Review Article

HIV AND AIDS IN SIERRA LEONE: A PROGRAMMATIC SCENARIO

Alghali, S.T.O.1*, Alghali – kaitibi A F²

¹Department of Microbiology, College of Medicine & Allied Health Sciences, University of Sierra Leone ¹; HIV and AIDS Coordinator, US Embassy. ²

ABSTRACT

This review is a comprehensive description of the programmatic scenario in Sierra Leone's fight against HIV/AIDS.

It presents a situation analysis for HIV/AIDS infection including a range of prevention and treatment activities. The spread of the infection and disease would have damaging consequences if not controlled. The country's experience suggests that there are certain aspects of this development problem which require urgent and adequate attention. Among these are mainstreaming HIV/AIDS education and developing well coordinated programmes to protect orphans and other vulnerable children. Stigma and discrimination, treatment and the country's need to find sustainable resources for this complex, multi-faceted development problem which requires both short-term containment actions and long-term broad-based responses are elaborated on and extensively discussed hereunder

Key Words: HIV, Programmatic, Sierra Leone

	S.T.O ALGHALI Email: sidialghali@yahoo.com

BACKGROUND

HIV/AIDS is a complex, multifaceted, development problem requiring both shortterm containment actions and long-term, and broad-based responses; sustained, including a range of activities involving all levels virtually and sectors government and society. Rapid spread of HIV/AIDS would have damaging consequences for sectors such as education, social welfare, gender and children's affairs, transportation, social security, defence, agriculture, rural development, mining sector and the private sector, all of which are key for the future development of Sierra Leone. At the same time, each of these sectors could, in turn, provide significant contributions to the overall fight against HIV/AIDS.

Government and the National HIV/AIDS recognize Authority that the global HIV/AIDS pandemic constitutes formidable challenge to human life and dignity and to the full enjoyment of human rights (National HIV/AIDS, 2006). Sierra Leoneans also underscore that the struggle against HIV/AIDS cannot be separated from the struggle against poverty, which affects primarily women and children. HIV/AIDS pandemic is a medical, social and economic emergency affecting families and social structure, economic security, governability, security, national communal and international security.

Today in Sierra Leone, human security is being threatened by HIV/AIDS. The virus destabilizes society and the state in various ways. The economically active succumb to AIDS-related illnesses. Families, households, workplaces and communities

are disrupted, income levels are reduced, our social fabric undermined, and our economies weakened.

Sierra Leone's HIV transmission rates can be reduced if extensive prevention campaigns, supported by a very committed government reach and sensitize a large section of the population. A timely and extensive programme combining therapy and prevention will weaken the spread of this devastating infection significantly (WHO/UNAIDS/UNUICEF, 2010).

The National HIV/AIDS Secretariat has realised that a range of largely povertyrelated factors enables the spread of HIV. The higher the economic dependency of population groups, the lower their level of education and social status and the easier it is for the disease to spread unhindered among these groups. Poorer population groups – especially in rural areas – are on the whole much more difficult to reach through preventative programmes. Prevention and coverage programmes take comparably quicker hold in our urban areas among the better-off sections of society. A lack of empowerment of women, sex work, drug use, migration, as well as social and cultural misconceptions also contributes towards the rapid spread of HIV. The risk of infection remains high in ghettos where injecting drug users are not able to benefit from initiatives such as needle exchange and drug substitution programmes. The fight against HIV/AIDS is made even more

.....

Correspondence author: S.T.O ALGHALI Email: sidialghali@yahoo.com

difficult where risk groups and people living with HIV/AIDS are easily discriminated against and stigmatized (ARC/MOH, 2004).

The National HIV/AIDS Secretariat conducted a National Population-based Seroprevalence Survey in 2005 (NAS/MOH/GOSL/NIMBA 2005). The results therefrom indicated the prevalence in the study population is 1.53% (127 positives out of 8308 valid samples). Among the HIV antibody positives (67 samples) HIV-1 was dominant at a level of 91% (61 positives/67 samples), HIV-2 was 4.5% and dual HIV-1 and HIV-2 were also 4.5%. 60 of the 127 samples were negative for both HIV-1 and HIV-2 using an antibody discriminatory assay algorithm.

