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**HIGH RISK \PERCEPTION STUDY AMONG \HIGH RISK GROUPS IN LIBERIA**

**SPONSORED BY:**

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## **EXECUTIVE SUMMARY**

HIV/AIDS spread from infected person through heterosexual (man and woman sexual intercourse, homosexual (man to man sexual intercourse) intravenous drugs use, blood transfusion, blade/needle use and from infected mother to her fetus (child in the mother womb/belly).

About 4 million people are infected and 22 million have died since began world-wide. In Liberia, the disease was first reported in 1986 when 5 cases were diagnosed. The present prevalence rate is 1.5 percent.

The study was conducted in four counties, Nimba ,Grand Gedeh , Lofa and Montserrado Counties respectively. The sample of 1,932, 1,132 males and 800 females was purposively selected.

- The population faces high risks of HIV/AIDS sexually transmitted infections. The unstable sexual union and multiple sexual partner relationships practices among the population are predominant conduit for the spread of HIV/AIDS and sexually transmitted infections. For example 59.6 percent respondents were in unstable union. About 58.6 percent of respondent had multiple sexual partners.

- Major health problems were malaria, diarrhea, and yellow fever. Other cited unclouded typhoid and sexually transmitted infections and TB.
- 67 percent of respondents have access to health care. 13 percent did not have to access. The reasons for no access could not afford cost, lack of qualified services drugs and long distance.
- Data on sexual activity revealed that a little more half of the respondents had sex before 18 years. Moreover, 89.3 percent of respondents had sex with consent. In addition, there is evidence of same sexual relationships among the study population.
- High risky behavior among the population. About 32 percent of respondents had sex with someone who they met for the first time. The proportions by sex revealed that more females were picked, 35.5 percent compared to males. Places where they met or picked were night/drinking club, market and public gathering. About 23.3 percent met sexual partner week before the survey and 17.3 percent during the week of the survey. However, the usage of preventive measure such as the condom use during is not generally practices. Of the 96.8 percent of the respondent who have heard of condom, 95.2 percent have seen it. However, 65.7 percent ever used condom compared to 34.7 percent used condom in the last 12 months.
- 51.4 percent of respondents rarely used condom during sex while 26 percent and 23.4 percent used condom regularly and always respectively.
- Negotiation ability for condom used was 36.1 percent. Moreover, self negotiation was 64.4 percent compared to 23.1 percent for conjoint decision.
- sources of condom were 47.4 percent from pharmacy, 34.5 percent NGOs/CBOs and 30.5 percent from friends. Other included health centers, private clinic and hospitals among others.
- 64 percent of respondents were non-users of condoms. The reasons for non-used were faithful to partner, marriage, partner dislike and reduction in sexual pleasure.
- 40.8 percent of respondents experienced some sexually transmitted infections in the last 12 months. About 48.8 percent of female respondent had bad smelling fluid and 46.5 percent had sores on or around the vagina while 61 percent experienced lower abdominal pain.
- Among the males, 62.5 percent had painful or urination and 37 percent and 27.3 percent experienced abnormal pains discharge and sore/ulcer around penis respectively.
- 80.6 percent of respondents sought treatment in health facility and 39.1 percent in private clinic. Others included 11.7 percent in pharmacy and 10.9 percent traditional healers among others. The services received were drugs, 87.6 percent; 22.8 percent laboratory test among others.

- 42.8 percent of the sexually active respondents to some actions to prevent sexually transmitted infections. The actions taken were stopped sex, 44.8 percent and use of condom, 24.4 percent.
- Mode of transmission of sexually transmitted infections were unprotected sex, 93.8 percent; blood transfusion 30.1 percent and 25.4 percent for un-satirized objects. Meanwhile, mother to her unborn child was 10 percent.
- Sources of knowledge of sexually transmitted infections were friends 46.3 percent; health service provider and radio, 42.3 percent. Other sources were teachers 21.2 percent; NGOs/CBO 17.7 percent and 15.3 percent for IEC materials
- Majority of the respondents have heard of HIV/AIDS. Sources of information on HIV/AIDS were 63.8 percent for radio; health providers 55.8 percent and 49.4 percent for friends/peers. IEC materials were 30 percent while 25 percent and 24 percent were observed for teachers and NGOs/CBOs respectively. TV and News paper were 13.6 percent and 11.2 percent respectively.
- Mode of transmission cited by respondents were unprotected sex with infected persons, 85.6 percent; 70.9 percent for using sharp/pie icing instruments and , 61.3 percent for blood transfusion. About 25.9 percent of respondents cited from mother to unborn child and 4.6 percent for mosquito bites among others.
- 75 percent indicated that condom use during sex was one way to prevent the spread of HIV/AIDS. Other means of prevention cited included faithful to one uninfected partner 66.1 percent, avoiding sharing sharp/piecing instrument, 49 percent and 32 percent for abstinence among others.
- 91.1 percent of respondents indicated sex without condom with person who has HIV/AIDS was high risk behavior. Other high risky behavior were sex with prostitute without condom, 87.8 percent, 81.3 percent for having many sexual partner, receiving blood transfusion, 76.4 percent, giving blood, 65.1 percent; tattooing/scarification piercing, 64.1 percent. Sex with homosexuals was 57.7 percent and 35.7 percent for intravenous drug use.
- 8.7 percent of respondents know someone with HIV/AIDS. Sourced of knowledge with HIV/AIDS were from health care provider, physical appearance and the infected persons.
- Significant proportion of the respondents expressed segregated behavior toward people with HIV/AIDS. About 50.6 percent of respondents revealed that people with HIV/AIDS should be isolated from the community while 25 percent and 23 percent said the people with HIV/AIDS should be marginalized and stigmatized respectively. Only 341 percent advocated for integration of HIV/AIDS persons.
- 56 percent believed that men and women should be equal. Moreover, 64.1 percent have heard of gender before violence. The leading sources of information were 70.8 percent for radio and 45.1 percent from posters/placards. Training workshop sessions and humanitarian were 34 percent respectively.

- 31.4 percent of respondents had sex with children and 30.7 percent knew anyone who has forced someone to have sex.
- 50.3 percent of respondents said that people have sex with mainly for sacrifice, 12.6 percent to gain strength and 4.5 percent for protection against disease.

## RECOMMENDATIONS

The following recommendations are made for actions to interventions to prevent and control of sexually transmitted infections and HIV/AIDS and promote gender harmony:

- Promotion of responsible parenthood and family life education;
- Increase accurate information, education and behavioral change for the prevention of sexually transmitted infections and HIV/AIDS;
- Promotion of safe sex and sexual hygiene
- Promotion of condom use and condom availability;
- Establish and create positive attitude of community for people living with HIV/AIDS;
- Promotion of health care delivery;
- Promotion gender harmony and female economic empowerment

## SUGGESTED INTERVENTION AND STRATEGIC PROGRAMMES

The following problems/issues and situation have been identified and required actions for the prevention of sexually transmitted infections and HIV/AIDS and promotion of gender harmony.

| Problem/situations and issues/condition  | Program<br>Issues/intervention   |
|--|--|
| Unstable union, 59.1 percent; and multiple sexual partner relationship, 58.6 percent; 31.7 percent had sex with someone who they met picked for the first time from night/drinking spot. | Promotes responsible parenthood and family life education.                               |
| Limited and inaccurate knowledge of STIs and HIV/AIDS  | Increase accurate knowledge STIs and HIV/AIDS prevention education and behavioral change |
| High prevalence of STIs, 40.8 percent have experience STIs which increase high risk for HIV infection.   | Promote of safe sex and sexual hygiene family l  |

|   |  |
|---|--|
| Low condom use, 34.7 percent used condoms in last 12 months and 23.8 percent always used condom during sex. | Promote condom use and its availability                                |
| Poor general health condition, high rate of malaria, diarrhea, yellow fever.                                | Promote health care  |
| High prevalence of stigmatization/prejudice and discrimination of people with HIV/Aids                      | Establish and create positive attitude for people living with HIV/AIDS |
| Evidence of gender based violence against women and female vulnerability.                                   | Promotion of gender harmony and female economic empowerment.           |

## **1.0 BACKGROUND INFORMATION**

### *The National Context*

#### **1.1 Political and Situations and Administration Division**

Liberia is unitary state. It is located on the west coast of Africa, bordering Cote d'Ivoire to the east, Guinea to the north, Sierra Leone to the west and the Atlantic Ocean to the south. Liberia covers an area of 38,250 square miles with coastline of about 350 miles. The population of Liberia increased from 1.5 million in 1974 to 2.1 million in 1984. Hence, the population increased by 3.3 percent per annum between 1974 and 1984. Moreover, the civil conflict between 1989 and 2003 adversely affected the population through death, refugee situation and displaced. The estimated population for 2006 is 3.0 million.

Liberia was founded in 1822 by the repatriated freed African slaves from United States of America. Liberia declared independence in 1847. Liberia enjoyed a relatively political

stability from 1847 to 1980 when the military coup toppled the government. In 1985, a civilian government was elected into power. However, in 1989, civil war engulfed the country until 1997 when peace and stability returned to the country with the democratically elected government in July 1997. However, this peace was fragile and conflict renewed in 1999 to 2003, mainly from northern parts of the country and spread to all parts of the country. In August 2003, peace returned to Liberia with the assistance and facilitation of the international community.

The signing of the Comprehensive Peace Agreement in Accra, Ghana on 18 August 2003 ended the second round of conflict. This established the transitional government that administered the affairs of the country including the conducting of elections for civilian government October – November 2005. The government is based on the presidential system consisting of three coordinating branches. This includes legislative executive and judiciary branches of government.

Liberia is divided into 15 counties. Each county is divided into districts; districts into chiefdoms; chiefdom into clans and clans into towns and villages. At the national level, the President of the Republic of Liberia is the Chief Executive and Head of the Government. The government has sectoral ministries, each being headed by a minister who is appointed by the President by the advice and consent of the Senate. At the lower administrative levels, the superintendents and commissioners who are also appointed by the President with the advice and consent of Senate respectively. At the community level, the paramount chief heads the chiefdom, while the clan chief and town chief head the clan and town respectively. They are also elected by the community members respectively.



## 1.2 Demographic, Social and Economic Status

The estimated population for Liberia in 2007 is 3.2 million. Of this, 50.1 percent were males and 49.9 percent were females. It was observed that 55.6 percent of the population is under 20 years of age. The contributing factors to this high youth population are high fertility and high mortality. The total fertility rate is 5.2. The dependency ratio is 133 for every 100 people in the active working age. The life expectancy was 47.1 years in 2000.

The level of under-five mortality in 2002 was 111 deaths per 1,000 while infant mortality was 72 deaths per 1,000 in 2007 (GOL, 2007).

It also reported that communicable diseases, malaria, diarrhea, acute respiratory infections and measles are the major causes of morbidity and mortality.

It is observed that literacy is 38.5 percent in Liberia; 54 percent for males while 24.5 females. Only 33.5 percent of the population has some formal education. The primary school enrolment rate of 34.8 percent. The gross enrolment ratio was 56.2 percent; 48.5 percent for boys and 35.5 percent for girls (GOL 2000).

The civil conflict since 1989 has affected every aspect of living standard of the Liberian population. The war has caused more than 300,000 deaths. The violence has also made more than one million Liberians displaced and 842,261 refugees in neighboring countries.

The greatest victims of the war were women and adolescents. The war resulted to virtual breakdown of law and order, near total collapse of the economy, destruction of all types of social infrastructure, decline in family and parental discipline and care. Consequently, adolescents and workers unwillingly engaged in high risk behavior detrimental to their health and developments. Early unprotected sex and drug abuse are critical significance risk behavior among adolescents in Liberia. The exposure to the high risk behavior among adolescents had led to serious problem such as increase in sexual activities, teenage pregnancies and childbearing induced abortion, contracting of sexually transmitted infections including HIV/AIDS, prostitution, violence against women, sexual abuse, school dropout, poor productivity and undesirable behavior.

Another effect of the war is mass unemployment and poverty. It is documented that unemployment is 85 percent and 60 percent of Liberians are perceived to be poor. Most of the adolescents are unemployed and poor. This is conducive for exchanging sex for money, gifts or favors, thus present high risk for reproductive health problems including the transmission and increase of HIV/AIDS infections among adolescents. Moreover, social, economic and cultural contexts within which adolescent find themselves that make them to enter sexual relationships socially and economically rewarding.

Sex in exchange for money, gifts or favor is prevalent in Liberia. Available data revealed that “more than one out of ten males and almost one out of every thirteen females gave or received money, gifts or favor in exchange for money” (GOL 2000).

The data further indicate that the proportion engaged in this activity is higher in urban areas, 13.4 percent and 6.4 percent in rural areas.

Sexual intercourse is widespread and commences very early in Liberia. The data from the Liberia Demographic Survey in 2000 revealed that the mean age first sexual intercourse was 15.5 years for girls and 17.8 years for boys (GOL 2000). Saydee and Getaweh (2000) found that the mean age at first sex among adolescent was 16.7 years. This is associated high risks of pregnancy particularly in situations where knowledge of reproduction is lacking and no

access to reproductive services. Teenage pregnancy is high in Liberia. About 50 percent girls aged 15 years have been pregnant at least once.

### **1.3 GENDER BASED VIOLENCE**

Available evidence shows that war against women is increasing in Liberia. Forced prostitution sexual abuse including rape has increased. These gender-based violence has inherent health, social, economic and psychological consequences. Some of the violence against women are institutionalized such as the female genital mutilation. This is a requirement and important “rite de passage for girls”. In Liberia, it is well-organized traditional school for girls where the procedures are carrying out. About 81 percent of the ethnic groups in Liberia institutionalized female genital mutilation.

Rape is one of the wars against women that prevent in Liberian. Rape became more widespread during the civil conflict, 1989 – 1997 and the renewed scenario, 1999 – 2003, became an institution weapon of war “marriage” of women to rebels and their commanders became a form of reward and ‘modus vivendi’ during the conflict. Gang rape was widely practice. It has been documented that there is a very strong relationship between rape and the movement and location of fighting forces during. Thus, the high rate of rape observed from the survey in Bomi, Bong, Grand Bassa, Grand Cape Mount, Grand Gedeh, Montserrado and Nimba Counties is related to the high concentration of rebels and soldiers in these counties and the amount of fight that took place there. The mean age of victims of rape was 13.4 years while the rapist was 35.8 years (GOL 2000).

Recent studies conducted by WHO (2004) in six counties of Liberia (Montserrado, Bong, Lofa, Nimba, Grand Bassa and Grand Gedeh Counties) revealed that 90.8 percent of 1,628 women and girls interviewed were subjected to one or multiple acts of abuse and or sexual violence during the conflict. The Investigation revealed that 74.7 percent of the respondents were gang rape involving two to twenty-five perpetrators consecutively. The studies further indicated that 25 percent of the respondents experienced that objects such as corn stick, wood, barrel of a gun, raw cassava root flashlight batteries, ants, hot paper mortal pestle etc. were brutally penetrated into vagina . It was discovered that theses object had health hazards to the victims. About 15.5 percent of respondents reported vesico-vaginal and 8.5 percent recto-virginals fistula (WHO, 2004).

