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## Development of a Health Education Strategy for Adolescents to Prevent Maternal Mortality in Liberia.

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報 告

## Development of a Health Education Strategy for Adolescents to Prevent Maternal Mortality in Liberia

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### [Abstract]

#### PURPOSE

In 2003 at the conclusion of the 14 year civil war in Liberia the Liberian Ministry of Health and Social Welfare listed the reduction of maternal mortality as a critical health need. However, the maternal mortality ratio in Liberia continued to increase.

It was the purpose of this study to identify the contributing factors that led to the increased maternal mortality. As a result of our analyses, we developed a health education strategy for adolescents to prevent unwanted pregnancy, one of the contributing factors of maternal mortality.

#### METHODS

A review of literature and systematic discussions with health promotion agencies provided data for this study. Clinical information about Japan was made by the researcher during visits to three clinical sites. The clinical information about Liberia was gathered by e-mail and telephone.

#### FINDINGS

In Liberia 42% of the population are women between the reproductive ages of 15 to 49. Three community hospitals reported a total of 511 maternal deaths in 2006/2007 and 284 (55.6%) were adolescents. This number of adolescent deaths was especially high.

We analyzed the factors that influenced maternal health and categorized the findings into five areas: (1) lack of adequate knowledge and poor communication, (2) gender inequities, (3) economic, social, and cultural problems, (4) lack of a comprehensive abortion policy, and (5) poor accessibility to health care.

We developed a picture drama to demonstrate the unmet needs of adolescents in the community and to provide comprehensive sexual and reproductive health education.

#### CONCLUSION

The health promotion material addresses the need for sex education and empowerment of young people regarding reproductive health. It can be administered by health workers or peer educators in Liberia.

[Key words] maternal mortality, adolescent, Liberia, health promotion materials, pregnancy

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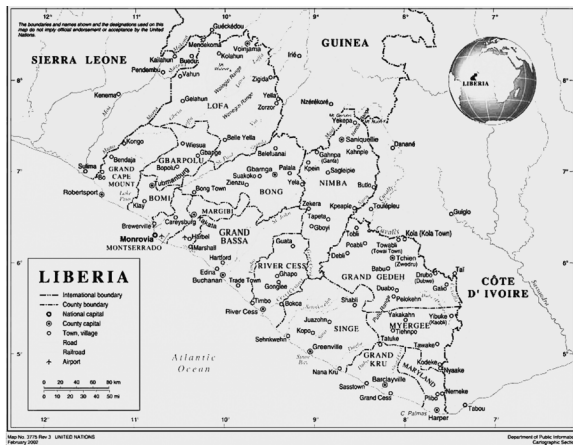


Fig.1 Map of Liberia

Table1. Demography and Socioeconomic Status of Liberia and Japan

	Liberia (2006/2007)	Japan (1950)	Japan (2006)
Population	3,283,000	83,199,637	129,085,000
Area of Country (km <sup>2</sup> )	99067	377,873	377,873
Population of age by (%)			
0-14 years	37	35.37	14.20
15-64 years	59	59.69	65.70
65+ years	4	4.94	20.00
Population growth rate (%)	4.4	17.2	0.02
Official Language	English	Japanese	Japanese
Religion	Christian	Buddhism	Buddhism
Literacy rate (%) Male/Female	72.8/50.4	99	100
Gross Domestic Product (GDP per capita), (\$USD)	485	1,060	27,967
Unemployment rate (%)	85	2.0	4.4
Total water coverage (%)	62	30	96.7
Culture	multicultural (16)	Multicultural (few)	Multicultural (few)

## INTRODUCTION

The purpose of this paper is to present the current situation in Liberia with regards to maternal mortality and to describe an innovative educational program aimed at reducing adolescent maternal mortality. Influential social, cultural and political contextual variables are addressed. Selected comparisons are made between Liberia and Japan which adds an important perspective.