Prevalence by stratum indicated a higher prevalence in urban areas (2.1%) than the percentage in rural areas (1.3%). There was no significant (P>0.05) difference between male and female prevalence in the rural and urban areas. Age-specific prevalence for both males and females peaked at 15-24 years for young women (1.9%) and at 1.2% for older women aged 25-49 years. Male counterparts peaked at 35-39 years. HIV prevalence was higher in the age groups 15-19 and 20-24 years in females than males (NAS/MOH/ NIMBA, 2005).

These results are comparable to those in Liberia (PDF/UNGASS, 2008) (LIBERIA/MOH, 2009) and Ghana (PDF/UNGASS, 2007)where HIV prevalence was 1.5% – 1.7% among 15 – 49

years in a sub-national HIV prevalence survey in 2007. (UNAIDS Fact Sheet). Data from Nigeria indicated HIV prevalence among a similar cohort of 15 – 49 years old at an average of 2.6 – 3.6% (NACA 2010; WORLD BANK, 2008). Similar results from Kenya (MOH, KENYA 2005; NACC, 2008) showed an average prevalence among 15 – 49 years old at 5% and at 6.5% for Uganda (2005) (Govt. Uganda, 2009; PDF/UNGASS, 2007) (UNAIDS Fact Sheet).

2. Particularly Vulnerable Groups

Girls and women from poorer societal classes, are disproportionately affected by HIV/AIDS in Sierra Leone. In addition to them being biologically more susceptible to HIV infection through heterosexual contact, women do not have the necessary knowledge or the ability to assert themselves and protect themselves from an HIV due to insufficient infection sexual empowerment. This is particularly the case among young women, who can neither defend themselves properly against violence nor demand responsible sexual behaviour from their partners. A situation not dissimilar in Nigeria, Kenya or Uganda. (PDF/UNGASS/UNAIDS,2007)

An effective health care system staffed with enough adequately-trained health care workers is vital not only for delivering care and treatment but also to destignatize HIV/AIDS. Action on HIV/AIDS needs to be integrated with other services – sexual

Correspondence author: S.T.O ALGHALI Email: sidialghali@yahoo.com

and reproductive health care, including treatment for sexually transmitted infections. General access to a good quality health care system promotes equality between genders and different social groups. However, Sierra Leone has a challenge in the number and distribution of her health workforce.

Prevention among groups that are especially vulnerable to HIV infection should be seen as a priority, not as an option. The potential for rapid spread in these vulnerable groups forms a major risk factor for a rapidly growing epidemic. Programmes for young people need to take account of gender dynamics, where young boys and girls may be markedly different. When it comes to treatment, access to treatment and care will be comprehensive and should reach those in need, regardless of gender or social status. Special emphasis will be made to ensure that women and young girls get equal treatment.

Sierra Leone has advanced and developed gender equality, but we still have a long way to go (GOSL, 2008) GOSL ACT). The feminization of the HIV/AIDS pandemic shows in very cruel terms how far we are from equality. We know that equality and empowerment for both sexes involves many aspects: attitudes, culture, education, the bringing up of children, house work, opportunities to work and earn a decent including rights provided by legislation and societal structures. Sierra Leonean thinking stresses that equal opportunities per se are not enough. To promote gender equality is also to promote women's health. Empowerment is needed to make girls be aware of the fact that they are

precious and special. They need to develop a sense of their own rights – including their sexual rights. The State can make major advances in fighting the spread of HIV/AIDS by committing itself to the promotion of sexual and reproductive health and rights.(GOSL/NAS ACT, 2009)