It has been observed that even though the civil conflict is over, violence or war against women and girls continues. For example, a hospital in Monrovia, the capital operated by Medicine San Frontier (MSF) reported 1,400 cases of sexual gender base violence in 2005. In 2006; the same hospital treated four victims of violence against women per day. Moreover, available data within the first three months of 2006 from the Women and Children Protection Section (WCPS) of the Liberian National Police revealed that 215 cases of violence against women and children.

Recent empirical study by Saydee and Ramirez (2007) indicated that of the 85 AIDS women interviewed in Monrovia, 75 percent believed that they are positive because they were sexually abused or exploited.

Consistent with the United Nations Millennium Development Goals of achieving gender equality and the outcome of the Convention on the Elimination of all forms of Discrimination against Women (CEDAW, 2006) and the 1995 Beijing Declaration, the United Nations systems has committed itself in achieving these objectives and continue to initiate development projects to contribute to the elimination of sexual gender based violence in Liberia to preserve the rights of women and girls and promote sustainable gender harmony for sustainable development. Moreover, the African Union Protocol on women recognized gender harmony and main streaming of gender in development.

The Government of Liberia reduction strategy has prioritized key areas of development to ensure pro-poor growth; rebuilding the nations road network; accelerating human resource development; strengthening g the environment for private sector growth; job creation and promoting good government and the rule of law.

Women's empowerment and meaningful participation in all development initiatives is national priority. To this end, current policy objectives include making the security sector more gender sensitive and responsible; to enhance and promote the economic empowerment of women; to comprehensively address gender based violence issues and strengthen implementation of international women's and children's rights instruments.

#### **1.4 SITUATION OF HIV/AIDS**

It is generally known that HIV/AIDS spreads through several routes and that the major routes are heterosexual intercourse, homosexuality, and intravenous drug use, blood transfusion and forms a mother to her fetus. In Africa the major route of HIV/AIDS transmission is said to be heterosexual intercourse. Pending the development of vaccine for the disease, the only means of avoiding or reducing HIV/AIDS transmission is abstinence and use of condom. The sexual behavior of any population of a society determines the rate and a pace of the spread of HIV/AIDS. Globally, 42 million people have acquired HIV infection with 22 million who have already died since the epidemic began. In sub-Saharan Africa, younger people who are mainly within the production sector are greatly affected by the HIV infection.

AIDS has serious impact on growth, income and poverty. It is estimated that the annual per capital growth in half of the countries in Sub-Saharan Africa is falling by 0.5 percent – 1.2 percent as a direct result of AIDS. The premature death of half of the adult population, at ages when they have already started to form their own families and become economically productive, can be expected to have effect on the every aspect of the social and economic life.

The prevalence of HIV/AIDS is fast growing in Liberia. The disease was first reported in Liberia in 1986, when 5 cases were diagnosed. Recent data revealed that HIV prevalence was 1.5 percent , 1.8 percent among women and 1.2 percent for men ( GOL ,2007. However, the sentinel surveillance HIV prevalence rate among pregnant women predominately in urban areas was 5.7 percent in 2007 GOL 2007.

There is a real potential for HIV/AIDS to explode in Liberia because of unsafe sex and cultural practices. It is observed that 80 percent of the youths are sexually active. A quarter of the students have already contracted STD and over 38 percent of young people have had multiple sex partners (MOH, 2002). Meanwhile, the usage of preventive measures such as condom is not wide spread. It is observed that among the higher –risk intercourse group ( sex with partner who neither was spouse or lived with ) condom used was 14 percent for women and 25 percent for men(GOL, 2007). The low acceptance of contraceptive coupled with reckless sexual behaviors, increased drug use, sexual violence against women and girls, lack of basic services and public information, have increased the risk of contracting STDs and HIV/AIDS, and are among the reasons for the rapid spread of the HIV/AIDS.

As a result of these circumstances, the entire population of the country including the agricultural force is faced with an extreme poverty situation, which could be further exacerbated by the prevalence level of HIV/AIDS in the country. It is observed that the work force is at the highest risk of infectious disease because of its sexually active composition. More than two-thirds of the work force like the drivers, local and international traders, concession workers and population on the border line are highly exposed to risk of HIV/AIDS infection. These people are found in both the formal and informal sectors of the local population.

The Government of Liberia recognizes the serious health, education and development problems facing the population. The government has noted the important role the laborers play in reconstruction, rehabilitation and development. There is a need to deliver reproductive health and HIV/AIDS programs among the population and their families. This strategy will contribute to the reduction in morbidity, maternal morbidity and mortality as well as improve quality of life.

## **II. Rationale of the study**

To respond promptly and effectively to the HIV/AIDS pandemic, complete and reliable information is needed about the attitudes, beliefs and practices of groups at high risk, particularly about the sexual behaviors that can spread HIV. Monitoring changes over the time in these behaviors and attitudes is essential to maintaining appropriately-designed programs.

Liberia is categorized in countries with generalized epidemic (more than 1 percent prevalence in the general population). In this setting, groups with particularly high levels of risk behavior may continue to drive new infections in a generalized epidemic, and the patterns of HIV spread goes far beyond higher-risk individuals and their immediate partners. By investigating sexual links with others outside the sub-population with high risk behavior, this study will help to gauge the likelihood that the virus is spreading widely into a broader population.

This survey is intended to help National HIV/AIDS Programs set up efficient behavioral assessment and monitoring programs to assist in program design, direction and evaluation.

### **Objective of the Survey**

- To develop a broad understanding about the structural and psycho-practices among these target groups.
- Identify of opportunities and entry points for HIV prevention and response in relation to each of the target group.
- Identify the social, behavior and cultural drivers to HIV epidemic in Liberia, with special attention the high risk population.
- To identify services available, accessibility and affordability
- Make recommendations for prevention strategies and specific interventions target those high risk HIV transmission groups.

## **1.6 STUDY AREA**

The survey was conducted in four Counties. They were Nimba, Grand Gedeh, Lofa and Montserrado counties respectively.

## **NIMBA COUNTY**

Nimba County is one of the conflict regions in Liberia. In 1983, the county experience what is known as Nimba Raid. Moreover, the 1985 abortive coup d'état reprisal was predominately felt in Nimba County because most of the people involved in the attempt coup were from Nimba County. This made some of the population to seek refuge in neighboring countries like Guinea, Ivory Coast and Sierra Leone.

Moreover, the Liberian Civil War started in 1989 in Nimba County. It began with border incursion and sided by Cote d'Ivoire. The conflict was spearheaded by the National Patriotic Front of Liberia headed by Charles Ghankay Taylor who later was elected as President of Liberia in 1997 after seven years of conflict that intensified and engulfed the country.

Nimba County is predominantly inhabited by Mano and Gio (Dahn) ethnic groups in Liberia. Nimba County had political rivalries against another ethnic group, the Krahn, which dominated the Government of Liberia from 1980 – 1989. The ethnic tension had two versions, the Mano and Gio in Nimba County on one hand and the Krahn in Grand Gedeh County and the Mandingos on the other over disputes of the 1985 Election results which is believed was won by Mr. Jackson F. Doe, a Gio from Nimba County.

Hence, Nimba County became “home or base” for the rebellion, against the government. It was also a very strong hold and support for the 1997 election for the government. Many youth or adolescents were actively involved and were also victims of the conflict. Nimba County was targeted during the renewed armed incursion in 1999 by the Liberian United for Reconciliation and Democracy (LURD) and the Movement for Democracy in Liberia (MODEL). In 2003, the conflict had engulfed Nimba County and created immense humanitarian and emergency situation which needed urgent attention.

The population of Nimba County increased from 313,050 in 1984 to an estimated population of 551,887 in 2007. The two major ethnic groups, Mano and Gio in the county constituted 85 percent of the population.

Nimba County is located on the North by Guinea, east by Cote d'Ivoire and Grand Gedeh County, on the west by Bong County and South by Grand Bassa County and River Cess Counties. Nimba County is divided in six political and geographic districts. They are Sanniquellie – Mah, Saclepea, Gebehlay-Geh, Yarwin Mensonoh, Tappita and Zoe-Geh.

## **GRAND GEDEH COUNTY**

Grand Gedeh county is located in eastern Liberia, on east is River Gee County which was part that county until 2000. It is also border south by Sinoe, on the west by Nimba county and Ivory Coast on the north. Grand Gedeh county most affected during the conflict. Grand Gedeh was targeted by the rebellion group because it was home of the president of Liberia 1980-

1990. During conflict most of the population sought refuge in Ivory Coast and some parts of west Africa.

### **LOFA COUNTY**

Lofa County was created out of Western Providence in 1964. It is presently divided into six districts, several chiefdoms, clans and towns. The six districts are Voinjama, Vahun, Salayea, Kolahun, Foya and Zorzor. The estimated population of Lofa County is 276,347 in 2006. It is predominately inhabited by the Kissi, Lorma, Mandingo, Kpelle, and Gbandi ethnic groups of Liberia.

Lofa County was among the counties that were affected by the Liberian civil conflict of 1989 – 1997. Moreover, the 1999 renewed conflict in Liberia started from the border incursion in Lofa County by rebel group, the Liberia United for Reconciliation of Democracy (LURD), (1999 – 2003). In 2003 peace returned to Liberia with the assistance of the International Community. During the conflict periods, most of the people were either displaced or sought refuge in neighboring countries such as Sierra Leone and Guinea. It is estimated that more than 50 percent of the population of Lofa was either displaced or sought refuge.

Lofa county is located on the north by the Republic of Guinea, the west by Republic of Sierra Leone, the east by Gbarpolu County which was created out of Lofa County in 2001.

### **MONTSERRADO COUNTY**

The political and economic capital of Liberia, Montserrado, is located in this county. Monrovia accounts for more than 50 percent of Liberia's socio-economic infrastructure. Most businesses, higher institutions of learning, schools, etc. are concentrated in this city. Also, mass migration of the rural people to Monrovia in search for security and better future gives rise to a high population.

This high population has created depression in the already fragile socio-economic services of the county. Montserrado County covers an area of 1058 square miles. The population density increased from 304 persons in 1974 to 464 persons in 1984. The estimated population in 2004 was 906,778 persons (GOL 1997). The persistent civil war since 1989 has compelled many persons to migrate to Montserrado, which is considered a "safe haven."

### **NATIONAL RESPONSE**

In 1986, the government of Liberia established the National AIDS Control Program and National AIDS Commission within the Ministry of Health and Social Welfare. The government has committed itself to the prevention of HIV/AIDS spread in the country through the organization of program and activities. The National HIV/AIDS policy had been developed including guidelines and protocol for testing counseling and treatment. A sentinel HIV Surveillance system has been organized in few health centers in the country. Two of these centers are located in Nimba County.

Moreover, with the assistance of the United Nations Population Fund, the government has initiated the prevention HIV/AIDS at the workplace through the Ministry of Labor. In

addition, the Ministry of Education has integrated HIV/AIDS prevention and control within the curricula for students and school authorities among other initiatives by government.

## **UN RESPONSE**

The United Nations General Assembly special session on HIV/AIDS emphasized the need to: “create global fund to fight HIV/AIDS in Africa, integrate HIV/AIDS prevention control and support in development activities and the elaboration of policy framework to address HIV/AIDS issues at the workplace”.

Moreover, at the Conference on Population and Development held in Cairo, Egypt in 1994 and its programme of action, it was recommended that “government develop programme to reduce the spread of HIV/AIDS. (UNFPA, 1994). In Liberia the priority reproductive concerns includes prevention and management of sexually transmitted infections, including HIV/AIDS, promotion of adolescent reproductive health, gender harmony and empowerment of women preventing violence against women including sexual harassment rape, harmful practices, such as early marriages and female genital mutilation.

In this juncture, UNFPA has participated in regional and sub-regional response initiatives for the prevention of HIV/AIDS and sexually transmitted infections. Thus, a new strategy which linked HIV/AIDS sexually transmitted infections and development of six sub-regional initiatives has been conceived. These include countries lying along Rivers Congo Ubangi and Shari, countries of the Great Lakes, Lake Chad Basin, the Abidjan/Lagos corridor, the Indian Ocean partnership and the Mano River Union/Cote d’Ivoire HIV/AIDS/STI prevention and control initiatives.

Thus, the Mano River Union and Cote d’Ivoire HIV/AIDS prevention and control project in Liberia falls within the UNFPA Plan of Action. The overall goal is to “stop the spread and begin to reduce the incidence of HIV/AIDS.” The specific objective are to prevent the spread of new infections of STI/HIV/AIDS among refugees, internally displaced population and their host communities in the Mano River Union Countries and Cote d’Ivoire and provide psycho-social support to those living with HIV/AIDS. The Mano River Countries are, Sierra Leone, Guinea and Liberia.

## **2.0 METHODOLOGY**

The study was conducted in four (4) counties. They were Grand Gedeh, Nimba, Lofa and Montserrado Counties.

The sample size of 1,932 respondents was purposely selected for this study; 1,132 males and 800 females. However, the sample size for each county was proportionally. A total of 4 teams were used in the data collection procedure comprising of 24 enumerators and 4 supervisors.

The data for this survey was obtained through the administration of a structure questionnaire and focus group discussions. Four focus group discussions were held in each of the selected county.

## **SURVEY PERSONAL AND TRAINING**

The survey interviewers and supervisors were selected based on language skills residence, ie, native to the assigned county, ability to read and write effectively in English, prior experience in the conduct of survey.

A training of a survey personal lasted for 6 days, and the covered the following:

- Background on the purpose of the study and on data collection and design,
- Geography of the study areas,
- Participatory reviews of the questionnaire with practice interviews in class,
- Reproductive health topics covered in the questionnaire including general health condition STIs sexuality activities, knowledge and risk perception toward HIV/AIDS and attitude toward people living with AIDS and gender violence,
- Procedures for maintaining confidentiality,
- Techniques of asking about violence and appropriate follow up,
- Sensitivity toward study subjects,
- Ensuring privacy, and
- Language translation
- Methods and procedure of conducting focus group discussions,
- Moderating and note taking during focus group discussions.

The entire team was trained in strategies to ensure not only their own safety, but the safety of the respondents as well. Supervisors were trained in second-stage sampling, checking of interviews for data accuracy and mistakes, and ensuring all procedures were followed. Referral protocols were implemented that simply provided village-level information on access to health, water, and sanitation. Before actual data collection began, the survey instrument was pre-tested in a village site that was not part of the sample.

## **QUESTIONNAIRE COMPONENTS**

The development of the questionnaire took into considerations into the account of the following sources:

- The Liberia Demographic and Health Survey,
- The Mano River Union Countries HIV/AIDS study.