### 1. Demographic outline of Liberia<sup>1)</sup>

Liberia is a small, tropical, developing country located on the west coast of Africa. The country generally has tropical rainforest vegetation, characterized by a predominance of leguminous trees and a small volume of timber trees. It occupies an area of 99,067 square kilometers. Liberia has 15 administrative areas, called counties. The population is about 3.3 million. It is multicultural with many languages. It has 16 major ethnic groups that make up their indigenous population. The protracted and violent 14 year long war that concluded in 2003, left Liberia with numerous economic, political, health and socio-cultural problems. The Liberian civil war created a major humanitarian crisis throughout the country. The Integrated Regional Information Network<sup>2)</sup> reported that "Liberia is going through difficulties in its public health system because of lack of manpower, lack of hospitals, clinic, and of roads which create delays in getting help. Thus, in obstetrics and maternal health, any delay is a big problem" (p 1-4) .

### 2. Maternal Mortality

In the last two decades, the goal of preventing the death of women during child birth has gained wider attention and urgency. Indeed, reducing maternal mortality is one of the eight priorities of the Millennium Development Goals set by Member States of the United Nations. The ambitious goal of reducing maternal mortality by 75% by 2015 presents a formidable challenge.<sup>3)</sup> In 2005 developing countries accounted for 99% (533,000) of the estimated 536,000 maternal deaths, worldwide. Slightly more than half of the maternal deaths (270,000) occurred in the sub-Saharan Africa region alone, followed by South Asia (188,000). Thus, sub-Saharan Africa and South Asia accounted for 86% of the global maternal deaths.<sup>4)</sup>

### 3. Adolescents Health

The focus of this program was women's reproductive health in Liberia's postwar context which had led to an increased maternal mortality; there was special emphasis on female adolescents because of their vulnerability. Female adolescents carry the brunt of the consequences of unwanted pregnancy leading to morbidity or mortality. In addition most female adolescents must now be the bread winners for the family in Liberia because their parents are poor, having lost everything in the civil war.

According to the World Situation Report around Adolescents<sup>5)</sup>, many adolescents do not have the skills to protect themselves from pregnancies and other risk conditions. Therefore, many adolescents are forced to work as sex workers. In addition, because of their social position, their opinions to say no to various male forces including the negotiation of condom use is often demeaned and refused by their male counterparts.

According to Mesce<sup>6)</sup>, globally abortion-related deaths account for 13 % of all pregnancy related deaths. This study also estimated that unsafe abortions were responsible for nearly 33% of maternal deaths in West Africa, and in sub-Saharan Africa, unsafe abortions accounts for as much as 50% of maternal deaths. In Africa, about 25% of the unsafe abortions are among teenagers (ages 15 to19); this is a higher proportion than any other region in the world.

#### **4. Teenage Pregnancy in Liberia**

The incidence of teenage pregnancy in the country is a major cause for concern. Many of the teenage mothers are between 12 to 14 years and are at risk for numerous complications associated with pregnancy. The increasing number of illegal and unsafe abortions adds another horrific dimension to this complex situation. Liberia poverty reduction strategy<sup>7)</sup> revealed that teenage pregnancy rate was over 68% among 15 to 19 years and HIV prevalence rate is 0.9 percent. An estimated 23% of adolescent girls gave birth before the age of 18. According to a UNCEF survey, evaluating teenage pregnancy, Liberia rated the highest in Sub-Sahara Africa.<sup>8)</sup>

### **PURPOSE**

It was the purpose of this study to identify the contributing factors leading to the increase in maternal mortality. Based on our findings, we developed the health education strategy for adolescents to prevent unwanted pregnancy.

### **METHOD**

We gathered statistical data about maternal and child health in both Liberia and Japan to enhance our perspective. We did a comparative study between Liberia and Japan with the intent to identify system weaknessness with the ultimate goal of exploring ways to improve and strengthen maternal and child health. Additionally, activities in one country can help those in another to improve their ability to achieve certain goals.

Review of research literature and discussion with health promotion agencies also provided data for this study. The clinical information about Japan was from clinical observations made by the researcher during three clinical site visits. The clinical information about Liberia was gathered by e-mail and telephone calls to clinicians in Liberia. We used the statistical information published in a variety of reputable data sources (see Reference List).