Girls and women are expected to assume the most responsibility for caring for people living with HIV/AIDS in the home and the community. The heavier the burden these responsibilities bring, the worse the chances are for them to plan and cope with their lives, as well as to nurture their own development. Economic disadvantage and financial needs lead our girls and women into commercial sex, which furthermore increases the risk of infection.(GRANT et al., 1998) (MOH/GOSL/NIMBA, 2005)

The majority of new cases of HIV infection can be found among youth and young adults. Many young people are still not sufficiently informed about sexual and reproductive health issues, such as pregnancy, sexually transmitted infections (STI) and HIV/AIDS. Furthermore, certain initiation rites within youth groups and loss of self-control caused by excessive drinking and drug consumption can lead to increased vulnerability to HIV infection. Young people therefore depend on protection and instructions from their families, schools and society, especially counselling and health services appropriate to their needs and which aim to provide education for an empowered and responsible life.(NAS & CDC, 2002)

Prevention is the most effective approach to protecting a large section of the population from HIV infection. One of the primary Sierra Leone's prevention programme is to break through the silence surrounding HIV/AIDS. Extensive education for the whole population, which aims to break down taboos, rumours and false ideas, does not only promote informed decisions for individual behaviour, but it also assists in the breakdown stigmatization and discrimination against people living with HIV/AIDS. The key messages of such programmes centre on responsible sexual behaviour. Promoting the use of condoms and the avoidance of sexual practices which increase vulnerability to HIV infection remain crucial for prevention. However, given the fact that Sierra often control Leoneans can their vulnerability to HIV infection with great difficulty, providing these messages is not enough.(NAS, 2006) (MOH/NIMBA, 2005) Abstinence and being faithful offer no protection for women and young girls who are forced into sex and for women whose husbands have various sexual partners or become infected before marriage.(Rotherham et. al. 2001) As condom use depends on the co-operation of men, greater integration of men into our prevention programmes is therefore essential. Prevention programmes for people living with HIV/AIDS are becoming more important.

3. Treatment

Currently, there is no effective method of completely preventing the transmission of HIV/AIDS, such as through vaccination.(CIA,World bank,2011) Nevertheless, thanks to antiretroviral therapy, the onset of AIDS can be delayed or suppressed. ART is most commonly a combination of three forms of medication, which effectively stops the reproduction of the virus in the body. Therapy lasts throughout a patient's life; if it is interrupted, the disease will continue to progress. Sierra Leoneans will benefit from ART though funding of treatment is a major gap in our strategies.

The key prerequisites for the effective implementation of ART, such as the development of a national drugs policy and qualified health systems still need to be met. Sierra Leone has developed appertaining guidelines in its treatment endeavours.(NAS, 2006)

Mother-to-child transmission of HIV during pregnancy, birth and through breast-feeding is the most common cause of HIV infection among children under the age of ten. (PDF/UNGASS) 2007, World Bank 2008 UNAIDS, 2006) In order to prevent or reduce the possibility of this transmission, the following measures need to be scaled up rapidly to prevent infection of younger women as part of a general prevention campaign: secure access to voluntary testing for women, enable pregnant women to have access to ART, ensure safe birth and, if

necessary, provide access to alternatives to breast milk. The health system of Sierra Leone is struggling to fulfill the key prerequisites necessary to implement these interventions. Insufficient obstetric care and professional support during birth, deficient infrastructure and a lack of trained staff are the main obstacles. Ethical, cultural and social issues, such as the danger of stigmatization of mother and child, are further concerns. (UNAIDS, 2006)

GAPS

While there has been a substantial increase in resources for HIV/AIDS in the country over the past years, major resource gaps remain. There is a shortfall of at least US\$90Million to mount an effective country-led AIDS response over the next four years. (NAS, 2006) Narrowing these financing gaps is essential, and the National HIV/AIDS Secretariat (NAS) is committed to playing its role in encouraging all donors to play their part. Sierra Leone expects to see a successful replenishment process and stronger finance flow across its HIV/AIDS system.