The survey questionnaire included:

- The background information
- General Health
- Sexual Activities
- Sexually transmitted infections
- Risk perception toward HIV/AIDS
- Attitude toward people living with HIV/AIDS
- General Violence

## HUMAN SUBJECTS

International protocol for the protection of human subjects was applied in this study. The survey research involves no minimal risk to the participants and that based on national policy that individuals, male and female under who are married are considered emancipated minors. Also information revealed that adolescent married individuals legally emancipated and can consent for them. In addition unmarried adolescent can self-consent to participate in demography surveys. Moreover, human subjects' protection such as confidentiality and verbal consent were adhered to during the study.

## 2.3 DATA MANAGEMENT

The data collected from the field were handed to Mr. Joseph Nyan, National Programmer of the Liberia Institute for Statistics and Geo-Information Services .Mr. Nyan designed the data entry screen.

## 3.0 FININGS AND DISCUSSION

### 3.1 CHARACTERISTICS OF RESPONDENTS

The characteristics of the selected respondents are essential for the interpretation of the finding and provide in approximate indicates of the representativeness of the survey.

Table 1 shows 51.4 percent of the respondents lived in urban areas while 48.6 percent were in rural areas. The data also revealed that 52.5 percent of the female respondents were in urban areas composed to 47.5 percent males' respondents in rural areas. However, 54.2 percent of males were in rural areas compared 45.8 percent females in urban areas.

Table 1: Percent distribution of respondents by sex and place of residence.

| Resident | Sex              |                  | Total |
|----------|------------------|------------------|-------|
|          | Male (n = 1.132) | Female (n = 800) |       |
| Urban    | 45.8             | 52.5             | 51.4  |
| Rural    | 54.2             | 47.5             | 48.6  |

|       |       |       |       |
|-------|-------|-------|-------|
| Total | 100.0 | 100.0 | 100.0 |
|-------|-------|-------|-------|

The data in Table 2 show that 50 percent of the respondents were single. However, 46.7 percent of respondents were married; 25.1 percent legally married and living with spouse, 15.8 percent living together and 5.8 percent separated and divorced respectively. The findings from the survey showed that large proportions of respondents have unstable union and relationship.

Table 2 percent distribution of respondents by sex and married status.

| Marital Status                         | Sex              |                  |                   |
|--|------------------|------------------|-------------------|
|  | Male (n = 1,132) | Female (n = 800) | Total (n = 1,932) |
| Single                                 | 41.7             | 61.8             | 50.0              |
| Legally married and living with spouse | 30.0             | 18.1             | 25.1              |
| Married and separated by work          | 8.7              | 1.8              | 5.8               |
| Living together                        | 16.8             | 14.3             | 15.8              |
| Separated                              | 1.6              | 1.5              | 1.6               |
| Divorces                               | 1.0              | 1.0              | 0.5               |
| Widowed                                | 0.2              | 1.0              | 0.5               |
| Not response                           | -                | 0.5              | 0.2               |
| Total                                  | 100.0            | 100              | 100.0             |

Moreover, Figure 1 show the number of married males and number of wives. It was observed that 9.6 percent were along and 74.7 percent had one life. About 11.1 percent had two wives while 1.9 percent had three wives.

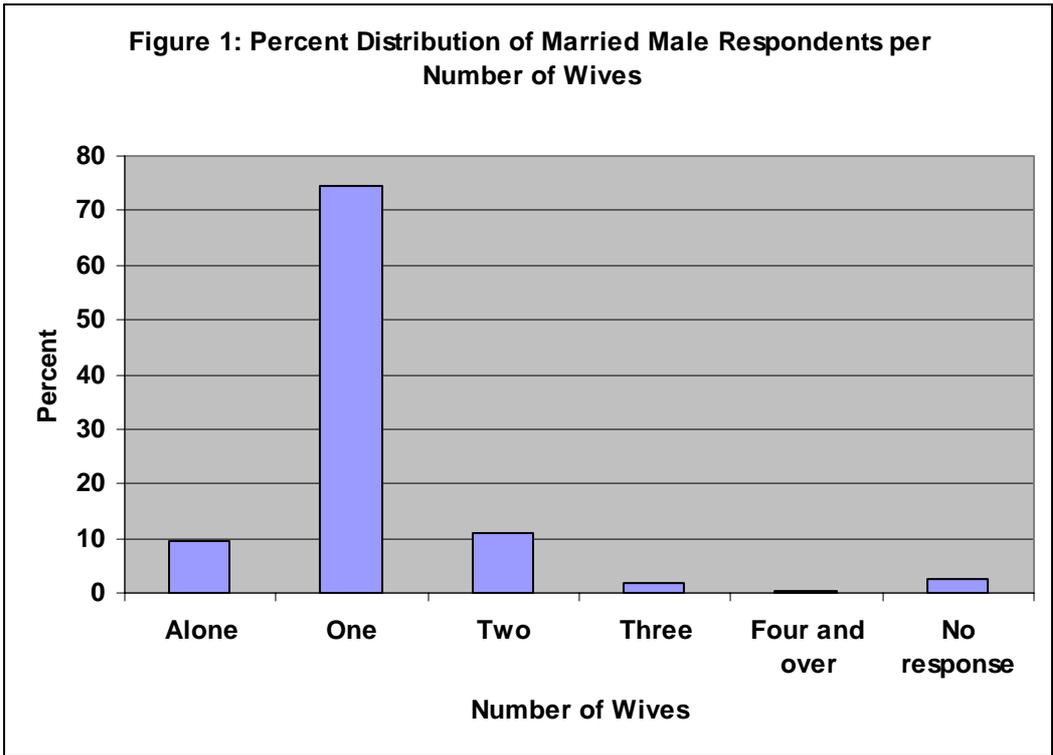


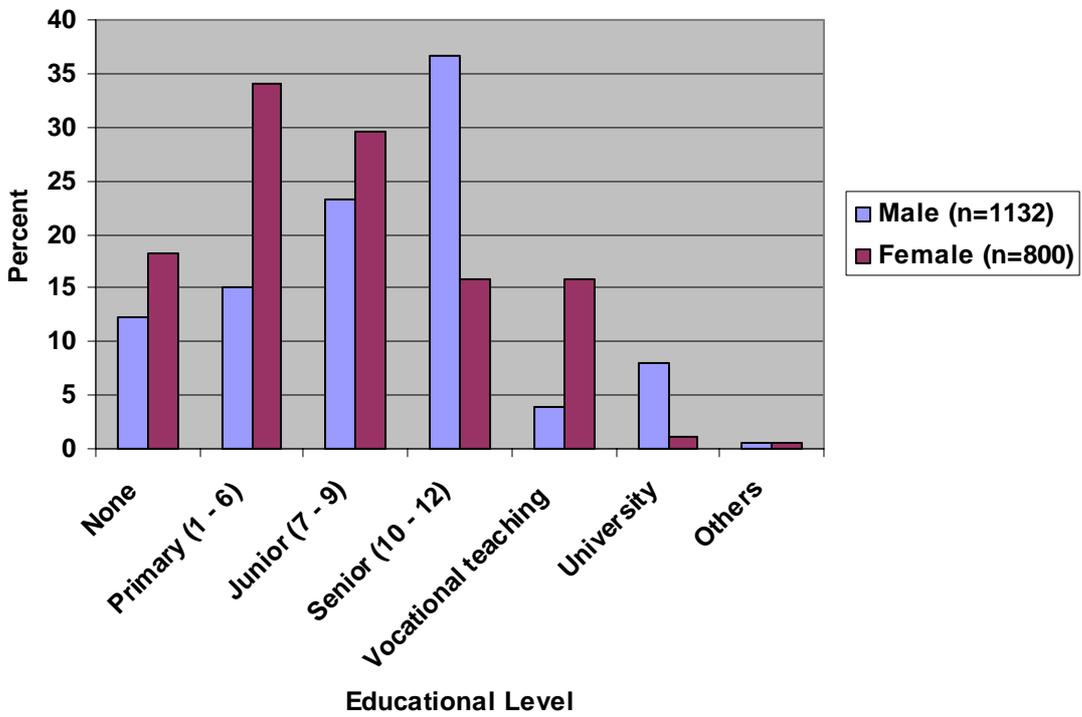
Table 3 Percent distribution of married female respondents and number of wives husband have including her.

| Number of wives | Percent (n = 8) |
|-----------------|-----------------|
| One             | 75.0            |
| Two             | 12.5            |
| No response     | 12.5            |
| Total           | 100.0           |

Figure 2 indicates that 28.1 percent and 25.9 percent of respondent had secondary and junior high education respectively. About 22.9 percent had primary education compared to 14.8 percent without formal education.

The survey data in Figure 3 showed that 53.3 percent of respondents were Christians and 10.5 percent Muslims. About 33.3 percent did not state any religious affiliation. However, significant effort could be deployed for prevention of sexually transmitted infections and HIV/AIDS through the emphasis of Christian and after religious teachings and principles relating to preservation of and care of life.

**Figure 2: Percent Distribution of Educational Level by Sex**



**Figure 3: Percent Distribution of Respondents by Religion and Sex**

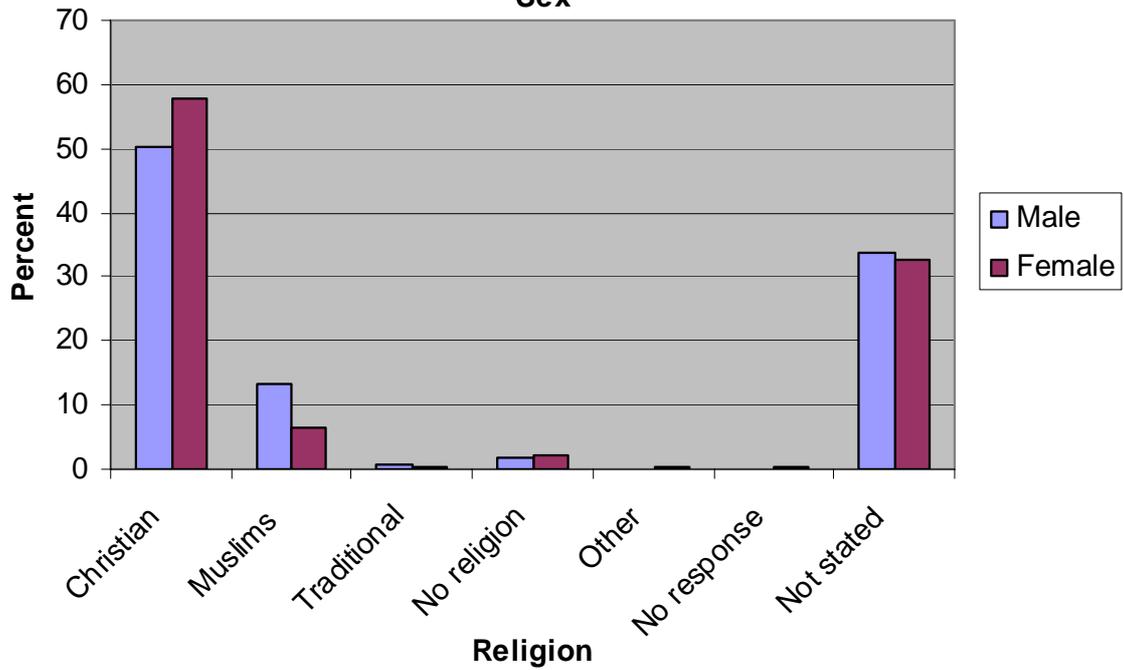


Table 4: Percent distribution of respondents by occupation and sex.

| Occupation                 | Male  | Percent | Female | Total |      |
|----------------------------|-------|---------|--------|-------|------|
| Unemployed                 | 155   | 10.2    | 122    | 237   | 12.3 |
| UNMIL                      | 77    | 6.8     | 9      | 86    | 4.5  |
| Liberia security personnel | 213   | 18.8    | 36     | 249   | 12.9 |
| Student                    | 243   | 21.5    | 234    | 477   | 24.7 |
| Farmer                     | 221   | 19.5    | 124    | 345   | 17.9 |
| Driver                     | 245   | 21.6    | 17     | 262   | 13.6 |
| Trader                     | 196   | 17.3    | 168    | 364   | 18.8 |
| Commercial sex worker      | 18    | 1.6     | 224    | 242   | 12.5 |
| Other                      | 102   | 9.0     | 83     | 185   | 9.6  |
| No response                | 9     | 0.8     | 19     | 28    | 1.4  |
| Total                      | 1,132 |         | 800    | 1,932 |      |

The survey data revealed that 26.6 percent of the respondents were displaced thrice or more during the civil conflicts. About 31.6 percent were displaced less than a year and 17.3 percent with in a year. The average displacement were 2.1 years, 2.4 years for females and 1.9 years for males as in Table 5.

Table 5: Percent distribution of respondent by sex and length of time displaced.

| Length displaced | Sex            |                  |                 |
|------------------|----------------|------------------|-----------------|
|                  | Male (n = 364) | Female (n = 149) | Total (n = 513) |
| Less than year   | 34.1           | 25.5             | 31.6            |
| One year         | 19.8           | 11.4             | 17.3            |
| Two year         | 13.5           | 14.8             | 13.8            |
| Three years      | 31.6           | 46.3             | 35.9            |
| No response      | 1.0            | 2.0              | 1.4             |
| Total            | 100.0          | 100.0            | 100.0           |
| Average          | 1.9            | 2.4              | 2.1             |

Table 6: Percent Distribution of respondents by main source of living by sex.

| Source of living               | Male  | Female | Total |
|--------------------------------|-------|--------|-------|
| Depends on parents / relatives | 244   | 242    | 482   |
| Salary from job                | 420   | 74     | 494   |
| Farming/agriculture            | 239   | 141    | 380   |
| Trading                        | 159   | 14     | 293   |
| Selling in street              | 94    | 93     | 187   |
| Working in bar/restaurant      | 10    | 98     | 108   |
| Hair dressing                  | 7     | 82     | 89    |
| Others                         | 154   | 78     | 232   |
| No response                    | 10    | 16     | 26    |
| Total                          | 1,132 | 800    | 1,193 |

### Health Concern

The civil conflicts have adversely affected health situation in the country. Available data revealed that 37 percent of the population has access to modern health care (Gol. 2007).

The survey data in Figure 4 indicated that 11.6 percent of respondents, 78.3 percent are females, and 77.1 percent revealed that malaria is the most health concern in the community. Malaria is endemic in Liberia. This is due to the geography location and climatic conditions which are favorable to the high reproductive rate of the vectors. Malaria ranks as the leading cause of morbidity in health facilities accounting about 45 – 50 percent of morbidity (Gol. 2000). In addition, 35.6 percent of respondents indicated diarrhea and 18.1 percent for yellow fever as health problems and concerns in the selected communities. About 13.9 percent mentioned TB.

Moreover, Table 7 shows that 73.5 percent of respondents, 74.3 percent females and 73 percent males mentioned that people suffered from malaria.