### **FINDINGS**

#### **1. Demographic and Socioeconomic Statistics**

Table 1 shows the statistics of both Liberia<sup>9)</sup> and Japan.<sup>10)</sup> Keep in mind that at different points in time both Liberia and Japan suffered prolonged massive devastation related to war. In 1950, the population ages 0 to 14 years in both Liberia and Japan were somewhat similar. However, by 2006, Liberia had 2.6 times more early teens than Japan. The over 65 years of age population in Liberia for 2006 was the same as in Japan in 1950. Amazingly, in 2006, the population in Liberia was five times smaller than that of Japan. Presently, literacy rates, employment rates, and GDP are lower in Liberia than in Japan.

In 1950, compared to Japan, the water coverage in Liberia was two times larger because Japan just ended the World War Two and all hydro-systems were destroyed. By comparison, in 2006, the water coverage in Liberia was 1.56 times lower because Liberia civil war ended in 2003 and all their hydro-system were destroyed.

Table2. Health Statistics & Human Resources:  
Comparison Between Liberia and Japan

	Liberia (2006-07)	Japan (1950)	Japan (2006)
Birth rate/1000 Population	43.8	10.9	9.4
Mean life expectancy (M/F)	41/44	63.6/67.8	79.0/84.7
Total fertility rate per women	6.8	3.7	1.4
Maternal mortality rate	994	161.2	4.8
Infant mortality rate	72	60.1	2.6
Human resources for health, total number:			
Gynecologist	(-)	6,623	9592
Physicians	103	94,563	277, 927
Midwife	446	55,356	25 ,775
Traditional Birth Attendants	2,875	(-)	(-)
Health facilities in numbers:			
Hospitals	18	5 ,119	9, 266
Clinics	286	51 ,349	92, 824
Public Health Centers	50	691	576 (2003)

Table3. Reproductive Health:  
Comparison between Liberia and Japan

	Liberia( 2006/2007 )	Japan (1950 )	Japan( 2006)
Economic Status	Fair (less than \$2 per day)	Fair	Excellent
Family Planning	Little information	Moderate	More information
Access to health facilities	Poor	Poor	Easy access
Contraceptive rate (%)	11	19.5	52% (2004)
Health Insurance	None	Limited in scope	Universal Coverage (excluding abortion)
Adequate health professionals	Limited	Limited	Abundant
Harmful traditional practices	In part of rural areas	None	None
Gender issues	Fair ( more priority for boys)	Fair (formal sector)	Good
Human sexuality - discuss openly	Maximum restrictions	Maximum restriction	Minimum restriction Excellence
Decision making concerning ones: Health, Abortion Legality	Fair Yes, maximum restrictions	Fair Yes, maximum restriction	Yes, with minimum restrictions

## 2. Vital Statistics, Human Resources, and Health Facilities

The vital statistics clearly demonstrate the severity of Liberia's reproductive health issue. (Table 2) Liberia records about 994 deaths per100, 000 live births among women between the reproductive age s 15 to 49. These deaths are due to five major direct causes; 1) postpartum hemorrhages, 2) complication from unsafe abortion, 3) sepsis, 4) hypertensive disorders of pregnancy (eclampsia), and 5) uterine rupture from obstructed labor.

Compared to Japan,<sup>11)</sup> the 2006 total fertility rate in Liberia is two times higher than in 1950 and five times higher in 2006. The current birth rate in Liberia compared to Japan is four times higher than in 1950 and 2006. Contraceptive usage rate in Liberia is low because of poor accessibility and misconceptions surrounding family planning. Compared to Japan, the 2006 maternal death per 100,000 live births in Liberia is 6.2 times

Table4. Comparison of Maternal Mortality from  
Three Community Hospitals in Liberia

