and a woman with epilepsy/*spell* (chi-square value: 4.89, p-value: 0.027) was found.

Table 9 displays descriptive statistics for survey respondents reporting an instance of rape (n=26) or an instance of beating (n=108) in the 12 months prior to being surveyed. Table 10 displays descriptive statistics for survey respondents who self-report experiencing symptoms of open mole. The table also includes information on experience of traumatic events and complaints of associated health problems.

## Discussion

The chief goals of survey questions discussed within this document sought to identify common health problems in Liberia as well as issues that affect an individual's ability to access to mental and reproductive health services. Additionally, questions sought to understand community perceptions of the variable risks of sexual violence associated with different types of disability—including mental handicaps, physical handicaps, and *spell* (epilepsy). The following section discusses main findings and provides recommendations from quantitative and qualitative research.

*Primary community concerns:*

In order to gauge community priorities in both West Point and Peace Island, respondents were first asked to identify the issues of most concern occurring within their community. In West Point, survey respondents identified unsanitary living conditions, a lack of latrines/toilets, and poor housing as the top three problems occurring in their community. Similarly, in Peace Island, the top three community concerns reported by survey respondents included unclean water sources, lack of police or community security resources, and the lack of latrines/toilets. While the majority of NGO interventions in Liberia focus on efforts meant to improve civic education and civic participation in government processes, it is clear that basic resources in the form of clean water and latrines continue to be inaccessible and remain of priority concern to community members.

This is especially important to note because in the absence of these resources, women must continue to walk long distances from their homes to collect water and to

defecate. This perpetuates not only health risks—as individuals continue to be forced to utilize unsanitary conditions–but results in extensive personal security risks as well. Women participating in focus groups in both communities reported that they felt most vulnerable to rape during these activities, especially when they occurred at night. Women in Peace Island reported that the trek into the swamp to collect water or to use the open latrines remained the most unsafe area of their communities, while women in West Point denoted the same feelings of insecurity and vulnerability about their trips to the beach to collect water and to defecate.

Women in both communities were also more likely to report that they were raped or beaten by a stranger or neighbor within their community while outside the home, indicating that there are major risks to women as they travel greater distances from their homes to participate in these essential routines. It is therefore increasingly important that future government and NGO recommendations take into account these basic, cheap-to-implement interventions in order to reduce the risk of communicable disease transmission while also providing more secure, safer living environments for women and children in order to reduce risks of SGBV outside of the home.

*Priority health and wellness concerns:*

To assess risks and prevalence of specific health-related events occurring within each community, survey respondents were asked to identify health risks and events that had occurred within their own household or neighboring households within the 12 months previous to the date of being surveyed. Tables 3-6 provide information on health issues reported in each community.

Despite the notion that West Point has been targeted for health and social interventions by international NGOs and the Liberia government whereas Peace Island has not received any such attention or in-community services, respondents in West Point were still much more likely to report negative health outcomes and mistrust in social interventions than those living in Peace Island. The fact that respondents in West Point were equally to more likely to report health problems or increased difficulty in accessing health care services as those living in Peace Island may illustrate a number of issues related to the availability and access of health services throughout Liberia, even where they are suggested to exist.

While most West Pointers questioned were aware of health clinics established in their communities, they also reported a host of other factors that limited the success of these in-community resources. In interviews and focus groups, in addition to survey questions asked about health access barriers, a number of obstacles to accessing health care were elucidated. Limited hours of operation, long wait times, no medical staff or nurses available to staff clinic sites, and a dearth of necessary medical equipment or medicines were commonly reported as deterrents to receiving health care assistance in-community for West Point residents.

For both communities, receiving health care assistance outside of the community was limited by distance to clinic or hospital facilities, unaffordability of seeking health care in these environments, and lack of availability of transportation to these sites. From the twelve focus groups conducted in both communities, a series of challenges and opportunities were offered up by community members in order to improve health care access and utilization.

Additionally, focus group responses relating to mental health and reproductive health questions indicated that both Peace Island and West Point faced many of the same challenges when it came to health services availability and access. Both the quantitative survey and qualitative interviews and focus groups targeted the same challenges. Major health access challenges reported by participants in both communities included:

1. Severely limited availability of health services at national and local levels
2. Poor access to public and private transportation services
3. West Point and Peace Island suffer from relative isolation from other Monrovia neighborhoods and their resources
4. Lack of trained medical health workers exist within the community
5. High levels of poverty and mistrust in modern medical practices often precludes individuals from seeking health services outside of the community
6. Overcrowded and unsanitary hospitals and clinics are often seen as substandard to traditional, trusted community-based healing practices

A series of recommendations for improving the availability, accessibility, and utility of mental and reproductive health services were suggested by survey respondents and focus group participants. Reproductive health services requested included:

1. The establishment of community-based family planning clinics and services stocked with condoms and birth-control pills

2. Improved access to a midwife or skilled-birth attendant within the community through the utilization of home visits and/or the establishment of an in-community health clinic with a birthing center
3. The provision of structured sexual education courses for adolescents and young adults living within the community
4. The establishment of routine, preventative health clinic visits at community-based health centers that are free or low-cost

Mental health services requested included:

1. The incorporation of community-based counselors to deal with intrafamilial disputes—including domestic violence issues
2. Make educational opportunities available for those living with mental and physical health conditions
3. The development and dissemination of anti-stigma campaigns that target to dispel myths surrounding mental disabilities
4. Improved anti-stigma campaigns that support individuals with *spell*

By addressing existing gaps and barriers in access to health care resources and services, it is assumed that this would also serve to reduce the prevalence of negative health outcomes reported in each community.

*Substance Abuse in the Community:*

The majority of Peace Island and West Point respondents responded that alcohol and marijuana usage were major issues in their communities. The increased reporting of alcohol abuse and marijuana usage in West Point may be resultant of the community's proximity to the marketplace and the port, where drugs and alcohol can easily be brought into the community. Substance abuse is often a result of major depression or trauma and is also known to be a risk factor for increased perpetration of physical or sexual violence, particularly events occurring in the home (40). As such, the Ministry of Health and Social Welfare and other health NGOs should attempt to garner an improved understanding of the prevalence of alcohol and drug addiction within communities and provide resources for drug cessation programs.

*Disabilities and Risk of Sexual Violence:*

Survey respondents were also asked to answer questions regarding how different disability types (physical handicaps, mental handicaps, or *spell*) can affect vulnerability to rape of physical assault. Respondents were also asked whether they perceived that a victim's disability type would affect a witness's willingness to report acts of sexual or gender-based violence. Survey data suggests that violent crimes perpetrated against women who were identified as having cognitive delays or mental illness were considered less "reportable" than violence against women with a physical handicap (vision, hearing, motion) or women suffering from *spell* (see Table 7). In subsequent focus groups, respondents in both communities also reported more unwillingness to report crimes against women with mental disabilities. This was, in part, due to the fact that rape cases

where the victim suffers from a mental illness or mental handicap are seen as being less likely to be taken seriously by police officers and court officials and would be considered a waste of time and social resources to prosecute.

Survey respondents were also asked about their perceptions of different types of disabilities and how each affects vulnerability to rape (see Table 8). Women with physical disabilities were seen as being more vulnerable to rape than women with mental illness or epilepsy, negating the hypothesis that all disabilities would be perceived to have an equal effect on increasing vulnerability to SGBV. Through focus groups and interviews with community members and healthcare workers, respondents reported that in some instances culturally-held stigmas against mental illness and epilepsy may, in fact, be a deterrent against rape in some instances.

However, other respondents negated this notion, expressing instead that due to the low status accorded to women living with mental health illness or disability, these women were at much greater risk of sexual or physical violence than women living without disabilities. These respondents noted that oftentimes there were few familial or legal protections targeting persons living with disabilities, and the Liberian legal system was said to be notorious at failing to adequately persecute perpetrators of crimes against women with mental health issues or reduced cognitive functioning. As a result, it was suggested by many that SGBV perpetrators were more likely to target persons living with disabilities as they were much less likely to be arrested and tried for these crimes.

It was also suggested by focus group participants that the Government of Liberia incorporate stronger protections for all victims of SGBV crimes while encouraging a heightened sense of awareness and communal responsibility to protect more vulnerable

populations. Media campaigns targeting the general public in order to dispel myths about disabilities and encourage better reporting of crimes against persons living with disabilities were also suggested by focus group participants.