More than a quarter, 29.1 percent of respondent indicated people had suffered from diarrhea, compared to 14.5 percent and 12.9 percent yellow fever and TB respectively among other health problems.

Table 8 show that 67 percent of the selected respondents have access to healthcare. About 42.3 percent had access to private clinic and 28 percent to government private hospital. The data also indicated that 17.7 percent had access to government private health center while 4.7 percent had access to health post.

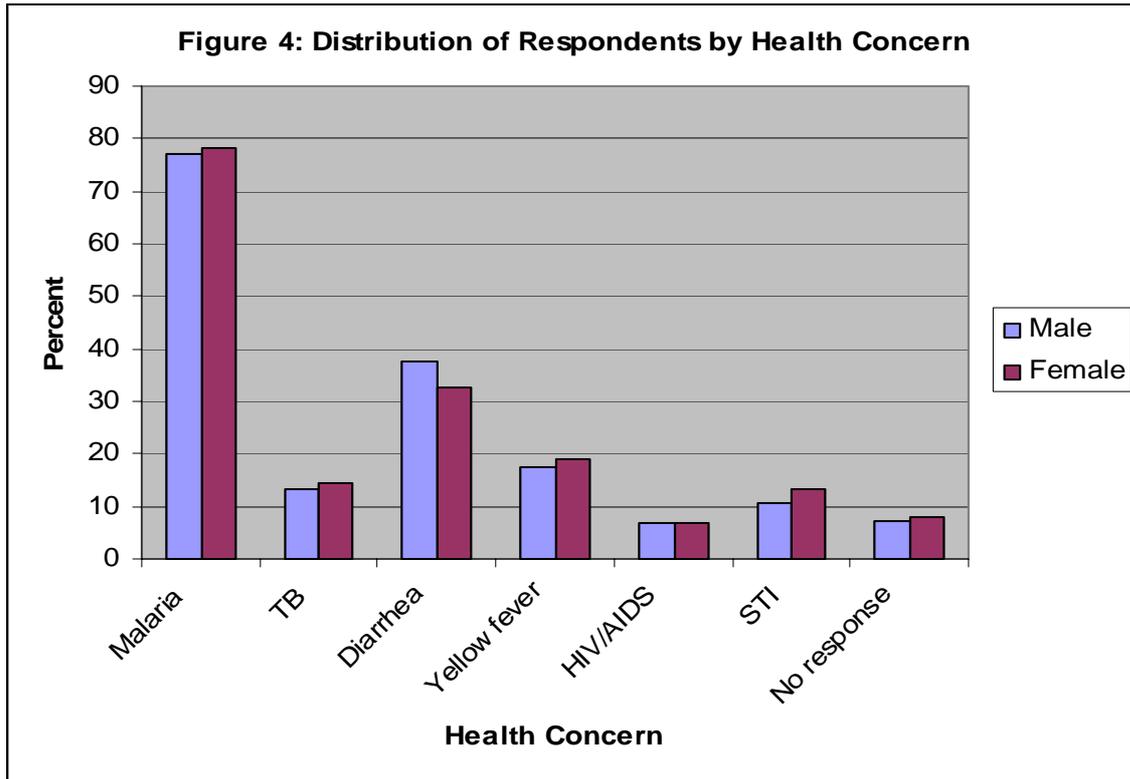


Table 7 Percent distribution of respondents by sex and type of health problems people suffer in community.

| Types of health problems       | Male (n = 1,132) | Female (n = 800) | Total (n = 1,932) |
|--------------------------------|------------------|------------------|-------------------|
| Malaria                        | 73.0             | 74.3             | 73.5              |
| TB                             | 11.9             | 14.3             | 12.9              |
| Diarrhea                       | 30.6             | 27.0             | 29.1              |
| Yellow fever                   | 14.7             | 14.4             | 14.5              |
| HIV/AIDS                       | 1.0              | 1.0              | 1.0               |
| Sexually transmitted infection | 6.8              | 7.5              | 7.1               |
| Alcohol / drugs abuse          | 2.5              | 2.5              | 2.4               |
| Other                          | 12.0             | 10.5             | 11.4              |
| No response                    | 9.7              | 9.1              | 9.5               |

Table 8: Percent distribution of respondents by sex and type of health facilities access

| Type of health facility     | Male (n = 748) | Female (n = 540) | Total (n = 1.288) |
|-----------------------------|----------------|------------------|-------------------|
| Gov't/Private hospital      | 26.5           | 30.2             | 28.0              |
| Gov't/Private clinic        | 39.8           | 45.7             | 42.3              |
| Gov't/Private health center | 19.5           | 15.2             | 17.7              |
| Gov't / Private health post | 4.9            | 4.3              | 4.7               |
| Others                      | 9.2            | 4.6              | 9.7               |
| Total                       | 100.0          | 100.0            | 100.0             |

A total 254 respondent provided reasons for non access to healthcare. However, 389 did not state any reason. About 46.5 percent of the respondent did not have access because they could not afford the cost associated to health care. Moreover, 20.5 percent had no access because of no qualities services and 15 percent for long distance to facilities as in Table 9.

Table 9: Percent distribution of respondents by sex and by reasons of no access to health facility.

| Reason              | Sex            |                  |                 |
|---------------------|----------------|------------------|-----------------|
|                     | Male (n = 364) | Female (n = 144) | Total (n = 254) |
| Distance            | 13.9           | 16.4             | 15.0            |
| Not afford          | 40.3           | 54.5             | 46.5            |
| No health personnel | 1.4            | 2.7              | 2.0             |
| No drugs            | 11.1           | 7.3              | 9.4             |
| No quality service  | 23.6           | 16.4             | 20.5            |
| Others              | 6.9            | 2.7              | 5.1             |
| No response         | 2.8            | -                | 1.6             |
| Total               | 100.0          | 100.0            | 100.0           |

## SEXUAL ACTIVITY

It is observed sexual intercourse is universal and widespread in Liberia as other societies. About 95.2 percents of respondents; 95.7 percent males and 94.5 percent females have had sex.

Figure5 indicates that 51.4 percent of respondents had sex before age 18 years; 69.1 percent among females and 39.1 percent for males.

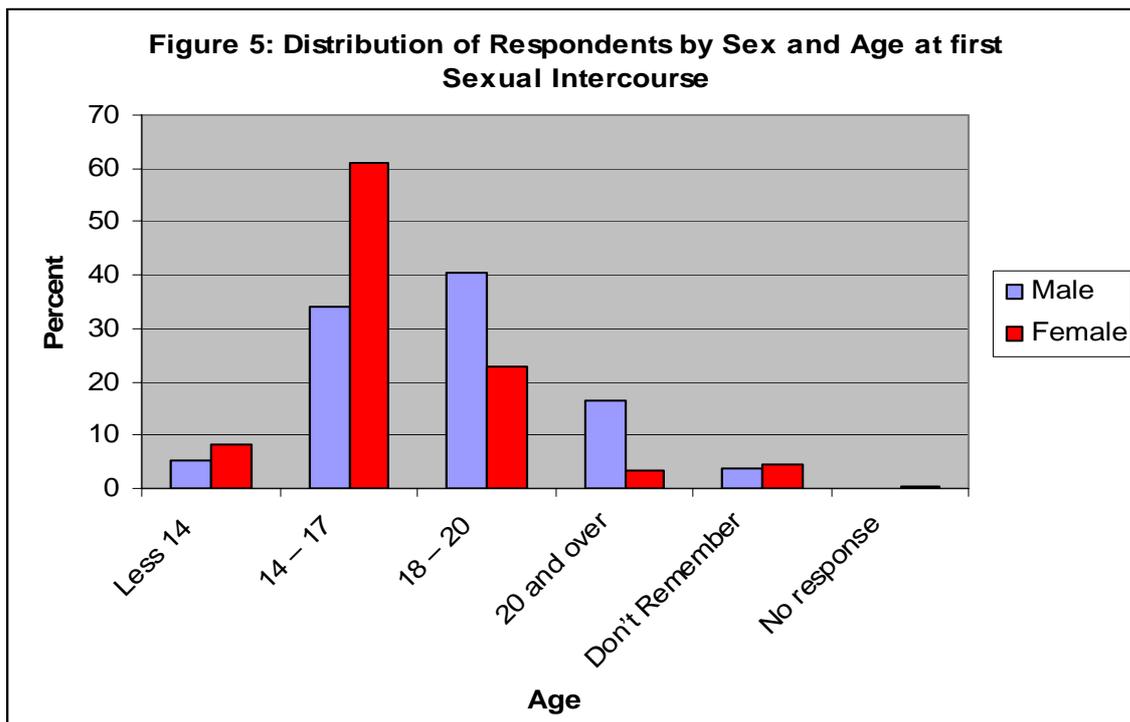


Table 10 shows that 89.3 percent of the respondents had sex with consent and 10 percent were forced. The data for males were 94.4 percent consent and 5.2 percent.

Survey show that homosexuality is evidence in Liberia. The data in table show that 8 respondents. 4 males and female had sexual relationships with males and females respectively as indicated in Table 11.

Table 10: Percent distribution of respondents by sex and description of first sexual intercourse

| Description | Male (n = 1,083) | Female | Total |
|-------------|------------------|--------|-------|
| Force       | 5.2              | 16.9   | 10.0  |
| Consent     | 94.4             | 82.0   | 89.3  |
| No response | 0.4              | 1.1    | 0.7   |
| Total       | 100.0            | 100.0  | 100.0 |

Table 11: Number of respondent by place of residence man / woman had sex with men.

| Residence | Men | Women |
|-----------|-----|-------|
| Urban     | 3   | 3     |
| Rural     | 1   | 1     |
| Total     | 4   | 4     |

Polygamous marriages and multiple sexual relations practices in Liberia. Survey data in Table 12 show that 58.6 percent of respondents had more one or multiple sexual partner in the last 12 months. The average number of sexual partners was 2.7. Moreover, 60.8 percent were observed for males and 55.4 percent for female. These practices are conducted for sexual transmitted infections and HIV/AIDS transmission.

The data showed that most of sexual partners were adolescents. The age of last sexual partners is shown in Table 13.

It was observed that 14.9 percent of respondents had sex with persons who were less than 19 years of age, 19.2 percent among male respondents and 8.6 percent for females.

Table 12: Percent distribution of respondents by sex and number of sexual partners in the last 12 months.

| Number of sexual partners | Sex   |        |       |
|---------------------------|-------|--------|-------|
|                           | Male  | Female | Total |
| None                      | 3.5   | 2.4    | 3.0   |
| One                       | 35.7  | 42.2   | 38.4  |
| 2 – 3                     | 32.2  | 22.5   | 28.2  |
| 4 – 5                     | 12.8  | 14.0   | 13.3  |
| 6 – 7                     | 3.5   | 6.4    | 4.7   |
| More than 7               | 7.3   | 5.6    | 6.6   |
| Don't know                | 3.4   | 4.5    | 3.9   |
| Not response              | 1.6   | 2.4    | 1.9   |
| Average                   | 100.0 | 100    | 100.0 |

Table 13: Percent distribution of respondents by sex and age of last sexual partner.

| Age of last partner | Male (n = 1,083) | Female (n = 756) | Total (n = 1,939) |
|---------------------|------------------|------------------|-------------------|
| Less 14             | 0.6              | 0.7              | .07               |
| 15-18               | 1.6              | 7.9              | 14.2              |
| 19 – 24             | 32.1             | 19.2             | 28.8              |
| 25 and over         | 42.6             | 64.9             | 51.8              |
| No response         | 6.1              | 7.3              | 6.6               |
| Total               | 100.0            | 100.0            | 100.01            |

The survey findings revealed that 31.7 percent had sex with someone who they met for the first or picked up from bar/club/drinking spot. The proportions by sex revealed that more females were picked up, 35.5 percent compared 29.1 percent for males. Figure 6 shows that 46.2 percent picked or were picked sexual partner from night club/bar or drinking spot. About 38.6 percent of male respondents picked sexual partners from night club/drinking spot compared to 55 percent of females that were picked. Other places where they met or picked sexual partners included market and public gathering of 13 percent respectively street was 11 percent and noted/guest house was 8.2 percent.

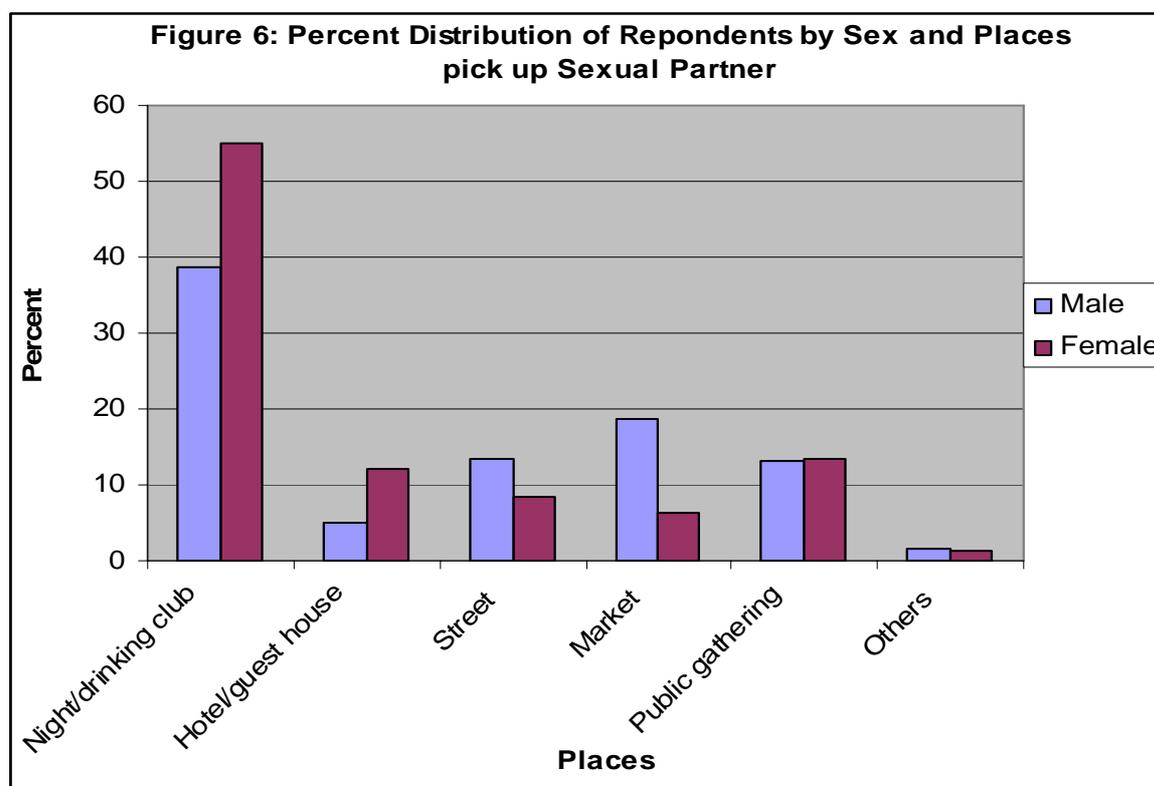


Table 14 indicates the time respondent picked/met or were picked by sexual partner. It was observed that about a quarter of respondents picked/met a partner a week before the survey.