	(A)Bong county (Rural area) (2007)	(B)Redemption (City) (2006/2007)	(C)MSF Spain Paysneville (City) (2007)
<b>Total deliveries</b>	<b>12,380</b>	<b>2,648</b>	<b>4,202</b>
<b>No. of Deaths per 1000 live birth</b>	<b>446</b>	<b>53</b>	<b>12</b>
<b>Mortality Rate (%)</b>	<b>3.6</b>	<b>2.0</b>	<b>0.2</b>
<b>No. of Adolescent's death</b>	<b>268</b>	<b>16</b>	(-)
<b>Ratio of Death (%)</b>	<b>60</b>	<b>30</b>	(-)

higher than in 1950 and 207 times higher in 2006. The contributing factors are: 1) poor maternal health care services, 2) early teen's mother, 3) restrictive abortion laws, 4) poor nutrition, and 5) low level of education (Public Health at a Glance, 2006).<sup>12)</sup>

The 2006 infant mortality rates (IMR) of Liberia and the 1950 rates in Japan were very similar. However, compared to the 2006 IMR rates, Liberia had a much larger rate of IMR than Japan. In Liberia primary causes of infant mortality are due to: 1) early motherhood (12 to 14 years old), 2) poor nutrition, and 3) limited access to pediatric care<sup>7)</sup>.

In comparing Liberia's human resources for health with Japan, one finds that Liberian physicians are 1.1 times fewer than that of Japan in 1950 and 2.2 times fewer than in 2006. For Liberian midwives as compared to Japan, there is no notable difference. The fact is, Japan has more trained and qualified health professionals than Liberia. From statistical data and my clinical observations, Japan is a well developed nation, with many specialties doctors, and has more advanced medical technology.

### 3. Reproductive health

Table 3 shows the contrast of reproductive health problems and social status. By comparison the Liberian household family lives on 2 US dollars per day for food, whereas Japan uses approximately 20 US dollars per day for food<sup>13)</sup>. This means that the more money women have for food the better able they are to care for themselves.

Liberian contraceptive rate is two times lower than that of Japan in 1950 and five times lower in 2006. The reasons are the lack of information surrounding contraceptive, family planning and accessibility.

Liberia female literacy rate is two times lower than that of Japan. This is due to the Liberia culture prioritizing boys over girls. Gender discrimination existed long before the civil crises. Now this situation is changing, because Ellen Johnson-Sirleaf, our female president, has made primary education free to all especially prioritizing females.

### 4. Adolescent's death cases from community hospitals

Accurate statistics regarding the total number of maternal deaths especially as it relates to unsafe abortion are difficult to obtain; neither medical nor nonmedical personnel documented the abortion cases. The following information highlights the seriousness of reproductive health problems in Liberia.

Table 4 displays the annual maternal statistics from (three of the few available) health institutions in Liberia. The Hospital (see column A) for the Bong County Health Team is located at the central part of Liberia and has 36 clinics to supervise. These clinics submit monthly maternal cases to the Phebe hospital. Presently only 20

clinics are functional. In 2007 the Bong County Health Team documented a total of 12,380 obstetrics consultations. A total of 446 deaths per 1,000 live births were recorded and 268 (60%) of those were adolescents. The three major causes of death were: hemorrhage, eclampsia, and complications from unsafe abortion.

In 2006/2007 Redemption, a government hospital (see column B) run by an NGO and located Monrovia, the capital city, providing free maternal care services, recorded a total of 2,648 births. Of the 53 maternal deaths, adolescents accounted for 16 (30%).

A Hospital (see column C), also located in Monrovia and run by an NGO, MSF Spain, in 2007, received 4,202 aternal consultations. A total of 12 deaths were recorded. Unfortunately, no age break down was available.

Of the total 19,230 births, 511(2.7%) ending in maternal death the adolescent portion was 284 (56.9%). This figure is probably lower than the actual yearly incidence because of the lack of data from the MSF supported hospital.

## **FACTORS THAT INFLUENCE MATERNAL HEALTH**

After reviewing the reproductive health statistics, complimented by reading statistical data records and the tables above, we were able to analyze and categorize those data into five areas that need attention in order to reduce material's death in Liberia. Those areas are; lack of adequate knowledge and poor communication, gender inequities, economic, social, and cultural problems, lack of comprehensive abortion policy, and poor accessibility.