## Strengths And Weaknesses

***Strengths:***

*A Mixed-Methods Approach:*

Both quantitative and qualitative methods were utilized in the study described within this document. Quantitative data was collected in order to provide baseline data on health issues and provide guidance to the Government of Liberia and non-government organizations to identify and target health issues of greatest importance to Peace Island and West Point communities.

Qualitative research was conducted to understand the impact of Liberian culture on driving behaviors and acceptance of public health interventions and services. This research also allowed us to research how cultural perceptions of disability and stigma can affect one's susceptibility to violence as well as how the community might respond to acts of violence perpetrated against individuals with varying types of disabilities. Qualitative interviews and focus groups also provided information on social organization, cultural beliefs, values, and expectations of communities while concurrently identifying existing community knowledge of government level policies that address sexual and gender-based violence.

Preliminary qualitative research also served as a frame by which to structure subsequent quantitative survey questions and topics. The focus groups attempted to provide flexibility in which respondents and the community could discuss issues that were later targeted by the quantitative survey. By using a combination of qualitative and quantitative analysis, data was triangulated in order to give a more complete idea of the context and complexity of issues of SGBV in the community. The incorporation of

qualitative and quantitative research to create a mixed-methods study helps to enhance reliability of data and the utility of data by a variety of organizations.

*Original Baseline Data:*

The findings of this study provide baseline data on community needs and perceptions of government services where little to no information existed before. It is hoped that the collection of this data can provide a voice to individuals living in these historically underserved communities and that data can be used to advocate for the improvement of health and social conditions at the community-level. The extensive scope of the 340 questions asked in the survey also serves to provide key information on a large variety of essential public health, cultural, and social issues that had yet been quantified in these communities.

*Sample Size:*

Using 2010 Census estimates of both communities and establishing a cut-off power of 80%, we determined that a sample size of 396 individuals was sufficient to make inferences about community experiences, while survey data collection methods attempted to ensure that the sample taken in each community was as representative as possible.

**Limitations:**

*External Validity and Generalizability:*

Qualitative and quantitative data collected was limited to two slum communities in an urban setting. While the intent was to be representative of these two communities, the information collected does not incorporate the thoughts and perceptions of rural Liberians or of Liberians living in other communities within the capital of Monrovia. Historical inequities between the capital and the rural areas, uneven effects of the war, and challenges of transport have contributed to diverse and unequal service delivery in the country, making it both difficult and unwise to generalize research findings to the whole of Liberia. Findings should not be generalized to communities outside of Monrovia or to other developing country environments where mental illness and sexual violence are also prevalent and highly stigmatized. A detailed study of various communities across the country is necessary to begin to develop a national picture of service available for survivors of sexual violence.

*Scope of Survey Questions:*

The nature of survey data only garners information on questions explicitly asked to respondent, so the variety of responses of that can be elucidated from these types of questions are limited. The mixed method design of this study attempts to resolve some of the limitation of survey data by the utilizing focus groups to provide more narrative explanations for findings. Survey questions were also targeted to the local context in order to ensure that they were relatable, understandable, and relevant. The sheer number

of questions asked of respondents (up to 340 questions were possible) was also a limitation as type of questions asked were required to be somewhat generic.

*Recall Bias:*

When respondents are asked to report on experiences that have occurred in the past, it is possible that they may not remember or report their experiences accurately or completely. Given that the survey herein required that respondents answer questions about events occurring in the twelve-month period prior to the survey in addition to their experiences during the war, recall bias may come into effect.

*Response Bias:*

It is possible that surveyed and interviewed individuals may exhibit a "social desirability bias" by reporting answers that they perceived to be what the researcher wanted to hear or what were otherwise deemed appropriate by society and culture. Attempts to reduce the effects of response bias to gain the approval of cultural outsiders included the use of trained Liberian enumerators and research assistants who were familiar with cultural values and could speak to respondents in a trust-building manner. All survey questions were also couched in culturally relevant terminology in order to ensure understandability and accurate responses. Whenever possible, enumerators and focus group facilitators were conducted by an individual of the same sex as the respondent in order to facilitate trust and confidentiality of responses.

*Representativeness in Quantitative and Qualitative Research:*

Given that focus group participants were often selected through gatekeepers in the community, including community leadership and women's group leaders, selection bias may have an effect on the quality and diversity of responses provided in focus groups. Individuals hand-selected by community leaders were assumed to be more active in the community and may be more informed about social issues or have higher levels of formal education than the average community member. In order to confirm or negate the effects of the selection bias present in focus group selection, strong attempts to ensure representativeness in the quantitative survey were made a chief priority of the overall research design.

*Underreporting of SGBV Crimes:*

Research has shown that individuals are less likely to report crimes if the perpetrator is a close ally, relative, or intimate partner (10, 41). As such, it would not be unsafe to assume that the true number of SGBV crimes occurring in the community is likely underestimated and would be higher than the figures presented in this report.

## Public Health Implications

The main purpose of this study served to provide baseline data on citizen knowledge of and perceptions of reproductive health and mental health services to the Government of Liberia and associated NGOs working to improve health and quality of life in urban Liberia. This data also provides the first community-level estimates of self-reported health outcomes and health risks within the capital of Monrovia.

Additionally, the study was also the first of its kind to gather data on perceptions of disability type as it pertains to risk of sexual or physical violence, including rape and beating, in Liberia. While related research has been conducted in developed countries, but a literature review produced no evidence as to similar research being conducted in Sub-Saharan Africa, or more specifically, within West Africa. By understanding existing attitudes and perceptions of disability type among the general public it is hoped that strategies to improve public knowledge about disabilities and reduce social stigma related to disabilities.

Collectively, data garnered through this survey and focus groups has the potential to help guide outreach strategies and targeting of government and NGO-sponsored social services to the needs that communities have indicated are priority health and community concerns. By improving civic-level participation in the determination of community needs, it is possible to improve buy-in and utilization of social services by Liberian citizens. Also, by understanding cultural perceptions of disability type and its perceived reportability, educational campaigns may be better targeted by disability advocates to encourage reporting of SGBV crimes committed against persons with disabilities.

## Future Direction

*Expanding the Geographical Reach of Survey Questions:*

Questions on disability type and risk of being a victim of violence were developed by a partnership between the researcher, colleagues at the Carter Center and AIFO, an Italian NGO that provides community-based rehabilitation programs to community members living with physical disabilities and mental illness (29, 37). The data collected within the study served as a pilot of a questionnaire on experience with and perceptions of disabilities, and the questionnaire was developed as a tool to collect standardized data on perceptions of disabilities throughout all of Liberia's 15 counties in the future.

By expanding the geographical reach of these survey questions, a more holistic perspective of community and regional-level health needs can be established. Through this process, improved information on the targeting of relevant and utilizable health clinics can be garnered and outreach strategies can be targeted to meet the needs of individuals living in a multitude of communities.

*Expanding Research to Include Adolescent Experiences of SGBV:*

The UN Mission in Liberia (UNMIL) reports that most victims of rape are between the ages of 10 and 19 (6); another recent estimate of SGBV crimes has indicated that over 55% of SGBV survivors in Liberia are less than 14 years old (10). Given this knowledge and the fact that the quantitative survey discussed herein targeted only those over the age of 18 and asked respondents to self-report personal experiences with SGBV, a large proportion of crimes were likely missed and the true proportion of individuals experiencing sexual or physical abuse in each community was very likely

underestimated. Future research must target youth at-risk of violence to evaluate their experiences with SGBV and to understand the social and cultural context that victimization occurs within and to assess subsequent health care needs.

*Expanding Research to Include Experiences of SGBV for Persons Living With Disabilities (PWDs):*

Additionally, the Liberian government and UNMIL should be encouraged to collect and disseminate data on disabilities as per tenets of the UN's Convention on the Rights of Persons with Disabilities in order to identify the number of individuals living with disabilities and in order to protect these vulnerable persons (42). With 65% of cases stored within the Republic of Liberia's SGBV Crimes Database missing any sort of information on victims' disability statuses, there is a clear dearth of data on which to base future recommendations and interventions that target prevention and treatment of SGBV that targets persons living with disabilities.