Money alone will not secure effective responses. Money needs to be used in ways that are effective and which promote efficiency. Nevertheless, HIV/AIDS financial resources should not be delivered through increasingly complex, multiple systems and channels of financing and support that put a massive strain on the national systems, government departments and the National AIDS Secretariat. It is

within this context that the Sierra Leone scenario and initiatives is working closely with UNAIDS, with other donors, the international system and civil society to secure the Three Ones Agreement, and to take steps to translate these key principles into action at country level. Taking action on the Three Ones is founded upon the OECD/DAC Agreements on Aid Effectiveness, Ownership, Harmonization, Alignment, Results and Mutual Accountability made at Monterrey, Rome and, most recently, in Paris.(GOSL/NAS ACT, 2011)

4. ACCESS TO TREATMENT AND CARE

The WHO/UNAIDS 3by5 initiative has proven a remarkable mobilizing force to increase access to treatment for people with Since the inception of treatment HIV. interventions in 2003 there has been growing evidence of the effectiveness of treatment programmes and significant reductions in the costs of treatment and care. This largely has been a result of falling drug prices and Sierra Leone is now poised to take advantage of this paradigm. Sierra Leone to date has about 3,660 patients on anti-retroviral treatment.

There is increasing evidence that linking treatment and care to prevention and dealing with the impact of AIDS can increase effectiveness of the programme. (Ross et. Al. 2006) Availability of treatment and care can provide a strong incentive for people to seek HIV testing, and to access behavioural

.....

counselling and advice. Openness and disclosure of HIV status have played framing public important roles in AIDS. understanding about and underpinning behavioural change communications. (Oakley, et. Al. 1995).

5. SCALING UP COMPREHENSIVE PREVENTION PROGRAMMES

The stigma and discrimination all too often associated with AIDS can lead to individuals being rejected by their families, loved ones and their communities when they most need support.(Blumenthol, Discrimination spreads rapidly, fuelling anxiety and prejudice and increasing vulnerability to HIV infection. It prevents the open discussion that is needed to educate people on how to protect themselves or to support people that need treatment and care. By blaming certain groups – be they adolescent girls, commercial sex workers, men who have sex with men, migrants or drug users - The nation's societies can excuse themselves from the responsibility of caring for and supporting these most vulnerable Excluding groups. marginalising those at greatest risk of HIV and in need of services will also inhibit successful action against AIDS. Overcoming the stigma and discrimination which AIDS fuels, calls for especially strong leadership at all levels of society and from all walks of life. Sierra Leone has put in place antidiscrimination and awareness campaigns. The National HIV/AIDS Secretariat (NAS) has evolved and enacted legislation to protect the rights and freedoms of people with HIV, and communities most at risk of HIV, and to safeguard them from discrimination. Additionally, the national constitution protects the rights of vulnerable citizens (2001) in its equal rights provisions.(S.L. Constitution 1991)

In brief, the key elements of the Sierra Leone Strategy to fight HIV/AIDS are:

- 1. A prejudice-free education and prevention strategy. This means explaining to the public how the disease is transmitted. Thereby preventing new infections and strengthening protective behaviour:
- Universal or nationwide access to HIV testing, adequate therapy for persons infected with HIV and those suffering from AIDS as well as the strengthening of social care:
- 3. Creating a climate of solidarity within society which will simultaneously prevent the discrimination of those affected;
- 4. Co-ordination of and co-operation in national and international activities;
- 5. Surveillance to record new infections;
- 6. Strengthening biomedical, clinical, social, scientific and socio-cultural research especially in the context of international co-operation and continuous Monitoring and Evaluation.

These elements now guide the national efforts.

6. VULNERABILITY

We must also consider the impact of HIV and not only the impact of AIDS. Vulnerability can and must be addressed by improving access to, and the delivery of, appropriate and comprehensive services.

.....

Resources must get to communities and local organizations where they are most efficiently needed. and utilized developing the capacity of communities and civil society organizations. A key principle and practice that must continue to be emphasized is the participation of children at all levels, from informed policy and the interventions design implementation of actions. This must be under-pinned by an approach that values the rights of all children.