### **1. Lack of adequate knowledge and poor communication**

As Liberia sojourns to the path of stability and peace, the problems of limited health information and poor communication continue. The Liberian Ministry of Health and Social Welfare (MoHSW) has listed reduction of maternal death as one of the key goals in the National Health Policy. However, little has been done to promote reproductive health awareness education among the populace, and it does not adequately address issues related to adolescent reproductive health. There are many who do not have accurate information surrounding reproductive health, including contraception and family planning. There are also some who have misconceptions on the use of contraception.

Sexual education remains taboo in most societies because of general discomfort talking about these issues. There is a widespread ignorance among young people of the risks associated with unprotected sexual activity. Sources of information and contraceptive advice are rarely available or accessible to them.

Poor communication is also a barrier to improve one's health.

Because of societal norms, parents and health personnel find it difficult to discuss sexuality openly with children. As a result, these adolescents get most of their sex information from their peers with only a small amount from school. In the Liberian society, adults have not encouraged adolescents to discuss health related issues freely without embarrassment.

### **2. Gender problems**

In Liberia, violence against females has existed since 'time immemorial' to the present day. There is also gender inequality when it comes to decision making. Most decision making at the household level is considered to be the right of males in the society. Gender imbalance is reflected in the illiteracy rate in the country<sup>14</sup>.

Although the Ministry of Gender and Development has been established to address and mainstream corrections to gender problems in the country, it seems as though little or nothing is being done to improve the plight of women rights in Liberia. Women continue to suffer at the hands of those in power. The state, security apparatus, individuals, family and the community act with impunity as they routinely violate women's' rights; they are not held accountable for the violations. Almost on a daily basis, there are numerous reports of violations of women rights, according to the UNICEF survey evaluation on teenage pregnancy<sup>14</sup>.

A study by Hunt & Mesquita<sup>15)</sup> stated that gender equality has a greater role to play in preventing maternal mortality than is currently happening. Gender equality and employment leads to greater demands for family planning services, antenatal care and safe delivery, and delaying adolescents pregnancy and preventing sexually transmitted diseases including, HIV/AIDS.

### 3. Economic, social, culture and religious problems

Recent economic indicators reflect the poor quality of life in Liberia. Although the government has expressed the concern about low economic status of the Liberians, improvement is slow. The current status of Liberian women is very low as is reflected in the literacy rate. According to<sup>14)</sup>, “this economic vulnerability of the women especially girls will force them to prostitution and sexual exploitation for the granting of goods, services and benefits” (p.28). The Hunt & Mesquita<sup>15)</sup> study revealed that the low social status of girls and women frequently contribute to their sexual and reproductive ill health. Culturally, there are harmful traditional practices that affect women and girls socially for example: denial of opportunities, forceful and early teenage marriages, and Female Genital Mutilation (FGM)<sup>14)</sup>.

Some religions disapprove of sex education, contraception and family planning before marriage being taught to adolescents. Researcher Hauser<sup>16)</sup> found that in the USA ‘abstinent only until marriage’ education had not produced a positive impact on sexual behaviors of adolescents. According to<sup>12)</sup> “Religion can affect one’s attitude towards education, sex, marriage, the use of contraception and abortion” (p 13) .

### 4. Lack of comprehensive abortion policy

Restrictive abortion policies may play a contributory role in the incidence of unsafe abortion leading to increased maternal mortality. There is an abortion policy in Liberia but it is highly restrictive<sup>17)</sup>. The law states that an abortion is only legal for a pregnancy that is the result of rape or incest or to preserve physical and mental health of the woman and for fetal impairment and when performed by two physicians or specialists in a government registered or private registered hospital or clinic. Moreover, abortion is considered illegal if done for economic or social reasons, or available on request for unwanted or unplanned pregnancy. Although in 2007, the Government of Liberia had expressed the concern about the high incidence of illegal abortions no definitive action occurred to reduce this problem especially amongst adolescents.

### 5. Poor accessibility

There are many barriers to accessing reproductive health, gaining early health treatment and managing emergencies. The government has embarked on training for many health staff, repairing of roads, and renovating some health infrastructures. However, the problems are still increasing; adolescents have great difficulty accessing family planning and contraception. Most of the services are provided in clinics. Adolescents are often too shy to visit a clinic considering what the community may think of them.