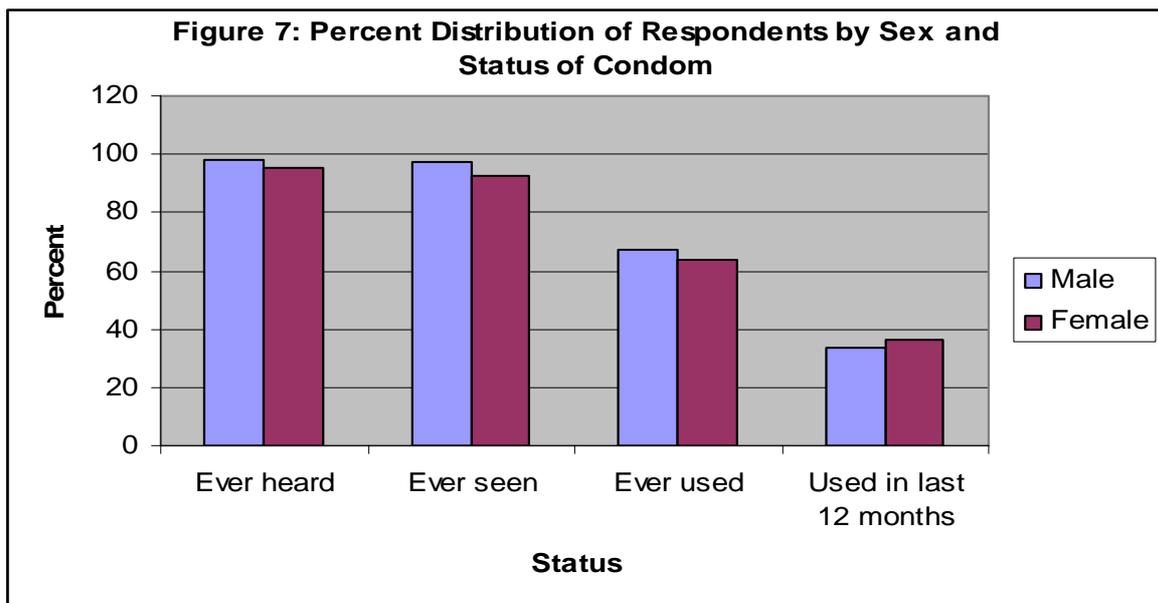
The distribution by sex show that 33.6 percent of females respondents were met compared to 14.5 percent male respondents. Moreover, 21.5 percent of respondents met sexual partner more than 4 week ago.

Table 14: Percent distribution of respondents by sex and last time picked/met sexual partner.

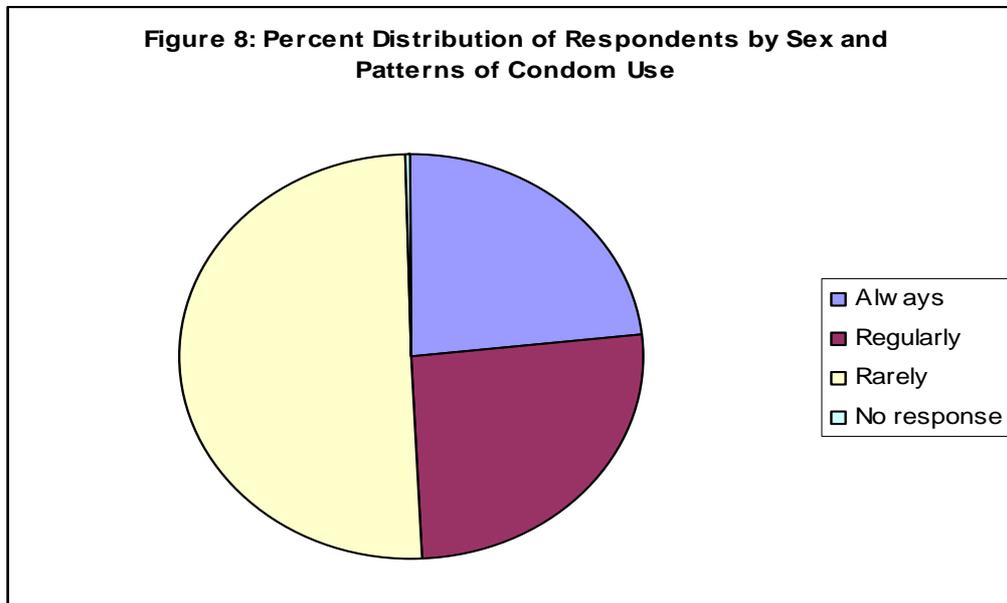
| Last time         | Male  | Female | Total |
|-------------------|-------|--------|-------|
| This week         | 11.4  | 24.1   | 17.3  |
| Last week         | 14.5  | 33.6   | 23.3  |
| 2 week ago        | 12.4  | 15.7   | 13.9  |
| 3 weeks ago       | 10.2  | 7.7    | 9.1   |
| 4 weeks           | 8.4   | 3.5    | 6.2   |
| More than 4 weeks | 34.3  | 6.7    | 21.5  |
| No response       | 8.7   | 8.7    | 8.7   |
| Total             | 100.0 | 100.0  | 100.0 |

### Condom usage

Due to the role condom plays in the prevention of sexual transmitted infections and HIV/AIDS, the respondents were ask on knowledge and usage of condom. The data in Figure 7 revealed that 96.8 percent of the sexually active respondents have heard of condom; 98.2 percent for males and 95 percent for females. Moreover, 95.2 of respondent have seen condom while 65.6 percent have ever used condom. However the current use of condom is relatively low. About 34.7 percent, 36.1 percent females and 33.7 percent male used condom in the last months of the survey.



The information on the pattern of use indicated that 51.4 percent rarely used condom during sex. However, 26 percent of respondents use condom regularly compared to 23.8 percent of respondents that use condom always as in Figure 8.



Negotiation of condom use was assessed during the survey. The relevant data revealed the negotiation ability among the respondent was 36.1 percent, 37.6 percent female and 35 percent for males. Table 15 shows 64.4 percent was observed for self and 23.1 percent was conjoint decision for condom use during sex. 11.9 percent was observed for partner.

Table 15: Percent distribution of respondent by sex and negotiation pattern for condom use.

| Negotiation       | Sex            |                  |                 |
|-------------------|----------------|------------------|-----------------|
|                   | Male (n = 379) | Female (n = 284) | Total (n = 663) |
| Myself            | 65.2           | 63.4             | 64.4            |
| Partner           | 11.1           | 13.0             | 11.9            |
| Conjoint decision | 23.0           | 23.3             | 23.1            |
| No response       | 0.7            | 0.3              | 0.6             |
| Total             | 100.0          | 100.0            | 20.5            |

Table 16 shows that 47.4 percent of respondents source of condom was from pharmacy and 34.5 percent from NGO/CBO. About 30.5 of respondents had condom from friends and 24.4 percent from health centers. Other sources of condom among the respondent included private clinic, 21 percent and 19.8 percent from hospital among other sources.

Table 16 Percent Distribution of respondents by sex and source of condom

| Source                  | Male (=379) | Female (=284) | Total (n=663) |
|-------------------------|-------------|---------------|---------------|
| Hospital                | 18.7        | 21.1          | 19.8          |
| Community health Center | 25.1        | 23.6          | 24.4          |
| Private Clinic          | 20.6        | 21.5          | 21.0          |
| Pharmacy                | 45.6        | 49.6          | 47.4          |
| Market                  | 8.7         | 9.5           | 9.0           |
| Store                   | 5.8         | 4.2           | 5.1           |
| NGO/CBO                 | 34.0        | 35.2          | 34.5          |
| Friends                 | 28.8        | 32.7          | 30.5          |
| Condom Vending outlet   | 3.7         | 3.2           | 3.5           |
| Others                  | 5.3         | 2.8           | 4.2           |
| No response             | 0.5         | 1.8           | 1.1           |

#### Non – use of condom

The data from the study that 64 percent of the respondents were non – users of condom. Moreover, reasons for non use of condom was sought. Table 17 show that 20.1 percent of respondents did not use condom because the were faithful to partner. About 22 percent of the respondent were males and 17.5 percent for females. Other reasons for non use were marriage, 14.8 percent for partner dislike of condom use. Moreover, reduction of sexual pleasure was 12.9 percent.

Table 17: Percent distribution of respondents by sex and reasons for non – use of condom.

| Reasons for non use         | Male | Female | Total |
|-----------------------------|------|--------|-------|
| Partners dislike            | 14.2 | 15.3   | 14.7  |
| Faithful to partner         | 22.0 | 17.5   | 20.1  |
| Married                     | 18.3 | 9.9    | 14.8  |
| Reduces pleasure            | 12.4 | 13.6   | 12.9  |
| Condom breaks/don't protect | 1.6  | 2.6    | 2.0   |
| Stomachache                 | 0.5  | 3.8    | 1.8   |
| Not available               | 6.6  | 4.9    | 5.9   |
| No money buy                | 2.6  | 0.4    | 1.7   |
| Remains in vagina           | 0.7  | 3.7    | 2.0   |
| Contraceptive               | 1.1  | 1.6    | 1.3   |
| Other                       | 10.6 | 11.2   | 10.9  |
| No response                 | 24.5 | 28.2   | 26.0  |

### 3.2.0 Knowledge and Attitude and Behavior of Sexually Transmitted Diseases

#### 3.2.1 Knowledge and Attitude

##### Knowledge on sexually infections

The survey revealed that 40.8 percent of respondents; 48.1 percent of the female respondents and 35.6 male respondents experienced some sexually transmitted infections 12 months before the survey. Table 18 shows that 48.8 percent of the females had bad smelling fluid and 46.5 had experiences sores on or around the vagina. The findings revealed that 61 percent of respondents experienced lower abdominal pain.

Table 18: Percent distribution of female respondents by type of sexual infections experienced in last 12 months.

| Type of infection      | Percent (n = 385) |
|------------------------|-------------------|
| Bad smell fluid        | 48.8              |
| Sores on around vagina | 46.5              |
| Lower abdominal pain   | 61.0              |

Meanwhile, Table 19 shows that 62.5 of male respondents experienced painful urinate and 37 percent abnormal discharge from pains. In addition, 27.3 percent had sore ulcer around penis while 2.3 percent experienced other sexually transmitted infection.

Table 19: Percent distribution of male respondents by type sexually transmitted infections experienced in 12 months.

| Type of infection        | Percent (n = 403) |
|--------------------------|-------------------|
| Abnormal penis discharge | 37.0              |
| Sore/ulcer round penis   | 27.3              |
| Pain when urinating      | 62.5              |
| Others                   | 2.3               |

The respondents were asked where they sought treatment for the symptoms experienced. About 80.6 percents of respondent sought treatment in health facility; 39.1 percent in private in pharmacy as in Table 20. The data that 10.9 percent sought treatment from traditional healer and 3.8 percent did not seek any treatment. About 4.7 percent of respondent sought treatment from other sources.

The type of services received is presented in Table 21 about 87.6 percent received drugs and 22.8 percent had laboratory tests. Treatment with herbs was 6.7 percent, 8.5 percent received counseling services compared 4.7 percent for condom demonstration provision.

Table 20: Percent distribution of respondents by sex and type of service received for symptoms.

| Place sought treatment   | Male (n = 403) | Female (n = 385) | Total (n = 788) |
|--------------------------|----------------|------------------|-----------------|
| Did not seek treatment   | 3.2            | 4.4              | 3.8             |
| Traditional health       | 14.1           | 7.5              | 10.9            |
| Private medical clinic   | 33.8           | 44.7             | 39.1            |
| Government health clinic | 29.5           | 30.1             | 29.8            |
| Pharmacy                 | 13.2           | 10.1             | 11.7            |
| Total                    | 100.0          | 100.0            | 100.0           |

Table 21: Percent distribution of respondents by sex and type of service received for symptoms

| Types of service               | Sex            |                  |                 |
|--------------------------------|----------------|------------------|-----------------|
|                                | Male (n = 403) | Female (n = 385) | Total (n = 788) |
| Drugs                          | 85.9           | 89.4             | 87.6            |
| Herbs                          | 6.7            | 6.8              | 6.7             |
| Counseling                     | 9.7            | 7.8              | 8.5             |
| Condom demonstration provision | 5.0            | 4.4              | 4.7             |
| Laboratory tests               | 18.4           | 27.5             | 22.8            |
| None                           | 3.2            | 4.2              | 3.7             |
| Others                         | 16.6           | 12.2             | 14.5            |
| No responses                   | 2.5            | 3.6              | 3.0             |

Table 22: Percent distribution of respondents by sex cured by treatment

| Sex    | Percent |
|--------|---------|
| Male   | 88.4    |
| Female | 85.9    |
| Total  | 87.2    |

The survey sought information from respondents on the action or prevention for transmission sexually infection to someone. The data revealed that 40.8 percent of respondents; 48.1 percent females and 35.6 percent males did something to avoid transmitting sexual infections to other people.

Table 23 indicated that among those respondents who did something to prevent six sexual transmitted infections, 44.8 percent stopped having sex and 24.4 percent did nothing for sexual infection transmissions.

The data indicated 10.5 percent of respondents, 14 percent female knew that they had sexual infection had ever had sex. Moreover, 5 percent of respondents, 5.6 percent females and 4.5 percent knew that partner had sexual infections had ever had sex.

Table 23: Percent distribution of respondents by sex and action to prevent sexually transmitted infections to some one.

| Actions taken      | Male (n = 403) | Female (n = 385) | Total (n = 788) |
|--------------------|----------------|------------------|-----------------|
| Stopped having sex | 46.2           | 43.2             | 44.8            |
| Used condoms       | 24.8           | 23.9             | 24.4            |
| Total partners     | 6.0            | 9.1              | 7.4             |
| Nothing            | 13.6           | 9.1              | 11.8            |
| Not applicable     | 6.9            | 10.1             | 8.5             |
| Other              | 1.0            | 1.6              | 1.3             |
| No responses       | 1.5            | 1.0              | 1.3             |
| Total              | 100.0          | 100.0            | 100.0           |

The survey data show that 73.3 percent of respondents, 77.7 percent males and 67.1 percent females could described sexually transmitted infection. Table 24 shows 89.6 percent Liberia Security Personnel and 8.6 percent UNMIL personnel could describe sexual infections. About 76.4 and 75.6 percent were observed for drivers and commercial sex workers respectively. About 68 percent for unemployed;68.1 percent for farmers and 67.5 percent among students.