Vulnerability, and an understanding of it, is important to determine where and how resources and interventions are prioritized. Concepts of vulnerability cannot generalized from one region another.(Ross et. al. 2006) Cultural, social, economic and regional differences in vulnerability must be respected.

7. ORPHANS AND VULNERABLE CHILDREN (OVC'S)

There remain many gaps in services and interventions for orphans and children made vulnerable by HIV and AIDS. Services must be comprehensive and integrated as far as possible, and should include prevention, care, support and treatment. There must also be an emphasis on community - based responses. The Frameworks of strategies provide a sound basis for formulating and delivering services. (NAS, 2006) Many practitioners working in the field of orphans and children made vulnerable to HIV/AIDS have defined areas that provide a basis for delivering and monitoring services: health

nutrition; psychosocial and support, economic strengthening; education; social inclusion; and child protection. Services for preventing the transmission of HIV from mothers to their children must strengthened to include access to screening and treatment for all mothers.

Anti-retroviral therapy children. including access, cost and the availability of paediatric formulations, requires greater attention and resources. The Declaration of Commitment must be implemented and monitored against all of these areas.

Ensuring that education is available. accessible and comprehensive remains an important objective. Secondary education is important and has been identified as an important protective factor, especially for girls. It should be promoted alongside primary education for all children. School feeding and nutrition programmes should be promoted as one element of a more comprehensive response. hildren orphaned and made vulnerable by HIV/AIDS continue to face schooling options such as flexible hours to accommodate the needs of children who are carers and head of households. Education of children must also include life skills development, human rights, HIV/AIDS and sexuality and sexual health.

Working together is essential to ensure a concerted impact. This includes all UN agencies, bi-laterals. multi-laterals. governments, the private sector and civil organizations. society Assessing

situation of orphans and children made vulnerable by HIV/AIDS remains important. Monitoring of the impact of services and interventions against the Declaration of Commitment also remains important. For example, the Rapid Assessment, Analysis and Action Planning (RAAP) implemented by UNICEF have been a very welcome development. Two areas need to be strengthened in relation to assessment and monitoring i) the close involvement of children with civil society organizations, and ii)assessment and monitoring. These should not paralyze or delay the development and implementation of services and interventions.

To secure a better future for orphans and children made vulnerable by HIV and AIDS, there is a need to prioritize action now to deliver integrated and comprehensive services based on an extensive body of knowledge that already exists about what works. (NAS/Dalan 2008) There must be a scale up of these services swiftly so that many more children do not continue to grow in extremely difficult and challenging circumstances.

Strategies enabling Sierra Leone's OVC to attain their physical, mental, spiritual, moral and social development through medical and social services include the following:

1. Strengthening the capacity of families by prolonging the lives of parents and providing economic, psychosocial and other support.

- 2. Ensuring access to essential services such as education and health.
- Reviewing and developing policies and legislations to address the needs of OVC.
- 4. Providing supportive environment for OVC.

The challenge ahead for Sierra Leone is to mobilize local social capital operationalize the newly developed National Strategic Plan which calls for decentralized response. Investing in children is investing in the future of Sierra Leone. Sierra Leone should heed the alarm-call and re-double efforts so that vulnerable children can regain their rights and their quality of life; then the spread of this terrible pandemic can be halted and reversed.

Every response to HIV/AIDS must be comprehensive, reflecting the needs of our people, with a balanced policy mix of prevention, treatment, care and research. State actors cannot be haphazard in choosing amongst these approaches, they need to use them together and in an integrated manner with nationally-led strategic plans. It must also include measures to combat the root causes of the pandemic such as inequality between women and men, poverty and social marginalization of the most vulnerable groups like (young) women, uniformed services, injecting drug users (IDU's), sex workers, prisoners, and men having sex with men. HIV/AIDS Act? It is necessary to integrate actions against HIV/AIDS into the National Poverty

Reduction Strategies (PRSP), and other national plans and budgets. Government has now infused HIV/AIDS in the PRSP so as to address the intricate link between the pandemic and poverty. The objects of the MDGs vis-a-vis HIV/AIDS is complementary.