*Incorporating a Multi-Disciplinary Approach to Addressing SGBV:*

An active network of actors from law enforcement, health services, social services, and the justice sector reinforce access to SGBV care and treatment by standardizing referral pathways for victims and by strengthening support provided to survivors. Thus, many sectors are engaging in addressing the issue of sexual violence. Little research, however, has been conducted on what services are actually provided to communities and victims of SGBV. Also, little information exist on who collaborates with whom, and little research has been conducted to determine whether or

not health interventions and services have been successful thus far. Understanding how various actors work together—particularly through the integration of informal practices with formal policies—is essential to addressing the problem of sexual violence.

It must again be noted that sexual violence is not merely a health, legal, or security issue. Holistic exploration of sexual violence and its root causes is vital to appropriately addressing risks and relationships in order to inform national and community strategic and policy development. For this reason, an interdisciplinary approach must be taken to facilitate the partnerships necessary for such preventative actions to emerge. Since theoretical, legal, and policy agreement is needed on what constitutes sexual violence across different sociocultural settings, more multidisciplinary research is needed to explain the patterns, scale, and scope of sexual violence over time.

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## Tables

**Table 1.** Comparison of descriptive statistics for surveyed adults (aged 18 years or older) in West Point and Peace Island communities in Monrovia, Liberia who completed both screening and main surveys (n=396).

| *Characteristic:* | **Peace Island** n=184 | **West Point** n=212 |
|---|---|---|
| Age range | 18-68 years | 18-75 years |
| Mean age | 33.9 years | 34.2 years |
| Average number of household residents | 5.8 | 6.2 |
| Average number of children per household | 2.3 | 2.1 |
| Literacy rate (self-reported, percent) | 69.2 | 65.9 |
| Literacy rate (could read newspaper, percent) | 61.4 | 53.3 |
| Average monthly household income | $64 USD | $61 USD |
| Unemployment rate (percent) | 62.5 | 57.6 |
| Participated in armed group during the war (percent) | 20.3 | 10.9 |
| Knew victims of sexual violence during war (percent) | 30.6 | 32.6 |
| Witnessed massacre during the war (percent) | 33.7 | 40.1 |
| Ever displaced during the war (percent) | 68.6 | 45.9 |
| Community population size (2010 Census estimate) | 30,000 | 70,000 |

**Table 2.** Descriptive characteristic statistics for surveyed adults (aged 18 years or older) in West Point and Peace Island communities in Monrovia, Liberia who completed both screening and main surveys, percentages (n=396).

| *Characteristic:* | **Peace Island** n=184 (%) | **West Point** n=212 (%) |
|---|---|---|
| **Sex** | | |
| Male | 66 (35.9) | 81 (38.2) |
| Female | 118 (64.1) | 131 (61.8) |
| **Age Categories** | | |
| 18-24 | 33 (18.0) | 36 (17.0) |
| 25-29 | 45 (24.6) | 50 (23.6) |
| 30-34 | 30 (16.4) | 35 (16.5) |
| 35-39 | 25 (13.7) | 32 (15.1) |
| 40-44 | 18 (9.8) | 21 (9.9) |
| 45-49 | 13 (7.1) | 17 (8.0) |
| 50 and older | 19 (10.4) | 21 (9.9) |
| **Relationship Status** | | |
| Married | 54 (29.4) | 56 (26.4) |
| Single | 63 (34.2) | 54 (25.5) |
| Living with Partner | 43 (23.4) | 57 (26.9) |
| Boyfriend/Girlfriend | 11 (6.0) | 30 (14.2) |
| Separated or Divorced | 5 (2.7) | 8 (3.8) |
| Widowed | 8 (4.4) | 7 (3.3) |
| **Top Five Jobs Reported** | | |
| Trade/Run Own Business | 62 (33.5) | 67 (31.8) |
| Student | 22 (11.8) | 20 (9.5) |
| Self-Employed | 24 (13.0) | 16 (7.5) |
| Transportation Driver | 16 (8.7) | 18 (8.5) |
| Other | 12 (6.2) (Salary Employee) | 43 (20.4) (Fisherman) |
| **Formal Education Attained** | | |
| None | 32 (17.4) | 35 (16.5) |
| $1^{st}$-$3^{rd}$ Grade | 5 (2.7) | 12 (5.7) |
| $4^{th}$-$6^{th}$ Grade | 28 (15.2) | 33 (15.6) |
| $7^{th}$-$9^{th}$ Grade (JH) | 18 (9.8) | 39 (18.4) |
| $10^{th}$-$12^{th}$ Grade (HS) | 50 (27.2) | 56 (26.4) |
| College Degree | 45 (24.5) | 36 (17.0) |
| Higher Degree | 6 (3.3) | 1 (0.47) |

**Table 3.** Number and percentage of West Point and Peace Island residents (aged 18 years and older) reporting the following community issues in the 12 months preceding the survey (n=396).

| *Community issue reported:* | **Peace Island** n=184 (%) | **West Point** n=212 (%) | **Prevalence Ratio*** |
|---|---|---|---|
| No jobs/high unemployment | 65 (35.3) | 120 (56.6) | 1.60 |
| Homes in disrepair | 90 (48.9) | 163 (76.9) | 1.57 |
| People are angry | 67 (36.4) | 119 (56.1) | 1.54 |
| No help groups | 41 (22.3) | 71 (33.5) | 1.50 |
| Community is insanitary | 105 (57.1) | 171 (80.7) | 1.41 |
| Illegal marijuana usage | 112 (72.8) | 202 (95.3) | 1.31 |
| No schools in community | 97 (52.7) | 141 (66.5) | 1.27 |
| People are apathetic | 57 (31.0) | 83 (39.2) | 1.26 |
| No transportation | 98 (53.3) | 125 (59.0) | 1.11 |
| Excessive alcohol intake | 156 (85.2) | 194 (91.5) | 1.07 |
| No toilets or latrines | 152 (82.6) | 177 (83.5) | 1.01 |
| Water is unclean | 134 (72.8) | 152 (71.7) | 0.98 |
| People are hungry | 69 (37.5) | 76 (35.8) | 0.95 |
| No doctors in neighborhood | 77 (41.8) | 70 (33.0) | 0.79 |
| No police in community | 108 (58.7) | 58 (27.4) | 0.47 |

*Prevalence ratios represent West Point as the group exposed to health and social interventions, while Peace Island acts as the referential control group as it has not been exposed to health and social interventions.

**Table 4.** Number and percentage of West Point and Peace Island residents (aged 18 years and older) reporting the following community health issues in the 3 months preceding the survey (n=396).

| *Community health issue reported:* | **Peace Island** n=184 (%) | **West Point** n=212 (%) | **Prevalence Ratio*** |
|---|---|---|---|
| **Pregnancy-related:** | | | |
| Woman has died in childbirth | 60 (32.6) | 90 (42.5) | 1.30 |
| Woman has died during pregnancy | 52 (28.3) | 77 (36.3) | 1.28 |
| Woman has given birth at home | 91 (49.5) | 110 (51.9) | 1.05 |
| **Injury and Transport:** | | | |
| Individual has had a seizure or *spell* | 58 (31.5) | 83 (39.2) | 1.24 |
| Child severely injured in community | 96 (52.2) | 127 (59.9) | 1.15 |
| Adult severely injured in community | 97 (52.7) | 121 (57.1) | 1.08 |
| Difficulty finding transport to hospital | 98 (53.3) | 114 (53.8) | 1.01 |
| **Sexual and Gender-Based Violence:** | | | |
| An individual has been raped | 35 (19.0) | 97 (45.8) | 2.41 |
| An individual has been beaten | 128 (70.0) | 182 (85.8) | 1.23 |

*Prevalence ratios represent West Point as the group exposed to health and social interventions, while Peace Island acts as the referential control group as it has not been exposed to health and social interventions.