## PLANNING AND PROPOSING A PROGRAM

The Liberian population is highly youthful and the majority was affected during the civil war. Today, adolescents face huge challenges relating to lack of knowledge surrounding reproductive health education, misunderstanding of family planning, and poor communication.

However, the Government has explicitly stated that the reduction of illegal abortion and early teenage pregnancies are one of its major goals of the family planning programmed. From this prospective, we have decided to help adolescents value who they are. This requires providing them with a comprehensive and acceptable reproductive health education model that is sensitive to their rights, culture, and needs.

In keeping with that vision we selected two educational models. The first one is an approach written by Marshal et al.<sup>18)</sup> about Reproductive Health Awareness (RHA) based on four pillars as foundational supports namely: body awareness, gender, sexuality, and interpersonal communication. This model will be specifically



used for adolescents. The second model is by Braeken<sup>19)</sup>, titled “Parents role and responsibility”. This is directed towards parents as a parenting guide.

## **1. Philosophy: The Four Pillars of Reproductive Health Awareness (Marshal Model)**

### **1) Body awareness and self-care:**

In this section we teach how to pay close attention to the way one looks and feels on a regular basis. This means knowing and observing one’s own body well, including one’s basic functions, typical emotions, physical feelings, normal patterns, and changes. We should engage in early detection and prompt self-referral in order to take optimal care of one’s body.

### **2) Gender**

Gender includes socially constructed roles and responsibilities assigned to women and men in a given culture. This means we are born either female or male and as we grow up, we learn how to act and relate to others as women and men. Against this backdrop, gender awareness is looking at one’s self through the filter of our own culture.

### **3) Sexuality as explained**

In this section we explain that sexuality is an important part of each of us. It includes all the feelings, thoughts, and behaviors of being female and male. Therefore, it is important that as individuals we establish our own safe and healthy sexual norms, understand the norms of our society, and work to eliminate behaviors that are violent and unsafe.

### **4) Interpersonal Communication**

In this portion we teach that communication is the ability for one to be able to speak openly and frankly with one’s partner, children, parents, peers, and healthcare provider without embarrassment. This also teaches us to learn how to negotiate for safer sex.

Because of cultural and societal norms, maximum precautions will be taken to achieve the aim of this unique project.

## **2. Target populations: Health awareness materials to promote adolescents’ health**

The target audiences for this educational program are adolescents between the ages of 12 to 19 because they are the most vulnerable. A comprehensive educational plan involving various religious groups, social clubs and local authorities will be organized. There will be a role play with the charts concerning reproductive health to achieve our aim. Most of the Christian churches have special programs honoring Stewart (a member of a church congregation, who is hard working, dedicated, and community minded towards serving the church) by various departments in the church, for example: men, women, youth, and choir departments. This occasion will be used by group leaders among the congregation to sensitize others to the danger of early adolescents’ pregnancy.

Muslims may be restricted in their use of the mosque for educational space. However, they have an organized youth club in the community. During their regular meeting, we will use a few minutes to do a role play using the reproductive health charts and Marshall’s<sup>18)</sup> The Four Pillars of Reproductive Health Awareness to disseminate our message.

There are already established peer groups of adolescents in some communities and schools. They would be sensitized to our health program. Some adolescents will be trained to teach others about reproductive health. Research has shown that peer to peer education will be more comfortable and effective for youth. Nevertheless some adults will monitor their activities.

This program will also be used in our clinical settings. We would create a suitable time and place to provide a friendly service to the youth using the drama charts and the Reproductive Health Awareness Pillars.

It is our aim that some health educators, Parents Teachers Associations, community youth leaders, and stakeholders will work as partners to increase massive sensitization about the benefit of using condoms.