Effective prevention means that people need properly informed. Simplistic messages about abstinence and faithfulness - sometimes ideologically driven - as the only ways to prevent HIV may mean that many vulnerable people are denied the information, knowledge, skills and services they need to protect themselves. Disinformation that casts doubt on the effectiveness of condoms is, frankly, inexcusable. People need the means to have safe and responsible options within the realities and circumstances of their daily lives (ASamoah-Odei, et.al.2004). This should be based on mutual respect and dignity, and not on any particular morality or ideology.

The epidemic will not be stopped if focus efforts are not on prevention (UNAIDS, Uganda Commission 2009). The human, social and economic consequences of not treating infected people will become catastrophic and put at risk most of development efforts unless there is increase on the number of people on antiretroviral (ARV) therapy. It is of great importance that ARV programs will be supported with strengthening health systems and procurement training and support so to avoid

HIV drug resistance. (GOSL, 2008^a). It is equally important to implement systems for surveillance and monitoring of HIV drug resistance.

The causes and consequences of HIV/AIDS – social and gender inequality, famine, lack of education, limited economic perspective, demographic challenges, to name but a few - can be attenuated if those who need it have access to affordable and quality treatment and are thus enabled to continue a productive life in society. But access to treatment means far more than only access to drugs. Without a comprehensive and integrated approach, including the training and capacity building of national human resources for procurement, treatment and follow-up and the taking into account of the and follow-up psycho-social aspects, donation or delivery of drugs will be inefficient and unsustainable (CIA, World Fact Book 2011).

AIDS is a new kind of emergency, because it depletes Sierra Leone's human capacity much faster than it can be replenished, affects all sectors of society and generates long-term vulnerability (Martinez, J. And Martineu, T. 2000). The lasting success of the country's efforts depends greatly on the enhanced development of human capacity and resources. This is the only way in which the country can ensure ownership and also the sustainability of actions (GOSL, 2008^a). The level of resources available for the response to HIV/AIDS needs to be continuously raised, in the general context

.....

Correspondence author: S.T.O ALGHALI Email: sidialghali@yahoo.com

.....

of Monterrey. It already appears that the pandemic, and hence the funds needed to control it, will continue to increase.

As the resources devoted to the fight against HIV/AIDS in Sierra Leone increase, there is a risk of duplication, overlap and lack of coordination. The AIDS action arena is increasingly crowded, with multiple funding and program mechanisms and initiatives, as duplicative procedures well as requirements for financing, reporting and monitoring. Sierra Leone should take greater steps to address the rapidly expanding scope of this resource mobilization so as to gain the greater impact from these efforts, and to reduce fragmentation and inefficiency along the way. This is the prerequisite for a longterm sustainable response.

REFERENCES

(Adeyi, et al.(2006) "AIDS IN NIGERIA: A nation on the threshold! Chapter 2: The epidemiology of HIV/AIDS in Nigeria. Harvard Centre for Population and Development Studies.

ARC International and Ministry of Health and Sanitation, (2004). Post intervention survey report: HIV/AIDS/STI Knowledge, Attitudes and Practice among Commercial Sex Workers. Military and Youth in Port Loko Sierra Leone.

Asamoah – Odei E, Garcia – Celleja JM, Boerma T (2004). HIV prevalence and trends in sub-saharan Africa: no decline and large sub-regional differences. Lancet, **364**:35-40.

Blumenthal SJ (2008). Women, HIV/AIDS and stigma: Results from a National Survey (http://www.amfar.org/binary-data/AMFAR_PDF/000/000/181-pdf.

CIA – The World Factbook (2011) Country Comparison: HIV/AIDS adult prevalence rate.