**Table 5.** Number and percentage of West Point and Peace Island residents (aged 18 years and older) reporting the following barriers to health care and hospital access (n=396).

| *Health access issue reported:* | **Peace Island** n=184 (%) | **West Point** n=212 (%) | **Prevalence Ratio*** |
|---|---|---|---|
| Would rather see a traditional healer | 16 (8.7) | 28 (13.2) | 1.52 |
| There are no accessible clinics | 39 (21.2) | 70 (33.0) | 1.51 |
| No transportation to health care facilities | 60 (32.6) | 96 (45.3) | 1.39 |
| Health care facilities are unsanitary | 33 (17.9) | 49 (23.1) | 1.29 |
| Health facilities are too far away | 105 (57.1) | 150 (70.8) | 1.24 |
| Health facilities are too crowded | 61 (33.2) | 83 (39.2) | 1.18 |
| Cost is prohibitive | 130 (70.7) | 158 (75.0) | 1.06 |
| Poor quality of care | 61 (33.2) | 69 (32.5) | 0.98 |
| The wait is too long | 110 (59.8) | 116 (54.7) | 0.91 |

*Prevalence ratios represent West Point as the group exposed to health and social interventions, while Peace Island acts as the referential control group as it has not been exposed to health and social interventions.

**Table 6.** Number and percentage of West Point and Peace Island residents (aged 18 years and older) reporting the following self-reported physical and mental health issues in the 12 months preceding the survey (n=396).

| *Health issue reported:* | **Peace Island** n=184 (%) | **West Point** n=212 (%) | **Prevalence Ratio*** |
|---|---|---|---|
| Fight with neighbor | 34 (18.5) | 84 (39.6) | 2.14 |
| Eating too much | 25 (13.6) | 57 (26.9) | 1.98 |
| Heart palpitations | 44 (23.9) | 99 (46.7) | 1.95 |
| "Spell"/epilepsy | 20 (10.9) | 54 (25.5) | 1.91 |
| Beating/fighting in home | 41 (22.3) | 86 (40.6) | 1.82 |
| Less interested in life | 30 (16.3) | 63 (29.7) | 1.82 |
| Hopelessness | 30 (16.3) | 60 (28.3) | 1.74 |
| Feeling weak or fatigued | 45 (24.5) | 85 (40.1) | 1.64 |
| Thoughts of death/self-harm | 33 (17.9) | 60 (28.3) | 1.58 |
| Thoughts of death/self-harm | 33 (17.9) | 60 (28.3) | 1.58 |
| Not eating enough | 49 (26.6) | 73 (39.7) | 1.49 |
| Aches and pains | 49 (26.6) | 83 (39.2) | 1.47 |
| Sleeping too much | 46 (25.0) | 77 (36.3) | 1.45 |
| Anger for no reason | 46 (25.0) | 75 (35.4) | 1.42 |
| Trouble sleeping/insomnia | 46 (25.0) | 74 (34.9) | 1.40 |
| Very bad dreams/nightmares | 83 (45.1) | 125 (59.0) | 1.31 |
| Sadness for no reason/depression | 48 (26.1) | 71 (33.5) | 1.28 |
| Head hurting/migraines | 122 (66.3) | 157 (74.2) | 1.12 |
| Worrying too much/anxiety | 58 (31.5) | 70 (33.0) | 1.05 |

*Prevalence ratios represent West Point as the group exposed to health and social interventions, while Peace Island acts as the referential control group as it has not been exposed to health and social interventions.

**Table 7.** Number and percentage of respondents who would report an act of SGBV if perpetrated against a woman with the following disabilities or conditions (n=396).

| *Would report if…* | **Peace Island** n=184 (%) | **West Point** n=212 (%) | **Combined Total** |
|---|---|---|---|
| Blind, deaf, or crippled woman was raped | 174 (94.6) | 202 (95.3) | 376 (94.9) |
| Blind, deaf, or crippled woman was beaten | 173 (94.0) | 199 (93.9) | 372 (93.9) |
| Mentally ill woman was raped | 157 (85.3) | 171 (80.7) | 328 (82.8) |
| Mentally ill woman was beaten | 161 (87.5) | 179 (84.4) | 340 (85.9) |
| Woman with *spell*/epilepsy was raped | 172 (93.5) | 196 (92.5) | 368 (92.9) |
| Woman with *spell*/epilepsy was beaten | 171 (96.7) | 200 (94.3) | 371 (93.7) |

**Table 8.** Number and percentage of respondents perceiving increased vulnerability of women or children to rape based on type of disability or physical condition (n=396).

| *Assumed more vulnerable if…* | **Peace Island** n=184 (%) | **West Point** n=212 (%) | **Combined Total** |
|---|---|---|---|
| Woman is blind, deaf, or crippled | 134 (72.8) | 171 (80.7) | 305 (77.0) |
| Woman is mentally ill or is “crazy” | 133 (72.3) | 161 (75.9) | 294 (74.2) |
| Woman with *spell*/epilepsy | 108 (58.7) | 140 (66.0) | 248 (62.6) |
| Child is blind, deaf, or crippled | 124 (67.4) | 155 (73.1) | 279 (70.5) |
| Child is mentally ill or “crazy” | 131 (71.2) | 159 (75.0) | 290 (73.2) |
| Child with *spell*/epilepsy | 107 (57.6) | 139 (65.6) | 246 (62.1) |

**Table 9.** Percent statistics for surveyed adults (aged 18 years or older) in West Point and Peace Island communities in Monrovia, Liberia who reported an incidence of rape (n=26) or physical abuse/"beating" (n=108) in the 12 months prior to the survey.

| *Characteristic:* | **Experienced Rape** n=26 (%) | **Experienced Beating** n=108 (%) |
|---|---|---|
| **Sex** | | |
| Male | 8 (30.8) | 39 (36.1) |
| Female | 18 (69.2) | 69 (63.9) |
| **Average Age of Victim** | 37.4 years | 33.3 years |
| **Age Categories** | | |
| 18-24 | 1 (3.8) | 14 (13.0) |
| 25-29 | 5 (19.2) | 39 (36.1) |
| 30-34 | 7 (26.9) | 29 (26.9) |
| 35-39 | 3 (11.5) | 17 (15.7) |
| 40-44 | 2 (7.7) | 7 (6.5) |
| 45-49 | 4 (15.4) | 1 (0.9) |
| 50 and older | 4 (15.4) | 1 (0.9) |
| **Relationship Status** | | |
| Married | 13 (50.0) | 34 (31.5) |
| Single | 2 (7.7) | 25 (23.1) |
| Living with Partner | 7 (26.9) | 30 (27.8) |
| Boyfriend/Girlfriend | 3 (11.5) | 13 (12.0) |
| Separated or Divorced | 0 | 4 (3.7) |
| Widowed | 1 (3.8) | 2 (1.9) |
| **Formal Education Attained** | | |
| None | 4 (15.4) | 16 (14.8) |
| $1^{st}$-$3^{rd}$ Grade | 4 (15.4) | 4 (3.7) |
| $4^{th}$-$6^{th}$ Grade | 3 (11.5) | 22 (20.4) |
| $7^{th}$-$9^{th}$ Grade (JH) | 1 (3.8) | 26 (24.1) |
| $10^{th}$-$12^{th}$ Grade (HS) | 5 (19.2) | 29 (26.9) |
| College Degree | 7 (26.9) | 13 (12.0) |
| Higher Degree | 1 (3.8) | 1 (0.9) |
| **Perpetrator of Violent Event** | | |
| Intimate Partner/Spouse | 1 (4.8) | 24 (22.2) |
| Friend | 1 (4.8) | 21 (19.4) |
| Stranger | 9 (42.9) | 10 (9.3) |
| Neighbor | 8 (38.1) | 35 (32.4) |
| Other | 2 (9.6) | 0 |

**Table 10.** Descriptive statistics for surveyed adults (aged 18 years or older) in West Point and Peace Island communities in Monrovia, Liberia who self-reported experiencing symptoms of *open mole* (n=99), by number and percent.

| *Characteristic:* | n=99 (%) |
|---|---|
| Age range | 18-64 years |
| Mean age | 33.8 years |
| Literacy rate (self-reported, percent) | 66 (66.7) |
| Literacy rate (could read newspaper, percent) | 58 (58.6) |
| Average monthly household income | $59 USD |
| Unemployment rate (percent) | 59 (59.6) |
| **Experiences during the war:** | |
| Participated in armed group during the war | 16 (16.2) |
| Witnessed an act of sexual violence during war | 31 (31.6) |
| Witnessed an act of massacre during the war | 37 (37.4) |
| Ever displaced during the war | 63 (63.6) |
| **Recent traumatic events:** | |
| Had experienced a sexual assault in last year | 7 (7.1) |
| Had experienced physical assault in last year | 22 (22.2) |
| **Complaints of other associated health outcomes:** | |
| Trouble sleeping/insomnia | 67 (67.8) |
| Very bad dreams/nightmares | 85 (85.9) |
| Anger for no reason | 74 (74.8) |
| Sadness for no reason/depression | 72 (72.7) |
| Less interested in life | 67 (67.7) |
| Thoughts of death/self-harm | 69 (69.7) |
| Sleeping too much | 68 (68.7) |
| Worrying too much/anxiety | 69 (69.7) |
| Aches and pains | 68 (68.7) |
| Head hurting/migraines | 74 (74.8) |
| Hopelessness | 61 (61.6) |
| Heart palpitations | 61 (61.6) |