Table 25 show that 93.8 percent of respondents, 95.9 percent males and 90.3 percent females indicated that sexual transmitted infections can be transmitted through unprotected sexual intercourse. Meanwhile, 30.1 percent and 25.4 percent respondents indicated that sexual infection can be transmitted through blood transfusion and unsterized objects respectively. Matter to her unborn child was 10 percent and other made of sexually infections was 11.7 percent.

Moreover, Figure 9 show mean of prevention of sexually transmitted infections. About 81.4 percent of respondents 82.9 percent males and 79 percent females revealed that sexually transmitted infection can be prevented through use of condoms. Faith to one partner was 51

percentages, 51.2 percent males and 50.8 percent females as means to prevent sexual infections. abstinence was 33 percent for sexual infection preventions among others.

Table 24: Percent distribution of respondents by sex and occupation who can describe sexually transmitted infections.

| Occupation                  | Male (n = 879) | Female (n = 537) | Total (n = 1,416) |
|-----------------------------|----------------|------------------|-------------------|
| Unemployed                  | 77.4           | 59.8             | 68.5              |
| UNMIL                       | 85.7           | 88.9             | 86.0              |
| Liberian security personnel | 91.1           | 80.6             | 89.6              |
| Students                    | 67.9           | 67.1             | 67.5              |
| Farmers                     | 73.3           | 58.9             | 68.1              |
| Drivers                     | 78.0           | 52.9             | 76.4              |
| Trader                      | 77.6           | 69.6             | 73.9              |
| Commercial sex worker       | 94.4           | 74.1             | 75.6              |
| Others                      | 68.6           | 63.9             | 66.5              |
| No response                 | 77.8           | 57.9             | 64.3              |
| Total                       | 77.7           | 67.1             | 73.3              |

Table25: Percent distribution of respondents by sex and mode of sexually transmitted infections

| Mode of transmission          | Male | Female | Total |
|-------------------------------|------|--------|-------|
| Unprotected sexual infections | 95.9 | 90.3   | 93.8  |
| Blood transfusion             | 28.9 | 32.0   | 30.1  |
| Unsterized objects            | 24.9 | 26.3   | 25.4  |
| Mother to her unborn child    | 10.1 | 9.7    | 10.0  |
| Other                         | 9.9  | 14.7   | 11.7  |
| No response                   | 5.6  | 4.5    | 5.2   |

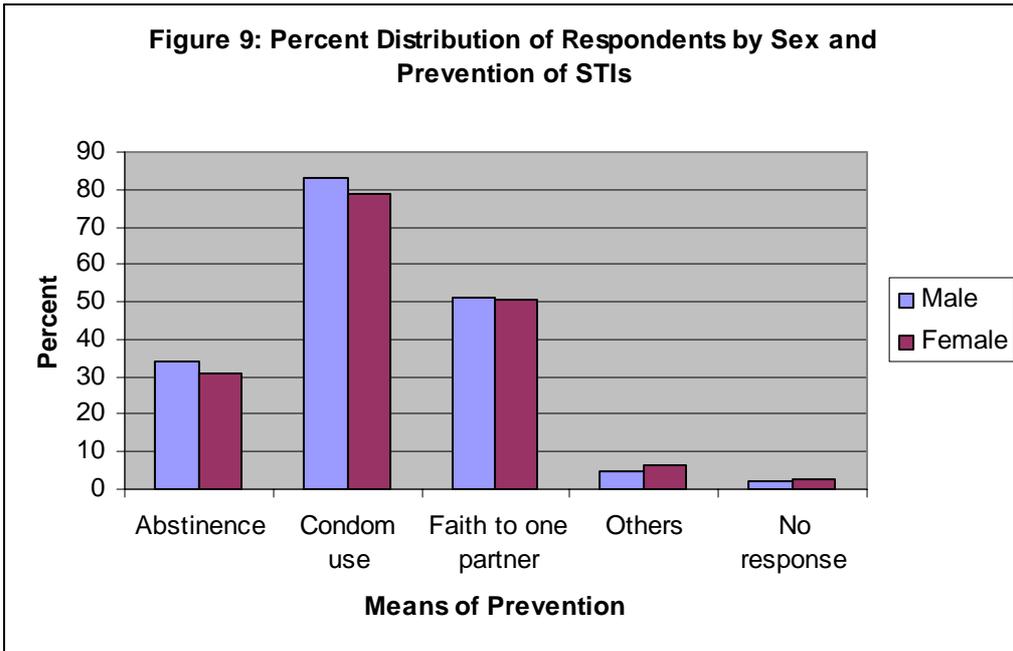
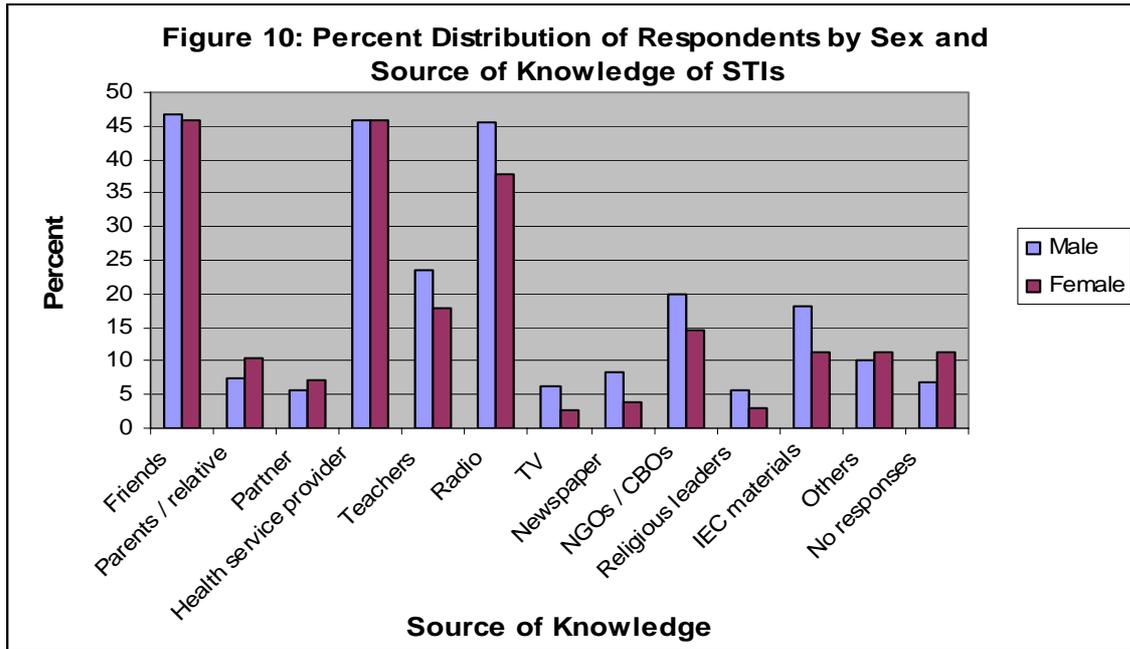


Figure 10 show that the major sources of knowledge sexually transmitted infections were friends, 46.3 percents; health services provider, 45.8 percent and radio, 42.3 percent. Other sources of information were teachers, 21.2 percents; 17.7 percent NGOs / CBOs and 15.3 percent for IEC materials.



The findings of the survey in Table 26 revealed that 55.9 percent of respondent indicated that sexually transmitted infections increase risk to HIV/AIDS compared 45.3 percent single respondents.

Table 26: Percent distribution of distribution of respondents by sex and marital status who indicated that sexually transmitted infections increase risk to HIV/AIDS.

| Marital status                         | Sex            |                  |                   |
|--|----------------|------------------|-------------------|
|  | Male (n = 697) | Female (n = 383) | Total (n = 1,080) |
| Single                                 | 36.7           | 61.0             | 45.3              |
| Legally married and living with spouse | 31.4           | 17.2             | 26.4              |
| Married but separated by work          | 11.3           | 1.6              | 7.8               |
| Living together                        | 17.9           | 15.4             | 17.0              |
| Separated                              | 1.7            | 1.6              | 1.4               |
| Divorced                               | 1.3            | 1.6              | 1.4               |
| Widowed                                | 0.1            | 0.8              | 0.4               |
| No response                            | -              | 0.8              | 0.3               |
| Total                                  | 100.0          | 100.0            | 100.0             |

### 3.3.0 KNOWLEDGE AND ATTITUDE TOWARD HIV/AIDS

#### 3.3.1 Knowledge

The HIV/AIDS pandemic is an extremely serious health and socio-economic development problem. HIV/AIDS is a national threat. It has been observed that the future course of HIV/AIDS prevention depends to large extent on awareness, knowledge and attitude among the general population as well as behavior change and improved provision and utilization of preventative measures. The data obtained in this study give opportunity to assess the level of knowledge attitude and behavior regarding HIV/AIDS in the selected countries.

The data obtained from the study revealed 98.3 percent of respondent, 98.7 percent males and 97.9 percent have heard of HIV/AIDS. The distribution by occupation as in Table 27 show that about 99 percent among unemployed, drivers and traders respectively have of heard of HIV/AIDS. About 98 percent were observed among UNMIL, Liberia Security Personnel commercial sex workers and students respectively.

Table 27: Percent distribution of respondent by sex and occupation who have heard of HIV/AIDS

| Occupation                 | Sex  |        |       |
|----------------------------|------|--------|-------|
|                            | Male | Female | Total |
| Unemployed                 | 48.5 | 51.1   | 99.6  |
| UNMIL                      | 57.8 | 40.5   | 98.3  |
| Liberia Security Personnel | 57.8 | 40.5   | 98.3  |
| Students                   | 50.1 | 47.8   | 97.9  |
| Farmers                    | 61.4 | 34.2   | 95.7  |
| Drivers                    | 92.7 | 6.5    | 99.2  |
| Traders                    | 53.8 | 45.3   | 99.2  |
| Commercial sex worker      | 57.8 | 40.5   | 98.3  |
| Others                     | 53.0 | 43.8   | 96.8  |

Figure 11 show that radio constituted 63.8 percent 68.7 percent for males and percent female as the major source of HIV/AIDS in the selected countries. In addition, health provider was 55.8 percent and 49.4 percent for friends/peers. Moreover, IEC materials were 30 percent while 25 percent and 24.3 percent were observed for teachers and NGOS / CBOS respectively. Other sources such as, TV, and Newspaper were 13.6 and 11.2 percent respectively among other sources.

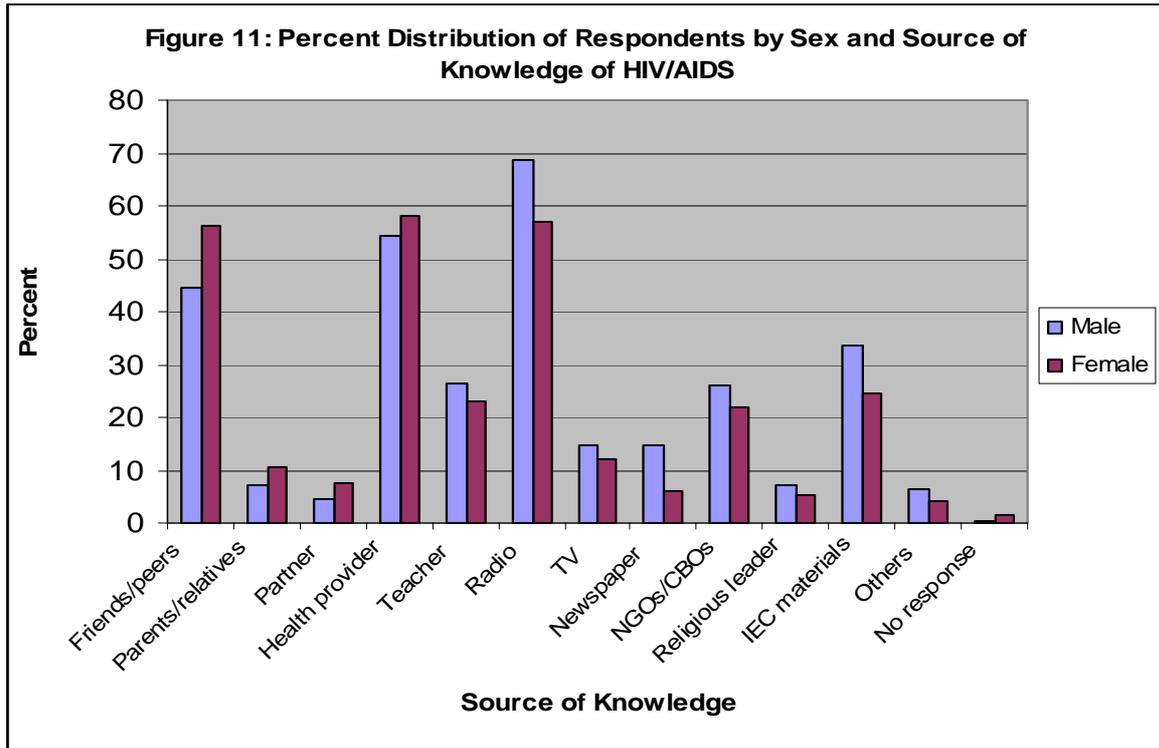


Table 28 show that 85.6 percent, 86.9 percent males and 83.7 percent females indicate that unprotected sex with infected persons was the major transmission of HIV/AIDS. Other male of transmission include using sharp/piercing instrument, 70.9 percent; the use of blood transfusion, 61.3 percent and from mother to unborn child 25.9 percent among others.

The respondents were on the method of HIV/AIDS prevention as in Table29. About the 75 percent indicated that the use of condom was one way for the prevention of HIV/AIDS. Other ways of preventing HIV/AIDS cited by the respondents included faithful to one un infected partner, 66 percent; avoiding sharing sharp/piecing instrument, 49 percent and 32 percent for abstinence among others.