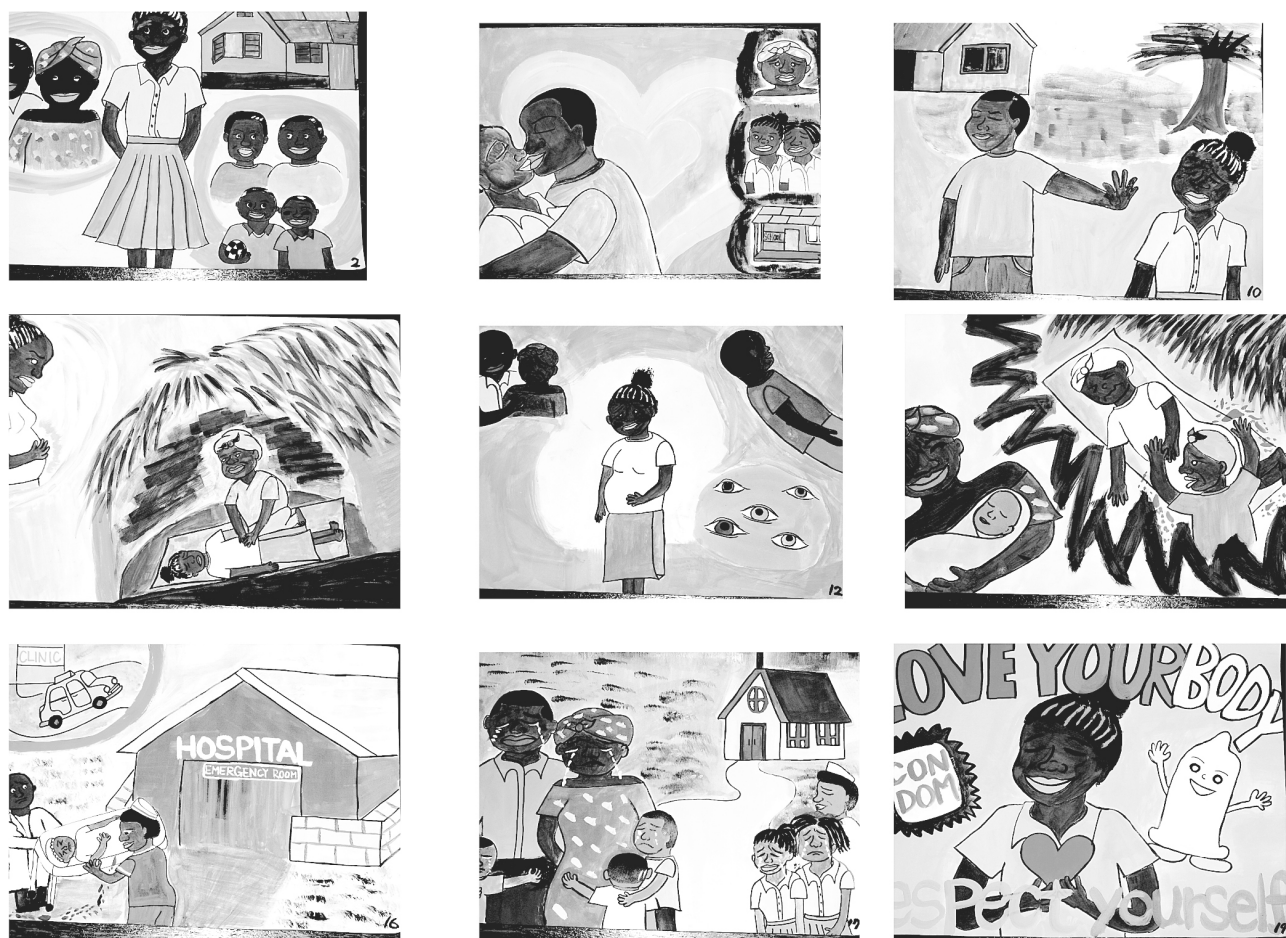


Fig.2. The Story of Adolescent Passion:Lila's Story

### 3. Teaching Materials

To respond to adolescents issues in the community, we have developed an effective community-based educational strategies and approaches to tackle the increasing rate of early teenage pregnancies and HIV/AIDS in Liberia. One example of these effects is the development of a “picture drama”. This powerful tool was designed for use by adolescents volunteer groups, community health volunteers, women's group, educators, etc, as means of changing attitude and behavior towards the fight against early and unwanted teenage pregnancies and the prevention of sexual transmitted infections (STIs) including HIV/AIDS.