## Figures And Figure Legends

**Figure 1.** Map of Monrovia indicating West Point and Peace Island communities.

**Figure 2**. Selection of survey participants for final quantitative analysis, by community.

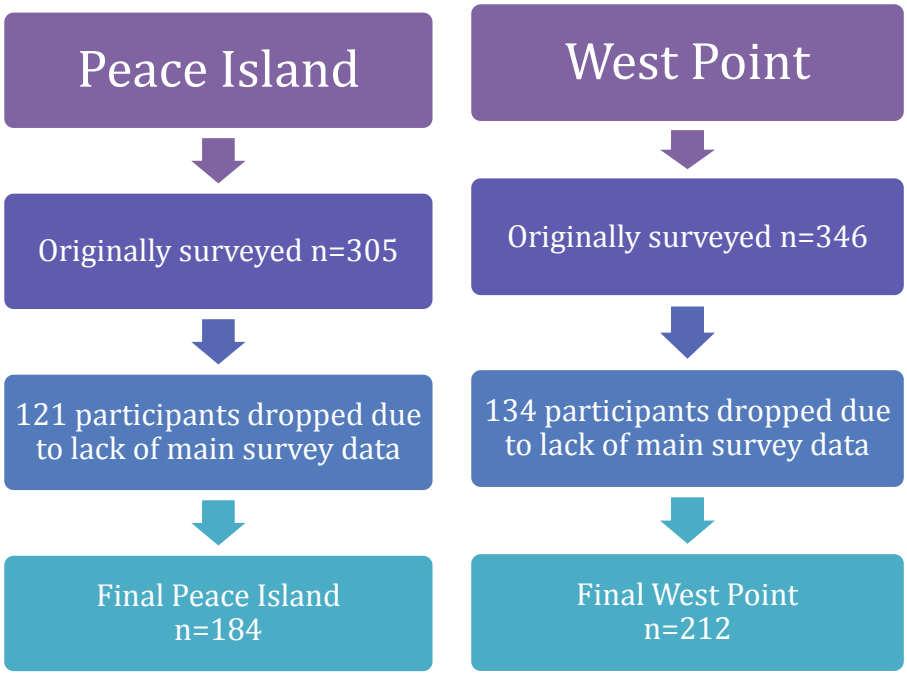
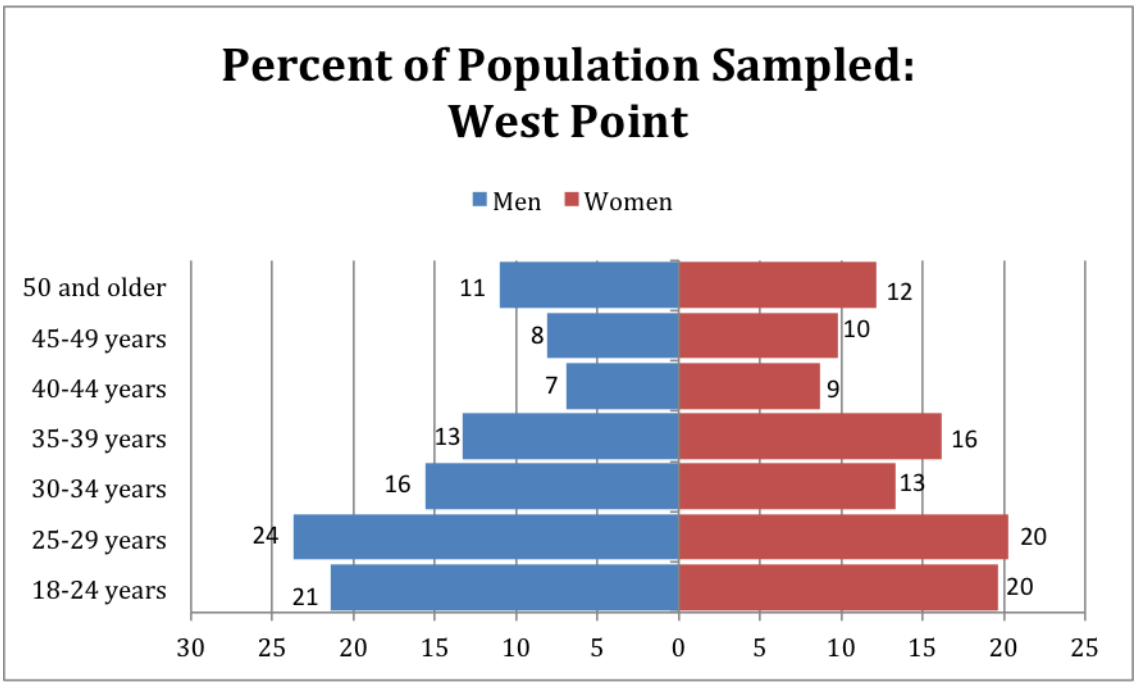



**Figure 3**. Variables used in quantitative analysis of data

| Dichotomous Variables | Categorical Variables |
|---|---|
| • Literacy status<br>• Employment status<br>• Health access indicators<br>• SGBV reporting indicators<br>• Participation in war indicators<br>• Health condition indicators | • Education level<br>• Relationship status<br>• Age category<br>• Job category |

**Figure 4.** Age and sex distribution (by percentage) of survey respondents, by community.



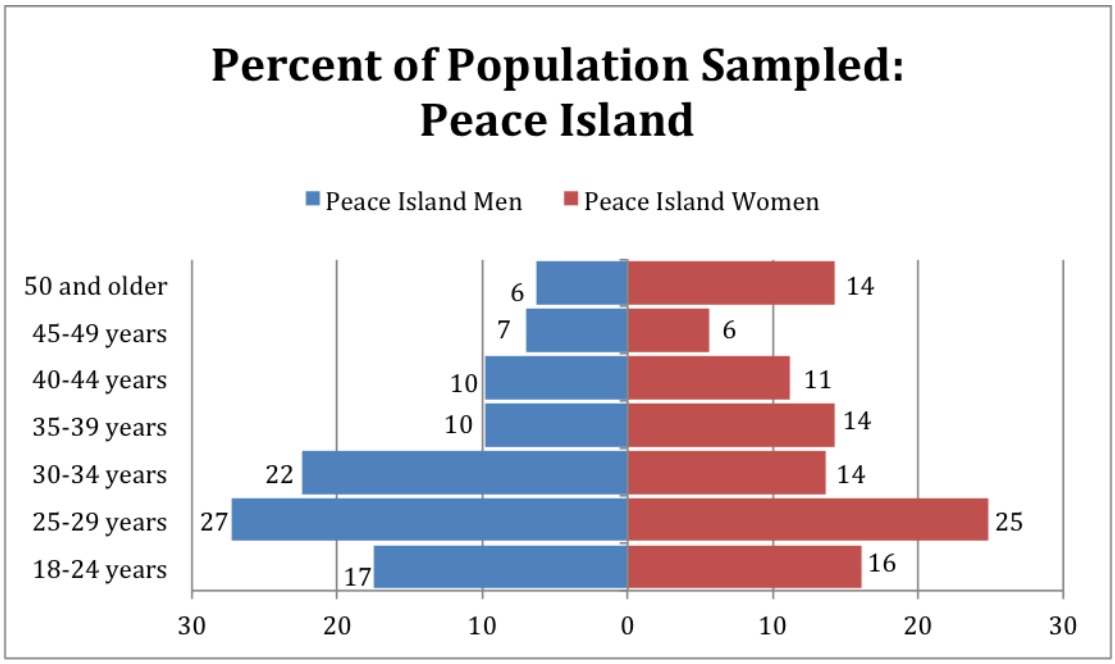
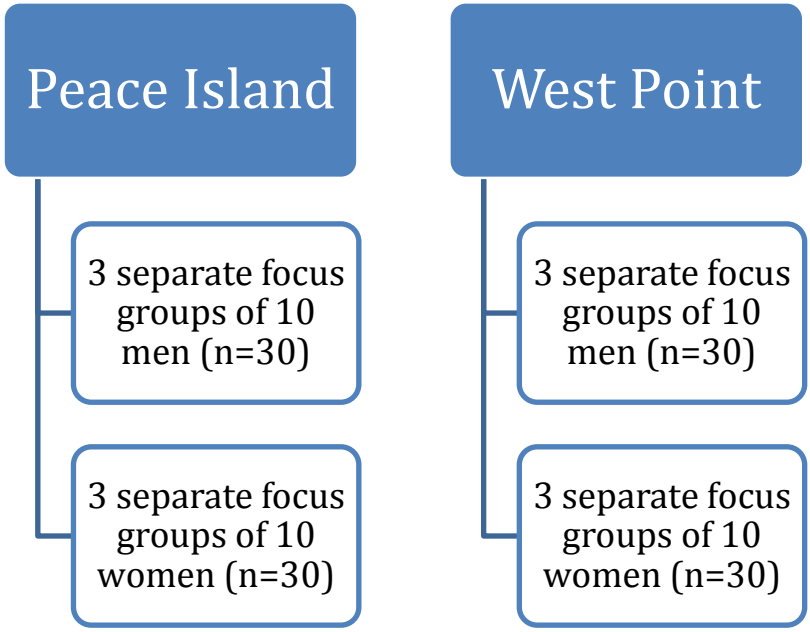