Table 28: Percent distribution of respondent by sex and mode of HIV/AIDS transmission

| Mode of transmission                 | Sex              |                  |                   |
|--------------------------------------|------------------|------------------|-------------------|
|                                      | Male (n = 1,117) | Female (n = 783) | Total (n = 1,900) |
| Unprotected sex with infected person | 86.9             | 83.7             | 85.6              |
| Blood transfusion                    | 62.4             | 59.6             | 61.3              |
| Using sharp/piercing instrument      | 73.8             | 66.9             | 70.9              |
| From mother to unborn child          | 28.3             | 22.3             | 25.9              |
| Mosquito bite                        | 4.8              | 4.3              | 4.6               |
| Witchcraft                           | 1.2              | 0.6              | 0.9               |
| Sharing food                         | 1.7              | 0.9              | 1.4               |
| Sharing toilet                       | 1.6              | 0.9              | 1.3               |
| Others                               | 3.0              | 4.9              | 3.8               |
| No response                          | 4.1              | 5.0              | 4.5               |

Table 29: Percent distribution of respondents by sex and method of HIV/AIDS prevention

| Mode of prevention                         | Sex           |               |                |
|--|---------------|---------------|----------------|
|  | Male (n=1118) | Female(n=784) | Total (n=1902) |
| Abstinence                                 | 32.1          | 31.9          | 32.1           |
| Use of condom                              | 77.4          | 71.4          | 74.9           |
| Faithful to one uninfected partner         | 67.9          | 63.6          | 66.1           |
| Avoid sharing sharp/piercing instrument    | 52.5          | 44.5          | 49.2           |
| Avoid pregnancy when infected with HIV     | 15.3          | 13.0          | 14.4           |
| Avoid sharing food with infected persons   | 3.0           | 2.6           | 2.8            |
| Avoid sharing toilet with infected persons | 1.3           | 1.1           | 1.3            |
| Avoid hugging an infected persons          | 1.1           | 1.7           | 1.3            |
| Others                                     | 2.9           | 4.2           | 3.4            |
| No response                                | 3.8           | 5.4           | 4.4            |

The respondents were to rate risky behavior of activity toward HIV/AIDS. The data in Table 30 revealed that 91.1 percent of respondent said that sex with someone who has HIV/AIDS without using condom constituted high risk. Other high risky behavior included sex with prostitute without condom, 87.8 percent ; having many sexual partners, 81.3 percent receiving blood transfusion, 76.7 percent for tattooing, scarification piercing. Sex with homosexuals was 59.7 percent and 35.7 percent for intravenous drugs use.

Table 30: Percent distribution of respondents by risk behavior

| Risk behavior                              | Level of risk behavior percent |      |      |       |
|--|--------------------------------|------|------|-------|
|  | No                             | Low  | High | Total |
| Kissing a person with HIV/AIDS             | 55.6                           | 29.2 | 15.2 | 100.0 |
| Sex with someone with HIV/AIDS with condom | 1.4                            | 7.5  | 91.1 | 100.0 |
| Oral sex with condom                       | 17.7                           | 32.3 | 50.0 | 100.0 |
| Sex with prostitute with out condom        | 28.1                           | 44.3 | 27.6 | 100.0 |
| Giving blood                               | 15.2                           | 19.7 | 65.1 | 100.0 |
| Receiving blood transfusion                | 5.1                            | 18.5 | 76.4 | 100.0 |
| Witchcraft                                 | 78.9                           | 12.7 | 8.3  | 100.0 |
| Drinking unclean water                     | 77.1                           | 15.2 | 7.7  | 100.0 |
| Anal sex without condom                    | 11.8                           | 22.2 | 65.9 | 100.0 |
| Tattooing/scarification piercing           | 11.1                           | 24.8 | 64.1 | 100.0 |
| Having many sexual partners                | 6.2                            | 12.5 | 81.3 | 100.0 |
| Drinking excessive alcohol                 | 69.8                           | 22.1 | 8.2  | 100.0 |
| Intravenous drugs use                      | 30.1                           | 34.3 | 35.7 | 100.0 |
| Sex with homosexuals                       | 16.3                           | 24.0 | 57.7 | 100.0 |

Table 31 show the rate/chance of HIV/AIDS infection.

It was observed that 56.9 percent of respondent that they low chance of HIV/AIDSs infection. About 13.3 percent had moderate chance of HIV/AIDS infections compared to 3 percent of respondent very high chance of HIV/AIDS infection.

Table 31: Percent distribution of respondents by sex and rate/chances of HIV/AIDS infection.

| Rate / chances | Male (n = 1,117) | Female (n = 783) | Total |
|----------------|------------------|------------------|-------|
| Low/absent     | 57.9             | 55.6             | 56.9  |
| Moderate       | 13.3             | 13.3             | 13.3  |
| High           | 4.4              | 4.0              | 4.2   |
| Very high      | 3.8              | 1.8              | 3.0   |
| Don't know     | 20.6             | 25.4             | 22.6  |
| Total          | 100.0            | 100.0            | 100.0 |

### 3.3 ATTITUDE TOWARD PEOPLE WITH HIV/AIDS

It has been documented that people with HIV/AIDS face stigma, social discrimination and rejection. There is a need to educate people about HIV/AIDS to overcome these prejudice bias. The attitude and care for people living HIV/AIDS are important and vital in designing

The survey data established that about 8.7 percent or 168 respondents indicated that they know someone with HIV/AIDS. Of this number 103 males and 65 females Figure 12 shows that 76.2 percent of respondents mentioned health care providers as sources of their knowledge, while 56.5 percent of respondents' knowledge was from physical appearance. About 36.3 percent of respondents said that their knowledge of HIV/AIDS persons in the community and 31.5 percent of respondents were from the infected persons.

Significant proportion of respondents expressed segregate behavior to people with HIV/AIDS. About 50.6 percent of respondents indicated that people with AIDS should isolated form the community.

In addition, 25 percent and 23 percent of respondents expressed that people with AIDS should be marginalized and stigmatized respectively. About 17.9 percent of respondents said that people with AIDS should abandoned by partner, while 13 percent agreed for rejection by parents and relatives. Only 31 percent of respondents advocated for the integration of HIV/AIDS in the community as in Table 32.

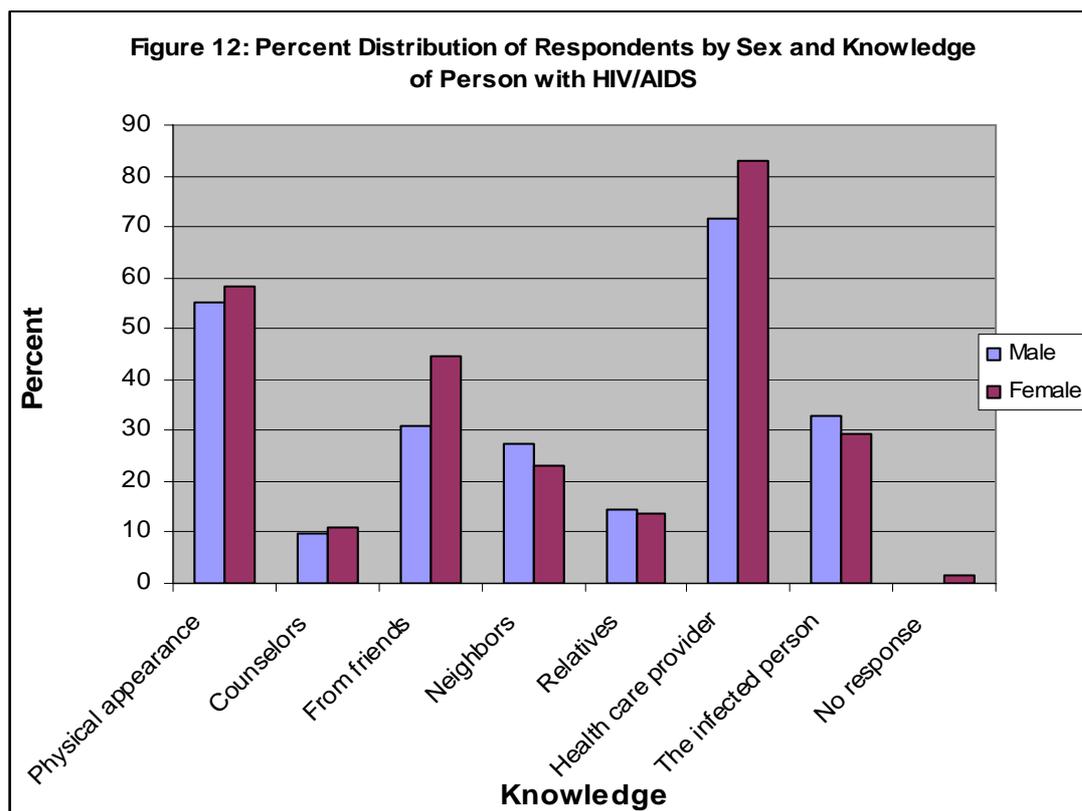


Table 32: Percent distribution of respondents by sex and attitudes / treatment of persons with HIV/AIDS

| Attitude                       | Sex          |               |              |
|--------------------------------|--------------|---------------|--------------|
|                                | Male (n=103) | Female (n=65) | Total(n=168) |
| Isolated                       | 50.5         | 50.8          | 50.6         |
| Marginalized                   | 24.3         | 26.2          | 25.0         |
| Stigmatized                    | 24.3         | 21.5          | 23.2         |
| Rejected by parent / relatives | 10.7         | 16.9          | 13.1         |
| Abandoned by partner           | 15.5         | 21.5          | 17.9         |
| Integrated in community        | 30.1         | 32.3          | 31.0         |
| No response                    | 92.2         | 90.8          | 91.7         |
| Total                          |              |               |              |

### 3.5 GENDER BASE VIOLENCE

#### 3.5.1 KNOWLEDGE OF GFENDER VIOLENCE

It has been documented that the Liberian civil conflict has exacerbated the violence against women. Hence, violence against women is widespread and increasing. Rape was used a weapon of war. Females relative of perceived enemies were rape and tortured. Forced “marriage” of women to rebel and their commanders became a form of reward and “modus vivendi” during the conflict. Child soldiers publicly opened stomachs of pregnant women one taking a bet on the sex of the fetus.

The data from survey revealed that 56.0 percent of respondents, 56.7 male and 54.9 percent females believed that men and women should be equal. Moreover, Table33 show that 47.8 percent of respondents indicated that man should be in charge of sexual encounter. The results also show that 41.8 percent of respondents said both man and woman should lead the process sex.

The survey result show that 64.1 percent of respondent have heard of gender base violence. The leading sources of information on gender base violence as in Table 34 were radio, 70.8 percent and posters/placards, 45.1 percent. Training workshop sessions and humanitarian workers were 34 percent respectively among others.

The respondents were asked of what they think gender based violence covers. Table 35 show that 84.5 percent said that physical assault constituted gender based violence. About 78 percent of respondents mentioned sexual assaults and rape attempted rape as gender based violence.

Forced married was 67.7 and 57.1 percent and 55.4 percent from domestic abuse and verbal assault respectively were considered as gender based violence among others.

Table 33: Percent distribution of respondent by sex and who should be in change of sexual encounter.

| Who should be in charge | Male (n = 1,132) | Female (n = 800) | Total (n = 1,932) |
|-------------------------|------------------|------------------|-------------------|
| Man                     | 45.8             | 50.7             | 47.8              |
| Both                    | 43.3             | 39.6             | 41.8              |
| Don't know              | 2.5              | 3.3              | 2.8               |
| No response             | 0.7              | 0.9              | 0.7               |
| Total                   | 100.0            | 100.0            | 100.0             |

Table 34: Percent distribution of respondent and source of information of gender base violence.

| Source of information | Sex  |        |       |
|-----------------------|------|--------|-------|
|                       | Male | Female | Total |
| Radio                 | 71.1 | 70.1   | 70.8  |
| At training workshop  | 38.7 | 26.6   | 34.5  |
| Posters/placards      | 45.1 | 46.6   | 45.6  |
| Friends               | 14.7 | 22.1   | 17.3  |
| Humanitarian workers  | 34.9 | 32.2   | 34.0  |
| Others                | 7.0  | 5.4    | 6.5   |
| No responses          | 2.0  | 3.1    | 2.3   |

Table 35: Percent distribution of respondents by sex and term of gender base violence

| Term of gender base violence                    | Sex            |                  |                   |
|---|----------------|------------------|-------------------|
|   | Male (n = 814) | Female (n = 425) | Total (n = 1,239) |
| Physical assault                                | 86.0           | 81.6             | 84.5              |
| Sexual assault                                  | 78.7           | 79.3             | 78.9              |
| Verbal assault                                  | 57.1           | 52.2             | 55.4              |
| Forced marriage                                 | 63.8           | 63.5             | 63.7              |
| Domestic abuse                                  | 58.6           | 54.1             | 57.1              |
| Rape or attempted rape                          | 78.9           | 78.1             | 78.6              |
| Female circumcision / female genital mutilation | 36.2           | 29.4             | 33.9              |
| Don't know                                      | 1.4            | 1.2              | 1.3               |
| Others  | 0.2            | 0.5              | 0.3               |
| No response                                     | 0.7            | 1.9              | 1.1               |

### Gender violence practice

Table 36 show that 31.4 percent of respondents 33.6 percent female who have sex with children. About 30.7 percent knew anyone who have forced someone to have sex. Moreover, 29.2 percent of respondent knew someone who has forced woman for sex, while 12.8 percent knew anyone who forced man for sex.

The respondents were asked why people have sex with children under 18 years. Table 37 show that 50.3 percent said that people have sex with children mainly for sacrifice. About 12.6 percent was to gain strength and 4.5 percent for protection against disease among others.

The survey data indicated that 44.8 percent; 51 percent and 36.1 percent females will do anything to prevent gender based violence in the society.

Table 36: Percent distribution of respondents by sex and sexual knowledge

| Sexual Knowledge                      | Percent |        |       |
|---------------------------------------|---------|--------|-------|
|                                       | Male    | Female | Total |
| Anyone who have force a woman to sex  | 27.6    | 31.5   | 29.2  |
| Anyone who forced a man to sex        | 13.4    | 12.0   | 12.8  |
| Anyone who forced someone to sex      | 29.3    | 32.6   | 30.7  |
| Anyone who ever forced someone to sex | 8.0     | 6.0    | 7.2   |
| Anyone who forced sex with child      | 29.9    | 33.6   | 31.4  |

Table 37: Percent distribution of respondents by sex and reasons people have sex with children under 18

| Reasons                    | Sex  |        |       |
|----------------------------|------|--------|-------|
|                            | Male | Female | Total |
| Protection against disease | 5.7  | 2.9    | 4.5   |
| To gain strength           | 11.8 | 13.8   | 12.6  |
| Sacrifice                  | 47.8 | 53.9   | 50.3  |
| Others                     | 38.4 | 31.0   | 35.4  |
| No response                | 14.0 | 10.5   | 12.5  |

## CONCLUSION/RECOMMENDATIONS

The findings from the study revealed that the population faces high risks of HIV/AIDS sexually transmitted infections. The unstable sexual union and multiple sexual partner relationships practices among the population are predominant conduits for the spread of HIV/AIDS and sexually transmitted infections. For example 59.6 percent respondents were in unstable union. About 52.8 percent of respondents had multiple sexual partners.

In addition, 13.2 percent of respondents had multiple wives. Moreover, sexual promiscuity and prostitution or commercial sex is common in view of unemployment and mass poverty transposed by the civil conflict.

The major health problems were malaria, diarrhea, and yellow fever. Other cited unclouded typhoid and sexually transmitted infections and TB.

The survey indicated that 67 percent of respondents have access to health care. However, 13 percent did not have to access. The reasons for no access could not afford cost, lack of qualified services, drugs and long distance.

Data on sexual activity revealed that a little more than half of the respondents had sex before 18 years. Moreover, 89.3 percent of respondents had sex with consent. In addition, there is evidence of same sexual relationships among the study population.