GOSL. Ministry of Health (2008). Strengthening district health survey project. Monitoring and evaluation plan. Freetown, Sierra Leone

GOSL (2008^a) Ministry of Health, Sierra Leone – Strengthening District Health Survey Project. Project implementation document, Freetown

GOSL/Child Rights Act (2000)

Government of Uganda (2010, March)"UNGASS country progress report: UGANDA

Grant, A.D., De Cock, K.M.(1998) The growing challenge of HIV/AIDS in developing countries. Brit.Med.Bull.**54**:369-81

GOSL/NAS ACT. (2011) PROTECTING HIV PLWHA

International treatment Preparedness Coalition (2007, December) "Missing the target #5:

"Improving AIDS Drug Access and advancing health care for all"

Company danger outhorn STO ALCHALLE mail: gidioloholi@yahaa gam

Liberia, Ministry of Health (2009) HIV/AIDS Seroprevalence – Behavioural Survey.

Ministry of Health (Kenya)(2005). Aids in Kenya. 7th Edition. Nairobi, National Aids and STI Control Programme (NASCOP)

Martinez, J and Martineu, T(2000) Rethinking human Resources: An agenda for the Millennium Health Policy and Planning.

National Agency for the control of Aids (2010)"National HIV/AIDS response review 2005-09. Nigeria.

NAS/Ministry of Health and Sanitation GOSL/Nimba Research and Consultancy – National Population-Based HIV Seroprevalence Survey (2005) Sierra Leone

National HIV/AIDS Secretariat and Dalan Consultants, (2008). Survival Analysis for PLWHIV on Antiretroviral Therapy.

National AIDS Control Council (Kenya) (2007) National HIV Prevalence in Kenya, Nairobi (July).

National HIV/AIDS Secretariat and CDC (2002). HIV/AIDS Seroprevalence and Behavioural Risk Factor Survey in Sierra Leone

National HIV/AIDS Secretariat (2006) "Sierra Leone National HIV/AIDS Strategic Plan (GOSL).

Njue, C. Et al (2009)"If you don't abstain, you will die of AIDS". AIDS education and Prevention, 2009; 21(2) 169-79.

Oakley A, Fullerton D, and Holland J (1995) Behavioural Interventions for HIV/AIDS Prevention, AIDS 9:479 – 86

PDF)UNAIDS (2007)"Sub-Saharan Africa – AIDS epidemic update Regional Summary.

(PDF)UNGASS(2007)
'UGANDA:UNGASS Country Progress
Report.

PDF) UNGASS(2008) "Liberia: UNGASS Country progress Report.

Ross, D. Dick B and Fergusson J. (2006) Preventing HIV/AIDS inyoung people: A systematic review of the evidence from developing countries. WHO Technical Report Series. No. 938. Geneva, Switzerland.

Rotheram – Borus M.J. Koopman C, Haignere, C. And Davies M (2001) – Reducing HIV Sexual risk behaviours among adolescents.

Sierra Leone Constitution (1991)

Strathdee, S.A. et al (2010) H|IV and risk environment for injecting drug users: the past, present and future. The Lancet 6736(10)

The World Bank (2009) Sierra Leone at a glance. http://devdata.worldbank-org/AAG/SLE_aag.pdf

The World Bank (2008)"West Africa HIV/AIDS Epidemiology and Response Synthesis

UNAIDS, Uganda Aids Commission (2009, March) "Uganda: HIV prevention response and modes of transmission analysis"

UNAIDS (2006). Setting national targets for moving towards universal access, Geneva.

UNGASS (2010)"Country Progress Report – Kenya"

UNGASS (2010)"UNGASS COUNTRY REPORT: NIGERIA

WHO/UNAIDS/UNICEF (2010) Towards Univrsal Access: Scaling up priority HIV/AIDS interventions in the health sector

Correspondence outhor: STO ALCHALLEmail; sidiolehali@yahoo oom

Correspondence author: S.T.O ALGHALI Email: sidialghali@yahoo.com