**Figure 5.** Qualitative focus group composition, by community


Peace Island
3 separate focus groups of 10 men (n=30)
3 separate focus groups of 10 women (n=30)
West Point
3 separate focus groups of 10 men (n=30)
3 separate focus groups of 10 women (n=30)

## Appendices

## **Appendix A.** Acronyms

**LDHS**……Liberian Demographic Health Survey
**LNP**….....Liberian National Police
**MOGJ**……..Ministries of Gender and Justice
**PI**……...Peace Island
**UN**…….....United Nations
**UNFPA**……..…United Nations Population Fund
**UNMIL**……..…United Nations Mission in Liberia
**MOHSW**……..…Ministry of Health and Social Welfare
**NGO**……..…Non-government organization
**PWD**…….Person(s) living with disabilities
**PTSD**……Post-traumatic stress disorder
**SGBV**…….**...**Sexual and gender-based violence
**UNSCR**…….....United Nations Security Council Resolution
**USNAPWPS**…….United States' National Action Plan on Women, Peace, and Security
**WHO**……..…....World Health Organization
**WP**……West Point

# **Appendix B.** Emory University IRB Exemption Letter

EMORY UNIVERSITY

Institutional Review Board

April 15, 2013

RE: Determination: No IRB Review Required
eIRB#: 00058107
Title: *Exploring Integrations of Mental Health and Reproductive Health Service Provision for Victims of Sexual Violence in Post-Conflict Liberia*
PI: Rosalyn Schroeder

Dear Rosalyn Schroeder:

Thank you for requesting a determination from our office about the above-referenced project. Based on our review of the materials you provided, we have determined that it does not require IRB review because it does not meet the definition(s) of "research" or "clinical investigation" involving "human subjects" as set forth in Emory policies and procedures and federal rules, if applicable. Specifically, in this project, you will analyze the mental and reproductive resources available in Liberia. The goal is to locate significant gaps in reproductive health access in order to influence public health care in these regions. As such, this project is considered non-research due to its public health surveillance goals.

Please note that this determination does not mean that you cannot publish the results. If you have questions about this issue, please contact me.

This determination could be affected by substantive changes in the study design, subject populations, or identifiability of data. If the project changes in any substantive way, please contact our office for clarification.

Thank you for consulting the IRB.

Sincerely,

Aric Edwards, BA
Research Protocol Analyst

Emory University
1599 Clifton Road, 5th Floor - Atlanta, Georgia 30322
Tel: 404.712.0720 - Fax: 404.727.1358 - Email: irb@emory.edu - Web: http://www.irb.emory.edu

**Appendix C.** University of Liberia IRB Approval Letter

UNIVERSITY OF LIBERIA
CAPITOL HILL
MONROVIA, LIBERIA
WEST AFRICA

**Office of the Institution Review Board**

4 June 2012

Rosalyn Schroeder
Emory University
Hubert Department of Global Health
Atlanta, GA
Tel: +404 727 9976 or +231 886 884 207

**Re: Ethical Approval for Exploring Integration of Mental Health and Reproduction Health Service Provision for Victims of Sexual Violence in Post-Conflict Liberia**

Dear Madam Schroeder,

In accordance with 45 CFR 46, the human subjects protocol of the above mentioned dissertation research study has been approved by the University of Liberia - Pacific Institute for Research & Evaluation Institutional Review Board (UL-PIRE IRB) through an expedited on May 31, 2012. This IRB will review the protocol during the implementation of the study to confirm human subject procedures. This approval expires on August 31, 2012.

Should there be other additional changes in protocols or incidents involving human subjects during the conduct of this research, you are required to report them right away to the IRB. Changes in research during the period for which IRB approval has already been granted may not be implemented without prior IRB review and approval; except where necessary to protect subjects. Proposed changes to approve human subject protocol must be reported promptly to the IRB for review using a continuation review format.

The IRB will require you to submit a progress report during the implementation of this study. For your record, our Federal-wide Assurance number is FWA 00004982, and our organization number is IOR0004203.

Kind regards.

Sincerely yours,

**Chairperson, ULPIRE-IRB**

E-mail: morris.cecelia@yahoo.com / tegli@ul-pireafrica.org Phone: 06-522-833 / 06-583-774

**Appendix D**. Google Earth Map of Survey Enumeration Zones in West Point (n=25)

**Appendix E.** Focus Group Discussion Guide

**Participants:**

· Female community members or male community members

Note: Focus group discussion guide is as close to final as possible without being in Liberia. Depending on the advice of in-country partners, questions may be further adapted to the local context.

**Introduction:**

*Hi, everyone. Welcome, and thank you for taking the time to participate in this discussion. My name is _____, and this is my assistant, _____. Please help yourself to refreshments.*

*Over the next few months, our research team will be conducting group discussions with women and men in Bong County as part of a project looking at mental health and reproductive health services for survivors of sexual violence. We are mostly interested in learning what services exist for survivors of sexual violenc e and why individuals might choose to seek some services and not others. We will not ask about anyone's personal experience with sexual violence. We do value your views and opinions. They will be helpful in understanding how to improve these services.*

*This is a sensitive topic, and we thank you for agreeing to talk about it. We have given each of you a description of the study and a list of places that provide services for people who have experienced sexual violence.*

*Your participation in this discussion is voluntary. If you are uncomfortable at any point, you are welcome to leave. We do value your opinions and hope you will stay to share your views.*

*Before we begin, let me tell you a little bit about how we will conduct the group discussion today. This conversation is completely confidential. That means that we must agree as a group to not talk to people outside of this group about any person in this group and what they said during the discussion. Everything we talk about will only be used for this research project. Do we all agree to respect each other's privacy and keep the discussion confidential?*

*After the discussion, I will take out all identifying information, like names of villages and people. Does anyone have any questions about confidentiality?*

*Please feel comfortable talking, agreeing, and disagreeing with one another. Please also respect others' points of view. There are no right or wrong answers. We will not go around the room for answers to questions. You may join the conversation at any point, but please allow one person to speak at a time.*

*During the discussion, _____ will be taking notes and reminding me if I forgot to ask something. However, so s/he does not have to worry about writing every word on paper, we would like to tape record the discussion. The reason for recording is so that we do not miss anything that is said. As mentioned before, anything that is said today will remain completely confidential. We will only use first names during the discussion. The recording will be securely stored so only the research team can access it.*

*Is it all right with everyone that I record this discussion? [Pause for permission.]*

*Great. Thank you. The discussion will last 1-2 hours. Do you have any questions before we start?*

**Opening Questions:**

*To start, let's go around the room and introduce ourselves. Please tell us your first name and a little bit about yourself. I'll start.*

1. Tell me about your community.

2. What are some of the strengths in this community?

3. Tell me about what it is like to be an adult woman/man living in this community.

**Accessing Services:**

I would like to learn more about how victims of sexual violence access mental/reproductive health services after they have been victimized in your community.