The findings revealed high risky behavior among the population. About 32 percent of respondents had sex with someone who they met for the first time. The proportions by sex revealed that more females were picked, 35.5 percent compared to males. The places where they met or picked were night/drinking club, market and public gathering. About 23.3 percent met sexual partner week before the survey and 17.3 percent during the week of the survey. However, the usage of preventive measure such as the condom use during is not generally practiced. Of the 96.8 percent of the respondent who have heard of condom, 95.2 percent have seen it. However, 65.7 percent ever used condom compared to 34.7 percent used condom in the last 12 months.

About 51.4 percent of respondents rarely used condom during sex while 26 percent and 23.4 percent used condom regularly and always respectively.

The negotiation ability for condom used was 36.1 percent. Moreover, self negotiation was 64.4 percent compared to 23.1 percent for cojoint decision.

The major sources of condom were 47.4 percent from pharmacy, 34.5 percent NGOs/CBOs and 30.5 percent from friends. Other included health centers, private clinic and hospitals among others.

About 64 percent of respondents were non-users of condoms. The reasons for non-used were faithful to partner, marriage, partner dislike and reduction in sexual pleasure.

40.8 percent of respondents experienced some sexually transmitted infections in the last 12 months. About 48.8 percent of female respondent had bad smelling fluid and 46.5 percent had sores on or around the vagina while 61 percent experienced lower abdominal pain.

Among the males, 62.5 percent had painful or urination and 37 percent and 27.3 percent experienced abnormal pains discharge and sore/ulcer around penis respectively.

About 80.6 percent of respondents sought treatment in health facility and 39.1 percent in private clinic. Others included 11.7 percent in pharmacy and 10.9 percent traditional healers among others. The services received were drugs, 87.6 percent; 22.8 percent laboratory test among others.

About 42.8 percent of the sexually active respondents to some actions to prevent sexually transmitted infections. The actions taken were stopped sex, 44.8 percent and use of condom, 24.4 percent.

The study found that the mode of transmission of sexually transmitted infections were unprotected sex, 93.8 percent; blood transfusion 30.1 percent and 25.4 percent for unsaturated objects. Meanwhile, mother to her unborn child was 10 percent.

The results revealed that the major sources of knowledge of sexually transmitted infections were friends 46.3 percent; health service provider and radio, 42.3 percent. Other sources were teachers 21.2 percent; NGOs/CBO 17.7 percent and 15.3 percent for IEC materials

Majority of the respondents have heard of HIV/AIDS. The sources of information on HIV/AIDS were 63.8 percent for radio; health providers 55.8 percent and 49.4 percent for friends/peers. IEC materials were 30 percent while 25 percent and 24 percent were observed for teachers and NGOs/CBOs respectively. TV and News paper were 13.6 percent and 11.2 percent respectively.

Mode of transmission cited by respondents were unprotected sex with infected persons, 85.6 percent; 70.9 percent for using sharp/pie icing instruments and , 61.3 percent for blood transfusion. About 25.9 percent of respondents cited from mother to unborn child and 4.6 percent for mosquito bites among others.

About 75 percent indicated that condom use during sex was one way to prevent the spread of HIV/AIDS. Other means of prevention cited included faithful to one uninfected partner 66.1 percent, avoiding sharing sharp/piecing instrument, 49 percent and 32 percent for abstinence among others.

About 91.1 percent of respondents indicated sex without condom with person who has HIV/AIDS was high risk behavior. Other high risky behavior were sex with prostitute without condom, 87.8 percent, 81.3 percent for having many sexual partner, receiving blood transfusion, 76.4 percent, giving blood, 65.1 percent; tattooing/scarification piercing, 64.1 percent. Sex with homosexuals was 57.7 percent and 35.7 percent for intravenous drug use.

About 8.7 percent of respondents know someone with HIV/AIDS. Sourced of knowledge with HIV/AIDS were from health care provider, physical appearance and the infected persons.

Significant proportion of the respondents expressed segregated behavior toward people with HIV/AIDS. About 50.6 percent of respondents revealed that people with HIV/AIDS should be isolated from the community while 25 percent and 23 percent said the people with

HIV/AIDS should be marginalized and stigmatized respectively. Only 341 percent advocated for integration of HIV/AIDS persons.

The results of the study revealed that 56 percent believed that men and women should be equal. Moreover, 64.1 percent have heard of gender before violence. The leading sources of information were 70.8 percent for radio and 45.1 percent from posters/placards. Training workshop sessions and humanitarian were 34 percent respectively.

About 31.4 percent of respondents had sex with children and 30.7 percent knew anyone who has forced someone to have sex.

The survey results also indicated that's 50.3 percent of respondents said that people have sex with mainly for sacrifice, 12.6 percent to gain strength and 4.5 percent for protection against disease.

## **RECOMMENDATIONS**

The following recommendations are made for actions to interventions to prevent and control of sexually transmitted infections and HIV/AIDS and promote gender harmony:

- Promotion of responsible parenthood and family life education;
- Increase accurate information, education and behavioral change for the prevention of sexually transmitted infections and HIV/AIDS;
- Promotion of safe sex and sexual hygiene
- Promotion of condom use and condom availability;
- Establish and create positive attitude of community for people living with HIV/AIDS;
- Promotion of health care delivery;
- Promotion gender harmony and female economic empowerment

## SUGGESTED INTERVENTION AND STRATEGIC PROGRAMMES

The following problems/issues and situation have been identified and required actions for the prevention of sexually transmitted infections and HIV/AIDS and promotion of gender harmony.

| Problem/situations and issues/condition  | Program<br>Issues/intervention   |
|--|--|
| Unstable union, 59.1 percent; and multiple sexual partner relationship, 58.6 percent; 31.7 percent had sex with someone who they met / picked for the first time from night/drinking spot. | Promotes responsible parenthood and family life education.                               |
| Limited and inaccurate knowledge of STIs and HIV/AIDS  | Increase accurate knowledge STIs and HIV/AIDS prevention education and behavioral change |
| High prevalence of STIs, 40.8 percent have experienced STIs which increase high risk for HIV infection.  | Promote of safe sex and sexual hygiene family l  |
| Low condom use, 34.7 percent used condoms in last 12 months and 23.8 percent always used condom during sex.  | Promote condom use and its availability  |
| Poor general health condition, high rate of malaria, diarrhea, yellow fever.   | Promote health care  |
| High prevalence of stigmatization/ prejudice and discrimination of people with HIV/Aids  | Establish and create positive attitude for people living with HIV/AIDS                   |
| Evidence of gender based violence against women and female vulnerability.  | Promotion of gender harmony and female economic empowerment.                             |

Appendix

Table 1A: Percent distribution of married male respondents per number of wives.

| Number of wives | Percent (n = 628) |
|-----------------|-------------------|
| Along           | 9.6               |
| One             | 74.7              |
| Two             | 11.1              |
| Three           | 1.9               |
| Four and over   | 0.2               |
| No response     | 2.5               |
| Total           | 100.0             |

Table 2A: Percent distribution of educational status by sex.

| Education level     | Sex              |                  |                   |
|---------------------|------------------|------------------|-------------------|
|                     | Male (n = 1,132) | Female (n = 800) | Total (n = 1,932) |
| None                | 12.3             | 18.3             | 14.8              |
| Primary (61 - 6)    | 15.1             | 34.0             | 22.9              |
| Junior (7 - 9)      | 23.3             | 29.5             | 25.8              |
| Senior (10 - 12)    | 36.7             | 15.9             | 28.1              |
| Vocational Teaching | 4.0              | 15.9             | 2.6               |
| University          | 8.0              | 1.2              | 5.2               |
| Others              | 0.6              | 0.5              | .06               |
| Total               | 100.0            | 100.0            | 100.0             |

Table 3A: Percent distribution of respondents by religion and sex.

| Religious   | Sex              |                  |                   |
|-------------|------------------|------------------|-------------------|
|             | Male (n = 1,132) | Female (n = 800) | Total (n = 1,932) |
| Christian   | 50.1             | 57.7             | 53.3              |
| Muslims     | 13.4             | 6.3              | 10.5              |
| Traditional | 0.8              | 0.5              | .07               |
| No religion | 1.7              | 2.2              | 1.9               |
| Other       | 0.1              | 0.4              | 0.2               |
| No response | -                | 0.4              | 0.1               |
| Not stated  | 33.9             | 32.5             | 33.3              |
| Total       | 100.0            | 100.0            | 100.0             |

Table 4A: Percent distribution of respondents by sex health center.

| Health concern                 | Male (n = 1,1132) | Female (n = 800) | Total (n = 1,932) |
|--------------------------------|-------------------|------------------|-------------------|
| Malaria                        | 77.1              | 78.3             | 77.6              |
| TB                             | 13.4              | 14.5             | 13.9              |
| Diarrhea                       | 37.6              | 32.8             | 35.6              |
| Yellow fever                   | 17.5              | 19.0             | 18.1              |
| HIV/AIDS                       | 7.0               | 7.0              | 7.0               |
| Sexually transmitted infection | 10.8              | 13.3             | 11.8              |
| No response                    | 7.2               | 8.1              | 7.6               |

Table 5A: Percent distribution of respondents by sex and age at first sexual intercourse.

| Age            | Male (n = 1,083) | Female (n = 756) | Total (n = 1,939) |
|----------------|------------------|------------------|-------------------|
| Less 14        | 5.1              | 8.1              | 6.3               |
| 14 – 17        | 34.0             | 61.0             | 45.1              |
| 18 – 20        | 40.5             | 22.8             | 33.2              |
| 20 and over    | 16.4             | 3.3              | 11.0              |
| Don't Remember | 3.9              | 4.5              | 4.1               |
| No response    | 0.1              | 0.4              | 4.1               |
| Total          | 100.0            | 100.0            | 100.0             |

Table 6A : Percent distribution of respondents by sex by place they met or pick up sexual partner.

| Place met/picked         | Male (n = 329) | Female (n = 284) | Total (n = 613) |
|--------------------------|----------------|------------------|-----------------|
| Night club/drinking spot | 38.6           | 54.9             | 46.5            |
| Hotel/guest house        | 4.9            | 12.0             | 8.2             |
| Street                   | 13.4           | 8.5              | 11.0            |
| Market                   | 18.8           | 6.3              | 13.1            |
| Public gathering         | 13.1           | 13.4             | 13.2            |
| Others                   | 1.5            | 1.4              | 1.5             |
| Total                    | 100.0          | 100.0            | 100.0           |

Table 7A: Percent distribution of respondents by sex and status of condom.

| Status of condom       | Male (n = 1,083) | Female (n = 756) | Total (n = 1,939) |
|------------------------|------------------|------------------|-------------------|
| Ever heard             | 98.2             | 95.0             | 96.8              |
| Ever seen              | 97.1             | 92.3             | 95.2              |
| Ever used              | 67.0             | 63.5             | 65.6              |
| Used in last 12 months | 33.7             | 36.1             | 34.7              |

Table 8A: Percent distribution of respondents by sex and pattern of condom use.

| Pattern of condom use | Sex            |                  |                   |
|-----------------------|----------------|------------------|-------------------|
|                       | Male (n = 726) | Female (n = 480) | Total (n = 1,206) |
| Always                | 21.5           | 23.8             | 23.8              |
| Regularly             | 22.3           | 31.4             | 26.0              |
| Rarely                | 55.8           | 44.8             | 51.4              |
| No response           | 0.4            | -                | 0.2               |
| Total                 | 100.0          | 100.0            | 100.0             |

Table 9A: Percent distribution of respondent by sex and means of sexually transmitted infections can be prevented.

| Means of STI prevention | Male | Female | Total |
|-------------------------|------|--------|-------|
| Abstinence              | 34.2 | 31.1   | 33.0  |
| Condom use              | 82.9 | 79.0   | 81.4  |
| Faith to one partner    | 51.2 | 50.8   | 51.0  |
| Others                  | 4.6  | 6.2    | 5.2   |
| No response             | 2.0  | 2.6    | 2.2   |

Table 10A: Percent distribution of respondents by sex and sources of knowledge on sexually transmitted infections.

| Source of knowledge | Sex              |        |       |
|---------------------|------------------|--------|-------|
|                     | Male (n = 1,132) | Female | Total |
| Friends             | 46.7             | 45.8   | 46.3  |

|                         |      |      |      |
|-------------------------|------|------|------|
| Parents / relative      | 7.3  | 10.4 | 8.6  |
| Partner                 | 5.8  | 7.1  | 6.4  |
| Health service provider | 45.8 | 45.9 | 45.8 |
| Teachers                | 23.5 | 17.9 | 21.2 |
| Radio                   | 45.5 | 37.8 | 42.3 |
| TV                      | 6.3  | 2.8  | 4.8  |
| Newspaper               | 8.3  | 3.8  | 6.4  |
| NGOs / CBOs             | 19.9 | 14.6 | 17.7 |
| Religious leaders       | 5.7  | 3.1  | 4.6  |
| IEC materials           | 18.2 | 11.3 | 15.3 |
| Others                  | 10.0 | 11.4 | 10.6 |
| No responses            | 6.7  | 11.3 | 8.6  |

Table 11A: Percent distribution of respondent by sex and source of information on HIV/AIDS

| Source of information | Sex              |                  |                   |
|-----------------------|------------------|------------------|-------------------|
|                       | Male (n = 1,117) | Female (n = 783) | Total (n = 1,800) |
| Friends/peers         | 44.6             | 56.2             | 49.4              |
| Parents/relatives     | 7.1              | 10.6             | 8.5               |
| Partner               | 4.6              | 7.4              | 5.7               |
| Health provider       | 54.3             | 58.0             | 55.8              |
| Teacher               | 26.3             | 23.1             | 25.1              |
| Radio                 | 68.7             | 57.0             | 63.8              |
| TV                    | 14.7             | 12.0             | 13.6              |
| Newspaper             | 14.7             | 6.1              | 11.2              |
| NGOs/CBOs             | 26.0             | 22.0             | 24.3              |
| Religious leader      | 7.0              | 5.1              | 6.2               |
| IEC materials         | 33.6             | 24.6             | 30.0              |
| Others                | 6.6              | 4.2              | 5.6               |
| No response           | 0.4              | 1.4              | 0.8               |

Table 12A: Percent distribution of respondents by sex and knowledge of persons with HIV/AIDS

| Knowledge            | Sex         |              |              |
|----------------------|-------------|--------------|--------------|
|                      | Male(n=103) | Female(n=65) | Total(n=168) |
| Physical appearance  | 55.3        | 58.3         | 56.5         |
| Counselors           | 9.7         | 10.8         | 10.1         |
| From friends         | 31.1        | 44.6         | 36.3         |
| Neighbors            | 27.2        | 23.1         | 25.6         |
| Relatives            | 14.6        | 13.6         | 14.3         |
| Health care provider | 71.8        | 83.1         | 76.2         |
| The infected person  | 33.0        | 29.2         | 31.5         |
| No response          | -           | 1.5          | 0.6          |

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