#### 1)Title and story; The Story of Adolescent Passion: Lila's Story (Fig.2)

The picture drama demonstrates the unmet needs of adolescents in the community and provides a comprehensive sexual and reproductive health education and intervention. The picture drama tells the story of Lila, a young African girl who gets pregnant at age 14 with a boy who is age 20. Lila dies in childbirth.

2)Author and artists; Colar Johnson Clarke, author, with assistance from Mika Tohey and Aya Miyamoto, created a picture drama that depicts adolescents who engaged in unprotected sex leading to unwanted pregnancy and ultimately death.

3)Style: The material uses both 'trailing edge' and modern-day technology. There are 19 pictures of study drama material measuring 37cm by 26 cm. The front part of the material contains the artwork while the back has the written story. Each drama page is covered with a transparent sheet, which makes it easy to carry and to protect against water damage. The script is easy to understand and could be used in the area where is hard to reach and electricity inaccessible. The drama has also been recorded on a CD, which makes it easy to copy and to disseminate for popular for use.

#### **4) Professional Reaction to the Educational Strategy:**

This drama was introduced in 2008 at the 23<sup>rd</sup> Annual Meeting of Japan Association for International Health held on October 25<sup>th</sup>. At the conference, it received positive responses and comments that the drama will be useful in Liberia.

The drama addresses the need for sex education and empowerment of young people regarding reproductive health. The picture drama is a tool that illustrates the hazards of unprotected sex and unplanned pregnancy and can be administered by health workers or peer educators.

#### **4. Parents' Role and Responsibilities( Braeken Model)**

##### **1) Parents and children friendly guide**

There is a lack of communication that would provide assistance to and among parents and children about comprehensive sexual education. As a result there is a lack of accurate information and there are misconceptions about contraception including family planning. Based on this we would like to adapt the Braeken model to be used by parents to strengthen their own relationship and then with their children to improve the lives of their adolescents.

##### **2) Parents' roles and responsibilities about sex education**

Braeken explains, being a parent, you need to question yourself how much you want to be in control over your children; do you own your children or do you view them as an independent person? The moment you have a child, that child becomes part of your identity. But it is not the other way around. Often parents see the child as an extension of their identity instead of an individual in their own right.

Then, Braeken<sup>19)</sup> goes on to explain to parents, just because you do not want to repeat the same mistakes your parents made, doesn't mean that you are doing everything right or that you are less controlling. Education is very much about looking at you as a parent and understanding why you act in the way you do.

There is a guide for parents to help facilitate the communication between parents and children, see Box1; Simple steps to keep in mind.

**5.Evaluation** Our program for reproductive health education should be consistent and on-going to achieve the aim of the program. Evaluation using questionnaires, interviews and observation for behavior change will be done quarterly to assess its impact. Adolescents should be able to say whether they are able to use the taught negotiation skills, contraceptives, or abstinence methods. These results will help us measure our weaknesses or strength.

## **CONCLUSION**

The material addresses the need for sex education and empowerment of young people regarding reproductive health. It can be administered by health workers or peer educators in Liberia.

Reproductive health education will take a long time to dissemination for adolescents. However, recognition of the problems and starting an action is the first step to improve the issue and preferable to doing nothing at all. This program will contribute to the reduction of the unsafe abortion and thus the high ratio of maternal mortality.

## Box1. Simple steps to keep in mind(Doortje,2008)

- Observe your child:  
This is not about watching what he/she is doing but it is really trying to understand why your child behaves in a certain way; ask questions, stimulate communication between you and your child, without giving your opinion.
- Acknowledgement of what you observe:  
Just observing is not enough you need to be able to understand and interpret what you see; what lens are you using; your own norms and values; this includes looking at your selves, at the way you were educated and what you want to do similarly or differently.
- Trust:  
Do you see your child as an 'empty box', which you should make into a 'good person' (bound to fail) or do you believe your child is intrinsically good?
- Let go:  
Giving your child space to develop and make mistakes; space is of course defined by boundaries so it is right to say what you want and do not want. But if you say no to your child, say no to his/her behaviour or his/her request not to him or her as a person.

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