1. Do you know of any organizations in your community that provide mental health services, reproductive health services, or both?

2. Who is most likely to receive mental health services? [i.e. are there any patterns in gender, age, ethnicity, marital status, socio-economic status, location, or health condition of people you know that receive mental health or reproductive health services?]

3. How would you go about contacting a doctor if you needed to access health services?

4. How do you feel about the services that exist in your community?

5. Can you give me examples of where efforts to improve health services in your community have been successful?

**Mental Health and Reproductive Health Services Asset-Mapping Exercise:**

I am interested in learning as much about the different mental health and reproductive health services that exist here in [community name]. [Lay out large piece of paper and hand participant black, blue, and red markers.]

6. Could you draw a map of important things that exist in your community? Please use the black marker to locate key public spaces, such as schools, police stations, clinics, etc.

[The map does not need to be perfect. It's just to give a general idea of what the community looks like.]

7. With the blue marker, can you locate places that provide different mental/reproductive health services?

8. Please tell me about the health service centers that you have drawn on the map.
   Can you tell me anything about the gender, age, ethnicity, marital status, socio-economic status, location, etc. of people they target and people who use the services?

9. Please tell me about more about the different centers that you have drawn on the map.

**Closing Questions:**

We have talked about a number of issues regarding sexual violence mental/reproductive health services today.

10. Of all the services we have talked about today, what do you think are the most essential for helping victims cope with physical and mental repercussions of sexual violence?

11. How can some of the health services that are currently being provided be improved?

12. What other kinds of health services would you like to see become available in your community?

13. Is there anything we have not talked about that you would like to add to the discussion?
14. If a friend or family member experienced sexual violence, where would you advise him or her to go to get help?

15. Why would you give this person this advice?

*We appreciate your participation. Your perspectives and opinions are valuable in helping us understand how to improve services for survivors of sexual violence in the community.*

*Thank you very much.*

**Appendix F.** Interview Discussion Guide

**Participants:**

Will include Liberian and foreign professionals working on mental health and reproductive health services provision and policy development

**Introduction:**

Thank you taking the time out of your busy schedule to be interviewed today, and thank you for agreeing to participate in this research study. My name is Rosalyn Schroeder, and I am a graduate student researcher from Emory University in the United States. I am conducting a research project on sexual violence services in Liberia. I am here today to talk with you and others working on sexual violence across sectors to learn about the mental and reproductive health services that you provide to persons who have experienced sexual violence.

The experiences and perspectives that you have to share will provide incredible insight as to what health services exist within Liberia and how we can incorporate these services with other sectors, including security and legal issues.

Please do recall that your participation in this interview is completely voluntary, and we can stop at any time. Please let me know if you are uncomfortable answering questions.

I am well aware that sexual violence is a highly sensitive topic, and I thank you again for agreeing to speak with me about it today. I want to assure you that I am comfortable speaking about any topics that may arise. This conversation will be kept completely confidential and will only be used for this research project. *Only* the researchers associated with this project will hear the recording and your identity will be kept confidential. Any research documents that may result from this research project that may refer to this discussion will *not* mention your name.

It is important that I accurately capture all that we say today. With your permission, I would like to record our conversation. Would it be okay with you if I voice record the discussion we have here today?

*(Interviewee response)*

Thank you so much for your cooperation. I have a list of topics I would like us to discuss, but I encourage you to bring up any other issues that you feel are relevant to this discussion or your work. There are no correct answers here, as I am most interested in your personal opinions about the topics we will discuss. The interview will last about an hour. Do you have any questions for me or about my research before we start?

*(Interviewee response)*

**Opening Questions:**

First, please tell me more about yourself and [organization interviewee works for].

1. What is your role here at [organization]?

2. Can you tell me a little bit about the health services that you provide/programs you design/policies upon which you decide that relate to sexual violence?

**Accessing Services:**

I would like to learn more about how victims of sexual violence access mental/reproductive health services after they have been victimized.

3. Does [interviewee organization] provide mental health services, reproductive health services, or both? Can you explain a little bit about the variety of services your organization provides?

4. Can you describe a typical client that accesses services through your organization?
   [i.e. are there any patterns in client gender, age, ethnicity, marital status, socio-economic status, location, or health condition?]

5. How do clients access services through your organization? Do you accept referrals from other organizations or community members?

6. (if organization does receive external referrals for services) If so, which NGOs or community organizations refer clients to your organization?

7. How does your organization manage follow up for your clients? Are clients likely to return for other services after their initial visits?

8. How does your organization measure and evaluate how successful your services are to you clients?

9. Can you give me examples of where efforts to improve health services in your community have been successful?

**Mental Health and Reproductive Health Services Asset-Mapping Exercise:**

I am interested in learning as much about the different mental health and reproductive health services that exist here in [community name]. [Lay out large piece of paper and hand participant black, blue, and red markers.]

10. Could you draw a map of the community/communities you serve? Please use the black marker to locate key public spaces, such as schools, police stations, clinics, etc.

[The map does not need to be perfect. It's just to give a general idea of what the community looks like.]

11. With the blue marker, can you locate places that provide different mental/reproductive health services?

12. Please tell me about the health service centers that you have drawn on the map.
    Can you tell me anything about the gender, age, ethnicity, marital status, socio-economic status, location, etc. of people they target and people who use the services?

13. With the red marker, can you draw a line between the services that collaborate with each other (i.e., referral systems, resource-sharing, etc.)?

14. Please tell me about the collaborations you have drawn on the map.

**Closing Questions:**

We have talked about a number of issues regarding sexual violence mental/reproductive health services today.

15. Of all the services we have talked about today, what do you think are the most essential for helping victims cope with physical and mental repercussions of sexual violence?

16. How can some of the health services that are currently being provided be improved?

17. What other kinds of health services would you like to see become available in the communities that you serve?

18. Is there anything we have not talked about that you would like to add to the discussion?

**Concluding interview**:

Thank you for taking the time to speak with me today. As I mentioned earlier, all identifying information will be removed from the transcript of this conversation. Do you have any final questions for me?

*(Allow time for final discussions and closing questions from interviewee.)*

**Appendix G.** Expert from Main Survey Codebook:
*Mental Health and Reproductive Health-Specific Questions*

**311. What are the biggest problems in your community?** [choose all that apply] **(GENPROBS311)**

1=People are angry (ANGER311)
2=People do not have enough food (HUNGRY311)
3=People do not care about others (APATHY311)
4=There are no police (NOPOLICE311)
5=There are no doctors (NODOCS311)
6=Transportation is bad/no cars (NOCARS311)
7=The community is not clean/sanitation is bad (UNCLEAN311)
8=The water is not clean (BADWATER311)
9=There is not safe public toilets (NOTOILETS311)
10=There is not enough schools/not good teachers (NOSCHOOLS311)
11=There are not enough jobs (NOJOBS311)
12=The housing is bad (NOHOUSING311)
13=There are not associations of self-help groups (NOHELPGPS311)
14=Other

**312. In the last 12 months, have you heard any of these health things happen in your community?** [choose all that apply] **(HEALTHPROBS312)**

1=Woman or girl has had a baby in her home (HOMEBIRTH312)
2=A woman has died while having a baby (MOMBIRTHDEATH312)
3=A woman has died while pregnant (MOMPREGDEATH312)
4=community member had difficult time finding transport to the hospital (HOSPTRANS312)
5=Child was severely injured in the community (CHILDHURT312)
6=Adult was severely injured in the community (ADULTHURT312)
7=A person has had "spell"/a seizure (SEIZURE312)
8=A woman was raped (RAPE312)
9=A woman was beat by her husband or boyfriend (BEATING312)

**313. If you needed to go to the hospital, where would you choose first? (HOSPITAL313)**

1=JFK hospital (JFK313)
2=Redemption hospital (REDEMPTION313)
3=Grant hospital (GRANT313)
4=I would go to a clinic instead (CLINIC313)
5=I would go to a traditional healer instead (HEALER313)
6=I would not get medical help (NOHELP313)
7=Medical store/pharmacy (PHARM313)
8=Blackbag (BLACKBAG313)
9=Other (OTHER313)

**314. What are some reasons someone would not go to the hospital?** [choose all that apply] **(NOHOSP314)**

1=Hospital is too far away (HTOOFAR314)
2=There is no transportation to the hospital (HNOTRANS314)
3=The hospital is too much money (HCOST314)
4=The care at the hospital is not good (HPOORQUAL314)
5=Hospital is too crowded/too many sick people (HCROWDED314)
6=Wait is too long at the hospital (HWAIT314)
7=Hospital is not clean (HUNCLEAN314)
8=I would rather go to clinic (HCLINIC314)
9=I would rather go to traditional healer (HHEALER314)
10=Other (HOTHER314)

**315. Is there a skilled midwife or birth attendant living in your community? (MIDWIFE315)**

1=Yes (YMIDWIFE315)
0=No (NMIDWIFE315)
99=Do not know (DKMIDWIFE315)

**316. Is there a trained doctor living in your community? (DOCTOR316)**

1=Yes (YDOCTOR316)
0=No (NDOCTOR316)
99=Do not know (DKDOCTOR316)

**317. Is trouble of the mind (zep-say, crazy, mentally retarded) a problem in your community? (MHPROB317)**

1=Yes (YMHPROB317)
0=No (NMHPROB317)
99=Do not know (DKMHPROB317)

**318. Is drinking too much a problem in your community? (DRINKPROB318)**

1=Yes (YDRINKPROB318)
0=No (NDRINKPROB318)
99=Do not know (DKDRINKPROB318)

**319. Is smoking weed/grass or doing drugs a problem in your community? (WEEDPROB318)**

1=Yes (YWEEDPROB319)
0=No (NWEEDPROB319)
99=Do not know (DKWEEDPROB319)

**320. Have you or a member of your household had any of the following problems lately? [choose all that apply] (HOUSEPROBS320)**

1=Can't sleep (SLEEPPROB320)
2=Very bad dreams/nightmares (BADDREAMS320)
3=Anger for no reason (ANGER320)

4=Sadness for no reason (SAD320)
5=Open mole (OPENMOLE320)
6=”Spell”/seizures (SPELL320)
7=Fight with neighbors (FIGHTNEIGHB320)
8=Beating/fighting in home (FIGHTHOME320)
9=Less interested in life or working (DISINTEREST320)
10=Thinking of dying or doing harm to self (SELFHARM320)
11=Sleeping too much (TOOMUCHSLEEP320)
12=Worrying too much (WORRY320)
13=Aches and pains for no reason (ACHES320)
14=Head hurting (HEADHURT320)
15=Having no hope (NOHOPE320)
16=Feeling weak or tired (WEAK320)
17=Not eating enough (NOFOOD320)
18=Eating too much (MUCHFOOD320)
19=Heart beating fast-fast (HEARTPALP320)

*[[321.”I am now going to ask you some questions about disabilities in your community.”]]*

**322. Do you know anyone in your community that has a physical disability? (PHYSDIS322)**

1=Yes (YPHYSDIS322)
0=No (NPHYSDIS322)
99=Do not know (DKPHYSDIS322)

**323. Would it be difficult for someone with a disability to get around easily in your community? (DISMVMT323)**

1=Yes (YDISMVMT323)
0=No (NDISMVMT323)
99=Do not know (DKDISMVMT323)

**324. Would you report a case to the police if a blind, deaf, dumb, or crippled woman were raped? (REPRAPEPHYS324)**

1=Yes (YREPRAPEPHYS324)
0=No (NREPRAPEPHYS324)
99=Do not know (DKREPRAPEPHYS324)

**325. Would you report a case to the police if a blind, deaf, dumb, or crippled woman was beaten or people chunked her? (REPBEATPHYS325)**

1=Yes (YREPBEATPHYS325)
0=No (NREPBEATPHYS325)
99=Do not know (DKREPBEATPHYS325)

**326. Would you report a case to the police if a woman who was zep-say, crazy, or mentally retarded were raped? (REPRAPEMENT326)**

1=Yes (YREPRAPEMENT326)
0=No (NREPRAPEMENT326)
99=Do not know (DKREPRAPEMENT326)

**327. Would you report a case to the police if a woman who was zep-say, crazy, or mentally retarded was beaten or people chunked her? (REPBEATMENT327)**

1=Yes (YREPBEATMENT327)
0=No (NREPBEATMENT327)
99=Do not know (DKREPBEATMENT327)

**328. Would you report a case to the police if a woman who has "spell" was raped? (REPRAPESPELL328)**

1=Yes (YREPRAPESPELL328)
0=No (NREPRAPESPELL328)
99=Do not know (DKREPRAPESPELL328)

**329. Would you report a case to the police if a woman who has "spell" was beaten or people chunked her? (REPBEATSPELL329)**

1=Yes (YREPBEATSPELL329)
0=No (NREPBEATSPELL329)
99=Do not know (DKREPBEATSPELL329)

[[330. "I am going to read you some statements. Tell me if your agree or disagree with what I say."]]

**331. A woman who is blind, deaf, dumb, or crippled is MORE likely to be raped than a "normal" woman. (PHYSDISMORERAPE331)**

1=Agree (YPHYSDISMORERAPE331)
2=Disagree (NPHYSDISMORERAPE331)
3=Don't know (DKPHYSDISMORERAPE331)

**332. A woman who is zep-say, crazy, or mentally retarded is MORE likely to be raped than a "normal" woman. (MENTDISMORERAPE332)**

1=Agree (YMENTDISMORERAPE332)
2=Disagree (NMENTDISMORERAPE332)
3=Don't know (DKMENTDISMORERAPE332)

**333. A woman who has "spell" is MORE likely to be raped than a "normal" woman. (SPELLDISMORERAPE333)**

1=Agree (YSPELLDISMORERAPE333)
2=Disagree (NSPELLDISMORERAPE333)
3=Don't know (DKSPELLDISMORERAPE333)

**334. A child who is blind, deaf, dumb, or crippled is MORE likely to be raped than a "normal" child. (CPHYSDISMORERAPE334)**

1=Agree (YCPHYSDISMORERAPE334)

2=Disagree (NCPHYSDISMORERAPE334)
3=Don't know (DKCPHYSDISMORERAPE334)

**335. A child who is zep-say, crazy, or mentally retarded is MORE likely to be raped than a "normal" child. (CMENTDISMORERAPE335)**
1=Agree (YCMENTDISMORERAPE335)
2=Disagree (NCMENTDISMORERAPE335)
3=Don't know (DKCMENTDISMORERAPE335)

**336. A child who has "spell" is MORE likely to be raped than a "normal" child. (CSPELLDISMORERAPE336)**
1=Agree (YCSPELLDISMORERAPE336)
2=Disagree (NDSPELLDISMORERAPE336)
3=Don't know (DKCSPELLDISMORERAPE336)

**337. The POLICE hear rape cases of "normal" people MORE than cases of people who have a disability (are blind, deaf, dumb, crippled, zep-say, crazy, mentally retarded, or have "spell"). (POLHEAR337)**
1=Agree (YPOLHEAR337)
2=Disagree (NPOLHEAR337)
3=Don't know (DKPOLHEAR337)

**338. A FAMILY MEMBER will report rape cases of another family member who is "normal" MORE than they would a family member with a disability (are blind, deaf, dumb, crippled, zep-say, crazy, mentally retarded, or have "spell"). (FAMREPORT338)**
1=Agree (YFAMREPORT338)
2=Disagree (NFAMREPORT338)
3=Don't know (DKFAMREPORT338)

**339. The ELDERS OR TRADITIONAL LEADERS hear about rape cases of a person who is "normal" MORE than they would a person with a disability (are blind, deaf, dumb, crippled, zep-say, crazy, mentally retarded, or have "spell"). (ELDERHEAR339)**
1=Agree (YELDERHEAR339)
2=Disagree (NELDERHEAR339)
3=Don't know (DKELDERHEAR339)

**340. A WOMEN'S GROUP will hear about rape cases of a person who is "normal" MORE than they would a person with a disability (are blind, deaf, dumb, crippled, zep-say, crazy, mentally retarded, or have "spell"). (WOMENHEAR340)**
1=Agree (YWOMENHEAR340)
2=Disagree (NWOMENHEAR340)
3=Don't know (DKWOMENHEAR340)